

# Physical Androgyny and Categorization Difficulty Shape Political Conservatives' Attitudes Toward Transgender People

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## Abstract

Researchers have recently begun to examine how categorization processes impact social evaluations. In two studies, we examined how sex categorization influences attitudes toward transgender individuals. We found that people evaluated transgender individuals more negatively if they possessed physically androgynous (vs. sex-typical) characteristics because they struggled to identify their sex. These relationships were stronger among political conservatives compared to individuals with more liberal political views. These findings provide new insights for research on attitudes toward gender minorities and for the role of political ideology in social judgments.

## Keywords

transgender attitudes, physical androgyny, political ideology

In 2014, Jessi Dye was fired on the first day of her new job as a nursing home assistant in Alabama (Browning, 2015). Dye's boss prefaced her dismissal by asking "What are you?" and "What am I supposed to do with you?" The questions were in reference to Dye's sex. Dye was a transgender person in the process of transitioning from male to female, and so her sex could not be readily categorized. In other words, her sex was ambiguous. As Dye's situation makes salient, the ambiguity of a transgender person's sex may shape how he or she is perceived, evaluated, and treated with the potential for discriminatory consequences.

Previous research has examined factors that shape evaluations of transgender people as an abstract group (Hill & Willoughby, 2005; Norton & Herek, 2013; Tee & Hegarty, 2006; Winter, Webster, & Cheung, 2008; Worthen, 2013). Researchers have yet to examine the factors that guide people's evaluations when they perceive or encounter transgender individuals as well as how characteristics of perceivers and targets might interact to influence evaluations of transgender people. Indeed, people's abstract attitudes toward a group often differ from how they feel when they actually come into contact with the members of that group (Dovidio, Kawakami, & Gaertner, 2002; Kite, 1994; Lee & Jussim, 2010). Understanding how perceivers' and targets' characteristics contribute to evaluations of transgender individuals may thus provide insight about the content and formation of attitudes toward gender minorities.

Accordingly, we addressed three central questions in the present research. First, we examined how physical androgyny (i.e., possessing a physical appearance with both prototypically

male and female features) shapes evaluations of transgender people. Specifically, we hypothesized that perceivers would view physically androgynous transgender individuals negatively. We then examined whether these evaluations might result because the ambiguity of transgender individuals' sex renders them more difficult to categorize. That is, we expected that perceivers would evaluate transgender people more negatively because they have a harder time resolving their sex. Finally, we examined whether this relationship between physical androgyny and categorization difficulty leads to more negative evaluations of transgender people more for politically conservative (vs. liberal) perceivers because conservatives are more motivated to efficiently categorize people into social groups (Stern, West, & Rule, 2015).

## Primacy of Sex Categorization

People automatically categorize others based on their age, race, and sex (e.g., Fiske, 2000; Macrae & Bodenhausen, 2000). Researchers have proposed that sex is one of the most central and important social categories for both evolutionary and cultural reasons. From an evolutionary perspective, rapidly and

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efficiently identifying a person as male or female allows people to determine whether the person might be a potential mate (Johnston, Arden, Macrae, & Grace, 2003; Macrae, Alnwick, Milne, & Schloerscheidt, 2002). Moreover, sex may constitute an organic social category compared to other distinctions (e.g., race) that rely heavily on culturally drawn boundaries and for which categorization can be overridden by other forms of group membership (Kurzban, Tooby, & Cosmides, 2001; Van Bavel & Cunningham, 2009). From a cultural perspective, the ability to divide people based on sex allows for the reinforcement of gender hierarchies and for the separation of people into social roles that provide structure and simplicity to a society (Bem, 1993; Eagly & Wood, 1999). Both of these perspectives thus help to explain why people seem to prioritize sex categorization when perceiving others.

Sex-typical physical characteristics facilitate sex categorization and buttress its efficiency (Johnson & Tassinari, 2005). That is, categorizing the sex of a highly masculine or highly feminine person requires less time and fewer cognitive resources than categorizing the sex of someone who is physically androgynous. Androgynous people thus disrupt sex categorization processes by requiring additional scrutiny before perceivers can categorize them as male or female. This may also affect how perceivers evaluate them. Previous research on perceptual fluency has shown that people feel more positively about stimuli (including people) that are easier to process (Winkielman & Cacioppo, 2001; Winkielman, Schwarz, & Nowak, 2002). Thus, individuals tend to evaluate people they can categorize quickly more positively than those who take longer to categorize into a social group (Lick & Johnson, 2013; Lick, Johnson, & Rule, 2015). Transgender people typically experience a mismatch between their internally felt gender and that conveyed by their physical appearance (e.g., Davis & Meier, 2014). We therefore predicted that participants' evaluations of transgender people would negatively correlate with their androgyny, meaning that they would like physically androgynous targets less. We expected that the perceptual disfluency involved in categorizing transgender targets would help to explain this association. To test this, we examined evaluations of transgender targets who varied in their physical androgyny/sex-typicality and related this to the speed with which participants could categorize them as male and female.

### Role of Political Ideology

If the efficiency of sex categorization drives evaluations of transgender people, then the ease of the categorization process should particularly affect evaluations made by people who value quick and definitive judgments. Past work has found that politically conservative (vs. liberal) people report a greater desire to efficiently reach closure and certainty in their judgments (Jost, Glaser, Kruglanski, & Sulloway, 2003; Jost, Sterling, & Stern, in press; Kimmelmeier, 1997). Additionally, recent evidence indicates that conservatives negatively evaluate and penalize people who deviate from stereotypes that help them efficiently categorize people into groups, whereas liberals

do not (Hehman, Carpinella, Johnson, Leitner, & Freeman, 2014; Stern et al., 2015). We therefore hypothesized that transgender people's level of androgyny would lead political conservatives (but not liberals) to evaluate them more negatively because their sex is more difficult to categorize.

### Present Research

In two studies, we examined whether the androgyny and categorization difficulty of transgender people shapes how participants evaluate them. In Study 1, we examined whether transgender targets receive more negative evaluations as their androgyny increases and whether this occurs more strongly among politically conservative perceivers. In Study 2, we examined whether the difficulty of categorizing transgender targets' sex partly explains conservative perceivers' more negative evaluations of them. In both studies, we examined how physical androgyny influences evaluations by using the photos of transgender people undergoing hormone replacement therapy (HRT) to transition from one sex to another. The present studies thus capture real-world shifts in the sex-typicality of people's physical characteristics and the evaluations that subsequently follow.

## Study 1

In Study 1, we tested the prediction that the physical androgyny of transgender targets would influence how people (particularly political conservatives) evaluate them.

### Method

**Participants.** A total of 449 undergraduates (350 women, 99 men;  $M_{\text{age}} = 19.45$  years, standard deviation [ $SD$ ] = 1.66) completed the study for course credit. We excluded 67 additional participants from analyses for either failing an attention check ( $n = 55$ ),<sup>1</sup> failing to complete more than one target evaluation ( $n = 11$ ), or not reporting their political ideology ( $n = 1$ ). We calculated statistical power using the procedures outlined by Bolger, Stadler, and Laurenceau (2012) for multilevel models and observed at least 80% power for all predicted results.

### Procedure

**Target selection.** We obtained facial photographs of transgender targets from the HRT Transgender Data Set (Mahalingam, Ricanek, & Albert, 2014), in which people undergoing HRT to physically transition to their desired gender identity provided photographs throughout their transition. We randomly selected the photo sets of four people transitioning from female to male who provided standardized photographs (i.e., facing forward, the only person in the picture) starting on the day they began HRT and every day thereafter for a year; one target did not have photos for Month 12. To obtain representative photo samples of each person, we selected the first three photographs for each month in which clothing did not obscure the person's face

(e.g., a hat or hood). We cropped the photographs to show only the person's head.

**Target presentation and evaluation.** Participants viewed four photographs individually (one of each target, randomly selected from among all the possible photographs of that target) while responding to the question "How positively do you feel toward this person?" using a slider scale ranging from 0 (*not at all positively*) to 100 (*very positively*).

**Political ideology.** After making their judgments, participants reported their political ideology in response to the question: "Where on the following scale of political orientation would you place yourself?" (1 = *extremely liberal*, 5 = *moderate*, 9 = *extremely conservative*;  $M = 3.69$ ,  $SD = 1.57$ ). This single item assessment is commonly used and possesses strong predictive validity (Graham, Haidt, & Nosek, 2009; McAdams et al., 2008).

**Target androgyny.** We estimated targets' androgyny by asking 302 independent coders recruited from Mechanical Turk (MTurk) to separately rate the masculinity and femininity of 1 photo of each target randomly selected from the 141 possible photos (e.g., 1 = *not at all masculine* and 7 = *extremely masculine*). Interrater reliability was high (masculine  $\alpha = .90$ ; feminine  $\alpha = .88$ ) and masculinity and femininity ratings strongly negatively correlated,  $r(139) = -.85$ ,  $p < .001$ . Thus, we reverse scored each rater's masculinity ratings and averaged them with the femininity ratings. We then averaged these scores across raters to create a composite femininity score for each photo (higher scores indicating greater femininity, lower scores indicating greater masculinity, and the midpoint indicating androgyny). We then translated these into androgyny scores by subtracting each photo's femininity score from the midpoint of the scale and taking the absolute value of the difference, and then subtracted the resulting scores from three (i.e., we reverse scored the values) so that higher scores indicated a more androgynous appearance and lower scores indicated a more sex-typical appearance (range: 0.81–3.00,  $M = 2.05$ ,  $SD = 0.48$ ).

**Analytic strategy.** Because participants evaluated four targets in random order, we tested our hypotheses using the MIXED procedure in SPSS (version 24) to account for the nonindependence in participants' responses, specifying a compound symmetry covariance matrix and calculating the degrees of freedom using a Satterthwaite correction (Fitzmaurice, Laird, & Ware, 2012). To test whether conservatives evaluated androgynous targets more negatively, we computed a model that included participant ideology (grand-mean centered), target androgyny (grand-mean centered), and their interaction as predictors. We also included a "target" variable as an additional predictor to account for between-target variance.<sup>2</sup> Participants' evaluations of the targets constituted the dependent variable.

## Results

A marginally significant main effect of ideology,  $B = -0.89$ ,  $SE = 0.48$ ,  $t(446.53) = -1.85$ ,  $p = .07$ , 95% CI  $[-1.83, 0.05]$ , showed that liberals made more positive evaluations overall. A significant main effect of target androgyny,  $B = -3.15$ ,  $SE = 0.74$ ,  $t(1,470.06) = -4.25$ ,  $p < .001$ , 95% CI  $[-4.60, -1.69]$ , indicated that people evaluated androgynous (vs. sex-typical) targets more negatively. Importantly, the predicted Ideology  $\times$  Target Androgyny interaction qualified these main effects,  $B = -1.59$ ,  $SE = 0.47$ ,  $t(1,483.07) = -3.41$ ,  $p < .001$ , 95% CI  $[-2.50, -0.67]$ . Decomposing this interaction by examining the effect of target androgyny separately for conservatives (i.e., individuals 1  $SD$  above the mean) and liberals (i.e., individuals 1  $SD$  below the mean; Aiken & West, 1991)<sup>3</sup> showed that androgyny significantly influenced conservatives',  $B = -5.63$ ,  $SE = 1.04$ ,  $t(1,489.73) = -5.41$ ,  $p < .001$ , 95% CI  $[-7.68, -3.59]$ , but not liberals' evaluations of the targets,  $B = -0.66$ ,  $SE = 1.04$ ,  $t(1,463.04) = -0.63$ ,  $p = .53$ , 95% CI  $[-2.69, 1.38]$ .<sup>4</sup>

## Discussion

The results of Study 1 suggest that physical androgyny affects evaluations of transgender people. Specifically, participants evaluated highly feminine and highly masculine targets more positively than those whose physical appearance expressed a more equal blend of masculine and feminine characteristics. In other words, people evaluated transgender targets who appeared sex-typical more positively than transgender targets who appeared androgynous. Yet this was only among conservatives, supporting our hypothesis that conservatives would evaluate people more negatively because they are difficult to categorize, thus undermining their desire to categorize people efficiently. We tested this hypothesis more directly in Study 2.

## Study 2

We had two main goals in Study 2. First, we wanted to directly test whether androgynous targets are evaluated more negatively because they are more difficult to categorize. Previous research has found that people spend more time deliberating about categorizations when the person's group membership is ambiguous (e.g., they are multiracial; Blascovich, Wyer, Swart, & Kibler, 1997). We therefore predicted that the more time needed to categorize targets as male or female would partly explain negative evaluations of androgynous (vs. sex-typical) transgender targets. Additionally, because conservatives typically strive to efficiently reach closure in their judgments (Jost et al., 2003), we expected that categorization latency would particularly explain conservatives' evaluations of the targets.

Second, we sought to clarify whether conservatives negatively evaluate androgynous transgender targets partly because they desire to make efficient categorizations or simply because they hold more prejudicial attitudes toward the members of low status groups and are more likely to endorse traditional gender

roles (e.g., Luguri, Napier, & Dovidio, 2012; Napier, Thorisdottir, & Jost, 2010). We therefore included measures of prejudice and gender-role endorsement and included these as covariates in our analyses.

## Method

**Participants.** Undergraduates ( $n = 219$ ) and MTurk workers ( $n = 292$ ) completed the study for course credit or 70¢, respectively (301 women, 210 men;  $M_{\text{age}} = 27.53$  years,  $SD = 10.34$ ). We excluded 75 additional participants for either failing an attention check ( $n = 61$ ) or failing to complete more than one target evaluation ( $n = 14$ ). When participants only failed to complete a single target evaluation, we excluded those single trials from all analyses (14 trials total, 0.7% of all trials). We observed at least 75% power for all predicted results.<sup>5</sup>

**Procedure.** All participants followed a link to the study, which we programmed using Qualtrics online survey software. They viewed the same photographs as in Study 1 (one photo for each of the four targets) twice: once to categorize the target and once to evaluate the target.

We first asked the participants to categorize a randomly selected photo of each target as male or female by pressing the *S* and *K* keys, respectively. Consistent with previous research (Blascovich et al., 1997; Lick & Johnson, 2013), we operationalized categorization difficulty as the amount of time taken to press the response keys, measured in seconds using the Qualtrics timing function. We excluded response times equaling zero or more than 3 *SDs* above the grand mean (1.9% of all trials). Participants then viewed the same photographs again and evaluated the person using the same procedure as in Study 1.

**Attitudes toward transgender people.** Participants reported their attitudes toward transgender people as a group from 0 to 100 using a feeling thermometer. To conceal that the study specifically regarded transgender people, they also reported their attitudes toward seven other social groups (men, women, White Americans, Black Americans, gay men, lesbian women, and bisexual people) at the same time. We instructed participants that “The warmer or more favorable you feel toward the group, the higher the number you should give it. The colder or less favorable you feel, the lower the number.”

**Support for traditional gender roles.** We assessed participants’ support for traditional gender roles using 11 items from a short-form version of the Attitudes Toward Women’s Scale ( $\alpha = .89$ ; Galambos et al., 1985; Spence, Helmreich, & Stapp, 1973). Participants responded using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. A sample item includes “swearing is worse for women than for men.”

**Political ideology.** Participants reported their ideology as in Study 1 ( $M = 3.90$ ,  $SD = 1.92$ ).

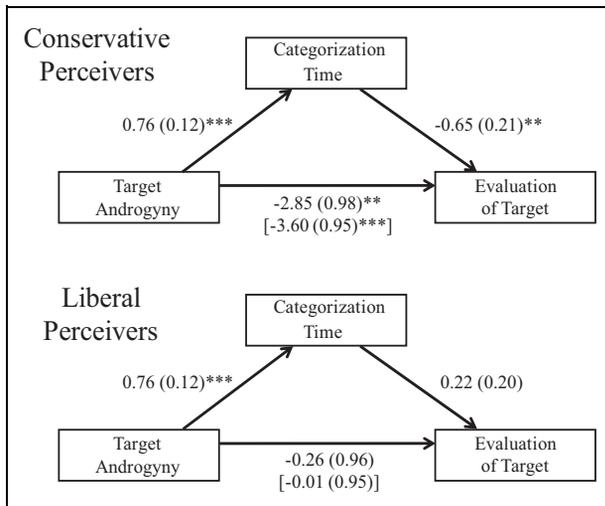
## Results

**Target androgyny.** As in Study 1, we computed a MIXED model that included participant ideology (grand-mean centered), target androgyny (grand-mean centered), target (see Note 2), and the Ideology  $\times$  Target Androgyny interaction as predictors, and evaluations of the targets as the dependent variable. The ideology main effect was not significant,  $B = -0.34$ ,  $SE = 0.40$ ,  $t(505.60) = -0.87$ ,  $p = .39$ , 95% CI  $[-1.12, 0.44]$ , but the androgyny main effect was,  $B = -1.81$ ,  $SE = 0.69$ ,  $t(1,600.90) = -2.60$ ,  $p = .009$ , 95% CI  $[-3.17, -0.45]$ ; participants evaluated androgynous (vs. sex-typical) targets more negatively. The predicted Ideology  $\times$  Target Androgyny interaction qualified this effect,  $B = -0.94$ ,  $SE = 0.34$ ,  $t(1,597.03) = -2.76$ ,  $p = .006$ , 95% CI  $[-1.60, -0.27]$ . Decomposing the interaction as in Study 1 again showed that the effect of target androgyny was significant for conservatives,  $B = -3.60$ ,  $SE = 0.95$ ,  $t(1,608.99) = -3.78$ ,  $p < .001$ , 95% CI  $[-5.47, -1.73]$ , but not liberals,  $B = -0.01$ ,  $SE = 0.95$ ,  $t(1,589.09) = -0.01$ ,  $p = .99$ , 95% CI  $[-1.87, 1.86]$ . These results replicated those of Study 1.

**Androgyny and response latency.** To examine whether targets’ level of androgyny influenced participants’ response latencies when categorizing them, we entered participant ideology (grand-mean centered), target androgyny (grand-mean centered), target, and the Ideology  $\times$  Target Androgyny interaction as predictors in a MIXED model with the response latency to categorize each target’s sex as the dependent variable. A main effect of target androgyny showed that participants took longer to categorize the sex of more androgynous (vs. sex-typical) targets,  $B = 0.76$ ,  $SE = 0.12$ ,  $t(1,814.49) = 6.53$ ,  $p < .001$ , 95% CI  $[0.53, 0.99]$ . Neither the ideology main effect,  $B = -0.01$ ,  $SE = 0.04$ ,  $t(489.77) = -.25$ ,  $p = .80$ , 95% CI  $[-0.09, 0.07]$ , nor the Ideology  $\times$  Target Androgyny interaction,  $B = 0.08$ ,  $SE = 0.06$ ,  $t(1,806.00) = 1.40$ ,  $p = .16$ , 95% CI  $[-0.03, 0.19]$ , reached significance; thus, liberals and conservatives did not significantly differ in how long they took to categorize the targets.

**Response latency and evaluations.** To examine whether sex categorization response latencies predicted target evaluations, we entered participant ideology (grand-mean centered), response latency (grand-mean centered), target, and the Ideology  $\times$  Response Latency interaction as predictors in a MIXED model with evaluations of the targets as the dependent variable. The Ideology  $\times$  Response Latency interaction was significant,  $B = -0.27$ ,  $SE = 0.08$ ,  $t(1,761.69) = -3.52$ ,  $p < .001$ , 95% CI  $[-0.42, -0.12]$ . Decomposing the interaction showed that conservatives,  $B = -0.79$ ,  $SE = 0.21$ ,  $t(1,750.45) = -3.87$ ,  $p < .001$ , 95% CI  $[-1.20, -0.39]$ , but not liberals,  $B = 0.25$ ,  $SE = 0.20$ ,  $t(1,762.09) = 1.24$ ,  $p = .21$ , 95% CI  $[-0.14, 0.64]$ , gave more negative evaluations to targets that they took longer to categorize.

**Mediation analysis.** We next examined whether longer response latencies explained why conservatives evaluated androgynous targets more negatively. We accounted for the multilevel



**Figure 1.** Unstandardized regression coefficients (and standard errors) from mediation models in which target androgyny predicted conservatives' (1 SD above the mean; upper panel) and liberals' (1 SD below the mean; lower panel) evaluations of the targets as a function of the time it took to categorize their sex. Values in brackets represent direct associations; values without brackets represent associations when all variables are included in the model. \*\*\* $p < .01$ . \*\* $p < .01$ .

nature of the model by conducting a moderated mediation analysis with Monte Carlo confidence intervals for the indirect effects for conservatives and liberals (Selig & Preacher, 2008). Categorization response latency significantly mediated the association between target androgyny and evaluations for conservatives, 95% CI  $[-0.87, -0.16]$ , but not liberals, 95% CI  $[-0.13, 0.50]$ , suggesting that conservatives evaluated androgynous transgender targets more negatively partly because it took them longer to categorize their sex (Figure 1).

**Control variables.** Participants' political ideology negatively correlated with their attitudes toward transgender people,  $r(509) = -.40, p < .001$ , and positively correlated with their endorsement of traditional gender roles,  $r(509) = .40, p < .001$ . We therefore recomputed all of the models while including gender-role endorsement, attitudes toward transgender people, and their interactions with the predictor variables as covariates; all significant results reported above remained significant. Attitudes toward gay men and lesbian women also tend to be associated with attitudes toward transgender individuals (Norton & Herek, 2013). We therefore recomputed all of the models while including a composite of attitudes toward gay men and lesbian women and their interactions with the predictor variables as covariates; all significant results reported above remained significant.

## Discussion

The results of Study 2 replicated and extended those of Study 1. Conservatives evaluated androgynous transgender targets more negatively than sex-typical targets whereas liberals did not. Although liberals and conservatives took similar amounts of time to categorize the targets' sex, conservatives evaluated

targets more negatively when it took them longer to categorize them. Accordingly, mediation analyses suggested that this increased processing time explained in part why conservatives evaluated androgynous targets more negatively. These relationships were independent of the participants' general prejudice against transgender people and gender-role endorsement. Thus, conservatives appear to dislike androgynous transgender targets in part because they require more effort to discern.

## General Discussion

The results of two studies showed that the androgyny and time required to categorize transgender individuals as male or female promoted negative evaluations of them. Politically conservative (but not liberal) participants, in particular, evaluated more androgynous transgender people more negatively, and the length of time it took to categorize their sex partly explained this association. These results advance research on attitudes toward transgender people, the role of androgyny in social evaluation, and how political ideology can affect social judgments. We elaborate on each of these points below.

### Attitudes Toward Transgender People

The number of Americans who openly identify as transgender reached a historical peak in 2016 (Flores, Herman, Gates, & Brown, 2016). Spikes in discrimination and violence against transgender people have paralleled this growth (Human Rights Campaign, 2015), prioritizing the need to understand what guides attitudes and behaviors toward transgender people. Previous research has examined factors that shape attitudes toward transgender people as a social group, including how characteristics of the *perceiver* influence evaluations of transgender people (e.g., Norton & Herek, 2013; Worthen, 2013). Rather than studying how participants think about transgender people abstractly, more research must investigate the processes that unfold when people perceive and encounter actual transgender individuals and should consider how their heterogeneous attributes contribute to the evaluation process (see Dovidio et al., 2002). The present research is the first to examine these points and to document that androgyny and categorization difficulty influence attitudes toward transgender individuals.

Our findings also raise interesting questions about how the process of transitioning from one sex to another might shape outcomes such as mental health. Previous research has found that transitioning from one sex to another either socially (e.g., wearing gender congruent clothing) or physically (e.g., undergoing HRT) can ultimately improve transgender individuals' psychological health (e.g., decrease depression and anxiety; Colizzi, Costa, & Todarello, 2014; Davis & Meier, 2014). However, the present research suggests that transgender individuals might experience negative evaluations and societal pushback that could adversely impact their mental health *during* the transition process because it elevates the ambiguity of their sex. The psychological impact of sex transition may therefore be more complex than previously discussed. We encourage future researchers

to examine these associations to better understand when and why transgender people will experience prejudice.

Notably, we only used female-to-male transgender targets in the present research. Although we have no theoretical reason to expect that the results would differ between female-to-male and male-to-female targets, future research may gain from examining whether the same patterns that we have observed would occur for male-to-female targets.

### *Complexities of Androgyny and Categorization Time in Social Evaluations*

Although we found that people evaluated physically androgynous targets more negatively, previous research has found some evidence that *psychologically* androgynous people experience advantages. Major, Carnevale, and Deaux (1981) reported that people who possessed both masculine and feminine psychological attributes received more positive evaluations than people who mainly possessed masculine or feminine attributes. A blend of masculine and feminine psychological characteristics may allow individuals to adapt better to different contexts, overriding social expectations of their sex (Bem, 1975). Thus, physical and psychological androgyny might both influence social judgments but in different ways—an incongruence that warrants additional study.

Consistent with previous research in which the time taken to make a judgment serves as the standard for assessing how much participants deliberate on a judgment before making a decision (e.g., Blascovich et al., 1997; Epley, Keysar, Van Boven, & Gilovich, 2004; Kleiman & Hassin, 2011; Lick & Johnson, 2015; Tamir & Mitchell, 2013), we have assumed that categorization latency reflects how much participants are deliberating about a target's sex. However, given that most psychological associations are explained by multiple mechanisms (Higgins, 1998), additional factors could have also contributed to the association between target androgyny and categorization time. Directly examining this question would be a fruitful direction for future research.

### *Ideology in Social Perception and Cognition*

Previous research found that conservatives categorized people by using stereotypes about the physical characteristics of their social groups and evaluated them more negatively when they deviated from those stereotypes (Hehman et al., 2014; Stern, West, Jost, & Rule, 2013; Stern et al., 2015). We extended these findings here by providing direct evidence that conservatives negatively evaluate people who deviate from the characteristics typical of a group because it requires more mental effort to categorize them. Neither conservatives' general negative attitudes toward transgender people nor their endorsement of traditional gender roles solely accounted for these effects. Conservatives' stronger motivation for order and structure may additionally guide them toward efficiently categorizing others. When they cannot (e.g., they encounter an androgynous person), this may provoke a negative evaluation. The present research therefore highlights the

importance of how basic psychological motivations to efficiently structure the social world can impact attitudes toward groups, above and beyond the effects of prejudice or defense of the status quo.

Here, we drew from the large literature linking conservatism to motivations for closure, structure, and order to generate predictions about how liberals and conservatives would evaluate target individuals who are easy (vs. difficult) to categorize (e.g., see Jost et al., in press). Nevertheless, future research might benefit from directly examining whether epistemic motivations for closure and structure shape why conservatives find deliberating on a person's social category membership aversive. Additionally, we found that categorization difficulty did not guide liberals' evaluations and, as reported in the Online Supplemental Material, people who reported being strongly liberal actually showed a slight preference for targets who were difficult to categorize. Liberals (vs. conservatives) tend to be relatively tolerant of uncertainty and ambiguity (Jost et al., 2003) and sometimes enjoy deliberating on difficult and complex tasks (Sargent, 2004). Future research could examine whether liberals' motivation to deliberate partly explains why categorization difficult does not relate to their judgments and, among people who most enjoy effortful thought, might actually foster more favorable evaluations.

An interesting question concerns whether liberals' evaluations were driven by "politically correct" or socially desirable responding. We find this unlikely for three reasons. First, although individuals engage in socially desirable responding when they know that targets possess a stigmatized social category membership (Plant & Devine, 1998), participants here were not informed that the targets were transgender. Second, people who are motivated to give a socially desirable response typically evaluate socially marginalized (vs. not marginalized) targets more positively to compensate for potential bias against them (Mendes & Koslov, 2013). Thus, we would expect liberals to provide more positive evaluations of androgynous (vs. sex-typical targets) if politically correct or socially desirable responding were driving their evaluations. But liberals in our studies did not evaluate the androgynous and sex-typical targets differently. Third, socially desirable responding frequently results in participants reporting attitudes toward the high end of the scale (i.e., displaying a ceiling effect). Liberals' average evaluations of targets did not display a ceiling effect (means of 53.79 and 59.30 for Studies 1 and 2, respectively). Nevertheless, future research could experimentally examine whether liberals adjust their evaluations in a socially desirable manner by, for example, manipulating whether participants evaluate targets under cognitive load (Stern et al., 2013).

### **Conclusion**

Here, we found that the effort required to resolve the sex of transgender people due to their physical androgyny explains in part why political conservatives evaluate them negatively. These findings contribute to a growing literature on how social categorization processes relate to social evaluations and how the characteristics of both targets and perceivers contribute to how people engage with the social world.

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## Supplemental Material

The supplemental material is available in the online version of the article.

## Notes

1. At the end of both studies, participants read: "People vary in the amount they pay attention to these kinds of surveys. Some take them seriously and read each question, whereas others go very quickly and barely read the questions at all. If you have read this question carefully, please write the word yes/yeah (Study 1/Study 2) in the blank box below labeled other. There is no need for you to respond to the scale below." A 7-point scale and response box appeared below the text. We excluded participants from analyses if they did not correctly follow the instructions.
2. We also examined whether the specific target person being rated impacted our predicted effects. The predicted Ideology  $\times$  Target Androgyny interaction did not significantly vary across targets in Study 1 ( $p = .49$ ) but did marginally vary ( $p = .09$ ) in Study 2, suggesting that the interaction was slightly stronger for some targets than others.
3. In both studies, we also decomposed the interactions at 1.5  $SD$  above and below the ideology mean to examine the effects for strong conservatives and strong liberals, respectively. All results are consistent with those reported in the main text (see Online Supplemental Material).
4. Participant sex did not significantly moderate any of the predicted results in either study ( $ps \geq .35$ ).
5. Participant source (i.e., undergraduates vs. MTurk workers) did not significantly moderate any predicted results ( $ps \geq .13$ ) and is not discussed further.

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