ABSTRACT. Some definitions and adoptions of the word “transgender” may be rooted in transgender prejudice and result in different conclusions about who is considered transgender. Transnormative definitions, fixed to the gender binary and medical transitions, could lead to categorical exclusions, whereas umbrella definitions, centered on people’s self-identification and often featuring a greater range of gender identities, could lead to broader inclusion. The present work explored whether the relationship between attitudes toward transgender people and transgender target categorization is associated with divergent definitions of the word transgender. We hypothesized that higher prejudice and gender essentialism would predict agreement with transnormative definitions that would then predict lower categorization of transgender targets. We also hypothesized that lower prejudice and gender essentialism would predict agreement with umbrella definitions that would then predict higher transgender categorization. Using a sample of MTurk Workers (N = 497), we tested these hypotheses with a parallel moderated-mediation analysis. Results support that gender essentialism moderated the relationship between prejudice and umbrella definitions, and umbrella definitions mediated the relationship between attitudes and categorization of transgender targets (index of moderated mediation = .46, BCa CI [.20, .76]). Transnormative definition agreement was not predicted by prejudice or gender essentialism, and did not mediate the relationship between these attitudes and categorization of transgender targets (index of moderated mediation = .00, BCa CI [–.06, .05]). These findings provide insight into the role of underlying attitudes on categorization, which has implications on transgender and gender-diverse people’s identity affirmation, social belonging, and healthcare access.

Keywords: transgender prejudice, social categorization, gender essentialism, transphobia
conceptualizations that are predominantly focused on a person’s self-identification (see Darwin, 2020, for full review of “binary and medicalized” and “umbrella” models). Although definitions of transgender continue to shift and evolve, these two thematic definitions are of particular theoretical interest due to their implications for who is perceived as transgender. Thus, the present work examined the extent to which transgender prejudices and gender essentialist (i.e., biologically based) beliefs predict agreement with transnormative and umbrella definitions, and who is categorized as transgender as a result of these beliefs.

Transnormativity refers to the structure of norms and expectations that transgender people may be held accountable to in order for their identity to be seen as authentic (Johnson, 2016). These perceptions often frame self-hatred, mental illness, and gender dysphoria (i.e., distress due to conflicting gender identity and sex assigned at birth) as core experiences to one’s transgender identity (Johnson, 2016; Konnelly, 2021). Such expectations frame surgery and hormone replacement therapy as a necessity (Bilodeau & Renn, 2005; Johnson, 2016). Although many transgender people experience such distress and do choose to medically transition, expecting these as vital features of transgender identity can be limiting to those who do not pursue or have access to such medical care. Further, transnormativity reinforces directional gender binaries (e.g., transitioning from “male-to-female” or “female-to-male”) that fails to emphasize current gender identity and to include people who identify with nonbinary genders (Factor & Rothblum, 2008; Kuper et al., 2012). Overall, transnormative definitions may fail to represent the wide range of transgender people’s experiences with gender and may reflect underlying prejudices.

The metaphor of the umbrella frames transgender identity as a broad spectrum. For example, in a survey of 1,211 transgender people, there were 279 additional unique descriptors of gender identity (e.g., “genderqueer,” “transvestite,” “two-spirit,” “butch” and “I am my own gender;” Beemyn & Rankin, 2011). Further, Puckett and colleagues (2020) found that transgender and gender diverse participants suggested a range of identities, such as “nonbinary,” “genderfluid,” and “agender,” to be included in demographic questionnaires. The ability to choose one’s transgender identity is said to provide greater agency to individuals (Darwin, 2020; Valentine, 2007). Umbrella definitions can be especially important if they counter transnormative definitions that are said to give the power of labeling to medical professionals (Spade, 2013; Stone, 1992).

Conceptions of the word “transgender” revealed that heterosexual, cisgender participants who referenced sex/gender changes had more negative attitudes toward transgender people, whereas those who referenced current gender identity reported more positive attitudes. These findings were supported by a recent replication study (Anderson, 2022). Moreover, negative feelings toward transgender people are associated with a higher endorsement of belief in the gender binary (Norton & Herek, 2013). Traditional gender views that influence outcomes of transgender prejudice may be due to gender essentialism, defined as the belief that “the differences between the sexes are of an intrinsic nature, closely associated with physical, physiological, and/or spiritual differences” (Crompton & Lyonette, 2005, p. 601). Gender essentialism has been linked to the justification of traditional gender norms, beliefs that gender is biological and unchangeable, and opposition to transgender civil rights (Brescoll et al., 2013; Wilton et al., 2019). Transgender prejudice and gender essentialist beliefs appear to similarly reflect themes of transnormative and umbrella definitions.

Social categorization helps people define and understand a complex world. Transgender categorization, however, may be more complicated for people who do not approach transgender identity through self-ascription. Previous work on transgender categorization has predominantly focused on how cisgender targets categorize the gender of transgender targets, and whether they categorize them by their stated gender identity or by the gender/sex they were assigned at birth (Gülgöz et al., 2018; Howansky et al., 2020, 2021; Stern & Rule, 2018). Other work has qualitatively explored transgender people’s experiences—or fear—of exclusion from the category of transgender (Catalano, 2015; Darwin, 2017, 2020; Garrison, 2018). To our knowledge, research has yet to explore factors that influence whether or not people categorize individuals as transgender. Such categorization could impact one’s ability to access certain forms of healthcare (Spade, 2013). Additionally, categorization could influence an individual’s comfort with the label of transgender, or connection to transgender communities, both of which have important consequences on health and well-being (Barr et al., 2016; Testa et al., 2014). Therefore, it is important to explore how cisgender observers categorize gender diverse targets as transgender.

Past work on biracial and multiracial categorization might inform how transgender prejudice and gender essentialism could influence transgender categorization. Blascovich and colleagues (1997) found that participants high in racial prejudice (i.e., compared to those lower in prejudice) took longer to categorize “ambiguous” faces as either Black or White, supporting the conclusion that
people with higher prejudice may be more cautious about these categorizations. Additionally, Ho and colleagues (2015) found that the interaction between high racial essentialism and high interracial bias predicted that multiracial targets would be more likely to be categorized as Black. Finally, Chen and colleagues (2014) found that people who were internally motivated to control racial prejudice (i.e., more egalitarian) were more likely to categorize such targets as multiracial. These studies show how prejudice can be moderated by essentialism and may influence how outgroup members may categorize “ambiguous” social targets. Such research provides a potential framework through which transgender identity categorization can be explored.

Although race and transgender identity—and the underlying processes that systematically regulate them—cannot be conflated, it is possible that the relationships between prejudice, essentialism, and categorization may also exist within the domain of transgender identity. Using this framework as an exploratory mechanism, it is unclear what the directionality of such an effect might be. In the context of racial categorization, Krosch and colleagues (2013) found that people categorized multiracial targets as being members of the more socially subordinated racial group. This notion of “hypodescent” categorization may occur for other social groups. If a similar pattern follows for transgender categorization, would inclusion or exclusion from the category be seen as more socially subordinated? This is where transgender definitions may play an important mediating role between attitudes and categorization.

The Present Study
This investigation examined the ability of transgender prejudice and gender essentialism to predict transgender definition agreement and transgender target categorization (see Figure 1 for a conceptual model). We predicted that lower prejudice and gender essentialism would predict greater agreement with umbrella definitions that in turn would positively predict target categorization (i.e., resulting in targets categorized overall as more transgender). Then, we predicted that higher prejudice and gender essentialism would predict greater agreement with transnormative definitions of the word “transgender” that in turn would negatively predict target categorization (i.e., resulting in targets categorized overall as less transgender). We also anticipated that transgender prejudice and gender essentialism would indirectly predict categorization through their relation to these definitions.

Method
Participants and Procedure
Participants (N = 637) were recruited via TurkPrime and were over 18 years of age, spoke English, and resided in the United States. One hundred fifteen participants were excluded for duplicate responses (7), giving incorrect or nonsensical answers to attention checks (77), or responding affirmatively to the question “Is there any reason we should not use your data?” (31). Because the current study was primarily focused on the perceptions of cisgender people, we excluded 25 participants who identified as noncategorical. Of the remaining 497 participants, $M_{age} = 39.34$ years, 361 identified as White, 262 women, and 440 heterosexual. See Table 1 for full demographics.

Participants received directions to answer questions honestly based on their personal definitions and feelings. First, they rated their agreement with a series of definitions for the word “transgender” and categorized a series of written targets as transgender (these two tasks were counterbalanced). Participants then completed a measure of transgender prejudice, followed by a measure of gender essentialism. Finally, participants responded to demographic questions and were then debriefed and dismissed. Lafayette College’s Institutional Review Board approved all procedures. All materials, data files, and

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N = 497</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, M (SD)</strong></td>
<td>39.34 (12.51)</td>
</tr>
<tr>
<td><strong>Gender, n (%)</strong></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>262 (52.7%)</td>
</tr>
<tr>
<td>Men</td>
<td>234 (47.1%)</td>
</tr>
<tr>
<td>Nonbinary or Genderqueer</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td><strong>Sexuality</strong></td>
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<tr>
<td>Heterosexual</td>
<td>440 (88.5%)</td>
</tr>
<tr>
<td>Bisexual</td>
<td>24 (4.8%)</td>
</tr>
<tr>
<td>Gay</td>
<td>10 (2.0%)</td>
</tr>
<tr>
<td>Lesbian</td>
<td>4 (0.8%)</td>
</tr>
<tr>
<td>Pansexual</td>
<td>3 (0.6%)</td>
</tr>
<tr>
<td>Asexual</td>
<td>4 (0.8%)</td>
</tr>
<tr>
<td>Queer</td>
<td>2 (0.4%)</td>
</tr>
<tr>
<td>Demisexual</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>Selected two or more</td>
<td>9 (1.8%)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White/European American</td>
<td>361 (72.6%)</td>
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<tr>
<td>Black/African American</td>
<td>43 (8.7%)</td>
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<tr>
<td>Asian-descent/Asian American</td>
<td>40 (8.0%)</td>
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<td>Hispanic/Latinx</td>
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<tr>
<td>Indigenous/Native American</td>
<td>3 (0.6%)</td>
</tr>
<tr>
<td>Selected two or more races/ethnicities</td>
<td>23 (4.6%)</td>
</tr>
<tr>
<td>Another race/ethnicity</td>
<td>5 (1.0%)</td>
</tr>
</tbody>
</table>
supplementary analysis including all gender-diverse participants are available at https://osf.io/h87qj/.

**Materials**

**Definition Agreement**

The definition agreement task was developed by the first author for this study and was not pretested. Definitions reflect Darwin’s (2020) framework of the medical and binary model and the umbrella model. Four descriptions of the word “transgender” were provided in counterbalanced order. Two definitions reflected the transnormative definitions (e.g., “Transgender people are individuals who transition from male to female or from female to male”), and two reflected the umbrella definitions (e.g., “Transgender refers to anyone who identifies as transgender, or as a member of the transgender community, regardless of other characteristics”).

Participants rated their agreement on a scale from 1 (strongly disagree) to 7 (strongly agree).

There was one index of transnormative definition agreement (\(M = 5.5, \text{SD} = 1.0\)) and one index of umbrella definition agreement (\(M = 5.2, \text{SD} = 1.3\)). These two-item indices had low reliability between the items (transnormative \(\alpha = .38\), umbrella \(\alpha = .57\)). However, an exploratory factor analysis revealed two common factors consistent with our designated transnormative and umbrella definition agreement indices, and were extracted from the four items (KMO = .52; Bartlett’s test of sphericity, \(x^2(6) = 131.06, p < .001\)). The eigenvalues (>1, also supported by the scree-plot) indicated that the two factors explained 37.52% (transnormative definitions) and 28.48% (umbrella definitions) amount of variance. PCA extraction with Varimax with Kaiser Normalization rotation revealed all items had primary loadings over 0.77 with no cross-loadings above 0.10. Due to the factor analysis, we created two composite scores from the two extracted factors based on the mean of the items, which had their primary loadings on each factor. Higher scores indicated greater definition agreement for each index. Data analysis that treated each definition agreement separately revealed no significant differences in final data analysis, and can be found in the supplementary materials.

**Categorization Task**

Participants rated a counterbalanced series of 23 target descriptors developed by the first author and based on past literature that presented a variety of descriptions of transgender people’s potential experiences (Beemyn & Rankin, 2011; Davidson, 2007; Factor & Rothblum, 2008). An example descriptor is, “A person who was assigned female at birth who identifies and presents as male, and who has not undergone hormone replacement therapy nor gender confirmation surgery, but wants to.” Ratings were made on a 0 to 100 scale adapted from a feeling thermometer measure from Bell et al. (2021), and included the following instructions:

---

**FIGURE 1**

**Moderate-Mediation Model**

![Moderate-Mediation Model](image-url)

Transnormative definition agreement

**Transnormative definition agreement**

\(c' = .0.25^{**}

\(a_1 = -0.19^{**}

Gender essentialism

Prejudice \(\times\) GE interaction = .08**

Umbrella definition agreement

Categorization score

\(b_1 = 5.91^{**}

Indirect effect for Low GE = \(-1.29, a \times b = -1.69, BCa CI [\text{–}2.45, \text{–}1.06]\)

Indirect effect for Average GE = 0.00, \(a \times b = -1.10, BCa CI [\text{–}1.67, \text{–}0.58]\)

Index of moderated mediation for umbrella definition agreement = 0.46, \(BCa CI [0.20, 0.76]\)

Note: Reported effects are unstandardized coefficients. Only statistically significant effects are included in this figure. See supplementary files on OSF for reporting of nonsignificant effects. 

\(\ast p < .05, \ast \ast p < .01, \ast \ast \ast p < .001.\)
Ratings between 0 degrees and 50 degrees mean that you would not consider this person to be transgender. Ratings between 50 degrees and 100 degrees mean that you would consider this person to be transgender. You would rate the person at the 50 degree mark if you do not know if you would consider the person transgender or not transgender.

This approach to measuring categorization is similar to past research that asked participants to categorize biracial targets on scales that ranged from “completely White” to “completely Black,” with scale midpoints representing a categorization as biracial or multiracial (Ho et al., 2013, 2015). The current work was not concerned with accuracy of categorization, but rather the extent to which people consider targets to be more or less transgender, and the task was developed with this in mind. Categorization scores were created by a mean composite (M = 50.5, SD = 17.3), and items across the measure demonstrated high reliability (α = .91).

Transnormative definition agreement

A mean composite of the 12-item Attitudes Toward Transgender Men and Women Scale (Billard, 2018) evaluated the extent of participants’ prejudice (e.g., “transgender men will never really be men” and “transgender women are unnatural”). Ratings were made on a 1 (strongly disagree) to 7 (strongly agree) scale; higher scores reflect more prejudice (M = 4.1, SD = 1.8). The measure demonstrated high reliability (α = .99) that is consistent with past research (α = .98 in Billard, 2018).

Gender Essentialism

Brescoll and colleagues’ (2013) gender essentialism scale consists of four statements (e.g., “there is something ‘essential’ that causes men and women to behave differently” and “men get in more physical fights than women because men have more of an inherent tendency for aggression.”). All ratings were made on a scale ranging from 1 (strongly disagree) to 7 (strongly agree), and higher scores reflect higher beliefs of gender essentialism (M = 4.2, SD = 1.3). The measure demonstrated high reliability (α = .79) compared to past work (α = .63 in Brescoll et al., 2013).

Results

Correlations

Pearson correlations for all measured variables are available in Table 2. There was a significant predicted positive correlation between transgender prejudice and gender essentialism r(497) = .63, p < .001. As predicted, umbrella definition agreement was positively correlated with average categorization score, r(497) = .45, p < .001. Unexpectedly, agreement with transnormative definitions was also positively correlated with average categorization score, r(497) = .14, p < .01. There were no other significant relationships between variables. The subsequent analyses aim to elucidate the directional nature of the correlations.

Parallel Moderated Mediation Analysis

We tested whether transnormative and umbrella definition agreement simultaneously mediated the relationship between transgender prejudice and target categorization, and whether gender essentialism moderates the relationship between transgender prejudice and each definition agreement. The parallel moderated-mediation analysis was conducted through the PROCESS macro in SPSS (Model 7; Hayes, 2013; Preacher & Hayes, 2004). As seen in Figure 1, results indicated that transgender prejudice is indirectly related to transgender categorization through its relationship with umbrella definition agreement (as moderated by gender essentialism) but not through transnormative definition agreement. See Table 3 for R² values that highlight the proportion of variance in categorization scores explained by each model.
Evaluating Transnormative Definition Agreement as the Mediator

Transgender prejudice was not directly associated with transnormative definition agreement ($a_1 = -0.01, p = .73$), transnormative definition agreement did not predict categorization ($b_1 = .70, p = .31$), and the relationship between transgender prejudice and transnormative definition agreement was not moderated by gender essentialism (interaction $= -0.00, p = .87$). A 95% bias-corrected confidence interval based on 10,000 bootstrap samples indicated that the indirect effect through transnormative definition agreement, holding the umbrella definition agreement mediator constant, did not fall above zero at any level of gender essentialism ($GE_{1SD} = -1.29, a = -0.01, BCa CI = [-0.12, 0.10]$, $GE_{2SD} = 0.00, a = -0.01, BCa CI = [-0.10, 0.08]$, $GE_{1SD} = 1.29, a = -0.01, BCa CI = [-0.14, 0.10]$). The overall moderated mediation model was not supported with an index of moderated mediation for transnormative definition agreement as the mediator $= -0.00, BCa CI = [-0.06, 0.05]$.

Evaluating Umbrella Definition Agreement as the Mediator

Transgender prejudice was a significant and negative predictor of umbrella definition agreement ($a_1 = -0.19, p < .001$). Then, umbrella definition agreement significantly and positively predicted target categorization ($b_1 = 5.91, p < .001$). The effect of transgender prejudice on umbrella definition agreement was moderated by gender essentialism (interaction $= 0.08 p = .001$).

To probe the moderating effect, conditional indirect effects were examined using the procedures of Aiken and colleagues (1991). The effects of transgender prejudice on umbrella definition agreement were examined by a simple slopes analysis at the mean as well as at $+/-1$ SD above and below the mean of gender essentialism (see Figure 2). When gender essentialism was low or at the mean, lower levels of transgender prejudice were associated with a higher umbrella definition agreement ($GE_{1SD} = -0.29, CI = [-0.38, -0.19]$; $GE_{2SD} = -0.19, CI = [-0.26, -0.11]$). In contrast, when gender essentialism was high, transgender prejudice no longer predicted umbrella definition agreement ($GE_{1SD} = 0.09, CI = [-0.19, 0.01]$).

A 95% bias-corrected confidence interval based on 10,000 bootstrap samples indicated that the indirect effect through umbrella definition agreement, holding the transnormative definition agreement mediator constant, fell below zero when gender essentialism was at low and mean levels ($GE_{1SD} c = -1.29, a = -1.69, BCa CI = [-2.45, -1.06]$; $GE_{2SD} c = 0.00, a = -1.10, BCa CI = [-1.67, -0.58]$), but not when gender essentialism was high ($GE_{1SD} c = 1.29, a = -0.51, BCa CI = [-1.11, 0.09]$). Finally, transgender prejudice did not predict greater target categorization when taking into account the moderating factor of gender essentialism and its indirect effect through both definition agreements ($c' = 0.25, p = .52$). The overall moderated mediation model was supported with an index of moderated mediation for umbrella definition agreement as the mediator $= .46, BCa CI = [0.20, 0.76]$. See Figure 1 for visualization of results.

**Discussion**

The present study assessed the interplay of transgender prejudice and gender essentialism to evaluate their influence on transgender definition agreement and subsequent categorization of transgender targets. The moderated-mediation regression analysis supported the predicted model only when umbrella definition agreement was treated as a mediator, but not when transnormative definition agreement was treated as a mediator. Although not all findings were as expected, the overall results have important implications considering how divergent narratives about transgender identity can reflect existing prejudices and influence perceptions of who is “trans enough.”

When umbrella definition agreement was the mediator, transgender prejudice did not directly predict target categorization. Umbrella definition agreement did positively predict categorization such that higher agreement with umbrella definitions was associated with higher categorization scores (as hypothesized). Moreover, the indirect effect of transgender prejudice on categorization via umbrella definition agreement was moderated by gender essentialism. Specifically, low

| Figure 2 | Moderating Effect of Gender Essentialism on the Relationship Between Transgender Prejudice and Umbrella Definition Agreement |
|----------|--|--|
| Transgender Prejudice | |
| Low (–1 SD) | High (+1 SD) |
| ![Graph](image.png) |
| Note. **p < .01. |

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transgender prejudice predicted higher umbrella definition agreement, which led to a higher categorization, but only for those who are low-to-average in gender essentialism. These results align with work that found that definitions associated with identity were associated with lower prejudice (Anderson, 2022; Buck, 2016). Further, the findings reflect theoretical arguments, such as those by Ekins and King (2006), which assert that these definitions are historically associated with transgender activism and self-advocacy and would thus be associated with lower prejudice and a rejection of gender essentialist views. Although gender essentialism alone did not predict agreement with umbrella definitions, the combination of low prejudice and low gender essentialism predicted greater agreement with umbrella definitions. Additionally, umbrella definition agreement explained the relationship between prejudice and categorization among those with average or below levels of gender essentialism. This not only supported the hypothesis that the types of relationship identified in Ho and colleague's (2015) work on racial categorization may present a framework through which transgender categorization can also be explored, but also identified the specific mechanism of this relationship. For those with lower levels of prejudice and gender essentialism, categorizing targets as transgender appears to be based on conceptions of the category as broad, inclusive, and based on self-identity.

When transnormative definition agreement was treated as a mediator, transgender prejudice and gender essentialism did not predict transnormative definition agreement or target categorization. Transnormative definition agreement was positively correlated with categorization, but this relationship did not persist in the moderated-mediation model. One potential explanation for these findings is that the definition task did not fully measure belief in transnormative beliefs. Transnormative understandings not only center dysphoria and medical transition, but also enforce a hierarchy, which rejects all other narratives and experiences (Johnson, 2016). Umbrella understandings of transgender also recognize binary medical transitions and experiences with dysphoria as important aspects of many transgender people's experiences, just as they also legitimize other experiences. Because participants were not required to choose between definitions or rank them, and because these definitions did not include explicitly exclusionary language, they may not necessarily reflect the exclusionary beliefs associated with transnormativity. This explanation could account for why the results of this aspect of the current study do not reflect those of Buck (2016) and Anderson (2022), who found that higher prejudice was associated with providing definitions, which focused on transition, rather than identity. This focus on transition is one aspect of transnormative definitions, in addition to expectations of binary gender and dysphoria. In Bucks' (2016) study, as well as Anderson's (2022), participants were asked to produce one definition which was likely the one that was most salient to them or the one they agreed with the most. In the current study, however, all participants rated several prewritten definitions and could agree with multiple definitions. A more exclusionary task might have been better suited to measuring exclusionary definitions.

Limitations and Future Directions
The present work sought to understand the processes by which underlying attitudes can influence agreement with transgender definitions and categorizing transgender people. The study is not without limitations in its development and selection of measures. Billard's (2018) Attitudes Toward Transgender Men and Women Scale has been found to have strong validity, but is limited in its ability to evaluate explicit prejudice and does not measure attitudes toward transgender people with nonbinary genders who were represented in the categorization task. Future work could test other forms of transgender prejudice (i.e., implicit bias, ignorance or lack of education of transgender identity), and attitudes toward noncisgender people, to evaluate their relationships with definitional beliefs and subsequent categorization. For this study, definition and categorization tasks were developed by the first author and not pretested. Umbrella and transnormative definitions were based on existing and common conceptualizations of how transgender is defined but did not account for the full range of possible definitions or lay perceptions of the word. For example, some people do not view transgender as a valid category, and believe transgender people to be deceptive or pretending about their gender identity (Beauchamp, 2019). Others may believe that transgender people are confused about their gender identity (Gazzola & Morrison, 2014). In a recent study, Anderson (2022) found that, when people referenced themes of confusion in defining the word transgender, they also reported higher levels of prejudice toward transgender people. Such themes might present an additional category of transgender definitions for testing in follow-up work.

Additional work could also explore the reliability and validity of the categorization task because it was developed for this analysis and was not tested prior to this study. This categorization task also deviates from past literature on transgender categorization in which cisgender participants categorized transgender targets
as either their gender or their gender assigned at birth (Gülgöz et al., 2018; Howansky et al., 2020; 2021; Stern & Rule, 2018), or in which transgender people reflected on feelings or experiences of inclusion and exclusion from the category (Catalano, 2015; Darwin, 2017; 2020; Garrison, 2018). This study was particularly focused on the extent to which cisgender participants regarded a target as transgender or not, which most similarly reflected past research on multiracial target categorization (Blascovich et al., 1997; Chen et al., 2014; Ho et al., 2015). Further evaluation of the categorization procedure could best determine whether targets (that varied by gender identity, gender presentation, gender assigned at birth, and references to medical transitions) were most representative of gender-diverse individuals. The targets developed for this study did not explicitly feature gender dysphoria, an important aspect of transnormativity that could affect people’s responses to target categorization, and the targets did not incorporate other social identities. In particular, transgender people of color have experienced a long and continued history of exclusion from transgender narratives, activism, and support systems (Skidmore, 2011; Snorton, 2017). Categorization could be uniquely influenced by identity multiplicity and intersectionality if gender diverse individuals are perceived as more or less transgender due to other identity factors, like race/ethnicity and socioeconomic status.

Regarding the sample and participants, a large subsample was excluded from analysis because participants failed one or more attention and quality assessments. The increasing presence of bots and MTurk “farmers” required intensive screening measures to identify and locate sources of such low-quality data in MTurk samples (Chmielewski and Kucker, 2020). Additionally, participants who qualified for final data analysis were mostly heterosexual and cisgender. Schudson and colleagues (2019) found that transgender people defined words related to gender, like man or woman, with a greater level of complexity than their cisgender counterparts. Following this work, we could expect that transgender people might differ in their agreement with, and conceptualizations of, transnormative and umbrella definitions. Because of the small proportion of respondents who identified as a label other than cisgender, such differences could not be explored in the current study. This sample limitation is particularly relevant because issues related to definition agreement and categorization have important impacts on acceptance within transgender spaces (Darwin, 2020; Sutherland, 2021). Future work should examine noncisgender perspectives regarding definitions and categorizations of transgender.

Due to the cross-sectional design, the analysis of the current project is limited in its ability to explore causal effects, and future research could experimentally test whether gender essentialism and transgender definitions could influence target categorization. Such research could be modeled after Ching and Xu (2018), who manipulated gender neuroessentialism (a subtype of gender essentialism), by providing fictional articles that attributed sex-based personality and behavior differences on either neurological or social explanations, before evaluating the extent of people’s transgender prejudices. They found that those exposed to the neuroessentialist condition reported higher levels of transgender prejudice compared to those exposed to the condition which also discussed social influences, as well as the control condition. Future work could similarly manipulate gender essentialism experimentally and measure its effects on agreement with different definitions of transgender as well as categorization process.

Implications and Conclusion
This project has laid groundwork for future exploration of perceived transgender categorization. Categorization was the outcome in this study but past work has found that categorization can consequently affect well-being and resilience for transgender people (Barr et al., 2016; Testa et al., 2014). For example, some nonbinary people do not identify with the label “transgender” because of perceived exclusion based on binary and medicalized definitions of the word (Darwin, 2017, 2020). Nonbinary people may also feel pressure to prove that they are “trans enough” in the face of transnormative narratives (Garrison, 2018). Then, categorization benchmarks utilized by medical gatekeepers, like doctors and therapists, could limit how transgender and gender-diverse individuals can access healthcare (Konnelly, 2021; Spade, 2013).

This study’s findings demonstrate lower prejudiced and essentialist attitudes, and umbrella definitional beliefs are positively related to transgender target categorization. To encourage greater transgender inclusion, it is critical to address individual attitudes and how transgender is defined to buffer against deleterious effects associated with categorization. Approaches to transgender categorization have important implications for psychological and physical well-being, healthcare experiences, community building, and activist movements. Wide adoption of umbrella definitions may improve education and intervention efforts to counteract prejudice and essentialist beliefs, and increase inclusion with broader categorization.
References


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Positionality Statement: Angela Bell identifies as a cisgender biracial (Black, White) woman, and is a trained social psychologist from the United States. Both authors acknowledge that, regardless of disclosure, their perspectives are influenced by their positions within dimensions of their identities.

Materials and data for this study can be accessed at https://osf.io/h87qj/.

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Preregistration for this study can be found at https://osf.io/2wvg5. This project was preregistered prior to the collection of any data. There were two changes between the preregistered plan and the final manuscript. First, an additional round of participants were sampled to increase statistical power, and received the same pre-registered materials and procedure. Second, the final analysis used a parallel moderated mediation model, rather than two separate moderated mediation models. This change was a better representation of testing the central research question and subsequently simplified the presentation of results. The analysis for the original separated models are described in the supplementary data analysis files available on OSF.

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