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Understanding Transgender Prejudice Through the Lens of Emotion

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ABSTRACT

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Transgender individuals report facing incidents of discrimination often in all aspects of their lives (James et al., 2016). A potential way to combat the discrimination transgender people face is through reducing transgender prejudice. However, it is not yet known what comprises transgender prejudice. Some research has found that emotions may be the more predominant determinant of prejudice, as opposed to stereotypes (Dasgupta, Desteno, Williams, & Hunsinger, 2009; Haddock, Zanna, & Esses, 1993a; Smith, 1993). Thus, the present research sought to identify the specific emotions associated with transgender prejudice. In Study 1, participants completed explicit and implicit measures of prejudice and measures of basic emotions (e.g., anger, disgust) about transgender men and women. In Study 2, participants completed an online survey of self-reported prejudice and emotions (both primary and secondary) toward transgender men and women. The studies found that more disgust, anger and contempt toward transgender individuals was associated with more prejudice; and more compassion toward transgender individuals was associated with less prejudice. Additionally, the studies found that differential patterns of emotions were associated with transgender individuals compared to cisgender individuals. Overall, the studies provide support that differential emotions are related to transgender prejudice.

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Understanding Transgender Prejudice Through the Lens of Emotion

Recently, the rights of transgender individuals have become a focal point of discussion in the U.S. In 2015, debates and issues around transgender rights reached the national level and a new spotlight of national attention. During that year, former President Barack Obama was the first President to mention transgender individuals in a State of the Union Address, and transgender people, along with their stories, started to be the focal points of major television shows and movies. This trend continued into 2016 with the introduction of several controversial state bills to reduce access for transgender individuals to bathrooms of their self-identified gender. Despite some forward strides in the recognition of transgender individuals and the discrimination they face, transgender individuals continue to report facing incidents of prejudice and discrimination often (James et al., 2016).

A study of 27,715 transgender individuals conducted by the National Center for Transgender Equality (2015) found "disturbing patterns of mistreatment and discrimination and startling disparities between transgender people in the survey and the U.S. population when it comes to the most basic elements of life" (James et al., 2016, p. 2). For example, respondents reported being denied medical services and being physically assaulted or harassed due to being transgender. These experiences were pervasive throughout the lifespan. About 54% of respondents who were viewed as transgender, or were open about being transgender, reported experiencing harassment in grades K-12 from both peers and teachers. Further, 30% of respondents reported workplace harassment or discrimination. Additionally, 40% of the respondents reported attempting suicide previously, at rates nearly nine times the U.S. national average for reported suicide attempts. These data indicate that transgender individuals experience

high levels of discrimination and prejudice within society, which may result in health disparities as well as other negative consequences.

One potential way to combat the discrimination and health disparities transgender individuals face is to reduce prejudice towards transgender individuals. However, to most effectively reduce prejudice, the affective basis (i.e., the specific emotions) underlying negative attitudes toward a group must be identified (Smith, 1993). Interventions can then be designed that specifically target those emotions. To date, relatively little empirical research has focused on transgender prejudice, and none of that research has investigated what negative emotions actually underlie transgender prejudice. The purpose of the proposed project was to identify the negative emotions underlying the prejudice directed toward transgender individuals.

Prejudice as a Construct

The scientific inquiry surrounding prejudice as a construct has generally focused on prejudice as an attitude (Abelson, Kinder, Peters, & Fiske, 1982; Bodenhausen & Moreno, 2000; Haddock, Zanna, & Esses, 1993b; Smith, 1993). That is, prejudice has been defined as the extent to which an individual likes or dislikes a group. Indeed, prejudice is traditionally defined as a negative attitude towards a group, generally an outgroup or a group to which an individual does not belong (Smith, 1993). Identification with one's ingroup (i.e., a group to which one belongs) does not necessarily signify prejudice – rather, when groups are perceived as being in conflict or posing a threat to one another, individuals may be hostile towards an outgroup (Brewer, 1999; Howard, 2000).

Attitudes are generally comprised of affective, cognitive, and behavioral information (Zanna & Rempel, 1988). This model is called the tripartite model of attitudes. In the case of prejudicial attitudes, the affective component entails negative emotions, the cognitive component

consists of group stereotypes, and the behavioral component comprises negative interactions or experiences with the specific group. According to the tripartite model, attitudes vary in the extent to which they are based on affective, cognitive, or behavioral information (Zanna & Rempel, 1988). Traditionally, prejudice was believed to be derived largely from the cognitive base (i.e., stereotypes) rather than the affective or behavioral bases (Abelson et al., 1982; Munro & Ditto, 1997). However, more contemporary research indicates that the affective base is a stronger determinant of prejudicial attitudes (e.g., Edwards, 1990; Haddock et al., 1993a; Munro & Ditto, 1997; Smith, 1993; Smith & Mackie, 2008; Stangor, Sullivan, & Ford, 1991).

Haddock and colleagues (1993) investigated the roles of affective and cognitive bases in prejudice towards gay men and lesbians. They assessed the importance of symbolic beliefs, stereotypic beliefs, and affective reactions in predicting prejudicial attitudes. Symbolic beliefs are the beliefs that outgroups promote or violate ingroup traditions and customs, stereotypic beliefs are beliefs in stereotypes about outgroups, and affective reactions are emotional reactions to different outgroups. Although both stereotypic beliefs and emotional reactions were associated with prejudice, only emotional reactions remained significantly related to prejudice when stereotypic beliefs and emotional reactions were simultaneous predictors of prejudice. Similarly, Stangor and colleagues (1997) investigated prejudice toward a number of social groups (e.g., Asian Americans, Jews) and consistently found that affect was a stronger predictor of prejudicial attitudes than cognitions (i.e., social stereotypes). Thus, in order to effectively predict prejudicial attitudes, affective components must be incorporated into models of prejudice.

Consistent empirical research supports the inclusion of affective components into models of prejudice, and additionally highlights the prominent role of affect in the determination of prejudicial attitudes. Munro and Ditto (1997) studied individual prejudice towards homosexuals,

and whether affective reactions would affect cognitive responses to stereotypic information. Participants were split into two groups – high and low prejudice – depending on their level of prejudice expressed towards homosexuals. Affective reactions mediated both low- and high-prejudiced individuals' cognitive responses to stereotype-consistent and stereotype-inconsistent information. Further, Edwards and von Hippel (1995) examined whether affect- or cognition-based attitudes would be expressed with more conviction by participants. They found that affect-based attitudes were expressed with more conviction compared to cognition-based attitudes. These results highlight the important role affect plays in prejudice and the role of affect in the expression of prejudice.

Due to affect's strong relation to prejudice, there has been a move toward further understanding prejudice through a focus on emotions (Cottrell & Neuberg, 2005; Smith, 1993). Emotion may be a better way of understanding prejudice, as all prejudice is not the same and prejudice tends to be expressed uniquely towards different groups (Brewer, 1999; Cottrell & Neuberg, 2005; Smith, 1993). Therefore, the conceptualization of prejudice as solely a negative attitude functionally washes out the variability in the aspects of prejudice directed towards different groups. Many researchers have found that distinct groups, and the stereotypes of distinct groups, elicit fundamentally different emotional responses (Cottrell & Neuberg, 2005; Smith & Mackie, 2008; Stangor et al., 1991; Tapias, Glaser, Keltner, Vasquez, & Wickens, 2007). For example, a group that is stereotyped as threatening may elicit anger or fear, and a group that is stereotyped as violating moral and ethical values may elicit disgust (Cottrell & Neuberg, 2005; Smith, 1993; Smith & Mackie, 2008). The specific emotion elicited by a group depends on the perceived threat posed by that group and the evolved function of different emotions. As different situational events trigger different emotions, it stands to reason that even

different groups may trigger different emotional responses (Cottrell & Neuberg, 2005; Smith & Mackie, 2008). Therefore, in order to achieve a greater understanding of prejudice, it is imperative to identify the specific negative emotions underlying prejudice.

Emotions

Emotions can be classified as either primary or secondary (Demoulin et al., 2004; Ekman, 1992). Primary emotions are affective reactions that are non-complex – essentially, they are the basic human emotions. These affective reactions are encountered universally, within every culture, and are not specific to human beings (Demoulin et al., 2004; Ekman, 1992; Leyens et al., 2000). Indeed, even non-human animals experience basic emotions (Cottrell & Neuberg, 2005; Ekman, 1992; Leyens et al., 2000). Although some disagreement still exists among researchers, the commonly accepted primary emotions are: fear, anger, disgust, sadness, surprise, and joy (Demoulin et al., 2004; Ekman, 1992). In contrast, secondary emotions are emotions that are linked to the human experience – they are more complex and may be culturally-bound (Demoulin et al., 2004). These emotions may have "evolved to help manage the complexities of the repeated, relatively stable interdependence that characterizes social life" (Cottrell & Neuberg, 2005, p. 772). Secondary emotions (e.g., pride, guilt, contempt, shame, pity, jealousy) are considered more complex than primary emotions (Buck, 1999; Cottrell & Neuberg, 2005; Leyens et al., 2000).

Different emotions, both primary and secondary, are conceptualized as responses to cognitive appraisals. Cognitive appraisals are "ways of perceiving people or events according to evolutionarily significant themes, such as attack, loss, or disease…In addition to physical survival and reproduction, appraisals are attuned to social-moral problems, such as injustice, impurity, and greed" (Tapias et al., 2007, p. 28). Either kind of appraisal (i.e., evolutionary or

social-moral) can be activated by an outgroup, and they are functionally specific much like emotions. For example, an outgroup that is perceived as experiencing unjust situations by a sympathetic ingroup member may engender pity. However, the same outgroup as viewed by an unsympathetic ingroup member would lack the perception of unjustness, and thus the outgroup may elicit anger (Cottrell & Neuberg, 2005; Smith & Mackie, 2008). Differing emotional responses to different outgroups have been analyzed in relation to prejudice, and patterns of emotional responding have been linked to specific groups.

Emotions and Prejudice

Through the conceptualization of emotions as being functionally specific, researchers have started to examine the similarities and differences in emotions expressed toward outgroups. Different social groups tend to elicit patterns of emotional responses particular to their social group, depending upon their societal categorization. In one of the initial studies of emotions underlying prejudice, Cottrell and Neuberg (2005) assessed affective reactions (e.g., anger, disgust, fear, sympathy) towards different groups (e.g., gay men, African Americans, feminists, evangelical Christians). They found that the groups elicited different emotions and each group differed in the amounts of specific emotions they elicited. For example, even though racial minorities as a whole elicited high levels of prejudice (i.e., negative attitudes), each racial group elicited varying emotional responses. Compared to European Americans, African Americans elicited significantly more fear and anxiety, whereas Asian Americans elicited more envy and less fear or anxiety than African Americans. Although groups may be characterized as being part of similar diminished social status (e.g., racial minority groups), the patterns of emotions they elicit may be fundamentally different from one another. The specific emotions elicited by a group depends on the type of threat that group is perceived to pose.

Disgust is a basic emotion that has been attributed to perceptions of particular groups (e.g., gay men). Disgust is posited to have evolved as an emotion to protect people from potential contaminants and infectious disease (Dasgupta et al., 2009; Pizarro, Inbar, & Helion, 2011; Terrizzi, Shook, & Ventis, 2010). Owing to disgust's evolutionary basis, groups that are perceived as violating societal norms of morality, posing a disease threat, or disrupting the standing social order typically elicit disgust (Haidt & Hersh, 2001; Hodson & Costello, 2007; Smith, 1993). Groups that are typically perceived as violating societal norms are those such as sexual minorities, the disabled, and the obese (Hodson & Costello, 2007). Indeed, higher levels of disgust have been consistently linked to increased prejudice towards lesbians, bisexuals, and gay men (Hodson & Costello, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009; Smith, 1993; Terrizzi et al., 2010). Further, disgust is the emotion most often linked to prejudice toward sexual minority groups in larger studies on the etiology of emotions. For example, Cottrell and Neuberg (2005) found that disgust was the strongest predictor of prejudice towards gay men. These findings also extend to implicit measures. Dasgupta et al. (2009) utilized a manipulation to elicit disgust to determine whether specific emotions may impact implicit bias towards lesbians and gay men. Those who underwent the disgust induction displayed more negative attitudes towards lesbians and gay men compared to those who were shown neutral images (e.g., a picture of a chair).

Anger is a basic emotion that is hypothesized to underlie many forms of prejudice. Broadly, anger occurs when a goal is blocked or when there is a perceived injustice, and an individual or group is motivated to attack another or others (Haidt & Hersh, 2001). However, anger may also occur as an associated emotion when groups fulfill certain conditions. Anger is hypothesized to occur in an ingroup-outgroup context "when people confront obstacles and

barriers to their desired outcomes," and thus intergroup anger is likely to occur when the outgroup is seen as a threat to factors such as social coordination, economic resources, or personal freedoms of the ingroup (Cottrell & Neuberg, 2005, p. 773). Anger also tends to occur most strongly when an ingroup perceives themselves as strong, and perceives an outgroup as weak (Smith & Mackie, 2008). Thus, if a group is perceived as receiving "handouts," they may elicit anger (Cottrell & Neuberg, 2005; Smith & Mackie, 2008). Anger is commonly linked to prejudicial evaluations of racial minorities, such as African Americans or Mexican Americans, who are often seen as potential threats to safety and social coordination (Cottrell & Neuberg, 2005). However, nearly all outgroups may be perceived as obstacles in certain contexts, and thus anger may act as an associated emotion in many cases of prejudice (Cottrell & Neuberg, 2005; Smith & Mackie, 2008). Cottrell and Neuberg (2005) hypothesized that anger may act as an associated emotion in the case of sexual minorities – while disgust may be the predominant emotional reaction, anger may also play a part in that sexual minorities may be seen as "promot[ing] values opposing those of the in-group" (Cottrell & Neuberg, 2005). Indeed, they found that gay men did elicit anger, although not as strongly as disgust (Cottrell & Neuberg, 2005).

Fear is another basic emotion that occurs in specific intergroup contexts. Fear may act as a trigger for an individual to follow societal norms and definitions of morality (Haidt, 2003). Further, fear also commonly occurs when outgroups or individuals are perceived to threaten the safety and norms of a group or individual (Cottrell & Neuberg, 2005; Haidt, 2003; Haidt & Hersh, 2001). The fear response also promotes concern about one's self or one's group (Haidt, 2003). It may also underlie many prejudicial reactions as an additional emotion (Smith & Mackie, 2008). Cottrell and Neuberg (2005) hypothesized that fear may predominate when

outgroups present threats to group safety and well-being; and uncertainty of the ingroup may lead to prejudice. Fear is most commonly linked to appraisals of racial minority groups. However, these fear appraisals do not apply uniquely to all racial minority groups – fear seems to be most commonly linked to minority groups that are culturally stereotyped as aggressive (Cottrell & Neuberg, 2005; Tapias et al., 2007). For example, fear is linked to appraisals of African Americans, Mexican Americans, and Muslim Americans; but not Asian Americans, who are typically stereotyped as being a passive "model minority" group (Cottrell & Neuberg, 2005; Lin, Kwan, Cheung, & Fiske, 2005; Tapias et al., 2007).

Expanding to secondary emotions, pity is another emotion associated with prejudice. Cottrell and Neuberg (2005) posited that pity should be involved when individuals in an extended ingroup experience "distress…because they are unable to maintain a reciprocity-based relationship for reasons outside their control (i.e., inability)," and this may motivate the ingroup to encourage altruistic acts that may make the outgroup more likely to be able to reciprocate in future engagements. Thus, if a group is stereotyped as "taking more than they are giving," and are perceived as unable to give back, pity may be elicited (Cottrell, Richards, & Nichols, 2010). Further, pity may also be linked to appraisals of groups that are perceived as being harmed by one's ingroup (Cottrell & Neuberg, 2005). For example, if ingroup members perceive LGBT persons as being willing to contribute to society at large, but also recognize that they are unable to contribute because of laws restricting their rights, ingroup members should experience pity (Cottrell & Neuberg, 2005; Cottrell et al., 2010). Indeed, pity is related to increased support for the rights of LGBT and immigrants (Cottrell et al., 2010).

However, depending on one's perception, a group may be perceived as either a) unable to give back or b) unwilling to give back, which contributes to prejudicial reactions. In the case of

the first scenario, an outgroup will engender pity. But, if an outgroup is perceived as unwilling to give back or preventing themselves from giving back, they may be perceived as ungrateful, which may elicit anger. An example of this contrast may be seen in responses to social programs for the impoverished. Someone who is sympathetic to the poor may advocate for an advancement of a social program that comes at the cost of increased taxation for the advocate, whereas someone who is unsympathetic to the poor may bemoan their getting "handouts" and react angrily to any advancement of a social program that uplifts them at the taxpayer's expense (Cottrell & Neuberg, 2005; Smith & Mackie, 2008).

Envy may also occur in intergroup contexts. Envy is a secondary emotion that is hypothesized to occur when an individual or group is perceived as having something that is a valuable resource (Cottrell & Neuberg, 2005). Envy in a prejudicial context usually occurs when an outgroup obtains a resource that the ingroup previously had, particularly economically, and thus the outgroup possesses a resource that is now unavailable to the ingroup (Cottrell & Neuberg, 2005). Envy is usually linked to prejudice towards minority groups that are seen as competent but emotionally cold (e.g., insular, unwelcoming) towards outgroups, and are also perceived as competing with the ingroup (Glick, 2002; Lin et al., 2005). This emotional coldness is further interpreted as the outgroup being unwilling to share their resources with the ingroup. Common groups that elicit envy in this manner are Asians and Jews (Glick, 2002; Lin et al., 2005).

Ingroup members may also experience guilt towards an outgroup. Guilt may occur when an ingroup recognizes, particularly if told by an ingroup source, that their actions have directly caused the suffering of an outgroup (Cottrell & Neuberg, 2005; Doosje, Branscombe, Spears, & Manstead, 2006; Johns, Schmader, & Lickel, 2005). This recognition of suffering is posited to

threaten ingroup perception of their own morality, and thus the ingroup may then act to confirm their moral standing by performing prosocial acts towards the outgroup (Cottrell & Neuberg, 2005). Amodio and colleagues (2007) investigated the role of guilt in relation to a prejudice situation. They found that Caucasian participants, when confronted with the information that they had behaved in a prejudicial manner towards an African American, would respond with guilt. However, those who felt more guilt had more interest in engaging in reparative behaviors aimed at prejudice reduction (Amodio, Zinner, & Hodson-Costello, 2007).

Compassion is also an important emotion in an intergroup context. Compassion occurs in an intergroup context when an ingroup member recognizes that an outgroup member is suffering or experiencing sorrow (Batson & Shaw, 1991; Haidt, 2003). Compassion urges people to want to reduce the suffering of others, which makes it more of an action-based emotion than pity (Batson, O'Quin, Fultz, & Vanderplas, 1983; Batson & Shaw, 1991; Haidt, 2003). However, compassion is more easily felt for members of one's ingroup than for outgroups (Batson & Shaw, 1991; Haidt, 2003). Thus, those who are more compassionate may be more likely to act to reduce the suffering of outgroups, and thus be less prejudiced. Conversely, those who are less compassionate are even less likely to be compassionate towards outgroups, and thus individuals low in compassion may be more prejudiced towards an outgroup because the outgroup's suffering is not seen as valid (Haidt, 2003).

Finally, contempt is a secondary emotion linked to prejudice. Contempt is hypothesized to fall thematically between anger and disgust (Haidt, 2003). The common definition of contempt is that it involves someone looking down on someone else and perceiving themselves as morally superior (Ekman, 1994; Haidt, 2003; Rozin, Lowery, & Haidt, 1999). Further, contempt is also associated with appraisals of incompetence, in that it may seek to oust those

who are seen as noncontributing to society and are perceived as less capable (Rozin et al., 1999). In this way, contempt is associated with prestige or rank, and the expression of contempt helps to maintain social order (Ekman, 1994; Haidt, 2003). Contempt is hypothesized to paint outgroups as less deserving of respect and more deserving of disregard or mockery, which makes contempt's expression prone to weaken the expression of more prosocial emotions and lead to prejudice (Haidt, 2003; Rozin et al., 1999).

Transgender Research

As emotions are key to understanding prejudice, it becomes imperative to think of new ways to apply this body of work to populations that have not been traditionally studied. Although much scientific inquiry has been made about prejudice towards lesbians, bisexuals, and gay men, comparatively less research has examined the experiences of transgender people (Gerhardstein & Anderson, 2010). Further, the literature commonly does not distinguish between the distinct issues of the transgender population, such as issues of gender expression and identity, as opposed to the issues of lesbians, gay men, and bisexuals (LGB) (Nagoshi et al., 2008). The experiences of transgender individuals, as opposed to LGB, are qualitatively different – and their experiences do not always intersect. In addition to struggles for sexuality-based equality, transgender individuals must also work for rights to be seen legally as their gender. Furthermore, depending upon the transgender person's gender identification, they may not even identify as gay, bisexual, or lesbian. In order to best rectify this gap in research, it is important to first understand the transgender population and the nature of prejudice towards transgender people.

Transgender is an umbrella term that incorporates many varieties of people, including those who cross dress, those who have undergone sexual reassignment surgery to become their desired gender, those who dress as their desired gender but have not undergone sexual

reassignment surgery, and those who feel that neither man nor woman fully encapsulates their gender (Bettcher, 2002; Hill & Willoughby, 2005; Nagoshi et al., 2008; Norton & Herek, 2013). This general term can be broken down further to specify gender identity. Male to female (MTF) transgender individuals, or transgender women, refers to people who were assigned male at birth but identify as female. Female to male (FTM) transgender individuals, or transgender men, refers to people who were assigned female at birth but identify as male. Sexual reassignment surgery is not necessary for identification as MTF or FTM (Bettcher, 2002). Gender identity, or one's sense of self as male, female, or someone outside those binary categories, is important to both the way individuals are perceived by the world and how one perceives the world (Nagoshi et al., 2008).

Like the complex definition of transgender, the prejudice directed towards transgender people by others is similarly nuanced. Hill and Willoughby (2005) hypothesized that transgender prejudice is comprised of transphobia, genderism, and gender bashing. Transphobia is prejudice directed towards those who do not behave in a societally gender-congruent way (Hill & Willoughby, 2005). This may be expressed as a repulsion similar to homophobia, in that those who are transphobic feel repulsed by those who are transgender (Bettcher, 2002; Hill & Willoughby, 2005). However, prejudice towards transgender people differs in fundamentally different ways. Transphobia is not only due to the issue of sexual orientation, it is also due to violations of gender roles and expectations (Bettcher, 2002; Hill & Willoughby, 2005; Nagoshi et al., 2008). Transphobia may also be associated with fear that an individual may be unaware that there are transgender people around them, particularly as potential romantic partners (Bettcher, 2002; Hill & Willoughby, 2005). However, these theoretical emotional links have not been empirically tested in the literature, and it is unknown which emotions actually underlie transgender prejudice.

Genderism is a societal ideology that insists that there are only two genders (i.e., men and women), and that sex and gender are essentially the same construct (Hill & Willoughby, 2005). Genderism is evidenced through a person's rigid avowal of the gender binary, and individuals must inhabit only one category in a gender-congruent way (Bettcher, 2002; Hill & Willoughby, 2005). Any deviation from this binary is considered offensive. Thus, the sex transgender individuals were assigned at birth is considered their "true" gender, and any gender-inconsistent behavior is seen negatively. Behaving in a gender-congruent manner consists of adhering to the gender roles prescribed to one's binary gender assignment (Nagoshi et al., 2008). Those who do not conform to their societally-prescribed gender are considered abnormal and in violation of societal norms (Hill & Willoughby, 2005; Nagoshi et al., 2008). Individuals higher in genderism respond unfavorably when people deviate from traditional gender roles (Hill & Willoughby, 2005; Rudman & Fairchild, 2004). The consequences of genderism, as a whole, are negative for both transgender and non-transgender men and women. When women deviate from gender norms – for example, if they are assertive or directive – they are perceived more negatively than if they behaved in a gender-consistent way (Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman & Fairchild, 2004; Rudman & Glick, 2001). Men who violate gender norms are seen as more ineffectual and perceived more negatively than gender-consistent men (Heilman & Wallen, 2010).

Finally, gender-bashing is "the assault and/or harassment of persons who do not conform to gender norms" (Hill & Willoughby, 2005, p. 534). Gender-bashing concerns activities such as physical assault, teasing, and verbally attacking those who are gender nonconforming. This component of transgender prejudice is particularly concerning, as it involves physical and mental harm. Transgender individuals are disproportionately impacted by hate crimes and violence

compared to LGB and heterosexuals. The National Coalition of Anti-Violence Programs (2013) found that 72% of the victims of hate crime homicides in 2013 were transgender women, particularly transgender women who were racial minorities. Transgender people were also more likely to experience police violence compared to non-transgender individuals, and transgender women were most likely across all heterosexual and LGBT groups to experience sexual violence (National Coalition of Anti-Violence Programs, 2013). Differences exist in how men and women express or endorse genderism and gender bashing, as well as negative attitudes towards transgender individuals. Heterosexual men, on average, report more negative views towards transgender individuals than heterosexual women (Fitzgerald, Pool, & Shook, 2017; Gerhardstein & Anderson, 2010; Nagoshi et al., 2008; Norton & Herek, 2013). Additionally, heterosexual individuals who are higher in genderism (i.e., endorse a gender binary or believe that gender is a biological, innate characteristic) express higher levels of prejudice toward transgender individuals (Hill & Willoughby, 2005; Tee & Hegarty, 2006). Further, heterosexual individuals who are more prejudiced against LGB in general are more likely to express negative attitudes about transgender people (Nagoshi et al., 2008; Norton & Herek, 2013; Tee & Hegarty, 2006).

However, heterosexuals are not the only group that hold negative attitudes toward transgender individuals. Gay men and women also report negative attitudes toward transgender individuals, although less so than heterosexuals (Warriner, Nagoshi, & Nagoshi, 2013). This may be due to the underlying nature of genderism and the difference between sexual orientation and gender diversity. Although LGBT are often lumped together as a group, the issues that LGB face are fundamentally different than the issues that transgender individuals face. Transgender individuals do not have to necessarily be gay – they may also be heterosexual. Rather, issues of

gender identity and sexual orientation underlie prejudice towards transgender people – and thus LGB persons may exhibit prejudice toward transgender individuals due to negativity surrounding their gender identity.

Proposed Research

Recent awareness and acknowledgment of the transgender community highlights the need to understand their experiences, particularly with regard to discrimination. Understanding prejudice toward transgender individuals is the first step in helping to reduce discrimination and combat the disparities in health and quality of life that impact transgender individuals. Previous research has shown that prejudice is not ubiquitous, and it is associated with different emotional responses depending on the target group. However, to date, no previous study has empirically examined the emotions underlying prejudice towards transgender individuals, despite hypothesized potential emotional links. In order to develop interventions to reduce prejudice towards transgender individuals, the negative emotions underlying these negative attitudes need to be identified.

The purpose of the proposed research was to determine which emotions underlie prejudice towards transgender men and women. The first study sought to demonstrate associations between different primary emotions (e.g., fear, anger, disgust) and prejudice towards transgender individuals. Participants completed self-report and implicit measures assessing prejudice. The second study sought to generalize the first study's findings in a broader non-college-student sample, conducted using MTurk. Further, the second study also included a range of secondary emotions in order to both replicate and extend the findings of the first study.

Overall, it was expected that the emotions underlying transgender prejudice would be primarily disgust and to a lesser degree anger. Disgust was hypothesized as the predominant

emotion due to its consistent link with prejudice toward sexual minority groups and its links with violations of societal norms (Haidt & Hersh, 2001; Inbar et al., 2009; Terrizzi et al., 2010). Anger was hypothesized to be a lesser emotion associated with transgender prejudice due to its theorized role of being related to reactions to threats to social coordination (Cottrell & Neuberg, 2005; Haidt, 2003). As transgender individuals stand to threaten existing gender roles, anger may play a role in transgender prejudice. Further, compassion and contempt were hypothesized to be lesser secondary emotions related to transgender prejudice. Compassion and contempt have been consistently linked to prejudicial responding and may be particularly relevant for transgender prejudice due to the unique status of transgender individuals in society (Haidt, 2003; Mackie, Devos, & Smith, 2000). Consistent with the functions of these emotions, the vulnerable status of transgender individuals may engender compassion, whereas those who feel that transgender individuals are abnormal and "beneath them" may feel contempt (Haidt, 2003; Mackie et al., 2000).

Study 1

The purpose of Study 1 was to establish the relation between primary emotions and transgender prejudice. As this was the first time that the emotions underlying prejudice toward transgender individuals were empirically assessed, the study was correlational and used adapted procedures from Cottrell and Neuberg (2005). The study involved explicit and implicit measures of transgender prejudice. Explicit measures were included to assess participant self-reported prejudice, and an implicit measure was included to provide a measure of transgender prejudice that is less affected by response bias. As this was the first examination of emotions related to transgender prejudice, and to reduce participant burden given the relatively lengthy implicit

measure, only the basic primary emotions – sadness, fear, disgust, anger, surprise, and joy – were assessed.

It was expected that the emotions of disgust and anger would be most strongly associated with prejudice towards transgender individuals, compared to the other primary emotions of fear, surprise, sadness, and joy. Thus, it was hypothesized that: 1) disgust would be the predominant emotion associated with transgender individuals, with anger as a lesser related emotion; and 2) participants who reported higher levels of prejudice towards transgender individuals would express higher levels of disgust and anger toward transgender individuals than those lower in transgender prejudice. Further, as an exploratory research question, differences in the responses to transgender men versus transgender women were examined.

Method

Participants

A total of 200 participants were recruited from the West Virginia University Department of Psychology's subject pool, utilizing the online SONA system. Of those, 169 participants completed the study in full. Participants were required to be over the age of 18 to participate in the study. Power analyses were conducted a priori utilizing the computer program G*Power, version 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007). The power analysis determined that a sample size of 150 was necessary to detect a small-to-medium effect size with power = .80 and α = .05. The sample was largely female (77.1% Female, 22.3% Male, 0.1% Other) with a mean age of 20.09 years (*SD* = 4.26). The sample was primarily White (90.4% White, 7.0% Hispanic/Latinx, 7.6% African American/Black, 3.2% Asian, 0.6% Native American, 5.10% Other) and heterosexual (84.1% heterosexual, 1.9% gay male, 1.3% lesbian, 7.6% bisexual, 5.1% Other). All demographic information is presented in Table 1.

Explicit Measures

Feeling Thermometer. Feeling thermometers were utilized to gauge participant attitudes towards the target groups. The participant was asked to indicate on a scale of 1 to 100 how warm (closer to 100) or how cold (closer to 0) they felt about a particular group. Participants slide the thermometer's gauge to display how warm or cold they felt about transgender men and transgender women, as well as several filler groups. In all measures, heterosexual was used in place of cisgender to ensure ease of understanding in participants.

Affective Responses (Cottrell & Neuberg, 2005). This measure assessed the extent to which participants experience different emotions in response to different groups. Participants rated on a scale from 1 (not at all) to 9 (extremely) how extensively they experienced each affective reaction when thinking about a target group and members of that target group. The specific emotions assessed were the basic emotions: anger, disgust, fear, sadness, joy, and surprise. Participants were asked to rate how much they felt each emotion in response to transgender men, transgender women, heterosexual men, and heterosexual women, as well as some filler groups. Heterosexual was used in place of cisgender to ensure ease of understanding in participants.

Genderism and Transphobia Scale (GTS; Hill & Willoughby, 2005). The Genderism and Transphobia Scale (GTS) is a 32-item measure designed to assess the degree of prejudice a participant has towards transgender persons. The original scale established good evidence of internal consistency reliability, discriminant validity, and convergent validity. The scale within the sample indicated good evidence of internal consistency reliability ($\alpha = .96$). A composite was created by reverse-coding all necessary items and taking the average of all items. Higher scores indicate more prejudice toward transgender individuals.

Motivation to Control Prejudice Scale (MCPR; Dunton & Fazio, 1997). This is a 17-item self-report measure that assesses a participant's motivation to inhibit prejudicial responding (e.g., "It bothers me a great deal when I think I've offended someone, so I'm always careful to consider other people's feelings"). This measure was included because a respondent's motivation to conceal their prejudice may result in underreporting prejudicial beliefs, and thus it may be an important covariate in analyses. Participants rate on a scale from -3 (strongly disagree) to +3 (strongly agree) how much they agree with each statement. Cronbach's alpha indicated that reliability across three participant samples ranged from .74 - .77. Higher scores indicate more motivation to respond without prejudice. The scale has two subscales: a) concern with acting prejudiced, and b) restraint to avoid dispute. The scale has established evidence of construct validity and predictive validity with the Modern Racism Scale and self-reports of feelings toward minority groups.

The original Motivation to Control Prejudice Scale refers to African Americans, so the scale was modified to refer to LGBT. This modified scale has been previously employed in an in-lab study, and Cronbach's alpha was .81 (Fitzgerald, Pool, & Shook, 2017). The measure indicated good reliability within the current sample ($\alpha = .72$). Subscales of the measure were created by first reverse coding necessary items, and afterward performing a principal components analysis with Varimax factor rotation limited to two factors. Results of the factor analysis are reported in Table 2**.** Subscales of the measure were used as covariates with other measures. Higher scores indicate greater concern and restraint, respectively.

Demographic questions. Participants were asked to provide their gender, age, marital status, ethnicity, political identification (i.e., liberal or conservative), political party alignment, religious affiliation, frequency of church attendance, level of education, current employment

status, size of the town the participant currently lives in, geographic location, and sexual orientation.

Implicit Measure

Stimuli. To date, there is no image repository that includes pretested images of transgender men and women for research purposes. Thus, online searches were conducted to develop a database of images of transgender men and women for the implicit measure. Images were found predominantly through searches of Creative Commons images on the online photography site Flickr. Creative Commons is a simple means of defining licensure for images on the internet (Creative Commons, 2018). Only images that were allowed to be used and modified in noncommercial work were selected for inclusion. Images were also obtained from a website on transgender issues through email contact with the originator of the images. Images were selected for inclusion if they were facing forward with their entire faces visible.

A total of 54 images of transgender women and 27 images of transgender men were found. These images were then visually matched with cisgender images of the same race, age, weight, and if the person in the image wore glasses or not. Matching images were found utilizing existing databases of cisgender individuals. Images were standardized by: removing the background of all images, adding a standard blue background, resizing to 640 by 480 pixels, and cropping images to standard headshots. Thus, a total of 108 images of women and 54 images of men were developed.

To select images for the implicit measure and to ensure that images were appropriately matched and standardized, all 162 images were pretested in a pilot study. A group of 89 undergraduate students were recruited from the Psychology Department's subject pool (75.3%

female; M_{age} = 19.69 years, *SD* = 2.67; 88% White/Caucasian; 86.5% Heterosexual). All demographic information is presented in Table 3.

First, each participant was presented with 40-42 images (i.e., 13-14 transgender women, 6-7 transgender men, 13-14 cisgender women, and 6-7 cisgender men) in a random order. For each image, participants were asked to rate how attractive, friendly, nice, and approachable they thought the person in the image was on a scale of 1 (Not at all) to 7 (Very). They were also asked to indicate what race they thought the person was, and if they thought the person was of Hispanic or Latino origin. Participants were also asked to indicate how male and how female each image looked on a scale of 1 (Not at all) to 7 (Very). Finally, participants were asked to indicate how old they thought the person was in ranges of 18-25, 25-30, 30-45, 45-60, and 60+.

Next, participants were presented with 41-45 new images (i.e., 13-14 transgender women, 6-7 transgender men, 13-14 cisgender women, and 6-7 cisgender men) one at a time and were asked if they thought the person in each image was transgender (yes or no). Participants were presented with new images, so as to have ratings of whether individuals were transgender or not unrelated to previous trait ratings. Further, it was hoped that it would reduce fatigue by producing novel stimuli as opposed to having participants rate the same stimuli they had seen previously. Thus, participants saw 78-82 images total. A full list of questions are produced in Appendix A. Participants who completed these ratings were not allowed to complete Study 1, as they had seen the images which may have affected their reaction times in the implicit measure.

As there were not enough images of non-white transgender men and women to be equally dispersed across groups in the initial search, images that were indicated as being of non-white individuals, or individuals that were indicated as being of Hispanic/Latinx origin, were removed from the pool. This was done to reduce potential variance due to race, as implicit measure

reaction times vary across target race (Fazio, Jackson, Dunton, & Williams, 1995). From the remaining 131 images, 12 images each of transgender men, cisgender men, transgender women, and cisgender women were selected for a total of 48 images. These images were matched on facial hair (for men only), eyewear, age ranges, and weight.

To ensure that the four image categories did not differ on any of the participant ratings (except for femaleness and maleness), a series of one-way ANOVAs were conducted comparing all four target groups (transgender women, transgender men, cisgender women, cisgender men). Descriptive statistics for each target group are presented in Table 4. The comparisons for attractiveness, femaleness, and maleness violated Levene's test of homogeneity of variances ($p < .001$) and thus the Welch test was used. Attractiveness did not significantly differ across groups, $F(3, 583.38) = 2.23$. Friendliness did not significantly differ across groups, $F(3, 1061) = 1.05$. Niceness did not significantly differ across groups, $F(3, 1061) = .89$. Approachability did not significantly differ across groups, $F(3, 1059) = 1.63$. Not surprisingly, femaleness [$F(3, 520.43) = 771.47$] and maleness [$F(3, 730.13) = 777.06$] significantly differed between groups ($ps < .001$). Women were viewed as more female than men ($ps < .001$). Transgender women were viewed as being less female than cisgender women, and transgender men were viewed as being more female than cisgender men ($ps < .001$). The opposite was true for maleness. Men were viewed as more male than women; transgender women were viewed as more male than cisgender women; and transgender men were rated less male than cisgender men ($ps < .001$). As the four target groups did not differ in attractiveness, niceness, friendliness, and approachability, the 48 images were utilized as stimuli in the implicit task (see Appendix B).

Evaluative Priming Task (Fazio, Jackson, Dunton, & Williams, 1995). The Evaluative Priming Task was utilized as an implicit measure of attitudes (see Figure A for a flow

diagram of the evaluative priming task phases). The task measures the extent to which positivity or negativity are automatically activated when presented with a target image. This task involved several phases in which photographs of relevant groups (e.g., transgender men and women) were presented as primes followed by adjectives that were to be categorized as positive or negative. Reaction times to the word categorization task were recorded to determine whether the primes facilitated (i.e., sped up) or inhibited (i.e., slowed down) responses. If a participant had positive feelings about a target group, then their response speed should be faster to categorize positive adjectives when a photograph of a member of the target group is presented. Conversely, those with positive attitudes toward a group should be slower to respond when a negative adjective follows the presentation of a target member of the group. If the subject had negative attitudes, however, they should be slower to respond to a positive adjective and faster to respond to a negative adjective preceded by a target member of the group.

To conceal the true purpose of the implicit measure, participants were informed that the task assessed their ability to multi-task – to learn faces and categorize words. To maintain this cover story and prepare participants for the primary task, there were several phases to the implicit measure. (Instructions for the task are provided in Appendix C.)

The first phase of the evaluative priming task consisted of the presentation of 12 negative (e.g., annoying) and 12 positive (e.g., attractive, likable) adjectives one at a time. Participants were instructed to categorize the words as good or bad as quickly and accurately as possible. Participants completed two blocks of 24 adjectives (48 trials total). Judgments were ascribed by assigning a computer key to the word “good” and another computer key to the word “bad.” Adjective presentation were randomized, and participants were warned that an adjective would appear by a row of asterisks. Adjectives remained on the screen until the participant responded,

or until a maximum of 1.75 seconds elapsed. Each trial was separated by an interval of 2.5 seconds.

The second and third phases involved preparing participants for the priming task; however, they were presented as learning and detection tasks, respectively, to maintain the cover story. In the second phase, participants were presented with 16 faces one at a time. Participants were instructed to memorize the faces, and that they would be tested on their accurate recall of faces in the next task. Faces remained on the screen for a maximum of 5 seconds. In the third phase, participants were presented with 32 faces one at a time and were asked to indicate "yes" or "no" if they had been presented with each face in the previous phase. Participants saw 16 faces that had appeared previously and 16 new faces. Each face was presented for a maximum of 5 seconds, with a 2.5 second interval separating each trial. These faces were not presented again in later trials.

The fourth phase involved the actual evaluative priming task. Participants were told that the previous tasks were now combined. That is, participants were instructed that the researcher was interested in determining how automatic the judgment of word meaning is. They were told that if word meaning is an automatic skill, the participants should be able to respond just as fast to these trials as they had in previous trials, even if they had to do something else at the same time. Thus, participants were told that this phase of the experiment would task them with learning faces and categorizing the adjectives. Participants were given instructions identical to the first task; however, they were also told to attend to the faces preceding the words because they would be asked to recall them in the next phase. Thus, the asterisks presented in the first phase were replaced by the 48 pretested images of transgender and cisgender individuals. During a trial, participants were presented with one of the images for 315 milliseconds, with a 135

millisecond interval before the target adjective was presented. Participants had 5 seconds to respond to the adjective. A 2.5 second interval separated each trial. An initial block for practice trials was presented first, and then participants completed 4 blocks of 48 trials. Over all 4 blocks, each image was presented with two negative and two positive adjectives. Each individual block consisted of 48 trials, where each of the primes were presented once, and then were followed by one of the 24 negative or 24 positive adjectives.

The fifth phase involved face recall and was the detection task the participants were told would happen during the fourth phase. Participants were presented with the 48 photos of faces they saw in the fourth phase, and 48 new photos of faces they had not seen before in the task. Each photo was presented only once. Participants were told to indicate "Yes" or "No" if they had seen the face before. Each photo appeared until the participant indicated an answer, or until 5 seconds had elapsed. A 2.5 second interval separated each trial.

The sixth phase involved ratings of attractiveness of the images. Participants were asked to rate the attractiveness of each image on a scale of 1 (Not at all attractive) to 9 (very attractive). Each photo appeared on the screen either until the participant rated the photograph, or for 15 seconds. This information was used to determine whether primed photographs differed in attractiveness, which can affect attitudes (Langlois et al., 2000).

The seventh phase involved participants judging each of the presented faces in phase 4 as to whether the participants believed that the person was transgender or not. Participants were instructed to press the "Y" key for "Yes" if they believed the person was transgender, and the "N" key for "No" if they believed the person was not transgender. Faces remained on the screen for 15 seconds, or until a judgement was made.

Before computing scores for the implicit measure, outliers on the fourth phase (e.g., the evaluative priming phase) were identified and excluded if they were above 1500 ms or below 300 ms; as these values are considered too slow and too fast, respectively, to be valid (Hermans, Houwer & Eelen, 2001; Wentura & Degner, 2010). Adjectives were subdivided into positive and negative, and levels of facilitation were computed for each group of adjectives. Afterward, average facilitation scores for positive target adjectives and negative target adjectives were computed for each primed face. These scores were grouped by target group (e.g., transgender men, transgender women, cisgender men, cisgender women). Average negative and positive difference scores were computed for each participant by subtracting average reaction times to negative adjectives for each target group from average positive reaction times for each group. Utilizing these scores, more positive values indicate more negativity toward the target group (e.g., less of a discrepancy between the positive and negative adjective scores).

Procedure

Participants underwent the study within a laboratory setting. Participants were greeted by a research assistant and seated at individual workstations. Eight different research assistants ran the study sessions. The majority of research assistants were female, between the ages of 18 and 22, and Caucasian. Informed consent was obtained, and participants completed the study at private workstations. Participants completed the implicit task first. Then, participants completed the explicit measures in random order (see Appendix D for all measures). Finally, participants completed the demographic questions. Upon completion of the study, participants were thanked and given one extra credit hour for their participation.

Results

Prior to conducting analyses, the data were checked for missingness, outliers, and normal distribution. Participants were excluded from the analysis based on participant characteristics that may have led to decreased attention on the implicit measure (e.g., sleepiness) or circumstances that may have affected results (e.g., trying to rush through the study), which were reported by research assistants conducting the study. Responses were checked to ensure that the data met necessary assumptions for statistical tests, and data were transformed in order to meet a normal distribution if the values for skewness and kurtosis were larger than around 1. For all analyses, variables were either log or square-root transformed to meet the assumption of normality, and all variables were normalized through transformation. Specifically, almost all of the affective reaction variables toward transgender women, transgender men, cisgender women, and cisgender men were positively skewed. Thus, log transformations were used when comparing emotions to other emotions. The only exceptions were joy toward transgender men and happiness toward cisgender women and transgender men. However, these variables were log transformed in order to compare these emotions to the other emotions. Means, standard deviations, and Cronbach's alpha for all measures are presented in Table 5.

Affective Reactions

To determine the predominant affective reactions toward transgender individuals, a 2 (Target Group: Transgender or Cisgender) x 2 (Target Gender: Woman or Man) x 6 (Emotion: Anger, Disgust, Fear, Sadness, Joy, or Surprise) repeated measures ANOVA utilizing a Greenhouse-Geisser correction was conducted. Degrees of freedom vary due to the use of corrections. MCPR was included as a covariate. Log-transformed versions of the emotion variables were all utilized so as to meet the assumptions of the repeated-measures ANOVA. Mauchly's test of sphericity was violated for the main effect of Emotions, the interaction

between Target Gender and Emotions, the interaction between Target Group and Emotions, and the interaction between Target Gender, Target Group, and Emotions (*p*s < .001). Greenhouse-Geisser corrections were used for analyses involving the main effect of Emotions and the interaction between Target Group and Emotions. Huynh-Feldt corrections were used for analyses involving the interaction between Target Gender and Emotions and the three-way interaction between Target Gender, Target Group, and Emotions.

The main effects of Target Gender [$F(1, 142) = 22.63$, $p < .001$, $\eta^2 = .14$)] and Emotion [$F(2.14, 303.60) = 131.66$, $p < .001$, $\eta^2 = .48$)] were significant. There were also significant Target Gender X Target Group [$F(1, 142) = 5.49$, $p = .021$, $\eta^2 = .04$)], Target Gender X Emotion [$F(5.07, 720.56) = 11.64$, $p < .001$, $\eta^2 = .08$)], and Target Group X Emotion [$F(2.89, 410.21) = 42.97$, $p < .001$, $\eta^2 = .23$)] interactions. However, all of these effects were qualified by a significant Target Gender X Target Group X Emotion interaction [$F(4.79, 680.25) = 9.21$, $p < .001$, $\eta^2 = .06$)].

To assess the first hypothesis that disgust and anger would be the predominant emotions associated with transgender individuals, the interaction between Target Group and Emotion was decomposed (see Figure B). Participants reported less anger, joy, and happiness toward transgender individuals than cisgender individuals. Participants reported more surprise toward transgender individuals than cisgender individuals. Participants did not differ in their expressions of disgust, fear, and sadness toward transgender individuals compared to cisgender individuals.

Next, individual emotions were compared within the two groups. As disgust and anger were of direct relevance to hypotheses, their relationships were assessed first. For transgender individuals, disgust was reported significantly more than anger and fear; and significantly less than surprise, joy, and happiness. Anger was reported significantly less than all other emotions

save for fear. Surprise was reported significantly more than fear and sadness. Joy was reported significantly more than all other emotions save for surprise. Fear was reported significantly less than all other emotions save for anger. Sadness was reported significantly less than happiness.

For cisgender individuals, disgust was reported significantly more than sadness; and significantly less than anger, joy, and happiness. Anger was reported significantly more than fear and sadness; and significantly less than joy and happiness. Surprise was reported significantly more than sadness; and significantly less than joy and happiness. Joy was reported significantly less than happiness, and significantly more for all other emotions. Fear was reported significantly less than happiness. Sadness was reported significantly less than happiness.

To explore potential nuances in reactions between transgender men and transgender women, the interaction between Emotions, Target Gender, and Target Group was investigated (see Figure C). Reports of anger did not significantly differ between transgender and cisgender women, but participants reported less anger toward transgender men than cisgender men ($p < .001$). Participants reported significantly more surprise toward transgender men and women than cisgender men and women ($ps < .001$). Participants reported significantly more disgust toward transgender women than cisgender women ($p = .001$), but there was no significant difference in expression of disgust toward transgender men and cisgender men. Participants reported significantly less joy toward both transgender women and transgender men than cisgender men and women ($ps < .001$). Participants reported significantly more fear toward transgender women than cisgender women ($p = .004$), and significantly more fear toward cisgender men than transgender men ($p = .002$). Participants reported significantly more sadness toward transgender women than cisgender women ($p = .041$), but there was no significant difference in sadness reported toward transgender men and cisgender men.

When comparing reactions toward transgender men and transgender women, participants reported less surprise and sadness toward transgender women than transgender men (*p*s < .01). Participants reported less joy toward transgender men than transgender women ($p = .037$). Transgender men and women did not significantly differ on anger, disgust, fear, or happiness.

Next, emotions were compared within transgender men and transgender women in order to determine if there were any differences in expression of emotions toward each groups. For transgender women, participants displayed significantly less anger than surprise, disgust, joy, and happiness (*p*s < .001). Participants displayed significantly more surprise than disgust, fear, and sadness (*p*s < .001). Disgust was reported significantly more than sadness and fear, but significantly less than joy and happiness (*p*s < .01). Joy was reported significantly more than fear and sadness (*p*s < .001). Fear was reported significantly less than happiness ($p < .001$). Sadness was reported significantly less than happiness ($p < .001$).

For transgender men, participants displayed significantly less anger than surprise, disgust, joy, sadness, and happiness (*p*s < .001). Surprise was reported significantly more than disgust, joy, fear and sadness (*p*s < .05). Disgust was reported significantly more than fear, but significantly less than joy and happiness (*p*s < .01). Joy was reported significantly more than fear and sadness, but significantly less than happiness (*p*s < .001). Fear was reported significantly less than sadness and happiness (*p*s < .01). Sadness was reported significantly less than happiness ($p < .001$).

Affective Reactions and Prejudice Correlations

To determine which emotions were most associated with transgender prejudice, bivariate correlations were conducted between individual affective reactions toward each transgender group and the three measures of transgender prejudice (i.e., the feeling thermometer rating, the

GTS, and the evaluative priming task). Motivation to control prejudice (MCPR) was controlled for in all analyses. Correlations between all variables and MCPR is included in Table 6. All partial correlations controlling for MCPR are reported in Table 7. Descriptive statistics for the implicit measure are reported in Table 8.

For transgender women, greater GTS scores were associated with greater anger, surprise, disgust, fear, and sadness. Lower GTS scores were associated with more joy and happiness toward transgender women. Warmer feelings toward transgender women on the feeling thermometer were associated with more joy and happiness, as well as less anger, disgust, fear, and sadness toward transgender women. Feeling thermometers were unrelated to surprise toward transgender women. The difference score for transgender women on the implicit measure was not associated with any of the affective ratings toward transgender women.

For transgender men, greater GTS scores were associated with more anger, surprise, disgust, fear, and sadness toward transgender men. Lower GTS scores were associated with more joy and happiness toward transgender men. Similarly, warmer feelings toward transgender men on the feeling thermometer were associated with more joy and happiness toward them, as well as less anger, disgust, and fear toward them. Feeling thermometers were unrelated to surprise toward transgender men. More positive difference scores on the implicit score (e.g., more positivity toward the target groups) were associated with more surprise.

Evaluative Priming Task Analyses

As the implicit measure of prejudice toward transgender individuals was generally not correlated with affective reactions, additional analyses were conducted to determine whether the evaluative priming task assessed prejudice. First, ratings of whether participants thought a person was transgender were analyzed. On average, participants were able to correctly identify

transgender women as transgender 51.53% of the time, and transgender men as transgender 32.90% of the time. In order to determine if the correct identification percentage for transgender women was significantly different from chance (e.g., 50%), a one-sample T-test was conducted. Participants did not identify transgender women as transgender significantly more than chance (t = 1.380, df = 2019, p = .168). In comparison, participants were able to, on average, correctly identify cisgender women as cisgender 89.61% of the time, and cisgender men as cisgender 94.85% of the time.

To determine if there were differences in reaction time, a 2 (Target Group: Transgender or Cisgender) x 2 (Target Gender: Man or Woman) x 2 (Adjective valence: Positive or Negative) repeated measures ANOVA was conducted. The main effects of Target Group [$F(1, 147) = 4.75$, $p = .031$, $\eta^2 = .03$)], Target Gender [$F(1, 147) = 7.26$, $p < .01$, $\eta^2 = .05$)], and Adjective valence [$F(1, 147) = 70.08$, $p < .001$, $\eta^2 = .32$)] were significant. Participants responded slower to trials with images of transgender individuals than cisgender individuals. Reaction times for trials with images of women were significantly faster than reaction times for trials with images of men. Consistent with previous literature, reaction times for positive adjectives were significantly faster than negative adjectives (Fazio et al., 1995). The interaction between Target Gender and Adjective valence was significant [$F(1, 147) = 7.24$, $p < .01$, $\eta^2 = .05$)]. Individuals responded significantly faster to female primes than male primes on positive adjectives, which is consistent with previous literature (Fazio et al., 1995). However, none of the interactions with Target Group were significant (ps > .05). Thus, there was no evidence of a prejudicial response pattern to transgender individuals.

Discussion

The goal of Study 1 was to identify which primary emotions are associated with prejudice toward transgender individuals. According to the first hypothesis, disgust was expected to be the predominant emotion associated with transgender individuals compared with cisgender individuals, and anger was expected to be a lesser related emotion. A comparison of affective responses toward transgender and cisgender individuals found that individuals reported more surprise and less positive emotions (e.g., joy and happiness) toward transgender individuals than cisgender individuals. Differences in surprise may be due to individuals being generally surprised to discover someone around them is transgender. Differences in reports of negative emotions toward transgender individuals compared to cisgender individuals may be due to participants having more negativity toward transgender individuals than cisgender individuals. However, disgust and anger did not differ between reactions to transgender or cisgender individuals. Thus, it does not appear that the hypothesis was confirmed.

Still, it should be noted that when comparing emotions within transgender groups, positive emotions were reported significantly more than negative emotions. This may be due to a reluctance to report less-positive emotions toward transgender individuals – social desirability bias. Further, as the inclusion of the MCPR affected analyses, it appears that participants were perhaps motivated to control their responding in order to appear less biased. As such, the lack of support for the first hypothesis may be due to response bias.

However, when emotions were compared between transgender men and transgender women, there was some evidence that disgust and anger were important. Participants reported more disgust toward transgender women than cisgender women, but there was no difference in disgust when comparing transgender men and cisgender men. This may be because transgender women are often the focus of transgender issues, compared to transgender men. Reports of anger

did not differ between transgender and cisgender women, but cisgender men received more anger than transgender men. As the sample was largely female, and more anger was expressed toward cisgender individuals overall, this may indicate more anger to the cisgender out-group (e.g., men) as opposed to the cisgender in-group (e.g., women).

The second hypothesis was that participants who reported higher levels of prejudice towards transgender individuals would express higher levels of disgust and anger toward transgender individuals. Greater prejudice toward transgender individuals as assessed by the explicit measures was associated with greater disgust, anger, fear and sadness, as well as less joy and happiness. These findings were true for both transgender men and transgender women. Thus, the second hypothesis was confirmed, as disgust and anger were related to transgender prejudice. Overall, more negative emotions were associated with more prejudice, and more positive emotions were associated with less prejudice.

The implicit measure of prejudice was generally not associated with the emotions toward transgender men or women. It could be that implicit prejudice toward transgender individuals is not associated with self-reported emotions. However, after examining the implicit measure, there did not seem to be evidence of a pattern of biased responding toward transgender individuals. This is most likely due to the exceedingly low rates of transgender individuals being correctly identified as transgender – transgender women were identified as such barely over half of the time and not at a rate better than chance levels, and transgender men only around a third of the time. This stands in stark comparison to cisgender accuracy ratings – cisgender women were correctly identified around 90 percent of the time, and cisgender men around 95 percent of the time. This finding may potentially explain why a pattern may not exist – perhaps, when individuals are viewed as "passing," there is no biased pattern of responding.

Study 2

The purpose of the second study was to replicate and extend the findings from Study 1 in a non-college sample. Thus, the second study was conducted online utilizing Amazon's Mechanical Turk (MTurk), an online survey platform through Amazon that allows researchers to pay individuals for participating in online research. The study further included secondary emotions (e.g., contempt), as well primary emotions, that may potentially be related to prejudice. Specifically, the emotions included were anger, disgust, sadness, fear, joy, surprise, pity, envy, guilt, compassion, resentment, anxiety, respect, happiness, hurt, pride, security, and contempt. Two secondary emotions were hypothesized to be linked to transgender prejudice – compassion and contempt. Specifically, compassion towards transgender individuals was expected to be related to less prejudice, and contempt was expected to be related to more prejudice. Thus, it was hypothesized that: 1) of the secondary emotions, contempt and compassion would be the strongest affective reactions to transgender individuals; 2) those high in transgender prejudice would express higher levels of disgust and anger towards transgender individuals; and 3) compassion would be negatively related to transgender prejudice, whereas contempt would be positively related to transgender prejudice. As in Study 1, responses to transgender men versus transgender women were explored.

Method

Participants

A total of 236 participants were recruited through Amazon's Mechanical Turk (MTurk). MTurk allows researchers to recruit participants and compensate them for completing studies. Participants were limited to those in the United States so as to limit potential variability that arises from including other countries that may have different norms about gender and sexuality.

Participants were also required to be over the age of 18. The resulting sample was primarily female (59.8% female, 39.7% Male, 0.5% Other) with a mean age of 34.96 years (*SD* = 12.103, range: 19 – 72). With regard to race and ethnicity, 60.2% of participants identified as White, 9.7% as Black, 8.1% as Asian, 8.1% as Hispanic/Latinx, 0.8% as Native American, and 0.4% as Other. The sample was largely heterosexual (88.3% heterosexual, 3.7% Lesbian, 7.5% Bisexual, 0.5% Other). All demographic variables for the sample are reported in Table 9.

Measures

Participants completed the same measures in as in Study 1. Specifically, participants completed the affective reaction questionnaires, the Motivation to Control Prejudice Scale, the Genderism and Transphobia scale, the feeling thermometers, and demographic questions. However, participants did not complete the implicit measure due to the difficulty in ensuring proper implementation of an implicit measure in an online setting. Additionally, the affective reaction questionnaires included a range of secondary emotions, and the demographic questions included several items designed to better fit the older age of the MTurk sample as compared to the SONA sample in Study 1.

Feeling Thermometer. Feeling thermometers were utilized to gauge participant attitudes towards the target groups. The participant is asked to indicate on a scale of 1 to 100 how warm (closer to 100) or how cold (closer to 0) they feel about a particular group. Participants slide the thermometer's gauge to display how warmly or coldly they feel about a particular group.

Affective Reactions. In addition to the affective reactions assessed in Study 1, the secondary emotions of pity, envy, guilt, compassion, resentment, anxiety, respect, happiness, hurt, pride, security, and contempt were included. This widening was to further expand the

emotions potentially associated with prejudicial reactions, replicate the results from Study 1 in a non-college-student sample, and further build upon Study 1.

Motivation to Control Prejudice Scale (MCPR; Dunton & Fazio, 1999). This 17-item scale ($\alpha = .79$) assesses a participant's motivation to inhibit prejudicial responding (e.g., "It bothers me a great deal when I think I've offended someone, so I'm always careful to consider other people's feelings"). This measure was included because a respondent's motivation to conceal their prejudice may result in underreporting prejudicial beliefs, and thus it may be an important covariate in analyses. On the measure, participants rate on a scale from -3 (strongly disagree) to +3 (strongly agree) how much they agree with a particular statement. As in Study 1, principal components factor analysis with Varimax factor rotation was used to generate two subscales: concern with acting prejudiced, and restraint to avoid dispute. Results of the factor analysis are reported in Table 10**.** Subscales of the measure were used as covariates with other measures.

Genderism and Transphobia Scale (GTS; Hill & Willoughby, 2005). The Genderism and Transphobia Scale is a 32-item measure ($\alpha = .97$) designed to assess the degree of prejudice a participant has towards transgender persons (e.g., "It's alright to make fun of people that cross-dress"). Responses are on a scale of 1 – 7, with higher scores indicating more prejudice.

Demographic questions. In addition to the demographics assessed in Study 1, participants were asked to indicate their household income, education level, home state, and number of children. This was due to the older age of the sample.

Procedure

Participants completed the survey online utilizing Amazon's Mechanical Turk. The questionnaires were created through Qualtrics and were randomized, except for the

demographics questions which appeared at the end of the study. After participants completed the survey, they were compensated $1.25.

Results

Before analyses were conducted, the data were checked for missingness, outliers, and normal distribution. Little's MCAR test was non-significant, indicating that the data were missing completely at random. Specifically, responses were checked to ensure that the data met necessary assumptions for statistical tests. Data were transformed in order to meet a normal distribution if the values for skewness and kurtosis were larger than around 1. Most of the emotions toward transgender women, transgender men, cisgender women, and cisgender men were non-normally distributed. All of the emotion variables were log transformed to meet the assumption of normality and for comparison. Means, standard deviations, and alphas for explicit prejudice measures are reported in Table 11. Means and standard deviations for affective reactions are reported in Table 12.

Affective Reactions

To determine the predominant affective reactions to transgender individuals, a 2 (Target Group: Transgender or Cisgender) x 2 (Target Gender: Woman or Man) x 18 (Emotion: Anger, Disgust, Fear, Sadness, Joy, Surprise, Pity, Envy, Guilt, Compassion, Resentment, Anxiety, Respect, Happiness, Hurt, Pride, Security, or Contempt) repeated measures analysis of variance was conducted. Analyses were conducted with the transformed and non-transformed versions of the variables. The pattern of results did not differ, so the original versions of variables are reported for ease of interpretation. The MCPR was included as a covariate.

Mauchly's test of sphericity was significant for the main effect of Emotions, the interaction between Target Gender and Emotions, the interaction between Target Group and

Emotions, and the interaction between Target Gender, Target Group, and Emotions (*p*s < .001). Thus, the assumption of sphericity was violated for these analyses and the Greenhouse-Geisser correction was used for them. Degrees of freedom vary due to the use of corrections.

The main effects for Target Group [$F(1, 160) = 10.63$, $p = .001$, $\eta^2 = .06$)] and Emotion [$F(3.09, 494.08) = 85.14$, $p < .001$, $\eta^2 = .35$)] were significant. The interaction between Target Gender and Emotion was significant [$F(8.42, 1347.78) = 11.16$, $p < .001$, $\eta^2 = .07$)]. The interaction between Target Group and Emotions was also significant [$F(2.81, 449.87) = 29.84$, $p < .001$, $\eta^2 = .16$)]. Finally, the interaction between Target Gender, Target Group, and Emotion was significant [$F(8.09, 1294.36) = 6.53$, $p < .001$, $\eta^2 = .04$)].

To determine the differences in affective reactions toward transgender and cisgender individuals, the significant Target Group X Emotion interaction was decomposed (see Figure E). Participants reported significantly more security, pride, respect, envy, joy, and happiness toward cisgender compared to transgender individuals (*ps* < .001). Participants reported significantly more surprise, disgust, pity, and sadness toward transgender compared to cisgender individuals (*p*s < .01). There were no significant differences in reported anger, hurt, anxiety, contempt, fear, guilt, compassion, and resentment.

To further determine differences in emotions, individual emotion differences were compared within each group. First, emotion differences for transgender individuals were assessed. As disgust, anger, compassion, and contempt are of interest to hypotheses, only these differences will be reported. For transgender individuals, disgust was reported significantly more than anger, hurt, anxiety, envy, contempt, guilt, sadness, and resentment; and significantly less than surprise, respect, and compassion (*p*s < .001). Anger was reported significantly more than hurt, envy, fear and guilt; and significantly less than security, pride, surprise, respect, joy,

happiness, and compassion (*p*s < .05). Contempt was reported significantly more than hurt, envy, fear, guilt, and resentment; and significantly less than security, surprise, respect, pity, joy, happiness, and compassion (*p*s < .05). Compassion was reported significantly more than all other emotions save for respect (*p*s < .001).

Next, emotion differences for cisgender individuals were assessed. Disgust was reported significantly more than guilt; and significantly less than security, pride, surprise, anxiety, respect, contempt, joy, happiness, and sadness (*p*s < .05). Anger was reported significantly more than pity and guilt; and significantly less than security, pride, anxiety, respect, contempt, joy, happiness, and compassion (*p*s < .001). Contempt was reported significantly more than hurt, pity, fear, guilt, sadness, and resentment; and significantly less than security, pride, respect, joy, happiness, and compassion (*p*s < .05). Compassion was reported significantly less than happiness and respect; and significantly more than all other emotions save for security and joy (*p*s < .05).

To investigate the exploratory research question of whether emotional reactions would differ between transgender men and transgender women, the significant Target Group X Target Gender X Emotion interaction was decomposed (see Figure F). Participants reported significantly more anger, surprise, disgust, pity, sadness, and resentment toward transgender women compared to cisgender women (*p*s < .05). Participants reported significantly less security, pride, respect, envy, joy, happiness, and compassion toward transgender women compared to cisgender women (*p*s < .001). There were no differences between transgender women and cisgender women on reported hurt, anxiety, contempt, fear, and guilt. For men, participants reported more surprise, disgust, pity, and sadness toward transgender men compared to cisgender men (*p*s < .01). Participants reported less security, pride, respect, envy, joy, fear, and happiness toward transgender men compared to cisgender men (*p*s < .01). There were no

differences between transgender men and cisgender men on anger, hurt, anxiety, contempt, guilt, compassion, and resentment. Furthermore, none of the eighteen emotions significantly differed between the transgender women and transgender men.

Next, emotions were compared within transgender men and women to determine the predominant emotions toward each group. For transgender women, disgust was reported significantly more than anger, hurt, anxiety, envy, contempt, fear, guilt, sadness and resentment (ps < .01). Disgust was reported significantly less than surprise, respect, and compassion (ps < .01). Anger was reported significantly more than hurt, envy, fear, guilt, and resentment (ps < .05), and significantly less than security, pride, surprise, respect, pity, joy, happiness, and compassion (ps < .01). Contempt was reported significantly more than hurt, envy, fear, guilt, and resentment, and significantly less than security, pride, surprise, respect, pity, joy, happiness, and compassion (ps < .05). Finally, compassion toward transgender women was reported significantly more than all emotions save for respect (ps < .01).

For transgender men, disgust was reported significantly more than anger, hurt, anxiety, envy, contempt, fear, guilt, sadness, and resentment (ps < .01), and significantly less than surprise, respect, and compassion (ps < .05). Anger toward transgender men was reported significantly more than hurt, envy, fear, and guilt (ps < .05), and significantly less than security, respect, pity, joy, happiness, and compassion (ps < .05). Contempt was reported significantly more than hurt, envy, fear, guilt, and resentment (ps < .05), and significantly less than security, respect, pity, joy, happiness, and compassion (ps < .01). Compassion toward transgender men was reported significantly more than all other emotions save for respect (ps < .05).

Affective Reactions and Prejudice Correlations

To determine which emotions are associated with prejudice toward transgender individuals, bivariate correlations were conducted between the explicit measures of transgender prejudice (i.e., GTS and feeling thermometer ratings) and the affective reactions toward both transgender groups. Correlations between all variables and MCPR is included in Table 13 for transgender women, and Table 14 for transgender men. Correlations with MCPR as a covariate are included in Table 15 for transgender women, and Table 16 for transgender men.

More transgender prejudice on the GTS was associated with more anger, hurt, disgust, anxiety, pity, envy, contempt, fear, guilt, sadness, and resentment toward transgender women. Less transgender prejudice on the GTS was associated with more feelings of security, respect, happiness, and compassion toward transgender women. Pride and joy toward transgender women were unrelated to transgender prejudice on the GTS. More warm feelings toward transgender women were significantly associated with feelings of more security, pride, respect, joy, happiness, and compassion toward transgender women (*p*s < .001). More cold feelings toward transgender women were associated with more anger, hurt, disgust, pity, sadness, and resentment (ps < .05). Feeling thermometers about transgender women were not significantly associated with surprise, anxiety, fear, and guilt.

More transgender prejudice on the GTS was associated with more anger, hurt, surprise, disgust, anxiety, pity, envy, contempt, fear, guilt, sadness, and resentment toward transgender men. Less transgender prejudice on the GTS was associated with more security, respect, happiness, and compassion toward transgender men. Transgender prejudice on the GTS was unrelated to pride and joy toward transgender men. For transgender men, more warm feelings toward transgender men were associated with more security, pride, respect, joy, happiness, and compassion (ps <.05). More cold feelings toward transgender men were associated with more

anger, hurt, surprise, disgust, anxiety, pity, and resentment (ps <.05). Feeling thermometers toward transgender men were not associated with envy, contempt, fear, and guilt.

Discussion

The aim of Study 2 was to extend and replicate the findings from Study 1. In particular, secondary emotional reactions toward transgender men and women were assessed. Differences were found in the affective reactions toward transgender individuals and cisgender individuals when comparing reported affective reactions. Specifically, participants reported more anger, surprise, disgust, pity, sadness, and resentment toward transgender individuals than cisgender individuals. This is somewhat consistent with Study 1, in that participants in Study 1 reported more surprise toward transgender individuals; but reports of anger, disgust, and sadness varied across target group, which was not true in Study 1. This may be due to Study 2's sample being more representative of the population by being a non-college, older sample. However, the differences in disgust and anger are consistent with the original hypothesis in Study 1. Also similar to Study 1, participants reported more positive emotions (e.g., security, pride, compassion) toward cisgender individuals than transgender individuals. These consistencies in two different samples strengthen the conclusion that these patterns are indicative of true affective reactions to transgender individuals – meaning, disgust is strongly associated with transgender prejudice and individuals attribute more positive emotions to cisgender individuals (e.g., the ingroup) than transgender individuals (e.g., the outgroup).

It was hypothesized that contempt and compassion, of the secondary emotions, would be the most related to transgender prejudice (Hypothesis 1). However, this hypothesis was not supported. Regarding contempt, this may be due to participants reporting less negative emotions than positive emotions toward transgender individuals. Participants may have been reluctant to

report negative emotions toward transgender individuals and appear biased. Indeed, inclusion of the MCPR affected analyses, meaning individuals were motivated to conceal their prejudice. Regarding compassion, compassion was reported highly, second only to respect, when comparing emotions. Compassion may be rated less than respect because respect may be more culturally evoked than compassion, as compassion requires an acknowledgement of a group's marginalized place in society and a sympathy for their position (Batson & Shaw, 1991; Haidt, 2003). Thus, it is probably more likely that respect will be reported than compassion, as compassion requires more of a lack of prejudice (Batson & Shaw, 1991; Haidt, 2003).

Hypothesis 2 posited that disgust and anger would be strongly positively related to transgender prejudice. Indeed, for both transgender men and women, disgust and anger reactions were associated with greater transgender prejudice. Hypothesis 3 held that contempt would be related to more transgender prejudice and compassion to less transgender prejudice. This hypothesis was confirmed. Contempt was related to more transgender prejudice, and compassion was related to less transgender prejudice. Similar to study 1, negative emotions were more related to prejudice, and positive emotions were less related to prejudice; thus strengthening the findings in Study 1.

General Discussion

The current research aimed to ascertain the particular affective bases underlying transgender prejudice. When separating primary and secondary emotions, it was predicted that the primary emotions of disgust and anger would be the most related to transgender prejudice, and compassion and contempt would be the secondary emotions most related to transgender prejudice. Study 1 was an in-lab correlational study that utilized both explicit and implicit measures of prejudice, in addition to assessing primary emotional reactions to four target groups

(e.g., transgender women, transgender men, cisgender women, and cisgender men). Study 2 was an online study conducted through Amazon's Mechanical Turk that utilized explicit measures and assessed 18 primary and secondary emotions toward the four target groups. Across both studies, as hypothesized, disgust, anger, and contempt were related to more transgender prejudice; and compassion was related to less transgender prejudice. However, the studies did not find that any of the four hypothesized emotions were the most predominantly related to reactions to transgender individuals.

Disgust is theorized to be elicited when groups pose a threat to the standing social order (Hodson & Costello, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009; Smith, 1993; Terrizzi et al., 2010). Disgust was hypothesized to be positively related to transgender prejudice, in that individuals who expressed more disgust toward transgender individuals would evidence higher scores on prejudice measures. This finding, across both studies, was supported. This is consistent with previous studies that have found disgust to be related to prejudice toward lesbians and gay men (Hodson & Costello, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009; Smith, 1993; Terrizzi et al., 2010).

Disgust was also hypothesized to be the emotion most strongly experienced in response to transgender individuals. However, across both studies, disgust did not emerge as the quantitatively strongest emotional response to transgender individuals when comparing emotional responses across target groups (e.g., transgender, cisgender) and target genders (e.g., male, female). However, there were differences within groups regarding disgust, and disgust was expressed differentially within both samples. In Study 1, there was no difference in disgust reported toward transgender and cisgender individuals overall. When further exploring this finding, it was discovered that participants reported significantly more disgust toward

transgender women compared to cisgender women, but there was no difference between transgender men and cisgender men. In Study 2, participants reported significantly more disgust toward transgender individuals than toward cisgender individuals overall. This finding is consistent with previous findings that disgust is related to prejudice toward lesbians and gay men (Haidt & Hersh, 2001; Inbar et al., 2009; Terrizzi et al., 2010). This difference in results between studies may be due to differences in the samples – Study 1's sample was comprised of college students located at one university, whereas Study 2 was an online study comprised of individuals across the United States. Further, the sample in Study 1 was comprised of mostly women as opposed to a more equal ratio between men and women in Study 2's sample. Thus, Study 2's sample may be more representative of the population than Study 1's sample. Meaning, Study 1's college student sample may have been more homogenous, masking true effects (Peterson, 2001).

Anger is an emotion largely related to social coordination, and may be elicited when a group is seen as promoting values contrary to those in the ingroup (Cottrell & Neuberg, 2005; Smith & Mackie, 2008). Anger was hypothesized to be positively related to transgender prejudice, in that individuals who expressed more anger toward transgender individuals would report more transgender prejudice. This finding was supported across both studies. As issues relating to transgender identity not only incorporate sexuality, but also issues of genderism, the values of transgender individuals may be seen by some as being contrary to their own ingroup's values (Bettcher, 2002; Hill & Willoughby, 2005; Nagoshi et al., 2008).

Anger was also hypothesized to be a lesser emotion, compared to disgust, that was evoked in response to transgender individuals. In Study 1, participants reported less anger toward transgender individuals than cisgender individuals. This finding may have been driven by the difference in reports of anger toward transgender men compared to cisgender men – transgender

men received significantly less anger than cisgender men, but there was no difference in anger toward transgender and cisgender women. As the sample was largely female, and participants reported more anger toward cisgender individuals, participants may have been more apt to report more anger toward the cisgender out-group (e.g., men) than the in-group. In Study 2, there was no difference in anger reported toward transgender individuals and cisgender individuals. However, anger differed between genders – more anger was reported toward transgender women than cisgender women, but there was no difference in anger reported toward transgender and cisgender men. It is hard to speculate on differences between the studies, as the findings are inconsistent across studies and are specific to separate genders. The findings of these studies are somewhat in contrast to Cottrell and Neuberg (2005), who found that anger was related to reactions to sexual minority groups. However, Cottrell and Neuberg (2005) did not include any positive emotions in their study, so the results are not directly comparable.

Study 2 examined the secondary emotions of contempt and compassion in relation to transgender prejudice. Contempt was hypothesized to be positively related to transgender prejudice, in that individuals with more transgender prejudice would report more contempt. Compassion was hypothesized to be negatively related to transgender prejudice, in that individuals who reported less transgender prejudice would report more compassion. These findings were supported.

Contempt and compassion were further hypothesized to be the secondary emotions most strongly experienced in response to transgender individuals. Contempt is hypothesized to weaken more prosocial emotions and lead to prejudice, as its expression advocates looking down on others (Ekman, 1994; Haidt, 2003; Rozin, Lowery, & Haidt, 1999). There was no difference in contempt across target groups and target genders. As contempt is a negative emotion, these

reports may be due to social desirability bias. However, the results may indicate that contempt is not expressed toward transgender individuals, as their identity may not evoke the moral superiority necessary for contempt (Ekman, 1994; Haidt, 2003; Rozin, Lowery, & Haidt, 1999). Compassion is a prosocial emotion that drives individuals to want to reduce the suffering of others (Batson, O'Quin, Fultz, & Vanderplas, 1983; Batson & Shaw, 1991; Haidt, 2003). When comparing affective reactions within transgender men and women, compassion was reported significantly more than all other emotions save for respect for both transgender men and women. Thus, the hypothesis was not supported in that the emotion of respect was reported more than compassion. However, compassion was still highly reported when compared to other emotions.

Surprise was an emotion consistently linked to transgender prejudice. In both Study 1 and Study 2, participants constantly reported more surprise toward transgender individuals compared to cisgender individuals. However, surprise is not necessarily a positive nor negative emotion, and it may be linked to a general non-familiarity with transgender individuals or the unexpectedness of encountering someone transgender (Roseman, 1998). For example, participants may be surprised to learn that a person around them is transgender. This surprise may engender positive or negative emotions, but surprise is not necessarily an emotion that can be characterized as positive or negative unilaterally (Roseman, 1998).

Across both studies, participants consistently reported more prosocial emotions (e.g., joy, happiness) compared to more negative emotions (e.g., disgust, anger) toward transgender women and men. Moreover, in study 2, respect was the emotion most reported toward transgender men and women. This is important to note, as it may indicate a larger trend toward more positive views toward transgender individuals. Further, inclusion of the MCPR affected results – meaning, participants were indeed motivated to control their prejudice. Thus, the lack of support

for disgust, anger, and contempt as the predominant emotions associated with transgender prejudice may be due to an expression of social desirability bias – individuals may not have wanted to report their true levels of affective responding toward transgender individuals, as they may not have wanted to respond in a way they would considered bigoted. This motivation is not solely due to external motivation – it may also be due to internal motivations to see oneself as non-prejudiced (Dunton & Fazio, 1997). Within both studies when comparing emotions, motivation to control prejudice exhibited a significant effect on results, meaning individuals were indeed motivated to control their prejudicial responding. Conversely however, individuals responding may associate more positive emotions with transgender individuals than negative emotions. As issues of transgender rights and identity are often in the media in the United States currently, participants may have a greater understanding of issues affecting the transgender community and thus may be more positive toward them.

As a secondary research question, affective responses to transgender men and women were compared to determine if there were any differences. To the researcher's knowledge, there have been no studies that have empirically studied if there are differences in responses toward transgender men and women. However, given that much of the issues in the media around transgender rights mostly surround transgender women (e.g., bathroom bills) and transgender men to a lesser degree, the question was of interest. In Study 1, participants reported significantly more surprise and sadness toward transgender women than transgender men. However, in Study 2, there was no difference in affective reactions between transgender men and women. As these results are inconsistent, it is hard to draw conclusions as to whether differences exist in reactions toward transgender men and women. The inconsistencies may be due to differences between the samples, but also may be due to the fact that these affective reactions

were correlational and thus divorced from the larger context in which transgender individuals exist. When explicitly reporting differences in reactions between transgender men and women, individuals may report no difference, but in interacting with transgender individuals in their day-to-day lives, participants may express differential reactions toward transgender men and women.

The current studies were limited in that they were largely correlational, as they sought to gain a foundational understanding of the emotions underlying transgender prejudice. Future studies can rely on experimental manipulation in order to directly assess the link between transgender prejudice and particular emotions. Further, the implicit measure in the first study did not detect a pattern of prejudicial responding toward transgender individuals. However, this may be due to individuals not being able to detect whether images were of transgender individuals or not. Only around one-third of transgender men were correctly identified as such, and only a bit over half of transgender women were identified as such; the latter finding not being significantly better than chance. Future studies should investigate this link and determine if differences in responding are determined for "passing" (e.g., not being seen as transgender) transgender individuals as opposed to non-passing transgender individuals. Moreover, explicit measures may court social desirability bias – individuals may have been motivated to respond in such a way that they report being less prejudiced than they truly are. Future studies should rely on more experimental, rather than cross-sectional, measures to hopefully counteract this bias.

The current study illustrates that all prejudice is not ubiquitous – transgender prejudice has distinct correlates of emotions. As issues of transgender rights become more prominent in the United States and worldwide, it becomes imperative to focus on transgender prejudice. By focusing on transgender prejudice, researchers can help to alleviate or potentially mitigate some of the barriers that transgender individuals may encounter. To the researcher's knowledge, this

study is the first to study the affective bases of transgender prejudice, and the first to develop an implicit measure designed to assess transgender prejudice. This study lays the crucial groundwork for developing further research designed to assess, and in the future reduce, prejudice toward transgender individuals.

References

Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. (1982). Affective and Semantic Components in Political Person Perception, *Journal of Personality and Social Psychology, 42*(4), 619–630. doi: 10.1037/0022-3514.42.4.619

Amodio, D. M., Zinner, L. R., & Harmon-Jones, E. (2007). Social psychological methods of emotion elicitation. *Handbook of Emotion Elicitation and Assessment*, (91), 91–105. doi:10.2224/sbp.2007.35.7.863

Batson, C. D., O'Quin, K., Fultz, J., & Vanderplas, M. (1983). Influence of self-reported distress and empathy on egoistic versus altruistic motivation to help. *Journal of Personality and Social Psychology, 45*(3), 706–718. doi:10.1037/0022-3514.45.3.706

Batson, C. D., & Shaw, L. L. (1991). Evidence for altruism: Toward a pluralism of prosocial motives. *Psychological Inquiry*, *2*(2), 107–122. doi:10.1207/s15327965pli0202_1

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk, 351–368. doi:10.1093/pan/mpr057

Bettcher, T. M. (2002). Evil deceivers and make-believers: On transphobic violence and the politics of illusion. *Hypatia, 22*(3), 43–66. doi:10.1111/j.1527-2001.2007.tb01090.x

Bodenhausen, G. V, & Moreno, K. N. (2000). How do I feel about them? The role of affective reactions in intergroup perception. In H. Bless & J. P. Forgas (Eds.), *The message within: The role of subjective experience in social cognition and behavior* (Vol. xvi, pp. 283–303). Philadelphia, PA: Psychology Press.

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of*

Social Issues, *55*(3), 429–444. doi:10.1111/0022-4537.00126

Buck, R. (1999). The biological affects: A typology. *Psychological Review*, *106*(2), 301–336. doi:10.1037/0033-295X.106.2.301

Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to "prejudice." *Journal of Personality and Social Psychology*, *88*(5), 770–89. doi:10.1037/0022-3514.88.5.770

Cottrell, C. A., Richards, D. A. R., & Nichols, A. L. (2010). Predicting policy attitudes from general prejudice versus specific intergroup emotions. *Journal of Experimental Social Psychology*, *46*(2), 247–254. doi:10.1016/j.jesp.2009.10.008

Creative Commons. (2018). Creative Commons. Retrieved March 1, 2018, from https://creativecommons.org/

Dasgupta, N., Desteno, D., Williams, L. a, & Hunsinger, M. (2009). Fanning the flames of prejudice: the influence of specific incidental emotions on implicit prejudice. *Emotion (Washington, D.C.)*, *9*(4), 585–591. doi:10.1037/a0015961

Demoulin, S., Leyens, J., Paladino, M., Rodriguez-Torres, R., Rodriguez-Perez, A., & Dovidio, J. (2004). Dimensions of "uniquely" and "non-uniquely" human emotions. *Cognition & Emotion*, *18*(1), 71–96. doi:10.1080/02699930244000444

Doosje, B. E. J., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (2006). Antecedents and consequences of group-based guilt: The effects of ingroup identification. *Group Processes & Intergroup Relations*, *9*(3), 325–338. doi:10.1177/1368430206064637

Dunton, B. C., & Fazio, R. H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin*, *23*(3), 316–326.

doi:10.1177/0146167297233009

Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. *Journal of Personality and Social Psychology*, *59*(2), 202–216. doi:10.1037/0022-3514.59.2.202

Ekman, P. (1992). An argument for basic emotions. *Cognition & Emotion*. doi:10.1080/02699939208411068

EvinDC. (Photographer). (2007). [*Digital image]*. https://www.flickr.com/photos/evmaroon/709597923/in/pool-ftms/ Removed background from original. Image is licensed under Creative Commons CC BY 2.0: https://creativecommons.org/licenses/by/2.0/

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. doi:10.3758/BF03193146

Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychologyocial*. doi:10.1037/0022-3514.69.6.1013

Fitzgerald, H., Pool, J., & Shook, N. (2017). [LGBT study]. Unpublished raw data.

Gerhardstein, K. R., & Anderson, V. N. (2010). There's more than meets the eye: Facial appearance and evaluations of transsexual people. *Sex Roles*, *62*, 361–373. doi:10.1007/s11199-010-9746-x

Glick, P. (2002). Sacrificial lambs dressed in wolves' clothing: Envious prejudice, ideology, and the scapegoating of Jews. In *Understanding Genocide: The Social Psychology of the*

Holocaust, *6*, 112–142. Oxford University Press. doi:10.1093/acprof:oso/9780195133622.003.0006

Haddock, G., Zanna, M. P., & Esses, V. M. (1993). Assessing the structure of prejudicial attitudes: The case of attitudes toward homosexuals. *Journal of Personality and Social Psychology*, *65*(6), 1105–1118.

Haidt, J. (2003). The Moral Emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852–870). Oxford: Oxford University Press.

Haidt, J., & Hersh, M. A. (2001). Sexual morality: The cultures and emotions of conservatives and liberals. *Journal of Applied Social Psychology*, *31*, 191–221. doi:10.1111/j.1559-1816.2001.tb02489.x

Heilman, M. E., Wallen, A. S., Fuchs, D. & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology*, *89*(3), 416–427. doi:10.1037/0021-9010.89.3.416

Heilman, M. E., & Wallen, A. S. (2010). Wimpy and undeserving of respect: Penalties for men's gender-inconsistent success. *Journal of Experimental Social Psychology*, *46*(4), 664–667. doi:10.1016/j.jesp.2010.01.008

Hermans, D., De Houwer, J., & Eelen, P. (2001). A time course analysis of the affective priming effect. *Cognition & Emotion*, *15*(2), 143-165. doi:10.1080/0269993004200033

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

Hodson, G., & Costello, K. (2007). Interpersonal disgust, ideological orientations, and dehumanization as predictors of intergroup attitudes. *Psychological Science*, *18*(8), 691–

698. doi:10.1111/j.1467-9280.2007.01962.x

Howard, J. A. (2000). Social psychology of identities. *Annual Review of Sociology, 26*(1), 367–393. doi:10.1146/annurev.soc.26.1.367

Inbar, Y., Pizarro, D. A., Knobe, J., & Bloom, P. (2009). Disgust sensitivity predicts intuitive disapproval of gays. *Emotion, 9*(3), 435–439. doi:10.1037/a0015960

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 US transgender survey*. Washington, DC: National Center for Transgender Equality.

Johns, M., Schmader, T., & Lickel, B. (2005). Ashamed to be an American? The role of identification in predicting vicarious shame for anti-Arab prejudice after 9–11. *Self and Identity, 4*(4), 331–348. doi:10.1080/15298860500145822

Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological Bulletin, 126*(3), 390–423. doi:10.1037/0033-2909.126.3.390

Leyens, J.-P., Paladino, P. M., Rodriguez-Torres, R., Vaes, J., Demoulin, S., Rodriguez-Perez, A., & Gaunt, R. (2000). The emotional side of prejudice: The attribution of secondary emotions to ingroups and outgroups. *Personality & Social Psychology Review (Lawrence Erlbaum Associates), 4*(2), 186–197. doi:10.1207/s15327957pspr0402_06

Lin, M. H., Kwan, V. S. Y., Cheung, A., & Fiske, S. T. (2005). Stereotype content model explains prejudice for an envied outgroup: Scale of anti-Asian American stereotypes. *Personality and Social Psychology Bulletin*, *31*(1), 34–47. doi:10.1177/0146167204271320

Ma, D. S., Correll, J., & Wittenbrink, B. (2015). The Chicago face database: A free stimulus set

of faces and norming data. *Behavior research methods*, *47*(4), 1122-1135. doi: 10.3758/s13428-014-0532-5

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, *79*(4), 602–616. doi:10.10371/0022-3514.79.4.602

Munro, G. D., & Ditto, P. H. (1997). Biased assimilation, attitude polarization, and affect in reactions to stereotype-relevant scientific information. *Personality and Social Psychology Bulletin*, *23*(6), 636–653. doi:10.1177/0146167297236007

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*(7–8), 521–531. doi:10.1007/s11199-008-9458-7

National Coalition of Anti-Violence Programs. (2013). *Hate Violence Against Transgender Communities*. New York, NY: National Coalition of Anti-Violence Programs.

Norton, A. T., & Herek, G. M. (2013). Heterosexuals' attitudes toward transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles*, *68*(11–12), 738–753. doi:10.1007/s11199-011-0110-6

Payne, S. (Photographer). (2008). [*Digital image]*. https://www.flickr.com/photos/sallypayne/2983216980/in/album-666824/ Removed background from original. Image is licensed under Creative Commons CC BY-NC-ND 2.0: https://creativecommons.org/licenses/by-nc-nd/2.0/

Peterson, R. A. (2001). On the use of college students in social science research: Insights from a second-order meta-analysis. *Journal of consumer research*, *28*(3), 450-461. doi:

10.1086/323732

Pizarro, D., Inbar, Y., & Helion, C. (2011). On disgust and moral judgment. *Emotion Review*, *3*(3), 267–268. doi:10.1177/1754073911402394

Roseman, I. J. (1996). Appraisal determinants of emotions: Constructing a more accurate and comprehensive theory. *Cognition & Emotion*, *10*(3), 241-278. doi:10.1080/026999396380240

Rozin, P., Lowery, L., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, *76*(4), 574–586. doi:10.1037/0022-3514.76.4.574

Rudman, L. A., & Fairchild, K. (2004). Reactions to counterstereotypic behavior: The role of backlash in cultural stereotype maintenance. *Journal of Personality and Social Psychology*, *87*(2), 157–176. doi:10.1037/0022-3514.87.2.157

Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *The Journal of Social Issues*, *57*(4), 743–762. doi:10.1111/0022-4537.00239

Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. *Affect, Cognition and Stereotyping*, *95*, 297–315. Elsevier. doi:10.1016/B978-0-08-088579-7.50017-X

Smith, E. R., & Mackie, D. M. (2008). Intergroup emotions. *Handbook of Emotions*, *2*, 428–439. doi:10.1037/14342-010

Stangor, C., Sullivan, L. A., & Ford, T. E. (1991). Affective and cognitive determinants of prejudice. *Social Cognition*, *9*(4), 359–380. doi:10.1521/soco.1991.9.4.359

Tapias, M. P., Glaser, J., Keltner, D., Vasquez, K., & Wickens, T. (2007). Emotion and prejudice: Specific emotions toward outgroups. *Group Processes & Intergroup Relations*, *10*(1), 27–39. doi:10.1177/1368430207071338

Tee, N., & Hegarty, P. (2006). Predicting opposition to the civil rights of trans persons in the United Kingdom. *Journal of Community and Applied Social Psychology*, *16*(1), 70–80. doi:10.1002/casp.851

Terrizzi, J. A., Shook, N. J., & Ventis, W. L. (2010). Disgust: A predictor of social conservatism and prejudicial attitudes toward homosexuals. *Personality and Individual Differences, 49*(6), 587-592. doi: 10.1016/j.paid.2010.05.024

Warriner, K., Nagoshi, C. T., & Nagoshi, J. L. (2013). Correlates of homophobia, transphobia, and internalized homophobia in gay or lesbian and heterosexual samples. *Journal of Homosexuality*, *60*(9), 1297–1314. doi:10.1080/00918369.2013.806177

Wentura, D., & Degner, J. (2010). A practical guide to sequential priming and related tasks. *Handbook of implicit social cognition: Measurement, theory, and applications*, 95-116.

Zanna, M., & Rempel, J.K. (1991). Attitudes: A new look at an old concept. In D. Bar-Tal and A. W. Kruglanski (Eds.), *The social psychology of knowledge* (pp. 315–334). Cambridge, UK: Cambridge University Press.

Table 1
Participant Demographics – Study 1

Measure	*n*	%
Marital status		
Single	163	99.8
Married	6	0.2
Separated	0	0
Divorced	0	0
Widowed	0	0
Race (select all that apply)		
White/Caucasian	152	89.9
Hispanic/Latino(a)	11	6.5
African-American/Black	15	8.9
Asian	5	3.0
Native American	2	1.2
Other (please list)	8	4.7
Political identification		
Strongly liberal	6	3.6
Liberal	43	25.4
Slightly liberal	12	7.1
Moderate	52	30.8
Slightly conservative	19	11.2
Conservative	32	18.9
Strongly conservative	5	3.0
Sexual orientation		
Heterosexual	142	84.0
Gay male	3	1.8
Lesbian	2	1.2
Bisexual	13	7.7
Other	9	5.3

Measure	*n*	%
Highest level of education		
Some middle or high school	0	0
High school diploma or GED	30	17.8
Some college	120	71.0
Associates degree	8	4.7
Bachelor's degree	11	6.5
Some graduate school	0	0
Graduate degree	0	0
Currently live		
Rural (unincorporated)	9	5.3
Small town (village or town)	42	24.9
Suburban (metropolitan area of large city)	19	11.2
Small city (population < 30,000	38	22.5
Medium-sized city (30,000 – 100,000)	52	30.8
Large city (population > 100,000)	9	5.3
Church attendance		
Never	43	25.4
Less than a few times a year	40	23.7
A few times a year	30	17.8
Every few months	23	13.6
A few times a month	12	7.1
Fairly often during a month	6	3.6
Regularly during a month	15	8.9
Current employment status		
Employed full time	10	5.9
Employed part-time	86	50.9
Not employed, looking for work	25	14.8
Not employed, not seeking work	48	28.4
Retired	0	0

Measure	*n*	%
Religious affiliation		
Christian	115	68.0
Muslim	4	2.4
Jewish	3	1.8
Hindu	0	0
Atheist	10	5.9
Buddhist	2	1.2
Agnostic	10	5.9
Not Religious	34	20.1
Other	5	3.0
Gender		
Male	37	21.9
Female	131	77.5
Other	1	0.6
Geographic location		
Northeast/Mid-Atlantic	124	73.4
Pacific coast	4	2.4
Mountain/southwest	11	6.5
Central/Midwest	12	7.1
South/southeast	18	10.7
Political party		
Democrat	58	34.3
Republican	60	35.5
Independent	34	20.1
Libertarian	10	5.9
Other	7	4.1

Table 2
Motivation to Control Prejudice Factor Analysis – Study 1

Item	Concern with appearing prejudiced	Restraint to avoid dispute
1. In today's society it is important that one not be perceived as prejudiced in any manner.	**.587**	-.114
2. I always express my thoughts and feelings, regardless of how controversial they might be.*	-.101	**.653**
3. I get angry with myself when I have a thought or feeling that might be considered prejudiced.	**.611**	-.129
4. If I were participating in a class discussion and a LGBT (lesbian, gay, bisexual or transgender) student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint.	**.365**	.077
5. Going through life worrying about whether you might offend someone is just more trouble than it's worth.*	-.125	**.507**
6. It's important to me that other people not think I'm prejudiced.	**.747**	-.137
7. I feel it's important to behave according to society's standards.	**.362**	-.049
8. I'm careful not to offend my friends, but I don't worry about offending people I don't know or don't like.*	-.175	**.352**
9. I think that it is important to speak one's mind rather than to worry about offending someone.*	.048	**.794**
10. It's never acceptable to express one's prejudices.	**.537**	-.196
11. I feel guilty when I have a negative thought or feeling about a LGBT person.	**.655**	-.125
12. When speaking to a LGBT person, it's important to me that he/she not think I'm prejudiced.	**.817**	-.113
13. It bothers me a great deal when I think I've offended someone, so I'm always careful to consider other people's feelings.	**.762**	.048
14. If I have a prejudiced thought or feeling, I keep it to myself.	**.814**	.053
15. I would never tell jokes that might offend others.	**.617**	.060
16. I'm not afraid to tell others what I think, even when I know they disagree with me.*	-.007	**.767**
17. If someone who made me uncomfortable sat next to me on a bus, I would not hesitate to move to another seat.*	.089	**.476**

** Indicates reverse coding.*

Table 3
Participant Demographics – Image Pretesting Pilot Study

Measure	*n*	%	Measure	*n*	%	Measure	*n*	%
Marital status			Highest level of education			Religious affiliation		
Single	87	97.8	Some middle or high school	0	0	Christian	64	71.9
Married	2	0	High school diploma or GED	13	14.6	Muslim	3	3.4
Separated	0	0	Some college	71	79.8	Jewish	2	2.2
Divorced	0	0	Associates degree	2	2.2	Hindu	0	0
Widowed	0	0	Bachelor's degree	3	3.4	Atheist	3	3.4
Race (select all that apply)			Some graduate school	0	0	Buddhist	0	0
White/Caucasian	79	88.8	Graduate degree	0	0	Agnostic	4	4.5
Hispanic/Latino(a)	4	4.5	Currently live			Not Religious	13	14.6
African-American/Black	3	3.4	Rural (unincorporated)	2	2.2	Other	2	2.2
Asian	0	0	Small town (village or town)	14	15.7	Gender		
Native American	1	1.1	Suburban (metropolitan area of large city)	10	11.2	Male	22	24.7
Other (please list)	5	5.6	Small city (population < 30,000	18	20.2	Female	67	75.3
Political identification			Medium-sized city (30,000 – 100,000)	40	44.9	Other	0	0
Strongly liberal	8	9.2	Large city (population > 100,000)	5	5.6	Geographic location		
Liberal	10	11.5	Church attendance			Northeast/Mid-Atlantic	65	73.0
Slightly liberal	11	12.6	Less than a few times a year	36	40.4	Pacific coast	1	1.1
Moderate	37	42.5	A few times a year	21	23.6	Mountain/southwest	7	7.9
Slightly conservative	7	8.0	Every few months	11	12.4	Central/Midwest	3	3.4
Conservative	13	14.9	A few times a month	5	5.6	South/southeast	13	14.6
Strongly conservative	1	1.1	Fairly often during a month	9	10.1	Political party		
Sexual orientation			Regularly during a month	7	7.9	Democrat	5	5.7
Heterosexual	77	86.5	Current employment status			Republican	30	34.1
Gay male	1	1.1	Employed full time	3	3.4	Independent	24	27.3
Lesbian	0	0	Employed part-time	38	42.7	Libertarian	27	30.7
Bisexual	8	9.0	Not employed, looking for work	17	19.1	Other	2	2.3
Other	3	3.4	Not employed, not seeking work	31	34.8			
			Retired	0	0			

Table 4

Target Group Descriptive Statistics – Image Pretesting Pilot Study

		Transgender Women		Transgender Men		Cisgender Women		Cisgender Men	
	Range	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Attractiveness	1 - 7	2.87	1.71	2.62	1.48	2.93	1.41	2.78	1.63
Friendliness	1 - 7	4.62	1.45	4.82	1.60	4.66	1.63	4.78	1.50
Niceness	1 - 7	4.60	1.35	4.77	1.45	4.65	1.48	4.75	1.42
Approachable	1 - 7	4.38	1.53	4.68	1.63	4.54	1.60	4.49	1.62
How female	1 - 7	5.04	1.81	1.99	1.66	6.05	1.17	1.15	0.53
How male	1 - 7	2.99	2.01	6.03	1.50	1.66	1.03	6.69	0.75

Table 5

Descriptive Statistics – Study 1

Explicit Prejudice Measures

Measure	*n*	*M*	*SD*	α	Range
Feeling Thermometers					
Transgender Woman	157	63.35	32.50		1 - 100
Transgender Man	157	61.20	32.91		1 - 100
Cisgender Woman	156	81.02	24.85		1 - 100
Cisgender Man	157	76.37	26.43		1 - 100
GTS	157	2.60	1.23	.96	1 - 7
MTCP				.72	
Subscale – Concern	145	3.18	1		1 - 7
Subscale – Restraint	145	2.05	1		1 - 7

Note: GTS = Genderism and Transphobia Scale; MTCP = Motivation to Control Prejudice Scale.

Affective Responses

	Transgender				*Cisgender*			
	Women		*Men*		*Women*		*Men*	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
1. Anger	2.01	2.07	2.17	2.14	2.76	2.34	2.97	1.65
2. Surprise	4.36	2.76	4.73	2.56	2.49	2.31	2.73	2.56
3. Disgust	2.62	2.48	2.82	2.56	2.66	2.28	1.78	1.57
4. Joy	4.43	2.78	4.05	2.72	5.47	2.76	5.62	2.81
5. Fear	2.04	1.79	2.08	1.95	2.60	2.15	1.56	1.28
6. Sadness	2.11	1.99	2.68	2.29	2.30	2.00	1.85	1.69
7. Happiness	4.55	2.82	4.34	2.80	5.66	2.66	6.13	2.57

Table 6

Correlations between Affective Measures, GTS, Feeling Thermometers, and MCPR in Study 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. GTS	1																				
2. TW - Anger	.51**	1																			
3. TW -Surprise	.21**	.24**	1																		
4. TW -Disgust	.60**	.79**	.30**	1																	
5. TW - Joy	-.54**	-.33**	.11	-.46**	1																
6. TW - Fear	.24**	.52**	.34**	.52**	-.11	1															
7. TW -Sadness	.32**	.68**	.31**	.61**	-.14	.48**	1														
8. TW - Happiness	-.58**	-.40**	.08	-.51**	.88**	-.14	-.23**	1													
9.TM - Anger	.53**	.73**	.39**	.69**	-.29**	.46**	.51**	-.34**	1												
10. TM -Surprise	.24**	.33**	.58**	.36**	.00	.40**	.30**	-.07	.37**	1											
11. TM - Disgust	.65**	.69**	.35**	.82**	-.44**	.39**	.54**	-.46**	.78**	.40**	1										
12. TM Joy	-.65**	-.28**	.03	-.38**	.70**	-.08	-.11	.73**	-.34**	-.04	-.40**	1									
13. TM - Fear	.31**	.55**	.28**	.49**	-.13	.66**	.42**	-.22**	.54**	.40**	.47**	-.13	1								
14. TM - Sadness	.37**	.44**	.33**	.51**	-.14	.35**	.60**	-.19*	.55**	.33**	.56**	-.12	.46**	1							
15. TM - Happiness	-.68**	-.36**	-.05	-.45**	.71**	-.11	-.19*	.72**	-.44**	-.02	-.50**	.76**	-.14	-.21**	1						
16. FT- TW	-.71**	-.58**	-.17*	-.65**	.51**	-.22**	-.41**	.53**	-.53**	-.24**	-.69**	.54**	-.32**	-.45**	.60**	1					
17. FT - TM	-.81**	-.62**	-.13	-.67**	.57**	-.24**	-.43**	.62**	-.59**	-.21**	-.73**	.60**	-.38**	-.45**	.65**	.87**	1				
18. FT - CW	-.25**	-.04	-.06	-.20*	.15	.07	-.03	.20*	-.04	-.13	-.16*	.15	-.05	-.13	.19*	.29**	.34**	1			
19. FT - CM	-.32**	-.07	-.07	-.24**	.27**	.07	-.07	.29**	-.12	-.05	-.19*	.23**	.02	-.11	.30**	.38**	.38**	.66**	1		
20. MCPR - Concern	-.33**	-.27**	-.05	-.23**	.26**	-.09	-.13	.23**	-.23**	-.06	-.23**	.22**	-.08	-.11	.28**	.25**	.27**	.14	.13	1	
21. MCPR - Restraint	-.11	-.14	.05	-.12	.14	.06	-.06	.11	.01	.09	-.09	.13	.14	.11	.04	.13	.09	.00	.00	.00	1

Note: ** $p < 0.01$; * $p < 0.05$; GTS = Genderism and Transphobia Scale; TW = Transgender Woman; TM = Transgender Man; FT = Feeling Thermometer; CW = Cisgender Woman; CM = Cisgender Man; MCPR = Motivation to Control Prejudice

Table 7

Correlations between Affective Measures, GTS, and Feeling Thermometers controlling for MCPR in Study 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. GTS	1																		
2. TW - Anger	.51**	1																	
3. TW -Surprise	.20*	.25**	1																
4. TW -Disgust	.60**	.80**	.26**	1															
5. TW - Joy	-.51**	-.28**	.10	-.42**	1														
6. TW - Fear	.25**	.49**	.38**	.51**	-.03	1													
7. TW -Sadness	.34**	.70**	.34**	.63**	-.08	.46**	1												
8. TW - Happiness	-.57**	-.35**	.06	-.47**	.87**	-.08	-.19*	1											
9.TM - Anger	.52**	.75**	.35**	.69**	-.30**	.42**	.50**	-.35**	1										
10. TM -Surprise	.26**	.34**	.59**	.38**	-.02	.42**	.29**	-.09	.39**	1									
11. TM - Disgust	.61**	.71**	.30**	.82**	-.41**	.35**	.53**	-.45**	.77**	.40**	1								
12. TM Joy	-.63**	-.33**	.01	-.42**	.72**	-.14	-.13	.78**	-.36**	-.09	-.39**	1							
13. TM - Fear	.32**	.53**	.32**	.52**	-.11	.69**	.42**	-.18*	.55**	.43**	.52**	-.18*	1						
14. TM - Sadness	.32**	.48**	.32**	.53**	-.09	.32**	.64**	-.16	.51**	.36**	.53**	-.09	.43**	1					
15. TM - Happiness	-.65**	-.36**	.02	-.43**	.74**	-.06	-.15	.78**	-.41**	.02	-.45**	.82**	-.12	-.10	1				
16. FT – TW	-.63**	-.63	-.15	-.67**	.46**	-.21*	-.45**	.51**	-.52**	-.28**	-.67**	.50**	-.34**	-.40**	.53**	1			
17. FT – TM	-.78**	-.62	-.12	-.68**	.53**	-.22*	-.45**	.59**	-.58**	-.23**	-.72**	.60**	-.35**	-.39**	.63**	.86**	1		
18. FT – CW	-.25**	-.08	-.02	-.18*	.14	.01	-.05	.20*	-.09	-.10	-.15	.14	-.13	-.16	.16	.31**	.39**	1	
19. FT – CM	-.31**	-.07	-.02	-.20*	.26**	.04	-.06	.29**	-.12	-.01	-.15	.19*	-.01	-.12	.25**	.39**	.42**	.64**	1

Note: ** $p < 0.01$; * $p < 0.05$; GTS = Genderism and Transphobia Scale; TW = Transgender Woman; TM = Transgender Man; FT = Feeling Thermometer; CW = Cisgender Woman; CM = Cisgender Man

Table 8

Descriptive Statistics for Implicit Measure in Study 1

Measure	*n*	*M*	*SD*	Range
Difference Scores				
Transgender Woman	148	-30.77	60.52	400.25
Transgender Man	148	-24.37	73.43	580.90
Cisgender Woman	148	-44.80	67.62	383.60
Cisgender Man	148	-24.16	61.67	307.80
Pos. and Neg. Adjectives				
Transgender Woman - Positive	148	691.87	112.30	560.75
Transgender Woman - Negative	148	722.65	114.58	732.50
Transgender Man - Positive	148	697.69	117.69	654.75
Transgender Man - Negative	148	722.06	120.93	675.61
Cisgender Woman - Positive	148	676.99	105.50	610.25
Cisgender Woman - Negative	148	721.79	117.37	653.19
Cisgender Man - Positive	148	696.18	110.53	703.08
Cisgender Man - Negative	148	720.34	110.08	611.08

Table 9

Participant Demographics – Study 2

Measure	*n*	%
Marital status		
Single	90	42.3
Married	102	47.9
Separated	3	1.4
Divorced	17	8.0
Widowed	1	0.5
Race (select all that apply)		
White/Caucasian	151	60.2
Hispanic/Latino(a)	20	8.0
African-American/Black	10.8	27
Asian	20	10.8
Native American	2	0.8
Other (please list)	1	0.4
Political identification		
Strongly liberal	30	14
Liberal	41	19.2
Slightly liberal	22	10.3
Moderate	57	26.6
Slightly conservative	19	8.9
Conservative	34	15.9
Strongly conservative	11	5.1
Sexual orientation		
Heterosexual	189	88.3
Gay male	0	0
Lesbian	8	3.7
Bisexual	16	7.5
Other	1	0.5

Measure	*n*	%
Highest level of education		
Some middle or high school	1	0.5
High school diploma or GED	17	8.0
Some college	52	24.4
Associates degree	26	12.2
Bachelor's degree	89	41.8
Some graduate school	7	3.3
Graduate degree	21	9.9
Currently live		
Rural (unincorporated)	30	14
Small town (village or town)	44	20.6
Suburban (metropolitan area of large city)	57	26.6
Small city (population < 30,000	19	8.9
Medium-sized city (30,000 – 100,000)	21	9.8
Large city (population > 100,000)	43	20.1
Church attendance		
Less than a few times a year	108	50.9
A few times a year	31	14.6
Every few months	18	8.5
A few times a month	18	8.5
Fairly often during a month	13	6.1
Regularly during a month	24	11.3
Current employment status		
Employed full time	142	67.0
Employed part-time	37	14.7
Not employed, looking for work	14	5.6
Not employed, not seeking work	14	5.6
Retired	5	2.0

Measure	*n*	%
Religious affiliation		
Christian	131	52.2
Muslim	7	2.8
Jewish	5	2.0
Hindu	9	3.6
Atheist	20	8.0
Buddhist	6	2.4
Agnostic	21	8.4
Not Religious	25	10.0
Other	6	2.4
Gender		
Male	85	39.7
Female	128	59.8
Other	1	0.5
Geographic location		
Northeast/Mid-Atlantic	52	24.4
Pacific coast	32	15.0
Mountain/southwest	22	10.3
Central/Midwest	47	22.1
South/southeast	60	28.2
Political party		
Democrat	80	37.4
Republican	66	30.8
Independent	61	28.5
Libertarian	5	2.3
Other	2	0.8

Table 10

Motivation to Control Prejudice Factor Analysis – Study 2

Item	Concern with appearing prejudiced	Restraint to avoid dispute
1. In today's society it is important that one not be perceived as prejudiced in any manner.	**.605**	-.046
2. I always express my thoughts and feelings, regardless of how controversial they might be.*	-.007	**.778**
3. I get angry with myself when I have a thought or feeling that might be considered prejudiced.	**.604**	-.100
4. If I were participating in a class discussion and a LGBT (lesbian, gay, bisexual or transgender) student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint.	.179	.175
5. Going through life worrying about whether you might offend someone is just more trouble than it's worth.*	.192	**.616**
6. It's important to me that other people not think I'm prejudiced.	**.707**	.049
7. I feel it's important to behave according to society's standards.	**.495**	.078
8. I'm careful not to offend my friends, but I don't worry about offending people I don't know or don't like.*	.044	**.431**
9. I think that it is important to speak one's mind rather than to worry about offending someone.*	.086	**.743**
10. It's never acceptable to express one's prejudices.	**.610**	-.010
11. I feel guilty when I have a negative thought or feeling about a LGBT person.	**.635**	.032
12. When speaking to a LGBT person, it's important to me that he/she not think I'm prejudiced.	**.721**	.063
13. It bothers me a great deal when I think I've offended someone, so I'm always careful to consider other people's feelings.	**.626**	.119
14. If I have a prejudiced thought or feeling, I keep it to myself.	**.631**	.236
15. I would never tell jokes that might offend others.	**.501**	.056
16. I'm not afraid to tell others what I think, even when I know they disagree with me.*	.040	**.725**
17. If someone who made me uncomfortable sat next to me on a bus, I would not hesitate to move to another seat.*	-.109	**.465**

* *Indicates reverse coding.*

Table 11
Descriptive Statistics – Study 2

Explicit Prejudice Measures

Measure	*n*	*M*	*SD*	α	Range
Feeling Thermometers					
Transgender Woman	200	55.34	34.59		1 - 100
Transgender Man	201	56.67	32.46		1 - 100
Cisgender Woman	202	79.51	20.53		1 - 100
Cisgender Man	198	75.93	22.03		1 - 100
GTS	199	3.12	1.43	.97	1 - 7
MTCP				.79	
Subscale – Concern	200	2.58	1		1 - 7
Subscale – Restraint	200	2.65	1		1 - 7

Note: GTS = Genderism and Transphobia Scale; MTCP = Motivation to Control Prejudice

Table 12
Affective Reactions Descriptive Statistics – Study 2

	Transgender				*Cisgender*			
	Women		*Men*		*Women*		*Men*	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
1. Security	4.25	2.68	4.21	2.65	5.50	2.30	5.48	2.48
2. Anger	3.04	2.52	3.01	2.46	2.68	2.34	3.08	2.39
3. Hurt	2.70	2.39	2.75	2.36	2.76	2.40	3.07	2.44
4. Pride	3.81	2.79	3.61	2.65	5.03	2.73	4.45	2.53
5. Surprise	4.18	2.59	4.25	2.60	3.13	2.52	3.02	2.31
6. Disgust	3.53	2.68	3.68	2.72	2.50	2.29	2.93	2.38
7. Anxiety	2.97	2.37	3.12	2.40	2.89	2.43	3.24	2.41
8. Respect	5.01	2.76	4.97	2.80	6.34	2.28	5.64	2.31
9. Pity	3.49	2.51	3.52	2.49	2.64	2.37	2.58	2.20
10. Envy	2.38	2.15	2.44	2.22	2.85	2.40	2.94	2.43
11. Contempt	3.06	2.53	3.13	2.57	3.08	2.71	3.31	2.61
12. Joy	3.94	2.76	3.81	2.64	5.56	2.47	4.90	2.44
13. Fear	2.62	2.38	2.64	2.31	2.49	2.23	3.12	2.41
14. Happiness	4.17	2.73	4.00	2.67	5.78	2.34	5.29	2.39
15. Guilt	2.36	2.17	2.46	2.32	2.42	2.34	2.48	2.27
16. Sadness	3.01	2.43	3.16	2.45	2.57	2.32	2.84	2.39
17. Compassion	5.16	2.60	5.04	2.59	5.80	2.49	4.91	2.53
18. Resentment	2.80	2.44	2.82	2.40	2.60	2.28	3.07	2.50

Table 13

Correlations for Transgender Women between Affective Measures, GTS, Feeling Thermometers and MCPR in Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. GTS	1																					
2. Security	-.15*	1																				
3. Anger	.67**	.13	1																			
4. Hurt	.58**	.31**	.85**	1																		
5. Pride	-.09	.70**	.25**	.39**	1																	
6. Surprise	.43**	.13	.56**	.58**	.19**	1																
7. Disgust	.77**	-.06	.80**	.67**	.03	.54**	1															
8. Anxiety	.53**	.28**	.72**	.80**	.32**	.57**	.62**	1														
9. Respect	-.34**	.66**	-.05	.12	.67**	.15*	-.26**	.16*	1													
10. Pity	.58**	.04	.63**	.62**	.09	.49**	.59**	.59**	-.11	1												
11. Envy	.49**	.42**	.67**	.78**	.50**	.50**	.52**	.76**	.31**	.53**	1											
12. Contempt	.59**	.15*	.74**	.71**	.26**	.53**	.70**	.69**	.06	.60**	.68**	1**										
13. Joy	-.12	.72**	.17*	.32**	.84**	.21**	-.04	.30**	.75**	.05	.48**	.24**	1									
14. Fear	.57**	.32**	.74**	.82**	.39**	.54**	.64**	.82**	.18**	.58**	.84**	.73**	.37**	1								
15. Happiness	-.15*	.74**	.17*	.30**	.80**	.16*	-.07	.25**	.76**	.02	.47**	.22**	.85**	.35**	1							
16. Guilt	.53**	.36**	.74**	.82**	.40**	.51**	.60**	.81**	.21**	.61**	.87**	.72**	.38**	.88**	.37**	1*						
17. Sadness	.56**	.17*	.73**	.74**	.23**	.57**	.67**	.72**	-.01	.69**	.65**	.65**	.18*	.74**	.16*	.75**	1					
18. Compassion	-.16*	.56**	.07	.15*	.60**	.20**	-.08	.22**	.68**	.18**	.28**	.10	.63**	.21**	.63**	.22**	.25**	1**				
19. Resentment	.63**	.22**	.80**	.83**	.31**	.56**	.69**	.79**	.09	.65**	.76**	.77**	.28**	.85**	.26**	.81**	.76**	.17*	1			
20. FT - TW	-.52**	.56**	-.25**	-.14	.51**	-.08	-.47**	-.09	.69**	-.29**	.08	-.15*	.58**	-.04	.62**	-.04	-.17*	.50**	-.14*	1		
21. MCPR - Concern	-.25**	.30**	-.04	.03	.26**	.02	-.15*	.14	.36**	-.12	.06	-.02	.24**	.07	.30**	.02	.03	.25**	.04	.40**	1	
22. MCPR - Restraint	-.28**	-.09	-.25**	-.21**	-.04	-.04	-.29**	-.10	.04	-.26**	-.15*	-.23**	-.06	-.12	-.11	-.13	-.18*	-.07	-.15*	.06	.02	1

Note: ** $p < 0.01$; * $p < 0.05$; GTS = Genderism and Transphobia Scale; TW = Transgender Woman; FT = Feeling Thermometer

Table 14

Correlations for Transgender Men between Affective Measures, GTS, Feeling Thermometers and MCPR in Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. GTS	1																					
2. Security	-.15*	1																				
3. Anger	.69**	.12	1																			
4. Hurt	.61**	.26**	.83**	1																		
5. Pride	-.02	.66**	.24**	.35**	1																	
6. Surprise	.42**	.10	.58**	.57**	.23**	1																
7. Disgust	.77**	-.13	.77**	.64**	.06	.48**	1															
8. Anxiety	.59**	.20**	.73**	.79**	.37**	.54**	.62**	1														
9. Respect	-.30**	.66**	.01	.16*	.69**	.13	-.24**	.17*	1													
10. Pity	.57**	.12	.59**	.66**	.22**	.47**	.53**	.64**	.07	1												
11. Envy	.47**	.40**	.62**	.77**	.52**	.44**	.47**	.69**	.34**	.57**	1											
12. Contempt	.56**	.20**	.70**	.67**	.38**	.46**	.64**	.65**	.15*	.61**	.65**	1										
13. Joy	-.09	.73**	.23**	.35**	.82**	.20**	.00	.29**	.73**	.14*	.53**	.30**	1									
14. Fear	.58**	.30**	.74**	.83**	.37**	.53**	.60**	.81**	.19**	.66**	.78**	.68**	.37**	1								
15. Happiness	-.18*	.76**	.14*	.27**	.79**	.17*	-.08	.23**	.78**	.11	.47**	.24**	.90**	.28**	1							
16. Guilt	.55**	.37**	.73**	.83**	.48**	.48**	.54**	.79**	.26**	.64**	.89**	.71**	.45**	.87**	.38**	1						
17. Sadness	.59**	.10	.75**	.80**	.23**	.62**	.65**	.71**	.08	.68**	.62**	.60**	.20**	.74**	.14*	.69**	1					
18. Compassion	-.17*	.54**	-.01	.15*	.57**	.15*	-.17*	.16*	.70**	.24**	.28**	.15*	.64**	.18*	.67**	.22**	.18*	1				
19. Resentment	.61**	.26**	.74**	.79**	.37**	.50**	.68**	.80**	.13	.63**	.76**	.76**	.35**	.82**	.28**	.82**	.69**	.14*	1			
20. FT - TM	-.49**	.54**	-.20**	-.14*	.47**	-.16*	-.46**	-.13	.64**	-.18*	.12	-.07	.52**	-.09	.58**	.02	-.18**	.50**	-.14*	1		
21. MCPR - Concern	-.25**	.23**	-.04	-.01	.18*	.00	-.12	.09	.36**	-.12	.03	.03	.26**	.06	.28**	.01	-.02	.17*	.01	.36**	1	
22. MCPR - Restraint	-.28**	-.15*	-.23**	-.19**	-.13	-.06	-.27**	-.12	-.01	-.21**	-.13	-.20**	-.11	-.12	-.10	-.13	-.22**	-.04	-.16*	.02	.02	1

Note: ** $p < 0.01$; * $p < 0.05$; GTS = Genderism and Transphobia Scale; TW = Transgender Woman; FT = Feeling Thermometer

Table 15

Correlations for Transgender Women between Affective Measures, GTS, and Feeling Thermometers controlling for MCPR in Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. GTS	1																			
2. Security	-.15	1																		
3. Anger	.65**	.12	1																	
4. Hurt	.58**	.30**	.84**	1																
5. Pride	-.06	.67**	.27**	.40**	1															
6. Surprise	.47**	.08	.57**	.54**	.14	1														
7. Disgust	.75**	-.08	.80**	.65**	.04	.57**	1													
8. Anxiety	.57**	.26**	.72**	.78**	.30**	.56**	.64**	1												
9. Respect	-.34**	.64**	-.08	.07	.64**	.05	-.27**	.07	1											
10. Pity	.51**	.05	.60**	.59**	.10	.49**	.51**	.58**	-.12	1										
11. Envy	.53**	.42**	.67**	.78**	.52**	.49**	.51**	.75**	.27**	.50**	1									
12. Contempt	.56**	.13	.74**	.69**	.25**	.52**	.67**	.68**	.04	.55**	.65**	1								
13. Joy	-.08**	.71**	.19*	.32**	.84**	.15	-.03	.28**	.73**	.05	.50**	.23**	1							
14. Fear	.60**	.31**	.75**	.83**	.40**	.53**	.63**	.82**	.13	.55**	.83**	.71**	.38**	1						
15. Happiness	-.13	.70**	.15*	.28**	.78**	.11	-.08	.21**	.78**	.02	.47**	.20*	.89**	.35**	1					
16. Guilt	.55**	.38**	.72**	.82**	.44**	.50**	.57**	.80**	.19*	.58**	.89**	.71**	.43**	.86**	.39**	1				
17. Sadness	.56**	.15*	.74**	.72**	.23**	.58**	.64**	.71**	-.04	.68**	.64**	.63**	.19*	.72**	.15*	.72**	1			
18. Compassion	-.18*	.51**	.03	.10	.56**	.12	-.10	.15*	.66**	.19*	.25**	.06	.60**	.18*	.62**	.21**	.23**	1		
19. Resentment	.64**	.21*	.79**	.82**	.31**	.54**	.67**	.78**	.04	.61**	.75**	.75**	.29**	.84**	.25**	.79**	.75**	.12	1	
20. FT - TW	-.46**	.53**	-.25**	-.11	.48**	-.12	-.44**	-.12	.68**	-.24**	.11	-.12	.56**	-.02	.60**	.03	-.16*	.50	-.14	1

Note: ** $p < 0.01$; * $p < 0.05$; GTS = Genderism and Transphobia Scale; TW = Transgender Woman; FT = Feeling Thermometer

Table 16

Correlations for Transgender Men between Affective Measures, GTS, and Feeling Thermometers controlling for MCPR in Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. GTS	1																			
2. Security	-.17*	1																		
3. Anger	.66**	.11	1																	
4. Hurt	.60**	.25**	.83**	1																
5. Pride	-.01	.64**	.27**	.36**	1															
6. Surprise	.45**	.07	.60**	.59**	.17*	1														
7. Disgust	.75**	-.14	.76**	.63**	.05	.49**	1													
8. Anxiety	.62**	.17*	.74**	.81**	.37**	.55**	.64**	1												
9. Respect	-.24**	.64**	.06	.19*	.68**	.10	-.21**	.16*	1											
10. Pity	.52**	.09	.59**	.66**	.21**	.48**	.52**	.68**	.09	1										
11. Envy	.49**	.37**	.66**	.80**	.49**	.42**	.50**	.72**	.34**	.57	1									
12. Contempt	.55**	.19*	.70**	.66**	.37**	.47**	.63**	.67**	.17*	.61**	.67**	1								
13. Joy	-.06	.72**	.24**	.36**	.82**	.17*	.01	.28**	.71**	.16*	.52**	.29**	1							
14. Fear	.60**	.27**	.74**	.84**	.37**	.54**	.63**	.81**	.20*	.68**	.81**	.69**	.36**	1						
15. Happiness	-.14	.75**	.18*	.29**	.78**	.13	-.06	.22**	.77**	.14	.46**	.27**	.89**	.29**	1					
16. Guilt	.55**	.36**	.74**	.85**	.50**	.47**	.54**	.79**	.29**	.64**	.91**	.72	.47**	.87**	.40**	1				
17. Sadness	.57**	.09	.76**	.80**	.22**	.65**	.62**	.71**	.11	.68**	.64**	.58**	.21**	.75**	.15*	.68**	1			
18. Compassion	-.15*	.55**	.03	.16*	.53**	.12	-.19*	.18*	.71**	.28**	.25**	.14	.62**	.19*	.65**	.23**	.17*	1		
19. Resentment	.60**	.26**	.72**	.79**	.38**	.50**	.66**	.81**	.17*	.65**	.79**	.75**	.35**	.82**	.31**	.82**	.68**	.17*	1	
20. FT - TM	-.46**	.51**	-.18*	-.14	.44**	-.18*	-.44**	-.17*	.57**	-.16*	.09	-.08	.48**	-.12	.53**	.01	-.18*	.47**	-.13	1

Note: ** $p < 0.01$; * $p < 0.05$; GTS = Genderism and Transphobia Scale; TM = Transgender Man; FT = Feeling Thermomet

Appendix A

Image-Related Questions

20 images to rate:

1. How attractive is this person?
    - Rate 1 (Not at all attractive) – 7 (Very attractive)
2. How friendly does this person look?
    - Rate 1 (Not at all friendly) – 7 (Very friendly)
3. How nice do you think this person is?
    - Rate 1 (Not at all nice) – 7 (Very nice)
4. How approachable do you think this person is?
    - Rate 1 (Not at all approachable) – 7 (Very approachable)
5. What race do you think this person is?
    - White
    - Black or African American
    - American Indian/Alaska Native
    - Asian
    - Arabic
    - Hawaiian Native & Pacific Islander
    - Other race (please specify)
6. Do you think this person is of Hispanic or Latino origin?
    - Yes/No
7. Does this person look male or female?
    - Choose option male or female
8. How female does this person look?
    - Rate 1 (Not at all female) – 7 (Very female)
9. How male does this person look?
    - Rate 1 (Not at all male) – 7 (Very male)
10. How old do you think this person is?
    - 18-25
    - 25-30
    - 30-45
    - 45-60
    - 60+

20 unseen images:

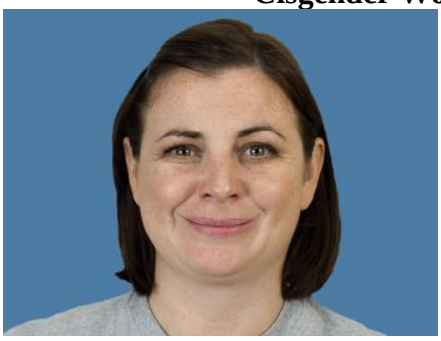
11. Do you think this person is transgender?
    - Yes/No

Appendix B

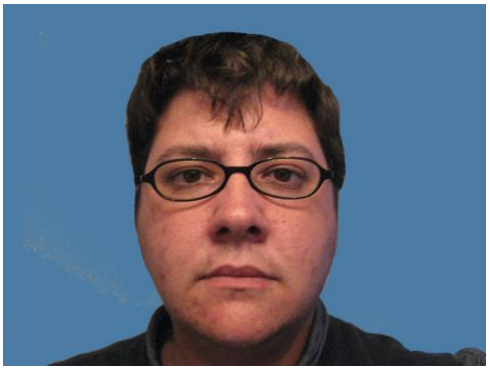
Example Images

Transgender Woman (Payne, 2008)

Cisgender Woman (Ma, Correll, & Wittenbrink, 2015)



Transgender Man (EvinDC, 2007)



Cisgender Man (Ma, Correll, & Wittenbrink, 2015)

Appendix C

Evaluative Priming Script

"Thanks for coming in today. Today you'll be participating in the first session of an experiment about your emotions and attitudes about a variety of subjects. The session will last about one hour, and you'll receive one hour of SONA credit.

The first session will begin with a series of tasks presented on the computer. The tasks concern various cognitive skills, including judging word meaning quickly and accurately, and learning, and then recalling, images presented on the screen. The second portion of this first session will be devoted to your completing brief inventories of your background, emotions, and ideas about life.

The information in the study records will be kept completely confidential. Data will be made available only to persons conducting the study. Your name will not be entered into any computer records. Nor, will you be asked to provide your name on any study materials. No reference will be made in verbal or written reports which could link you to the study.

Your participation in this study is voluntary; you may refuse to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

As the experimenter, I can answer any questions that you might have now. Do you have any questions? [Answer any]

Please read and sign the informed consent form, if you are willing to participate in the research project. You may keep one copy."

Give each participant a copy of the consent form, and allow them to keep a copy for their records.

Phase 1

"Ok, let's go ahead and begin. By the time we're adults we've acquired a number of skills at which we are so proficient they are automatic– These are things like reading and basic addition. In this experiment we will focus on word judgment as an automatic skill; that is, we'll be looking at the proficiency with which you can make judgments about the meanings of words.

"In the first task, you will be presented with words on the screen for you to judge. Your job is to indicate whether each word has a positive or negative connotation. If the word on the screen has a positive connotation (or meaning), press the front slash key. If the word on the screen has a negative connotation (or meaning), press the Z key. Also, use both of your hands to press the buttons on the keyboard—use the index finger on your LEFT hand to press the BAD key, and the index finger on your RIGHT hand to press the GOOD key. I will now check to make sure

you have your hands on the right keys. [Check to make sure they have their hands on the right keys, especially for the front slash as they may have confused it with a backslash.]

"We want to know how automatic these responses are for you, so try to respond to each word as quickly as you can. Don't respond so quickly that you make a mistake. Accuracy is very important, but being as accurate as you can, please respond to each word as quickly as you can.

"In each trial, a word will appear, and your job is to indicate whether this word has a positive or negative connotation. After you respond, the screen will go blank and a new trial will begin.

"Does anyone have any questions? Does the word meaning task make sense to everyone? [Answer any questions.] You are going to do a practice group first to get you used to the task. Then you will press the space bar and begin the actual task. The task will be divided into two blocks so there will be a rest period if you feel like you need it. Just press the spacebar to continue. When this task is over, the screen will tell you to inform the experimenter, at this point please raise your hand. Remember that your task is to judge each word as quickly and accurately as possible, and please be sure to focus on the center of the screen. Press the spacebar to begin."

Phase 2

"We are now ready for the next task; we'll get back to the word judgment task later, but now we are interested in how well you can learn faces that are presented for a very short time. This task is also a practice task for something we will do later.

"You'll see a series of photographs of faces on your screen and you need to pay attention to each face as it appears. You don't need to make any responses in this task, just watch the faces. Each face will remain on screen for a few seconds. We're interested in how well you can learn these faces, so it's important that you pay attention to them!

"After you finish this task we are going to test you for how well you can recognize these faces. Again, there will be two blocks. Stop when the screen tells you to inform me. Any questions? Press the spacebar to begin."

Phase 3

"Now we are going to test you on how well you learned the faces that were just presented. Now you will again be presented with a series of faces–half the faces will be from the previous task, and half of the faces will be new faces.

"Each trial will begin with a face appearing on the screen. Decide whether you saw this face in the previous task or not. If you think you remember the face from the previous task, press the Z key. If you think this is the first time that you have seen this face, press the front slash key for NO. Each face will remain on screen for 5 seconds, so there's no need to rush. Just make sure that you respond before the 5 seconds have elapsed. After the 5 seconds has elapsed, a new trial will begin and a new face will appear.

“Remember that because half of the faces are new and half of the faces are from the previous task, you should find yourself hitting the YES and NO keys about 50/50. Any questions? Stop when the screen tells you in capital letters to stop. Press the spacebar to begin.”

Phase 4

“To this point in the experiment we have been doing two different tasks separately, they were word judgment and face learning. Now we are going to put the two tasks together. We're interested in the automatic nature of word meaning and how well you can do two things at once. In order to study this we are going to introduce a distraction to see what effect it has on your ability to judge the meanings of words.

“We're interested in seeing how face learning will interfere with your ability to judge word meaning. If word judgment is an automatic skill, face learning should not have any effect on the speed and accuracy with which you can judge the meaning of words.

“For this task you will first see picture of a face. Once the face disappears, a word will be presented. As in the first task, press the key for bad, the Z key, if the word has a negative connotation; and the key labeled GOOD, the front slash key, if the word has a positive connotation. Just as before, you should respond as quickly as you can without making a mistake. However, you will also be tested later for your recognition of the faces that are presented during this task, so it's IMPORTANT THAT YOU WATCH THE FACES CAREFULLY.

“We want to see how well you can perform the word judgment task while having to learn faces at the same time. You'll begin with a practice group to get you used to this task. After the practice, there will be four blocks of the joint task. Please try to stay focused and answer as quickly as possible without making a mistake. The breaks between the blocks are for you to rest your eyes, so take what time you need. When you should stop, you will see the word STOP in all caps in the instructions. Any questions? Press the spacebar to begin.”

Phase 5

“Now we're going to do a recognition task like the one you did earlier. Once again, you will be presented with pictures of faces on the screen. Again, if this face is one that you recognize from the previous task, press the key labeled YES (the Y key). If you do not remember seeing this face, press the N key for No. As before, each trial will begin with a face appearing on screen. You will have 5 seconds to make your response. When you respond, the face will disappear from the screen and a new face will appear shortly. Any questions?”

Questionnaire

(When everyone is finished) “Next we’d like for you to fill out several questionnaires. Please read the instructions carefully before you begin each survey, and I want to emphasize that your answers will remain completely confidential. If you have any questions about any of the questionnaires, please let me know.”

Debriefing (as participants are finished)

Read aloud from the debriefing statement if there is time (or only one participant). Provide participants copies for their records. Emphasize that you ask them to please not share any details of the study with others.

Appendix D
Measures

Feeling Thermometers - Assessment of Societal Groups

We are interested in people's attitudes toward, and overall evaluations of, members of various social groups. Below you will see something that looks like a thermometer. You will use this to indicate your attitude toward different groups.

Here is how it works. If you have a positive attitude toward typical members of the group, you would give them a score somewhere between 50º and 100º, depending on how favorable your evaluation of the group is. On the other hand, if you have a negative attitude toward typical members of the group, you would give them a score somewhere between 0º and 50º, depending on how unfavorable your evaluation of that group is. The degree labels will help you locate each group on the thermometer. You are not restricted to the numbers indicated — feel free to use any number between 0º and 100º. Please answer honestly according to how you personally feel about each group. Your responses will be kept confidential.

1. Habitat for Humanity _____
2. Lawyer _____
3. Republican party _____
4. Hispanics/Latinos_____
5. Daytime talk show hosts _____
6. Muslims _____
7. Heterosexual women _____
8. Bisexual men _____
9. College professors _____
10. Nurses _____
11. Bisexual women_____
12. Female to male transgender men _____
    Note: A transgender male is someone who was assigned female at birth, but identifies as male.
13. Greenpeace _____
14. Lesbians _____
15. Congress _____
16. Gay men _____
17. Elementary school teachers _____
18. Blacks/African Americans _____
19. American Red Cross _____
20. National Rifle Association _____
21. Mormons _____
22. Democratic party _____
23. Whites _____
24. Heterosexual men ____
25. Male to female transgender women _____
    Note: A transgender woman is someone who was assigned male at birth, but identifies as female.
26. Christians _____

Genderism and Transphobia Scale (GTS; Hill & Willoughby, 2005)

INSTRUCTIONS: Please indicate how you respond to the following statements using the 7-point scale described below. Please respond THOUGHTFULLY and HONESTLY to each question. It is important to indicate how you really feel NOW and not how you might have felt in the PAST. Some of the situations may be unfamiliar to you, but try to think about similar situations you might have found yourself in. Respond to each item and do not worry about your previous responses. THERE ARE NO RIGHT OR WRONG ANSWERS.

Strongly agree	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	Strongly disagree
1	2	3	4	5	6	7

1. I have beat up men who act like sissies.
2. I have behaved violently toward a woman because she was too
3. If I found out that my best friend was changing their sex, I would freak out.
4. God made two sexes and two sexes only.
5. If a friend wanted to have his penis removed in order to become a woman, I would openly support him.
6. I have teased a man because of his feminine appearance or behavior.
7. Men who cross---dress for sexual pleasure disgust me.
8. Children should be encouraged to explore their masculinity and femininity.
9. If I saw a man on the street that I thought was really a woman, I would ask him if he was a man or a woman.
10. Men who act like women should be ashamed of themselves.
11. Men who shave their legs are weird.
12. I cannot understand why a woman would act masculine.
13. I have teased a woman because of her masculine appearance or behavior.
14. Children should play with toys appropriate to their own sex.
15. Women who see themselves as men are abnormal.
16. I would avoid talking to a woman if I knew she had a surgically created penis and testicles.
17. A man who dresses as a woman is a pervert.
18. If I found out that my lover was the other sex, I would get violent.
19. Feminine boys should be cured of their problem.
20. I have behaved violently toward a man because he was too feminine.
21. Passive men are weak.
22. If a man wearing makeup and a dress, who also spoke in a high voice, approached my child, I would use physical force to stop him.
23. Individuals should be allowed to express their gender freely.
24. Sex change operations are morally wrong.
25. Feminine men make me feel uncomfortable.
26. I would go to a bar that was frequented by females who used to be males.
27. People are either men or women.
28. My friends and I have often joked about men who dress like women.
29. Masculine women make me feel uncomfortable.
30. It is morally wrong for a woman to present herself as a man in public.
31. It is all right to make fun of people who cross---dress.

32. If I encountered a male who wore high---heeled shoes, stockings, and makeup, I would consider beating him up.

Note. All items except questions 5, 8, 23, and 26 are reverse scored

Personal Beliefs Survey (Motivation to Control Prejudice – adapted from Dunton & Fazio, 1995)

Please read each of the following statements carefully. Indicate the extent to which you agree or disagree with each statement by filling in the appropriate bubble according to the following scale.

Strongly disagree	Disagree	Disagree somewhat	No opinion	Agree somewhat	Agree	Strongly agree
-3	-2	-1	0	+1	+2	+3

1. In today's society it is important that one not be perceived as prejudiced in any manner.
2. I always express my thoughts and feelings, regardless of how controversial they might be.
3. I get angry with myself when I have a thought or feeling that might be considered prejudiced.
4. If I were participating in a class discussion and a LGBT student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint.
5. Going through life worrying about whether you might offend someone is just more trouble than it's worth.
6. It's important to me that other people not think I'm prejudiced.
7. I feel it's important to behave according to society's standards.
8. I'm careful not to offend my friends, but I don't worry about offending people I don't know or don't like.
9. I think that it is important to speak one's mind rather than to worry about offending someone.
10. It's never acceptable to express one's prejudices.
11. I feel guilty when I have a negative thought or feeling about a LGBT person.
12. When speaking to a LGBT person, it's important to me that he/she not think I'm prejudiced.
13. It bothers me a great deal when I think I've offended someone, so I'm always careful to consider other people's feelings.
14. If I have a prejudiced thought or feeling, I keep it to myself.
15. I would never tell jokes that might offend others.
16. I'm not afraid to tell others what I think, even when I know they disagree with me.
17. If someone who made me uncomfortable sat next to me on a bus, I would not hesitate to move to another seat.

Affective Reactions – Study 1

Note: Each separate version appeared as its own webpage.

Transgender Women Version

A transgender woman is someone who was assigned male at birth, but identifies as female.
To what degree do you feel positively towards transgender women? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards transgender women? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about transgender women. There are no wrong answers.
1= Not at all, 9 = Extremely

Anger
Surprise
Disgust
Joy
Fear
Sadness
Happiness

Transgender Men Version

A transgender male is someone who was assigned female at birth, but identifies as male.
To what degree do you feel positively towards transgender men? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards transgender men? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about transgender men. There are no wrong answers.
1= Not at all, 9 = Extremely

Anger
Surprise
Disgust
Joy
Fear
Sadness
Happiness

Heterosexual Women Version

To what degree do you feel positively towards heterosexual women? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards eterosexual women? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about heterosexual women. There are no wrong answers..

1= Not at all, 9 = Extremely

Anger
Surprise
Disgust
Joy
Fear
Sadness
Happiness

Heterosexual Men Version

To what degree do you feel positively towards heterosexual men? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards heterosexual men? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about heterosexual men. There are no wrong answers..
1= Not at all, 9 = Extremely

Anger
Surprise
Disgust
Joy
Fear
Sadness
Happiness

Affective Reactions – Study 2

Note: Each separate version appeared as its own webpage.

Transgender Women Version

A transgender woman is someone who was assigned male at birth, but identifies as female.
To what degree do you feel positively towards transgender women? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards transgender women? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about transgender women. There are no wrong answers.
1= Not at all, 9 = Extremely

Security
Anger
Hurt
Pride
Surprise
Disgust
Anxiety
Respect
Pity
Envy
Contempt
Joy
Fear
Happiness
Guilt
Sadness
Compassion
Resentment

Transgender Men Version

A transgender man is someone who was assigned female at birth, but identifies as male.
To what degree do you feel positively towards transgender men? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards transgender men? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about transgender men. There are no wrong answers.
1= Not at all, 9 = Extremely

Security
Anger
Hurt

Pride
Surprise
Disgust
Anxiety
Respect
Pity
Envy
Contempt
Joy
Fear
Happiness
Guilt
Sadness
Compassion
Resentment

Heterosexual Women Version

To what degree do you feel positively towards heterosexual women? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards eterosexual women? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about heterosexual women. There are no wrong answers..

1= Not at all, 9 = Extremely

Security
Anger
Hurt
Pride
Surprise
Disgust
Anxiety
Respect
Pity
Envy
Contempt
Joy
Fear
Happiness
Guilt
Sadness
Compassion
Resentment

Heterosexual Men Version

To what degree do you feel positively towards heterosexual men? (1 = Not at all, 9 = Extremely)
To what degree do you feel negatively towards heterosexual men? (1 = Not at all, 9 = Extremely)

Report the extent to which you experience each feeling when thinking about heterosexual men. There are no wrong answers..
1= Not at all, 9 = Extremely

Security
Anger
Hurt
Pride
Surprise
Disgust
Anxiety
Respect
Pity
Envy
Contempt
Joy
Fear
Happiness
Guilt
Sadness
Compassion
Resentment

Demographic Questions

Gender:
Male
Female
Other

Age:

Marital Status (check one):
Single
Married
Separated
Divorced
Widowed

Ethnicity (select all that apply)
White/Caucasian
Hispanic/Latino(a)
African-American/Black
Asian
Native American
Other (Please list)

Politically, how would you identify?
Strongly liberal
Liberal
Slightly liberal
Moderate
Slightly conservative
Conservative
Extremely conservative

Which political party do you consider yourself to be aligned with?
Democrat
Republican
Independent
Other (please specify)

What is your religious affiliation?
Christian
Muslim
Jewish
Hindu

Atheist
Buddhist
Agnostic
Not religious
Other (Please list)

How often do you attend church services?
Less than a few times a year
A few times a year
Every few months
A few times a month
Fairly often during a month
Regularly during a month

What is your level of education?
Some middle or high school
High school diploma or GED
Some college
Associates degree
Bachelors degree
Some graduate school
Graduate degree

What is your current employment status?
Employed full time
Employed part-time
Not employed and looking for work
Not employed and not seeking work
Retired

How would you characterize where you currently live? (check one)
_____ rural (unincorporated)
_____ small town (village or town)
_____ suburban (metropolitan area of a large city)
_____ small city (population < 30,000)
_____ medium-sized city (population 30,000 – 100,000)
_____ large city (population > 100,000)

Geographic Location
Northeast/Mid-Atlantic
Pacific coast
Mountain/Southwest

Central/Midwest
South/Southeast

Sexual Orientation
Heterosexual
Gay male
Lesbian
Bisexualr
Other

Figure A

Phases of the evaluative priming task

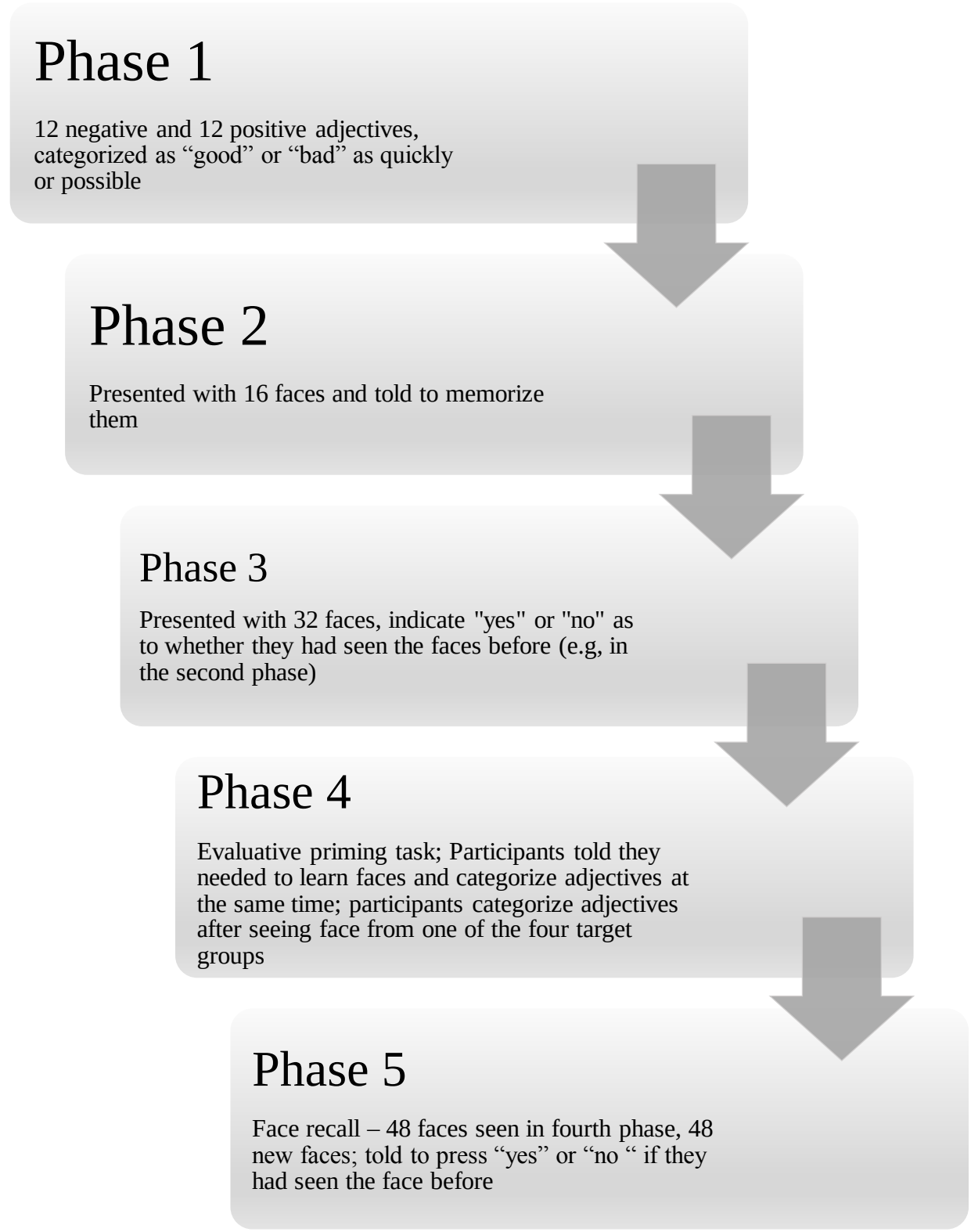


Figure B

Decomposed Interaction – Target Group x Emotions – Study 1

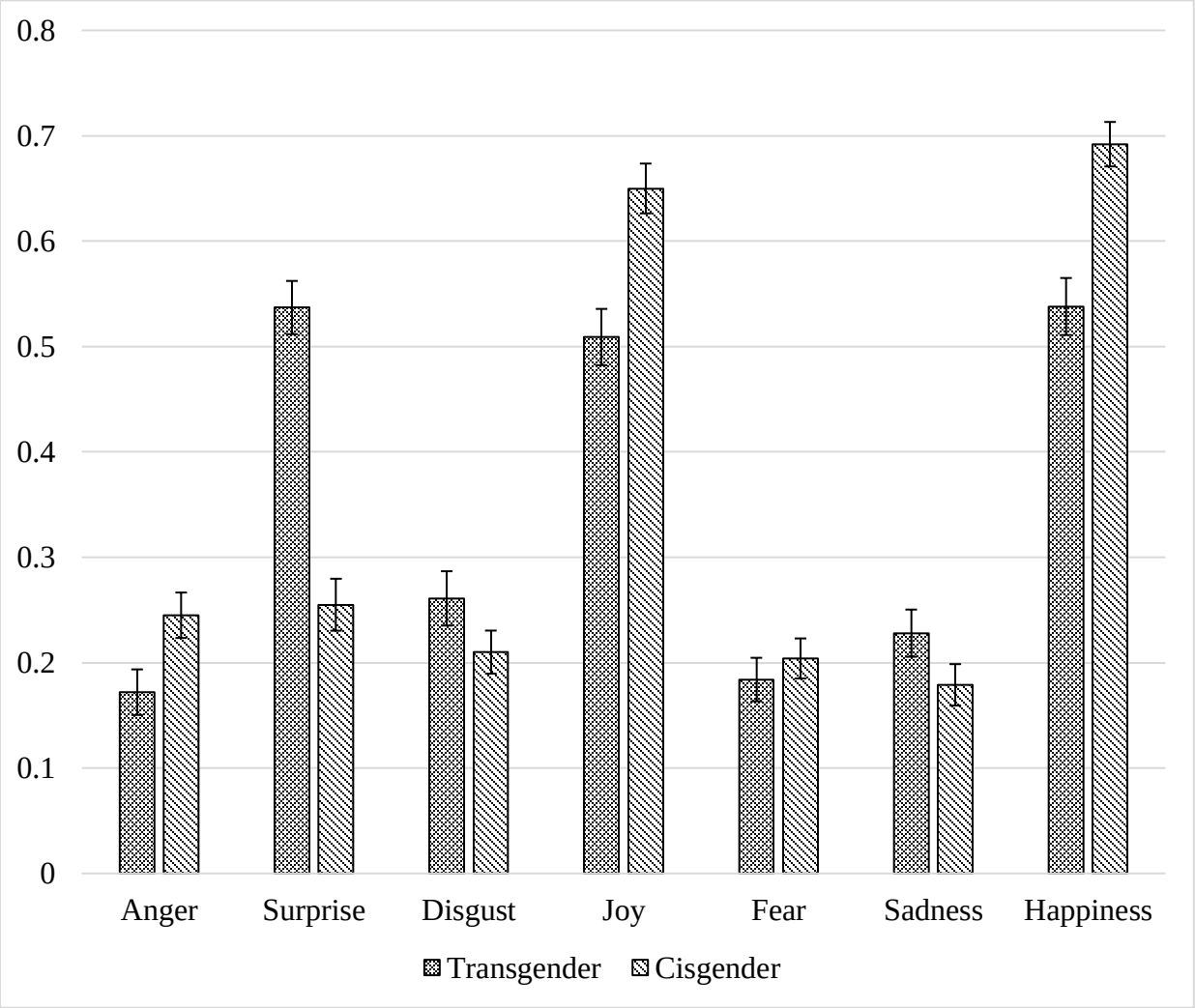


Figure C

Decomposed Interaction – Target Gender x Target Group x Emotion – Study 1

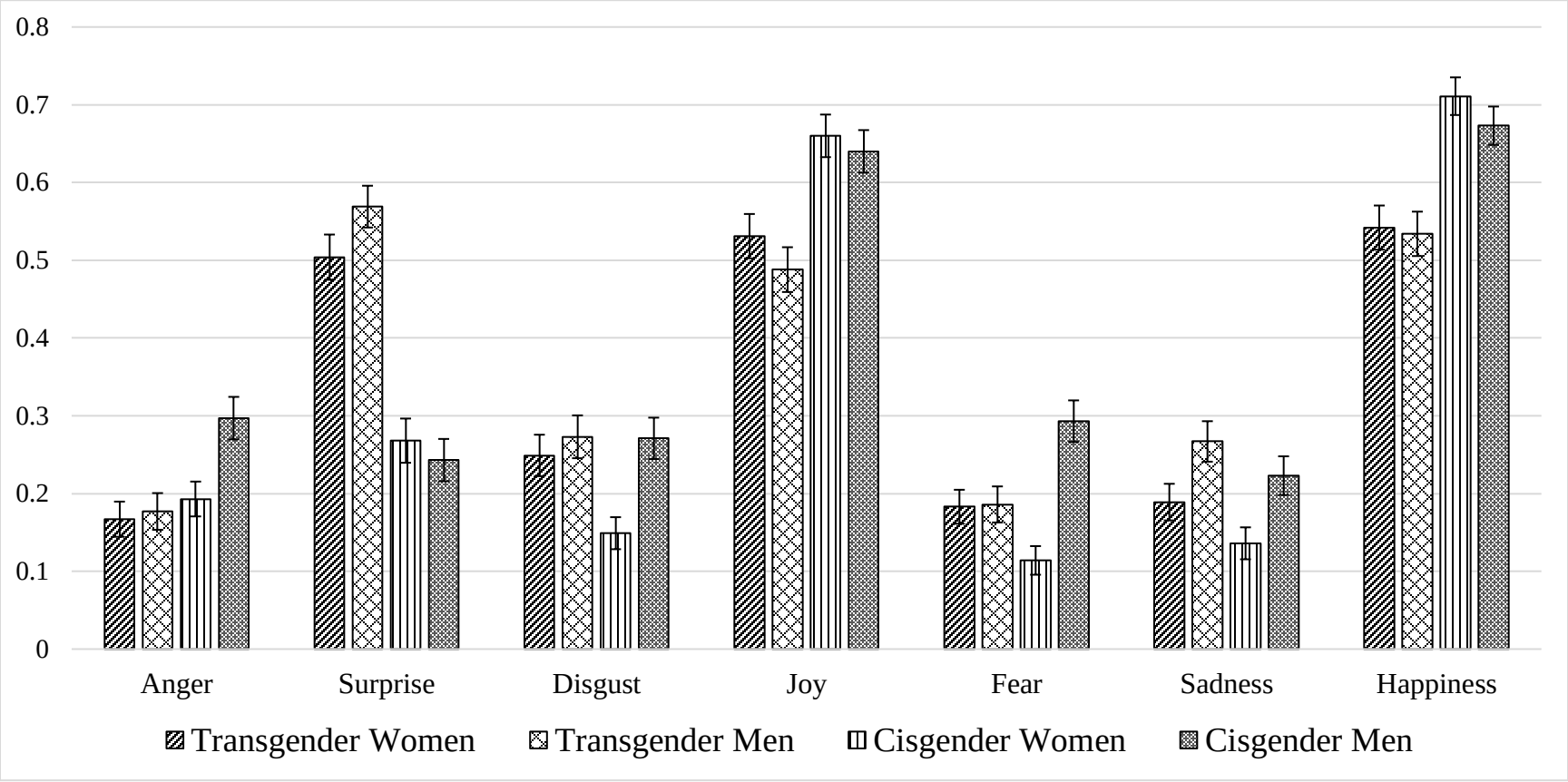


Figure D

Decomposed Interaction – Target Group x Target Gender x Emotion (Comparing Transgender Men and Women) – Study 1

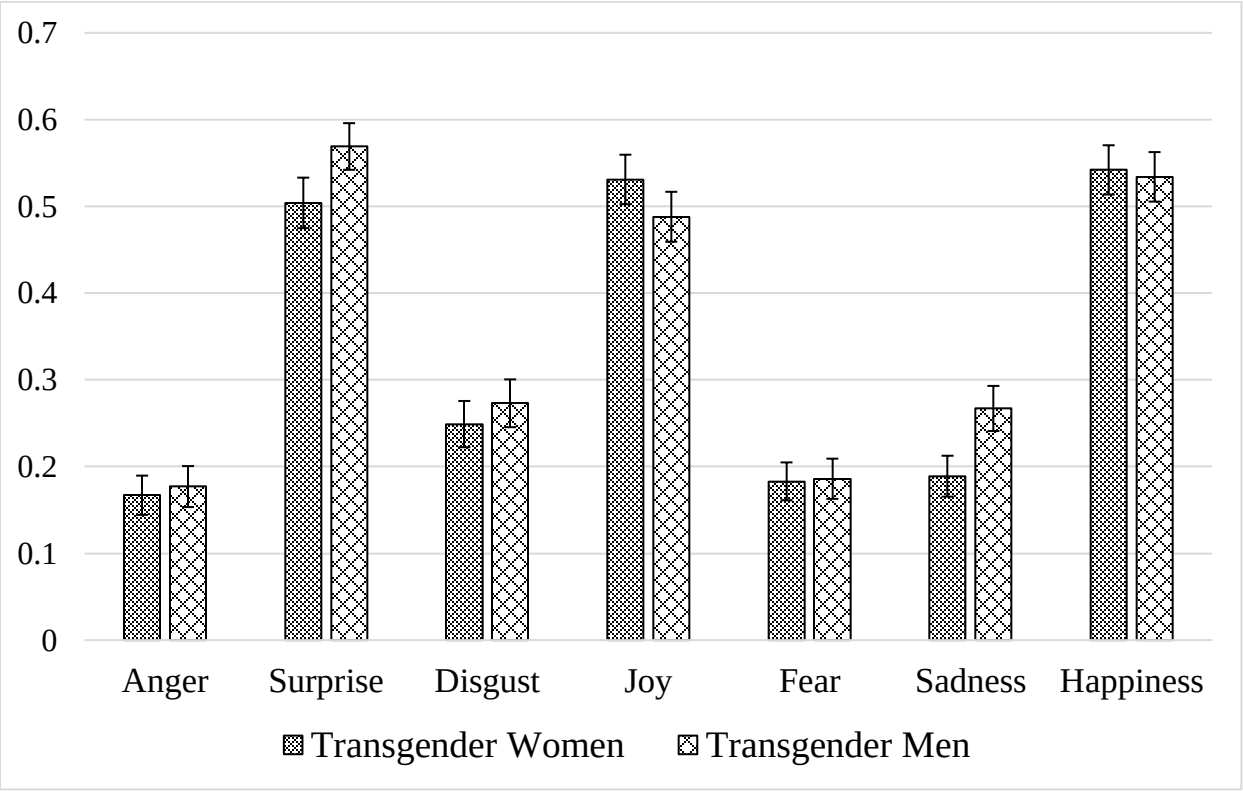


Figure E

Decomposed Interaction – Target Group x Emotions – Study 2

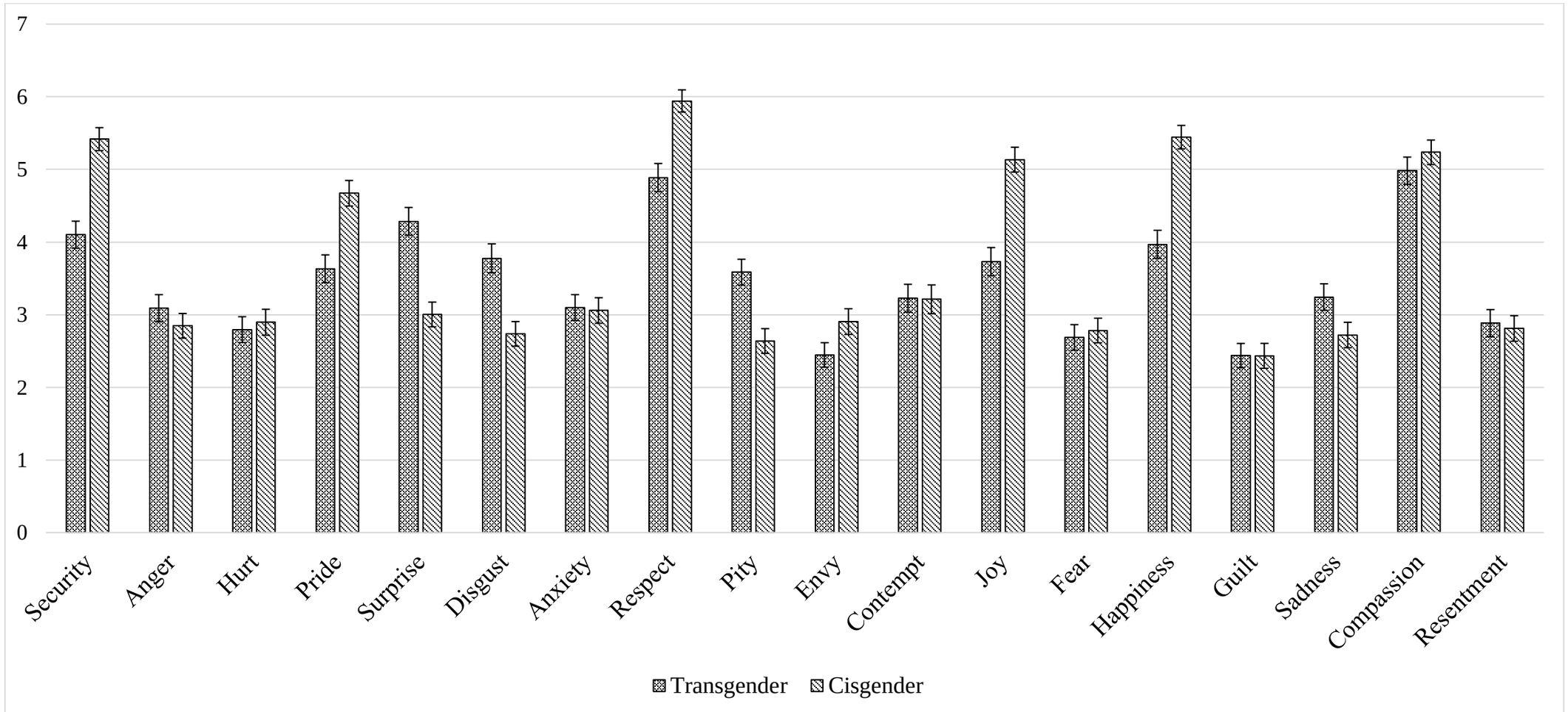


Figure F

Decomposed Target Group x Target Gender x Emotion Interaction – Study 2

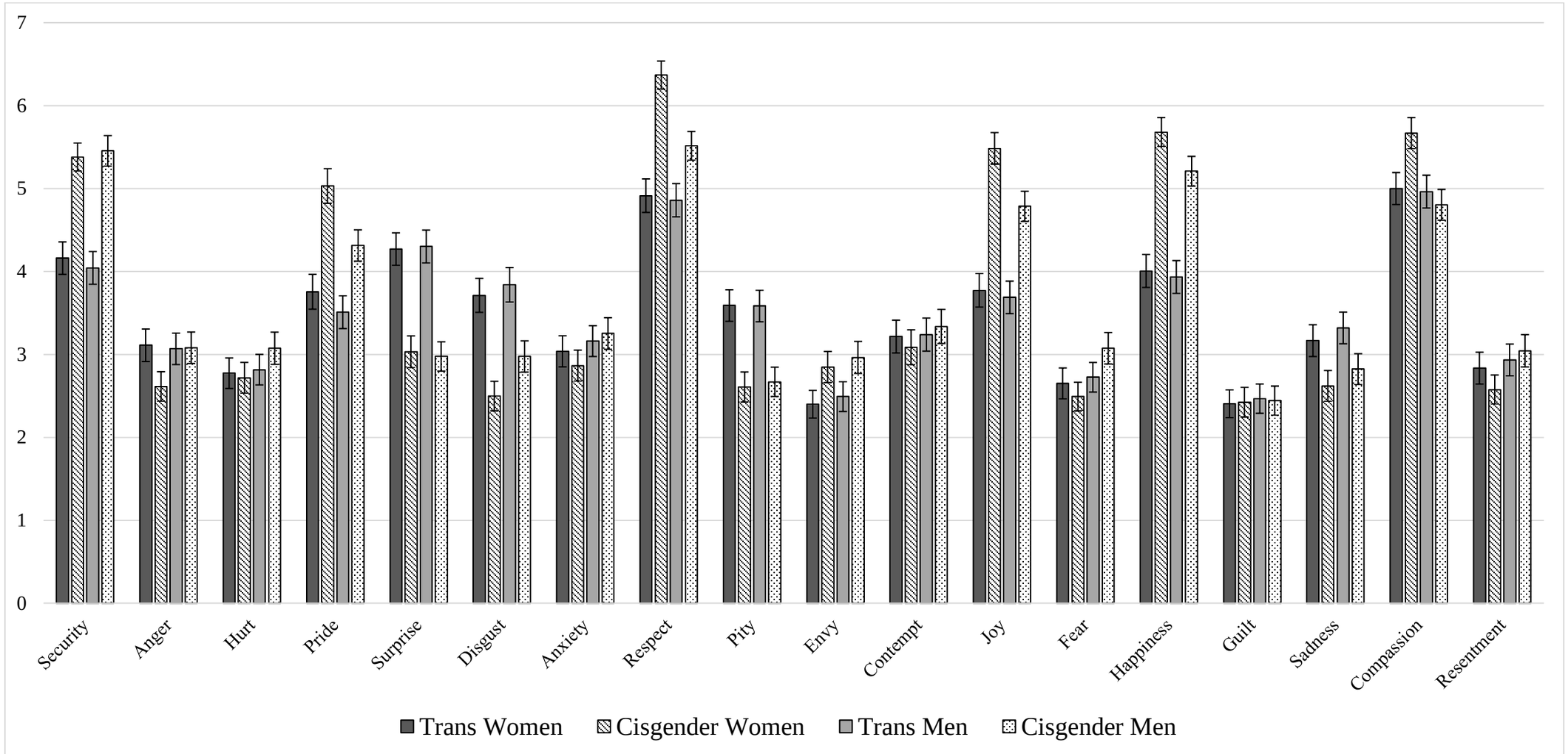


Figure G

Decomposed Target Group x Target Gender x Emotion Interaction Comparing Transgender Men and Women