The acronym's forgotten letter: Beliefs about transgender men and women

by

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The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this dissertation. The Graduate College will ensure this dissertation is globally accessible and will not permit alterations after a degree is conferred.

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ABSTRACT

Psychologists have long recognized the role of stereotyping social minority groups. The current sociopolitical environment of hostility toward transgender individuals would suggest that transgender stereotypes are negative. The purpose of this study was to explore the stereotypes of transgender women and men and examine the content of these stereotypes in comparison to cisgender women and men. It was expected that stereotypes would reflect that transgender individuals are social outsiders who do not fit their assigned gender role, placing them in the low warmth – low competence cluster of the stereotype content model. Multidimensional scaling and cluster analyses revealed a clear difference between the stereotypes of cisgender women and men versus transgender women and men. Specifically, three groups of stereotypes emerged for women, men, and transgender. In examination of the first hypothesis, transgender women and men were disproportionately assigned traits rated negatively and low in competence. Transgender women and men appeared to be assigned traits rated neutral or low in warmth. In examination of the second hypotheses, the feminine stereotypes of cisgender women and the masculine stereotypes of cisgender men were distinct from the non-gendered stereotypes of their transgender counterparts. In examination of the third hypothesis, stereotype content dimensions of valence, warmth, competence, and gender were somewhat interrelated as expected; however, these dimensions were all distinct and uniquely useful in examining stereotype content. Also, as the fourth hypotheses predicted, various participant variables, such as sex, sex role attitudes, transphobia, social distance, and gender self-concept influenced their perception of stereotypes.

Keywords: Transgender, LGBT, Stereotypes, Stereotype Content, SCM

CHAPTER 1

INTRODUCTION

The primary objective of the present study is to examine the stereotypes of transgender individuals. The public profile of this social minority group, and the stereotypes about them, has risen as transgender and gender nonconforming people become increasingly visible in the media of popular Western culture (Hendricks & Testa, 2012). From Laverne Cox's cover story in TIME magazine (Steinmetz, 2014) to Caitlyn Jenner public transition highlighted in an interview with Diane Sawyer (2015) to countless representations of transgender characters in shows like *Transparent*, *Orange is the New Black*, and *Two and a Half Men* (Cavalcante, 2017; GLAAD, 2015) and movies such as *Dallas Buyers Club* and *Boys Don't Cry* (Cavalcante, 2017). With such heightened visibility, there are likely developing social perceptions about transgender individuals. Researchers have noted that media has an undeniable influence on the development of stereotypes (Kashima et al., 2008), with media consumers developing perceptions of minority groups based on their visibility (Ramasubramanian, 2010). However, there is a paucity of research analyzing social perceptions and stereotypes of transgender individuals. As noted by Geiger, Harwood, and Hummert (2006) the ability to change such prejudicial attitudes depends upon the ability of psychologists "to understand the ways in which those attitudes are represented" (p. 176), such as in the understanding of stereotypes that people hold and how these stereotypes are cognitively organized.

The literature in social psychology indicates that such stereotyping and prejudice is at the core of how transgender people are perceived and treated by legislators, educators, employers, healthcare providers and other individuals in everyday interactions. Understandably, these

cultural experiences significantly impact the psychosocial stress transgender individuals face (Hendricks & Testa, 2012). Hill and Willoughby (2005) and Tebbe, Moradi, and Ege (2014) note anti-transgender prejudice leads to transgender individuals receiving negative evaluation because they do not fit the stereotypical roles of man and woman. Singh and dickey (2017) acknowledge the importance of mental health practitioners and clinical supervisors being aware of the impact of prejudice and stereotyping of gender nonconforming clients. Thus, knowledge of transgender stereotypes may enhance the development of interventions to counter anti-transgender prejudice, which is necessary to promote the lives and enhance the well-being of transgender individuals.

Singh (2016) argues that "gendered messages, stereotypes, and roles that cisgender women and men experience are culturally embedded" (p. 756), and transgender people are transgressing traditional cultural gender norms, which can have significant implications. For example, Lloyd (2013) notes the impact in the legal system, stating "the law relies on social stereotypes and common prejudice to lend credibility to openly hostile treatment of transgender claimants" (p. 174). Understanding the impact social perceptions and cultural views have on transgender people, these observations beg the question – what *is* this culturally-embedded view of transgender men and women? In other words – what are the cultural stereotypes of transgender people?

The research examining this question is in its infancy, with only two published studies on transgender stereotypes to date (Gazzola & Morrison, 2014; Antoszewsi, Kasielska, and Kruk-Jeromin, 2009), each with their own limitations. The limited research conducted on transgender stereotypes is troubling, particularly with the increasing visibility of transgender individuals in the media and legal system and the tremendous implications for transgender stereotypes on anti-transgender prejudicial attitudes and behaviors. Stereotypes are shaped by culture, and the

current sociopolitical milieu for transgender people is rather hostile in the U.S. It is imperative to examine cultural stereotypes of transgender people in the U.S. to develop appropriate interventions to counteract stereotype endorsement and reduce prejudice, discrimination, and violence as well as enhance the mental health of transgender people (Hendricks & Testa, 2012). Understandably, this is a primary reason the stereotype literature has developed for other social minority groups. Unfortunately, it appears the stereotype literature on transgender individuals has been forgotten as the stereotype literature stereotypes for fellow members of the lesbian, gay, bisexual, and transgender (LGBT) community has continued to flourish since the first publication mentioning homosexuals [sic] almost five decades ago (Simmons, 1965). As such, and in alignment with the suggestion by Geiger et al. (2006), the present study seeks to serve as a basis for changing anti-transgender attitudes by examining transgender stereotypes and their correlates.

To provide more clarity and insight to the transgender stereotype literature, the current study examines the stereotypes of transgender individuals generally and transgender men and women specifically by employing well-established stereotype research methodology. The study has been approved by the Iowa State University Institutional Review Board (see Appendix Q). The examination of stereotype content seeks to provide greater clarity into the cognitive organization of social perceptions of transgender women and men. The extensive research on gender stereotypes and stereotypes of lesbian, gay, and bisexual men and women, which have examined constructs of femininity, masculinity, warmth, and competence as well as positive- and negative-valence stereotypes (e.g., Blashill & Powlishta, 2009; Vaughn et al., 2016), will inform the exploration of stereotype dimensions that may exist among stereotypes of transgender people, and more specifically transgender women and transgender men. The stereotype

taxonomy will be further tested in its correlation with various participant characteristics (e.g., sex, gender self-concept, anti-transgender prejudice). To serve as a backdrop for these research study, this paper will provide an overview of gender theory, prejudice and stereotyping in the social psychological literature, prejudice toward transgender people, and the existing literature on gender stereotypes and stereotypes of the lesbian, gay, bisexual, and transgender (LGBT) community.

CHAPTER 2

REVIEW OF THE LITERATURE

Overview

The following literature review will highlight the important foundations upon which the hypotheses of this paper are based and will be tested. The discussion will begin with a review of theoretical underpinnings of gender and gender norms. There are widespread implications and assumptions made in gender theory and people's perceptions and expectations of gender expression in other people. However, there has been minimal research exploring social perceptions of gender nonconforming individuals. The literature review will discuss the definition, prevalence, and source of stereotypes of social groups. Discussion of research methodology and findings in the study of stereotypes of gender and subgroups of the lesbian, gay, bisexual, and transgender community will follow. It is proposed in this study that there are both general stereotypes of transgender people, and more specific stereotypes of transgender women and men. It is predicted that there will be discernible content dimensions that emerge for these stereotypes, aligning with previous study of social group stereotypes, and that these content dimensions will be interrelated. Additionally, it is predicted that certain participant variables, including sex, gender self-concept, sex-role attitudes, need for closure, transphobia, and social distance will be predictive of transgender cultural stereotype perceptions.

Gender Theory

Simone de Beauvoir was one of the first to highlight the cultural, social, and psychological components of gender in her popular work *The Second Sex*, originally published in 1949, when she stated "One is not born, but rather, becomes woman. No biological, psychic, or

economic destiny defines the figure that the human female takes on in society; it is civilization as a whole that elaborates this intermediary product between the male and the eunuch that is called feminine" (2009, p. 330). While de Beauvoir clearly rejects a deterministic view of biology and gender, the societal medicalization of gender ties biological traits to gender and essentially assigns a gender to a person at (or often prior to) birth with the exclamation 'It's a *boy*!' or 'It's a *girl*!' But first we must ask: What does it mean to be a boy or a girl?

Over the decades, theorists have noted that gender, something once thought simply as tied to biology (e.g., hormones, reproductive organs, chromosomes) with only two options, is complicated with multiple layers. Judith Butler (2004) argues that "gender is complexly produced through identificatory and performative practices, and [that] gender is not as clear or as univocal as we are sometimes led to believe" (p. 212). In piecing this apart, Kessler and McKenna (1978) published a book taking an ethnomethodological approach to understanding this complex topic by explaining the nuances of gender norms. The authors argue that gender is socially constructed, with variation from culture to culture. Deaux (1985) argues for the importance of making this distinction between gender and sex. Sex refers to the biologically base categories of male, female, and intersex, and gender refers to the psychological features associated with male and female biological categories. Kessler and McKenna (1978) highlight and explicate multiple layers to gender – gender assignment, gender identity, gender roles, and gender attributions. In other words, the concept of gender is more complex than what societal gender roles and stereotypes may lead people to believe.

O'Neil (1981) notes that gender roles are "defined by society as masculine or feminine" and embody the "behavior of the individual man or woman" (p. 203), or what is regarded as culturally appropriate for biological males and females. Bornstein (1994) argues that it makes

"sense to think [of gender roles] in terms of things like jobs, economic roles, chores, hobbies; in other words, positions in action specific to a given gender as defined by culture" (p. 26). Noting that gender stereotypes are shaped by culture, it is important to understand not only how they develop but why they persist. Bem's (1981) gender schema theory gives insight into why gender roles and gender stereotypes become so ingrained in a culture, noting that gender schemata serve as a filter of one's social environment. Thus, information that is congruent with the gender stereotype is more easily assimilated into a person's mind, further reinforcing the stereotype. What is deemed culturally appropriate, or stereotypical, for men and women in their respective gender roles, is also shaped through exposure and social learning (Gordjin, Koomen, & Stapel, 2001), which is why increased visibility of transgender individuals in the media has important implications. The legal system, which may be viewed as a supreme guideline for what is culturally approved and 'normal' perpetuates an essentialist view of gender (Bell, 2016) that can create "devastating repulsion and ordering" (Lloyd, 2013, p. 171) when individuals fall outside what is deemed 'appropriate' for their sex or gender. Butler (2004) acknowledges the important implications of societal and legal sanctions, arguing that:

> Justice is not only or exclusively a matter of how persons are treated or how societies are constituted. It also concerns consequential decisions about what a person is, and what social norms must be honored and expressed for 'personhood' to become allocated, how we do or do not recognize animate others as person depending on whether or not we recognize a certain norm manifested in and by the body of that other. The very criterion by which we judge a person to be a gendered being, a criterion that posits coherent gender as a presupposition of humanness. (p. 58).

Given the cultural, and often legal, sanctions on what is deemed appropriately 'feminine' and 'masculine' for women and men, and thus according to Butler (2004), what may be 'appropriately human,' researchers have examined these constructs closely over the years. Masculinity, which has typically been associated with men, has been linked to more instrumental

and agentic personality traits, such as competence and decisiveness, which affords higher social status. Femininity, which is typically associated with women, has been linked to more expressive and communal traits, such as warmth and concern for others (Bem, 1974; Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968; Nelson, 2002). While many researchers cast these constructs at two ends of the same spectrum (e.g., Spence, Helmreich, & Stapp, 1974), Sandra Bem (1974) was the first to suggest that masculinity and femininity are two separate dimensions as opposed to what was largely believed at the time to be bipolar dimensions of the same construct. Bem (1974) argued that an individual could be high or low in both feminine and masculine personality traits and that the two constructs were not dependent upon one another. Bem (1975) suggested that if a person endorsed high amounts of both feminine and masculine traits, they were considered androgynous.

Bem (1974; 1975) emphasized the importance of personal endorsement of feminine and masculine traits, or one's gender self-concept, shaping how they see themselves falling into the 'appropriate' sex role as well as their perceptions of other peoples' sex role. Thus, women who endorsed higher levels of feminine traits and lower levels of masculine traits aligned with their sex role, and vice versa for men. People who are highly congruent with their gender role tend to value this quality in other people as well. Those people who are androgynous, however, have seemingly greater flexibility in their approach to sex roles, personally and in perception of other people (Bem, 1975). Bem (1974) developed the Bem Sex Role Inventory (BSRI) to measure a person's gender self-concept and sex-role alignment, with subscales for Masculinity, Femininity, Social Desirability, and Androgyny.

While Bem suggested that Androgyny, and thus flexibility in gender role perceptions and personal concept, would be evidence of greater psychological health, the experience of those

who transgress gender, particularly transgender individuals, are not often thought of as the pinnacle of psychological health. Unfortunately, the psychiatric diagnosis of Gender Dysphoria, formerly Gender Identity Disorder, stigmatizes transgender individuals (Davy, 2015) and perpetuates stereotypes that transgender individuals are unstable or disturbed (Minter & Frye, 1996). This is a perception that transgender author Kate Bornstein (1994) is all too familiar with in her acknowledgement that "trans is considered an illness" according to society (p. 62).

The connection between gender-role nonconformity and perceived mental illness is not a novel concept, unfortunately. According to Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel (1970) mental health "clinicians have different concepts of health for men and women and these differences parallel the sex-role stereotypes prevalent in our society" (p. 5). These findings were replicated by Seem and Clark (2006) who determined almost 40 years later that mental health clinicians still held two different standards of health for men and women. Such outcomes in the literature precipitate concern about the stereotypes mental health clinicians have of transgender and other gender nonconforming people.

In addition to mental health clinician perspectives being shaped by the cultural regulations of gender, transgender individuals are far too often not seen as 'real' or 'natural' in the eyes of the law. In fact, Lloyd (2013) argues that "the law is motivated by disgust and a desire to codify a certain kind of normalcy that although unstated, reflects conventional gender and sexuality norms" (p. 173). Given these findings, it would appear anyone who breaks from gender tradition may face negative social perceptions and prejudice, such as that faced by transgender individuals in the United States (e.g. Grant et al., 2016). The literature in social psychology can provide insight into the development and conceptualization of the transgender stereotypes that perpetuate prejudice, discrimination, and violence.

Stereotypes and Prejudice

Stereotypes, put simply, are "pictures in our heads" (Lippman, 1922, p. 3) and represent a tendency for people to attribute similar characteristics to a group of people based on a common feature of members of this group (Nelson, 2002). Allport (1954) defined prejudice as "an avertive or hostile attitude toward a person who belongs to a group, simply because he belongs to that group, and is therefore presumed to have the objectionable qualities ascribed to the group" (p. 6). Social psychologists have long recognized the link between stereotypes and prejudice (e.g., Nelson, 2002; Ramasubramanian, 2010) with stereotypes serving to influence prejudice and justify discrimination (Allport, 1954; Fiske, Cuddy, Glick, & Xu, 2002). Given the current sociopolitical milieu of outwardly discriminatory policies and actions against transgender people in the United States, there is a need to understand the nature of this prejudice toward transgender people more effectively by examining transgender stereotypes.

Origin of Prejudice

Nelson (2002) notes the importance of understanding "the origin of prejudice, how it interacts with stereotyping in ways that maintain the stereotype and how stereotypes can promote the maintenance of prejudice toward out groups" (p. 46). Allport (1954) points to the human mind's engagement in overcategorization, in which "erroneous generalization" is a "natural and common" capacity "of the human mind" (p. 17). According to Nelson (2002), "We learn about different stimuli and tend to group them in terms of common features, attributes, or functions," which becomes an automatic process reducing "the complexity of stimuli in our social environment" (p. 19). These erroneous and overgeneralized views, beliefs, and prejudgments may come without having had any personal experience with anyone belonging to the outgroup in question (Allport, 1954; Kashima, Fiedler, & Freytag, 2008). These beliefs or judgments serve as

the cognitive component of social group perception, and drive the emotional response, or prejudice, toward the outgroup "based on real or imagined characteristics of the group members" (Nelson, 2002, p. 11).

These real or imagined characteristics yield cognitive representations, or stereotypes, include "the tendency of people to think of someone or something in similar terms based on a common feature shared by each" (Lippman, 1922, p. 4). While stereotypes are traits that are typically associated with a specific social group, counterstereotypes are traits that are *not* associated with this social group. Counterstereotypes, thus, can give insight about perceptions of a social group from the opposite end of the spectrum (e.g., Gazzola & Morrison, 2014). Whether stereotypes or counterstereotypes, McGarty, Yzerbyt, and Spears (2002) provide three guiding principles for perceptions of a group of people – stereotypes aid explanation, are used as energy-saving devices, and are shared group beliefs.

The human mind naturally categorizes the social environment to make sense of the world (Yzerbyt & Rocher, 2002). The mind distinguishes groups on their respective shared attributes or features, which serve the development of stereotypes (Nelson, 2002). Stereotypes serve to facilitate meaningful groupings based on the perception of group differences (McGarty et al., 2002). Understandably, the division into ingroups and outgroups are very difficult to cognitively disrupt (Tajfel, 1969) given that stereotypes are used efficiently and with minimal effort in understanding the world, which is necessary given the limits of the brain's information processing capacity (McGarty et al., 2002). Thus, with a desire to categorize people into simple social groups devised of concrete characteristics, stereotype endorsement and prejudice are often correlated with a need for closure, or intolerance of cognitive ambiguity (Nelson, 2002). Roets and Van Hiel (2011) note the "desire for cognitive closure varies along a continuum with a

strong need to attain closure at one end and a high need to avoid closure at the other end" (p. 4). Thus, the amount of tolerance one has for ambiguity in their social environment varies. By simplifying the grouping of people, less effort is spent on fully processing and interpreting the diversity of individuals in a social group and subsequently, erroneous perceptions form (McGarty et al., 2002).

While stereotypes may derive from direct observation or experience with a group, and thus, differentiation between groups occurs on traits that enhance the differentiation between these groups, cognitive biases in perception facilitate the development of stereotypes that are inaccurate (Brown & Turner, 2002). As demonstrated by Bem's (1981) gender schema theory, even when contradictory information is present, it is typically much more difficult to integrate this 'counterintuitive' information with information one already 'knows' about a person or group of people. Allport (1954) suggested one means for reducing bias, erroneous perceptions, and prejudice would be through the contact hypothesis, or intergroup contact theory, in which an individual would be able to fully process an interaction with one person who defies the stereotypical traits of the group to which they belong. However, researchers have determined that individuals engage in a cognitive strategy called subtyping, in which an individual who is contrary to their stereotypical beliefs is classified as an exception or deviant of the stereotyped group (Yzerbyt & Carnaghi, 2008). Thus, the attempt at reducing prejudice through contact with this person is unlikely to be successful because stereotypes are quite cognitively resistant to change, even when they are believed to be inaccurate (Moreno & Bodenhauser, 1999).

The inflexibility of changing stereotypes may be partially attributable to social influence and the pervasiveness of a stereotype in society – shared stereotypes stem from the "shared cultural pool of knowledge, social representations, ideology or culture from which different

people sample" (McGarty et al., 2002, p. 6). Tajfel (1981) contends that personality dimensions become associated with certain groups of people based on personal and cultural experiences and that the view of these personality traits as representative of a specific social group are exaggerated to create more clear differentiation between outgroups and ingroups. Most categorization occurs rather automatically using the most immediately available observable characteristics in other people – race, gender, and age (Nelson, 2002; Fiske, 1998).

Another possible explanation for social group bias is social identity theory (SIT; Tajfel & Turner, 1979, 1986). SIT emphasizes individuals' bias to view their own group as more favorable on important dimensions (e.g., race, gender) and, therefore, display favoritism toward their ingroup and bias against outgroups. The theory highlights the inherent reaction of individuals to categorize people, which is how brains process information in a complex social environment. Given the inherent human need for positive self-esteem, which is fueled by highlighting positive aspects of membership an ingroup, individuals may boost their own esteem by degrading outgroups, leading to negative evaluations and prejudice (Tajfel & Turner, 1979). This makes it easier to develop negative stereotypes about members of the outgroup and to hold prejudice (Nelson, 2002).

In seeking to understand the relationship between prejudice and stereotypes, Gordjin, Koomen, and Stapel (2001), found that participants knowledge of cultural stereotypes was influenced by their level of prejudice, with higher-prejudiced individuals coming up with more negative stereotypes of the social outgroup. These results were consistent in tasks of stereotype generation, when participants were asked to come up with stereotypes they believed described the group in question, and stereotype trait presentation, when participants were asked to rate the trait that was presented to them on how characteristic it was of the group in question (Gordjin et

al., 2001). On the other hand, Devine (1989) found that high- and low-prejudice individuals are equally aware of prevailing cultural stereotypes but differ with respect to their personal endorsement of these stereotypes. Understanding the long history in social psychology that acknowledges the connection between stereotypes and prejudice, it is therefore important to explore the relationship between anti-transgender prejudice and stereotype knowledge and endorsement.

While much of the literature focuses on negative aspects of stereotypes facilitating prejudice, stereotype valence can include positive, negative, or neutral aspects (e.g., Sue & Sue, 2013). Glick and Fiske (2001) argue that a uniformly negative stereotype is not necessary to perpetuate discrimination. In fact, seemingly positive stereotypes (e.g., Asians are good at math) can also serve as a basis for discriminatory practices, having a negative impact upon members in the positively stereotyped group (Glick & Fiske, 2001; Cox, Abramson, Devine & Hollon, 2012). Fiske, Cuddy, Glick, and Xu (2002) explain this phenomenon with a Stereotype Content Model (SCM), which categorizes people on dimensions of warmth and competence, eliciting specific emotional reactions in response to social groups dependent upon the combination of perceptions of warmth and competence. Outgroups may be viewed as likable (high warmth) even if they are not respected (low competence), or they may be respected (high competence) even if they are not likable (low warmth), and thus, stereotypes of a social group may include a mix of positive- and negative-valence traits. The SCM will be discussed more in depth in the following section on the content and dimensions of stereotypes.

Stereotype content and dimensions

Geiger and colleagues (2006) argue it is pertinent to understand the content and cognitive organization of stereotypes to inform anti-prejudice interventions in psychology. Specifically,

examination of the dimensions underlying the differences in cognitive representations of social groups can provide understanding of the perceptions and stereotypes of outgroups (Geiger et al., 2006; Brown & Turner, 2002). According to Stangor and Lange (1994), as stereotypes are formed, they are cognitively stored with certain content associated with them. Tajfel's (1981) emphasis on the function and dimensions of stereotyping provides insight into the importance of the cognitive organization on dimensions that are used to clearly differentiate between groups, and thus ensure the ingroup to which one belongs is positively distinct. Accordingly, stereotype content and strength shape the perceptions of social groups.

Stereotype content consists of the distinguishing traits that are characteristic of a social group, whether accurate or inaccurate. The strength of a stereotype, on the other hand, is an evaluation of the connection between the stereotype trait and the group being stereotyped. Some stereotypes resonate with varying levels of strength as characteristic of a particular social group. The strength of a stereotype is typically determined by examining the mean of participants' ratings of each stereotype trait on a response scale of "very uncharacteristic" to "very characteristic" (e.g., Madon, 1997). While stereotypes may be examined for their strength of relationship to a social group, the general content of stereotypes has been a chief focus in the stereotype literature within the past couple of decades. Much of the prior research on stereotype content has asked participants to rate the degree to which each adjective on a list is characteristic of the group in question (e.g., Boysen, Vogel, Madon, & Wester, 2006; Madon, 1997) or to simply check the adjective off in a list of traits if it is characteristic of the group in question (e.g., Simmons, 1965). While scholars such as Allport (1954) suggest that stereotypes typically consist of negative content and thus promote prejudice on this unidimensional content, Fiske, Cuddy, Glick, and Xu (2002) proposed that stereotypes of individuals are differentiated on dimensions of

competence and warmth, which have proven to be consistent dimensions of social evaluation across time and cultures (Fiske, Cuddy, & Glick, 2006; Cuddy et al., 2009).

Prior to Fiske et al. (2002) introducing the stereotype content model (SCM), the examination of stereotype content dimensions had received minimal attention in the stereotype literature. The authors contended the need for understanding the dimensions on which people make intergroup evaluations, which facilitate intergroup perceptions. Fiske et al. (2002) suggested that social groups and individuals are judged by other people on dimensions of warmth, which reflects the intentions of the target social group (cooperative = good/high warmth; competitive = bad/low warmth), and competence, which reflects the social status and agentic qualities of the target social groups. In proposing the warmth and competence dimensions of stereotypes, Fiske et al. (2002) highlighted that "Stereotype content may not reflect simple evaluative antipathy but instead may reflect separate dimensions of (dis)like and (dis)respect" (p. 879) with status and competition between groups serving as predictors for the stereotype dimensions. For example, some outgroups may be disliked for their perceived lack of warmth, whereas other outgroups may be disrespected for their perceived lack of competence.

To gain a better sense of how groups are evaluated on these dimensions, Fiske and colleagues (2002) asked college students and nonstudents to rate 23 different groups of people (e.g., Asians, men, women, disabled people, Black people, Muslims, gay men) on traits measuring competence (e.g., competent, confident, intelligent) and traits measuring warmth (e.g., warm, good natured, sincere). Using cluster analysis, Fiske et al. (2002) determined that most social groups could be distinguished on the warmth-competence dimensions falling into one of four clusters – low competence-low warmth, low-competence-high warmth, high competence-low warmth, and high competence-high warmth.

The stereotype content model (SCM) further advances that there are specific emotions tied to prejudice depending on the cluster in which the social group falls. Social groups high in both competence and warmth elicit pride (e.g., American Olympic athletes), those high in warmth and low in competence elicit pity (e.g., elderly people), those low on warmth and high in competence elicits envy (e.g., rich people), and those low on both competence and warmth elicit disgust (e.g., homeless people) (Fiske et al., 2002; Cuddy et al., 2009). Fiske et al. (2002) also found a fifth cluster that fell in the middle of both dimensions, which included social groups such as gay men, Arabs and Muslims, blue-collar workers, Native Americans, and migrant works. The work of Cuddy et al. (2009) revealed the cross-cultural validity of the stereotype content model, with the warmth and competence dimensions differentiating social groups and status and competition when comparing social groups reliably predicting the content of stereotypes in 10 European and East Asian countries.

Cuddy, Fiske, and Glick (2007) further expanded understanding of stereotyping and the subsequent affective responses in shaping behavior with the introduction of the behaviors from intergroup affect and stereotypes (BIAS) map framework. Utilizing the BIAS framework, Cuddy et al. (2007) determined that warmth stereotypes shape active behavioral tendencies by attenuating active harm behaviors (harassment) and eliciting active facilitation behaviors (help). Competence stereotypes shape passive behavioral tendencies by attenuating passive harm behaviors (neglect) and eliciting passive facilitation (associating). Thus, each cluster of social groups, depending on where they fall on beliefs of high to low warmth and high to low competence evokes certain attitudes and behaviors in other people who hold these stereotypes and emotional reactions (Cuddy et al., 2007).

According to Gazzola and Morrison (2014), who published the only existing study in English on transgender stereotypes, the warmth and competence dimensions do not hold up for transgender stereotypes, suggest that a 'social-distancing' factor may be more appropriate. However, it could be possible that there is a relationship between the perception of transgender stereotypes and those of the social groups that fell in the fifth cluster of Fiske et al. (2002). Specifically, transgender individuals are often grouped in a community of sexual orientation and gender minorities, such as gay men; and, they are often in a lower socioeconomic class, such as blue-collar workers, because transgender individuals are disproportionately unemployed (Grant et al., 2011; James et al., 2016). Transgender individuals are also more likely to be victimized for their gender nonconformity, falling victim to crime and interpersonal violence at a higher rate than the general population (Grant et al., 2011; James et al., 2016). These outcomes align with those groups who are stereotyped as low competence-low warmth that elicit both harm tendencies of harassment and neglect according to the BIAS map framework (Cuddy et al., 2007). Consistent with Gazzola and Morrison's (2014) suggested social-distancing factor, those social groups that are ostracized and looked upon with contempt or disgust (e.g., homeless, drug addicts, poor) were found in the low competence-low warmth cluster (Harris & Fiske, 2006; Harris & Fiske, 2007). These low-low social groups are often the victims of dehumanization (Harris & Fiske, 2006).

Outgroup dehumanization

Haslam (2006) explains that dehumanization of outgroups occurs when perceivers of this group deny them of uniquely human attributes and/or see the members of the outgroup as objects, which are clear means of creating social distance. Social distance is defined as "the grades and degrees of understanding and intimacy which characterize personal and social

relations generally" (Park, 1924, p. 339) and has been used to examine and understand a variety intergroup attitudes, such as race (e.g. Park, 1924), religion (e.g., Smith, McPherson, & Smith-Lovin, 2014), sex (e.g., Smith et al.,2014), and nationality in the United States (e.g., Nix, 1993). Lower scores on the social distance scale (Bogardus, 1925) indicate higher openness to close personal relationships with members of a specific social group. Consistent with Allport's (1954) contact hypothesis, this would correlate with lower prejudice toward a specific social group over time.

Allport (1954) advocates for closer interpersonal connection to enhance the perceived humanity of an outgroup, arguing that the worst form of prejudice is a perception of outgroups as not fully human. This form of prejudice amplifies disgust and social distancing rather than empathy, compassion, and positive regard toward a social outgroup. The societal treatment of the transgender community would suggest that transgender individuals are stereotyped in a negative way and viewed as less than human, and subsequently, experience disproportionate violence, discrimination, prejudice, and harassment. This likely dehumanization of transgender individuals is facilitated by the negative social perceptions and stereotypes associated with them, further enabling pervasive prejudice and discrimination (e.g., Moradi, 2013). In assessing the impact this has on transgender individuals, Lloyd (2013) highlights the reluctance of lawmakers, police officers, and other agents of the law to see transgender and gender nonconforming individuals as humans who deserve civil rights, noting "the law's dehumanization of transgender people is a rhetorical tool that legitimates the decision to deny transgender people legal recognition and protection" (p. 159). Such practices align with Butler's (2004) argument that transgender people's personhood is questioned for not aligning with the 'appropriate' gender expectations of them. Thus, Lloyd (2013) makes a plea to reduce prejudice in the legal system by asking

lawyers, legislators, and justices to “recognize that transgender people are human” (p. 195) to build compassion and empathy for them and reduce negative perceptions of them.

Unfortunately, the negative perceptions that people likely hold about transgender individuals makes it difficult for them to empathize with transgender individuals and treat them with compassion and respect. Transgender individuals have experienced a similar injustice in the psychological research with minimal attention in the stereotype literature provided to the examination of transgender stereotypes. These stereotypes that undoubtedly perpetuate prejudice and discrimination deserves greater exploration. To more fully understand potential transgender stereotypes, it is helpful to examine the societal perceptions of transgender people and the current conceptualization of anti-transgender prejudice.

Societal Perceptions of Transgender People

Negative social perceptions influence the social stressors (e.g., discrimination) that subject transgender individuals to higher probability of mental health concerns in addition to legitimate threats to personal safety (Hill & Willoughby, 2005; Hendricks & Testa, 2012). While transgender individuals are often grouped with sexual orientation minorities, they have differing life experiences and social evaluations because they are marginalized for their gender identity – not for their sexual orientation (Worthen, 2013). In Hendricks and Testa’s (2012) adaptation of Meyer’s (2003) minority stress model for lesbian, gay, and bisexual people, the authors highlight the implications for transgender individuals living in a social environment in which they experience added psychological stressors as minority group members. These psychological stressors include environmental events related to a person’s minority status (e.g., threats to safety), anticipation of these environmental events (e.g., expectation of rejection for being transgender), and an internalization of societal negative prejudices (i.e., internalized

transphobia). Thus, transphobia, which represents the emotional component of anti-transgender sentiment, is defined as "the feeling of revulsion to masculine women, feminine men, cross-dressers, transgenderists, and/or transsexual" and "the fear that personal acquaintances may be trans or disgust upon encountering a transperson [sic]" (Hill & Willoughby, 2005, p. 533-534). Such animosity can have tremendous consequences for transgender individuals – they face an alarming rate of harassment, discrimination, violence, and prejudice in trying to access even the most basic services of healthcare, housing, and employment (James et al., 2016).

The 2015 United States Transgender Survey, the largest survey of transgender individuals' experiences performed thus far with 27,715 respondents across all states, Guam, Puerto Rico, District of Columbia, and U.S. military bases overseas, provided evidence of the overwhelming prejudice that transgender individuals face in the U.S. Fifteen percent of transgender people and 20 percent of transgender people of color are unemployed, compared to the national average of 5 percent. Of those who are employed, 30 percent of respondents reported being denied a promotion, being fired, or otherwise mistreated in their workplace (James et al., 2016). Transgender individuals are also more likely to be underemployed and face troubling odds of suicide and interpersonal violence (Grant et al., 2011; James et al., 2016). One-third of transgender individuals have encountered a negative experience while seeking healthcare, while another 23 percent avoided seeking healthcare within the past year even though it was necessary because they feared a negative experience (James et al., 2016). Such negative experiences and fears in accessing a basic human need for survival providing troubling odds for transgender individuals. Understandably, 39 percent of respondents of the United States national survey of transgender individuals shared that they had experienced psychological distress (James et al., 2016).

While transgender individuals experience higher rates of crime victimization, violence, and harassment, they also are not afforded the same legal rights, which undoubtedly adds to their psychological distress (e.g., Minter & Frye, 1996; Lloyd, 2013). In the United States, there appears to be a surge of legislation that discriminates against transgender people's public access to bathrooms, emboldens conversion therapy advocates, and reduces safety for transgender students, creating a hostile social environment for the transgender community. Thus, in addition to everyday stress that people in the general population encounter, transgender individuals are subjected to high rates of prejudice, discrimination, and harassment for their defiance of the proscribed gender norms (Hendricks & Testa, 2012). Transgender individuals cannot even use the restroom without fear of retribution.

While it is clear the collective transgender community experiences disproportionate violence, harassment, and prejudice in comparison to the general population, the examination of the intersections of transgender identities reveals that discrimination experiences vary within the transgender community given the varying levels of oppression they face. As Lloyd (2013) puts it "a transgender woman likely experiences discrimination as a *transgender woman* (or a *transgender woman of color*, as the case may be); the animus she encounters is likely motivated not only by stereotypes of women or women of color as a group, but also by the particular hatred reserved for transgender women, stereotypes likely based on social animus towards men in dresses, transvestites, queers, prostitutes, child molesters, and perverts" (p. 164). This argument is supported by the U.S. Transgender Survey results indicating that transgender people of color, particularly transgender women of color, experience higher rates of poverty, unemployment, harassment, and violence compared to their transgender peers (James et al., 2016).

In addition to the ‘macro’ aggressions against transgender individuals, in which they experience limited freedoms and challenges to personal safety, they also face potential microaggressions in everyday life. Microaggressions are distinct forms of discrimination, verbal or behavioral, that may include subtleties communicated either intentionally or unintentionally (Sue et al., 2007). These microaggressions align with assumptions, beliefs, or stereotypes, about what a member of a specific social group may experience. Microaggressions take the form of microassaults, which are explicit verbal or nonverbal derogation; microinsults, which degrade a person’s identity; and, microinvalidations, which deny a person’s experience (Sue et al., 2007). While microaggression theory was originally introduced to conceptualize experiences of racial minorities (Sue et al., 2007), Nadal, Rivera, and Corpus (2010) demonstrated the translation of these concepts to sexual orientation and gender minorities. Shortly thereafter, Nadal, Skolnik, and Wong (2012) explored the taxonomy of transgender microaggressions, determining 12 themes of microaggressions through a directed content analysis. In examination of these themes, the authors explain the relationship of microaggressions to stereotypes that people hold, such as the assumptions of a universal transgender experience and sexual pathology of transgender individuals (Nadal et al., 2012).

Given the heightened risk of crime victimization, unemployment, and other forms of prejudice and discrimination, such as microaggressions, it is necessary to enhance understanding of stereotypes that people hold and how these stereotypes are cognitively organized since they are so influential to anti-transgender prejudice and justification of discrimination (Allport 1954; Fiske et al., 2002). It is critical to examine more thoroughly the societal perceptions and stereotypes of the transgender community collectively as well as stereotypes of transgender subgroups given their differing experiences of oppression. With enhanced knowledge of

stereotypes, appropriate interventions may be developed to reduce prejudice, discrimination, harassment, and violence as well as work toward the enhancement of mental health among transgender individuals.

While the implications for deepening knowledge of transgender stereotypes are significant, thus far, only two published studies on the topic of transgender stereotypes exist in this budding area of research. One study was conducted in Canada examining cultural and personally endorsed stereotypes of transgender men and women (Gazzola & Morrison, 2014), and the other study was published in Poland five years earlier in examination of college student stereotypes of transsexual men (Antoszewsi, Kasielska, and Kruk-Jeromin, 2009). Additionally, the examination of transphobia, or anti-transgender prejudice, is also in the nascent stages of research development. With such limited examination of transgender stereotypes, there remain numerous questions about transgender stereotypes and how they shape prejudice. Thus, to inform the development of a transgender stereotype taxonomy, research on measures of anti-transgender prejudice will be described in the next section of this paper.

Measurement of Anti-transgender Prejudice

Transgender author and activist Kate Bornstein (1994) argues that "This culture attacks people on the basis of being or not being correctly gendered" (p. 79) – an assertion that is evidenced by the troubling amounts of discrimination, harassment, and violence they face (James et al., 2016). Hill (2002) developed a framework for understanding this attack of transgender people based upon constructs of transphobia, genderism, and gender-bashing, which capture the emotional reaction, the cultural ideology, and the acts of violence toward transgenderism and gender nonconformity, respectively. Subsequently, Hill and Willoughby (2005) developed the Genderism and Transphobia Scale (GTS) based on this model to measure anti-transgender

prejudice, or transphobia. Though the term transphobia had been used in previous studies (e.g., Hill & Willoughby, 2005; Nagoshi et al., 2008), Tebbe et al. (2014) utilized the term "antitransgender prejudice" to highlight the prejudice directed at transgender individuals as prejudicial attitudes as opposed to fear.

Anti-transgender prejudice encompasses the discrimination, hate, aggression, or emotional disgust directed toward transgender and gender nonconforming individuals. These experiences of disgust align with a stereotyped group low in both warmth and competence according to the stereotype content model (SCM) described earlier, aligning with 'the lowest of the low' (Fiske et al., 2002; Harris & Fiske, 2006). Such emotions are fueled by genderism, which sets the stage as "a cultural belief that perpetuates negative judgments of people who do not present as a stereotypical man or woman" (Hill & Willoughby, 2005, p. 534). The ideology held by genderists is that those individuals who display incongruence with sex and gender according to sociocultural expectations are pathological and deserve negative evaluation. Beliefs about the stereotyped gender traits one *should have* fuel anti-transgender prejudice when these are not the traits and individual *does have*. Thus, anti-transgender beliefs and feelings enable gender-bashing, or the violence and harassment to gender nonconforming individuals. According to the behaviors from intergroup affect and stereotypes (BIAS) map framework (Cuddy et al., 2007), gender-bashing represents the behavioral tendency precipitated by the social evaluation of a social group – in this case, the transgender community – as low in both competence and warmth. As would be predicted by the SCM and BIAS map framework, the outgroup representing the most extreme of outsiders is the outgroup most likely to be dehumanized and victimized (Fiske et al., 2002; Harris & Fiske, 2006). This seems to align with the anti-transgender prejudice that is prevalent in U.S. society.

In further exploring anti-transgender prejudice, Tebbe, Moradi, and Ege (2014) developed a revised version (GTS-Revised; GTS-R) as well as an abbreviated version (GTS-R-Short Form; GTS-R-SF) of Hill and Willoughby's (2005) original GTS. In the validation of the GTS-R and GTS-R-SF, the authors found significant correlations with the Transphobia Scale (Nagoshi et al.,2008), Attitudes Toward Lesbians and Gay Men (ATLG) scale (Herek, 1988), Attitudes Regarding Bisexuality Scale (ARBS; Mohr & Rochlen, 1999), Attitudes Toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973), and Need for Closure scale (NFC; Kruglanski, Webster, & Klem, 1997). These finding support previous research that has noted a relationship between transphobia and homophobia/biphobia (Nagoshi et al., 2008), traditional sex-role endorsement and gender role congruity (Spence et al., 1973), and constructs that have traditionally been associated with prejudice and stereotyping (e.g., need for closure) (Nelson, 2002). Need for closure, which is defined as the desire for "an answer on a given topic, any answer…compared to confusion and ambiguity," (Kruglanski, 1990, p. 337 as cited in Roets & Van Hiel, 2011) and traditional sex-role endorsement (Spence et al., 1973) appear to be particularly relevant given the ambiguous nature of gender role nonconformity.

Given the gendered component of anti-transgender prejudice, it is important to attend to the experiences of individuals with differing gender identities within the transgender community. Thus far, studies have only examined transgender women and transgender men as subcategories of the transgender community, though the identities within the transgender community are vast (e.g., genderqueer, agender). Specifically, some studies have found no difference in the degree of prejudice against transgender men and women (Gerhardstein & Anderson, 2010). Other studies have found differences in social perception, with some finding more prejudice directed against transgender women (Winter, Webster, & Cheung, 2008) and others finding the stereotypes of

transgender men to be more negative than those of transgender women (Gazzola & Morrison, 2014). Given the inconsistencies, further examination is necessary in exploration of potential differences in stereotypes among subgroups of the transgender community.

In gaining greater conceptual understanding of transgender stereotypes, particularly given the pervasiveness of transphobia, anti-transgender prejudice, and gender-bashing in the form of discrimination, harassment, and violence, there needs to be a greater understanding of the cognitive components of the perception of transgender people. It would thus be helpful to examine the content of stereotypes toward a group of people which has been traditionally ostracized in the United States. This is particularly important with the discriminatory legislation and actions in the current hostile sociopolitical climate in the U.S. In such a climate, in which media coverage gives greater visibility of anti-transgender violence and discriminatory legislation, learning theory suggests that people learn that their anti-transgender prejudice and stereotypes are socially approved, thus reinforcing attitudes and stereotypes (Nelson, 2002). Although there has been limited exploration of the transgender stereotypes that are seemingly reinforced and evoked by anti-transgender prejudice, prior literature on gender stereotypes and stereotypes of lesbian, gay, and bisexual people, with whom transgender individuals are often categorized in the LGBT community, may serve as a model.

Gender Stereotypes

As scholars have noted, gender is equated with one's humanity (Butler, 2004), and those individuals who do not fit into the appropriate gender role are often evaluated negatively (e.g., Hill & Willoughby, 2005). Given that a gender component is likely to be present in transgender stereotypes, the previous literature on gender stereotypes may provide insight. As noted by social psychologists, in general, stereotypes are pervasive and extremely influential in how people

make sense of and behave in their social environment. Gender stereotypes have been shown to impact hiring decisions (Rice & Barth, 2016), academic performance (Igbo, Onu, & Obiyo, 2015; Tagler, 2012), behavior in and evaluation of romantic relationships (Good & Sanchez, 2009), and how individuals see themselves (Rosenkrantz et al., 1968; Bem, 1974; Igbo et al., 2015). In as early as childhood, people are aware of the cultural expectations of masculinity and femininity and 'suitability' in which an individual 'fits' in their stereotypical gender role (Martin & Little, 1990). The research on gender stereotypes has become quite rich, focusing on personality traits (e.g., Spence, Helmreich, & Stapp, 1973; Liben & Bigler, 2002), cognitive and physical traits (Diekman & Eagly, 2000) as well as activities (e.g., Liben & Bigler, 2002) and occupations (Glick, Wilk & Perreault, 1995; Liben & Bigler, 2002).

Diekman and Eagly (2002) argue for the importance of social role theory in the interpretation of gender stereotypes given that the preferred characteristics of gender roles align with the stereotypes of each sex. Stereotypical femininity is associated with women and stereotypically masculinity is associated with men. These gender roles predict people's attitudes and behavior toward individuals who do or do not conform to cultural expectations. Measures such as Spence, Helmreich, and Stapp's (1973) Attitudes toward Women Scale and Kerr and Holden's (1996) Gender Role Beliefs Scale capture the extent to which one endorses culturally traditional gender roles. Gender roles are associated with specific traits, occupations, activities, and other characteristics, so they pervade many aspects of individuals' lives.

Rosenkrantz, Vogel, Bee, Broverman, and Broverman (1968) emphasized that the core of gender stereotypes is personality traits. The authors asked 154 college undergraduate students to complete the Sex Role Stereotype Questionnaire when given the prompt to imagine they were about to meet an adult male/female. Participants were asked to indicate using a 7-point Likert

scale how characteristic 122 traits would be of the person they were about to meet. The characteristics of the female were labeled feminine traits and the characteristics of the male were labeled masculine traits. The study by Rosenkrantz et al. (1968) indicates that traits such as warmth and expressiveness are associated more so with women than with men, and traits like competence and rationality are associated more so with men than with women. An additional 121 participants rated each trait on its social desirability, and the authors noted that masculine traits are traditionally viewed as more favorable, regardless of participant sex (Rosenkrantz et al., 1968). More than three decades later, Nesbitt and Penn (2000) found very similar results, highlighting the longevity of such cultural stereotypes.

While Rosenkrantz et al. (1968), among other researchers, have focused extensively on the stereotypic feminine, masculine, or neutral personality traits, Deaux and Lewis (1984) note that gender stereotypes are more complex than simply personality traits, providing evidence for feminine and masculine versions of role behaviors, occupations, and physical appearance as well. Deaux and Lewis (1984) came to these conclusions by providing descriptions of men and women taking on different combinations of gender roles (masculine, feminine, and mixed) to participants and asking participants to rate each person use a probability scale of 1 to 100 to characterize the person in the description. Each person in the description was rated on the probability that they embodied eight each of masculine and feminine personality traits, five each of male and female physical characteristics, worked in five each of male-dominated and female-dominated occupations, and their sexual orientation as heterosexual or homosexual [sic] (Deaux & Lewis, 1984). This inclusion of sexual orientation on the ratings of gender stereotypic categorization highlights the important relationship between gender and sexuality in social perceptions of people.

While these constructs associated with a specific gender are correlated with one another, Deaux and Lewis (1984) argue for the importance of examining each distinctly from one another. Similarly, Six and Eckes (1991) studied the multidimensional nature of gender stereotypes, highlighting important distinctions in components of personality traits, role behaviors, physical characteristics, occupations, and sexual relationships, with different subtypes that emerged within categories of men and women. For example, the woman who is identified with the traditional stereotypical "housewife" as compared to a "career woman" or "feminist" and for a man who is the stereotypical "lady-killer" or the "macho type" versus the "intellectual" (Six & Eckes, 1991). In developing the stereotypic subcategories of men and women, 42 participants were asked to list common types of men and women and the characteristics associated with these types. Subsequently, 67 participants were asked to sort the most popular types (22 male and 20 female types) into classes. Six and Eckes (1991) performed hierarchical cluster analysis and multidimensional scaling to determine how closely related these types of men and women were. The authors determined there were nine types of women and 10 types of men, each associated with certain traits. This research on gender stereotypes highlights the importance of examining stereotypes of specific subgroups within a social group. As such, it is useful to examine the stereotypes of the lesbian, gay, bisexual, and transgender (LGBT) community subgroups given their social categorization with one another.

LGBT Stereotypes

Sexual and gender minority group individuals are often categorized together in the lesbian, gay, bisexual, and transgender (LGBT) community, and thus, transgender individuals are likely perceived in similar ways as sexual minority individuals. LGBT individuals have become increasingly visible in the media, and with greater visibility, stereotypes emerge and receive

attention from researchers (e.g., Kashima et al., 2008). As the LGBT community has evolved, this acronym has been expanded at times to be LGBTI, or LGBTQIA, among other variations, with hopes of increasing greater visibility of people of sexual orientation and gender minority identities not highlighted in the LGBT acronym, including queer (Q), intersex (I), and asexual (A) individuals among others (e.g., Alexander, Parker, & Schwetz, 2015). However, no literature on stereotypes of these specific groups have been explored. Thus, for the purpose of this study, only stereotypes examined among gay men, lesbians, bisexual men and women, and transgender men and women will be included.

Research on stereotypes within the LGBT community spans for decades from Simmons's (1965) initial research on social deviants to Taylor's (1983) examination of the gender dimensions of stereotypes of lesbians and gay men to research on specific subgroups within the LGBT population (e.g., Madon, 1997; Geiger et al., 2006; Burke & LaFrance, 2016; Gazzola & Morrison, 2014). Given their position as minority group members, stereotypes of LGBT individuals have been molded and reinforced by media (Raley & Lucas, 2006; Cavalcante, 2017). People are more likely to hold inaccurate beliefs or stereotypes of them based on what the 'learn' from the media, much like the experiences of other marginalized groups, such as racial minorities (Kashima et al., 2008). These stereotypes perpetuated by the media can impact not only how heterosexuals view LGBT individuals but how LGBT individuals see themselves and their future (McInroy & Craig, 2017), which is why it is so necessary to understanding what stereotypes exist. Understanding the impact of stereotypes and prejudice on social outgroup members, the stereotype literature has consistently examined the perceptions of minority groups, beginning with Katz and Braly's (1933) study on racial stereotypes. Although LGBT individuals and racial minority individuals have a shared status as minority groups in the United States, and

shared experiences of psychosocial stress (e.g., Meyer, 2003), the literature on LGBT stereotypes was not initiated until decades after Katz and Braly (1933).

Early LGBT stereotype research primarily focused on gay men and later shifted to acknowledge the stereotypes of other subgroups in the LGBT community, with transgender stereotypes receiving only minimal attention in recent years. In society at large, researchers have highlighted the marginalizing experiences of "T" in the LGBT community, given that other community members are sexual orientation minorities who have differing life experiences and social evaluations compared to transgender individuals who are marginalized for their gender identity (McCarthy, 2003; Worthen, 2013). This marginalization also appears to manifest in the focus of stereotype research attention and thus, it would appear to be no coincidence that the "T" is placed at the end of the LGBT acronym. There has been a necessary evolution of LGBT stereotype research, with researchers taking a variety of methodological approaches to understanding stereotypes, their content and strength, and correlates to stereotype endorsement. The next section will detail the early studies in the domain of LGBT stereotypes, followed by research examining the study of specific subgroups of the LGBT community, including the minimal attention on transgender stereotypes.

The beginning

Forty years after the concept of stereotypes was introduced (Lippman, 1922), Simmons (1965) was the first to address stereotypes of sexual or gender minority group members. Simmons (1965) asked 134 participants to mark off traits from a list of 70 that were characteristic of five 'deviant' social groups, with one of these groups being "homosexuals" [sic]. Simmons (1965) determined that those traits selected most frequently for a specific group were determined to be stereotypical. However, the amount of agreement necessary to be

considered a legitimate stereotype among the 134 participants was unclear. Staats (1978) utilized a similar trait checklist methodology with a sample of 538 undergraduate students who were asked to identify typical traits of homosexuals [sic] from a list of 84 traits. Noting the perception of social deviance of gay people, Staats (1978) examined the impact of social distance using the Bogardus (1925) social distance scale on stereotype endorsement.

Similarly, Steffensmeier and Steffensmeier (1974) also examined the correlation of social distance with participants' endorsement of three beliefs about homosexuals [sic]. The authors prompted participants to endorse whether they believed homosexuals [sic] were psychologically disturbed, easily identified, and dangerous because they prey on young people. These authors found that most of the participants endorsed that homosexuals [sic] were psychologically disturbed. Only one-third, and one-fifth, respectively, believed homosexuals [sic] to be easily identified and dangerous. Participant endorsement of increased social distance was correlated with stereotypes of dangerous and psychologically disturbed.

Shifting the focus

Later researchers (e.g., Laner & Laner, 1979, 1980) began examining stereotypes and attitudes toward gay men and lesbians separately. Taylor (1983) also differentiated between gay men and lesbian stereotypes in his examination of the gender dimensions of masculinity and femininity as the basis for these stereotypes. Taylor (1983) noted that research on attitudes toward homosexuals [sic] had identified traditional sex role endorsement as having a direct relationship with negative attitudes. Thus, using a sample of 103 non-college students, participants were asked to rate each of four groups (men, women, male homosexuals, and lesbians) on masculinity and femininity using the Personality Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974). Taylor (1983) expected that the gender-role stereotypes of gay men

and lesbians would be contrary to their heterosexual men and women counterparts. The results indicated that lesbians were rated more masculine and less feminine than gay men, and overall, gay men were rated significantly different from the other three groups. These findings somewhat align with Kite and Deaux's (1987) implicit inversion theory of gender in which individuals tend to perceive gay men as similar to heterosexual women and lesbians as similar to heterosexual men. Taylor's (1983) work served as the base for further expansion of the role of gender attributions and gay stereotyping.

Blashill and Powlishta (2009) sought to examine evaluations of masculine and feminine occupations, activities, and traits as a replication of prior work by Kite and Deaux (1987). The authors predicted that lesbians would be judged to be more masculine and less feminine than heterosexual women and gay men would be judged to be less masculine and more feminine than heterosexual women in categories of occupations, activities, and traits. The 110 undergraduate student participants in Blashill and Powlishta's (2009) study were each assigned to one of the four categories/conditions (gay male, lesbian, heterosexual male, and heterosexual female) and asked to think about the typical (condition) and likelihood that this person does or possesses the 75 items listed in Liben and Bigler's (2002) Occupations, Activities, and Traits—Attitudes Measure, short version, which is devised of a balanced combination of masculine, feminine, and neutral occupations, activities and personality traits.

Though Blashill and Powlishta (2009) acknowledged that their sample was relatively small given the four separate conditions, their findings were consistent with previous research on gender as a noteworthy content domain of gay stereotypes (e.g., Kite & Deaux, 1987). Gay men were viewed as more feminine than lesbians and heterosexual men, less masculine than heterosexual men, and equally low in masculinity in comparison to heterosexual women.

Lesbians were stereotyped as less feminine and more masculine than heterosexual women, more masculine than gay men, but not as masculine and more feminine in comparison to heterosexual men (Blashill & Powlishta, 2009). While age carries its own set of stereotypes (Dionigi, 2015), Wright and Canetto (2009) found similar inversions of gender stereotype traits for older lesbians and gay men. As research within the field of LGBT stereotypes and attitudes has expanded, researchers have focused their work exclusively on a specific subgroup within the LGBT population and/or have performed differentiating analyses of these subgroups within a study.

LGBT subgroup stereotypes

Vaughn, Teeters, Sadler, and Cronan (2016) acknowledged the diversity of experience and social perceptions of sexual orientation minority individuals noted in the lesbian, gay, and bisexual stereotype literature, but highlighted the lack of a single model available to explain the LGB stereotypes, prejudice, and discrimination. Thus, Vaughn et al. (2016) applied the framework of the stereotype content model (SCM; Fiske et al., 2002) and behaviors from intergroup affect and stereotypes (BIAS) map (Cuddy et al., 2007) to better understanding the social perceptions of lesbians, gay men, bisexual men, and bisexual women. One hundred seventy-six participants in the general population were asked to rate the stereotypes, emotions, and behavioral tendencies toward lesbians, gay men, bisexual men, and bisexual women. All groups were stereotyped above the midpoint for warmth and competence. Generally, higher warmth and competence facilitated more help and less harm behaviors as well as higher admiration and less contempt, except for gay men who were viewed with greater contempt and approached with more harm behaviors for the higher rating of warmth. Gay men were judged as the warmest social group, followed by bisexual women and men, and lesbians were judged to be

the least warm. Lesbians and bisexual women were stereotyped as the most competent, followed by gay men, and bisexual men were judged least competent.

Vaughn et al. (2016) suggested that future research using the SCM and BIAS map to examine stereotypes, affect, and behavioral responses to sexual minority groups should explore the impact of gender-role consistency – a suggestion that aligns with previous identification of the influence gender role stereotypes (e.g., Deaux & Lewis, 1984). Leading up to the work by Vaughn et al. (2016), the stereotype research of the LGBT community has developed to examine subgroups individual and in different ways. The next sections of this paper will highlight the research on the specific subgroups of gay men, lesbians, bisexual men and women, and transgender men and women. The description of stereotype research on these subgroups is presented in the order of the quantity of research performed on the respective subgroup, starting with gay men who have received the most attention in the stereotype literature.

Gay men. Prior to Vaughn et al.'s (2016) application of the SCM, Fiske et al.'s (2002) original work on the stereotype content model included the evaluation of gay men as a social group. While Fiske and colleagues (2002) found gay men to be neutral on both dimensions of warmth and competence, Clausell and Fiske's (2005) examination of subgroups of stereotypic gay male groups (e.g., hypermasculine, flamboyant, cross-dressers) yielded different combinations of ratings along the warmth and competence dimensions. For example, cross-dressers were stereotyped as low in competence and warmth. In addition to this research on gay stereotypes on dimensions of warmth and competence (e.g., Clausell & Fiske, 2005) as well as previously mentioned research on dimensions of masculinity and femininity (e.g., Blashill & Powlishta, 2009), other researchers have looked more generally at the social perceptions of gay men.

In examining content and strength of the stereotypes of gay men, Madon (1997) utilized three different methods, asking participants to indicate the characteristics of gay men using an adjective checklist, rating scale, and free response. In the first study, 98 participants engaged in a free response activity of personal attributes, which after being judged by research collaborators was whittled to 78 items that were used in the second study. In addition to these 78 participant-generated items, researchers included 300 personality traits in Gough and Heilbrun's (1983) adjective checklist, and 113 experimenter-generated traits selected from a thesaurus for the next study. These 491 traits were printed onto an index card and participants categorized them into five containers ranging from very characteristic to uncharacteristic of male homosexuals [sic]. Of these, the 50 most stereotypic and 25 most counterstereotypic traits were selected for the next part of the study, in which 115 undergraduate students used a 5-point Likert scale to rate how characteristic each term was of gay men. Madon (1997) analyzed this data to assess stereotype content, subtypes, and strength. Generally, stereotypes of gay men were found to be related to the female gender role and included a combination of personality traits, behaviors, and physical characteristics. Two subtypes emerged – one including feminine characteristics that do not violate the male gender role (e.g., good listeners) and another that included feminine characteristics that violated the male gender role (e.g., dainty), which were judged positively and negatively, respectively. Additionally, Madon (1997) found that behavioral stereotypes were associated more strongly than the personality and physical traits of gay men.

While researchers like Madon (1997) and Taylor (1983) have examined the general stereotypes of gay men believed to be held by the general population, Boysen, Vogel, Madon, and Wester (2006) noted the importance of examining the mental health stereotypes of gay men among college undergraduates and mental health therapist trainees, particularly given the history

of gay men being stereotyped as deviant and psychologically disturbed (Simmons, 1965; Steffensmeier & Steffensmeier, 1974). Boysen and colleagues (2006) asked participants – composed of college undergraduates and master's-level counseling trainees – in three separate studies to provide input on mental health stereotypes of gay men. The authors found that stereotypes endorsed by both undergraduates and therapist trainees were similar and the content contained traits of mental health disorder categories of anxiety, mood, sexual and gender identity, eating, and personality. Boysen et al. (2006) highlight the important implications of these findings in the way gay men are treated in society at large as well as in the therapy room.

Lesbians. Second to gay men in the amount of stereotype research in the LGBT community, lesbian stereotypes have received a growing amount of attention in the literature. While lesbians are women, lesbian stereotypes tend to veer from traditional gender role stereotypes ascribed to other women (Niedlich, Steffens, Krause, Settke, & Ebert, 2015) with lesbians being rated higher on masculinity and lower on femininity than a heterosexual woman (Blashill & Powlishta, 2009). Findings by Niedlich et al. (2015) highlight the slight advantage this gives lesbian women over heterosexual women in being perceived as higher in competence due to the stereotypically higher level of masculinity. Taking this gendered component of lesbian stereotypes into consideration, Geiger, Harwood, and Hummert's (2006) findings support the need to continue challenging homophobia, which is clearly not a favored trait in comparison to heterosexual women (p. 176).

In Geiger et al.'s (2006) examination of lesbian stereotypes, different stereotype content emerged among lesbian subgroups (e.g., lipstick lesbian, angry butch). The authors examined these various stereotype groupings among lesbians by engaging 61 participants in a stereotypic trait generation task and, subsequently, 63 participants in a trait sorting task. Participants in the

first part of the study were asked to generate stereotypic traits and characteristics they could think of based on what they know of lesbians. Participants in the second part of the study sorted 94 traits reduced from the generated list into various categories. The researchers determined using a hierarchical cluster analysis (HCA), which has previously been used to examine substereotypes among groups, as well as multidimensional scaling (MDS) to provide statistical triangulation of the subgroups of stereotypic lesbian characteristics. The HCA produced two high-level clusters – one of positive-valence traits and the other of negative-valence traits. Follow-up MDS procedure using a 94 X 94 matrix revealed that a two-dimensional solution fit the data best, with the subgroupings matching up with the HCA. Geiger et al. (2006) determined that the subgroupings of lesbians fell along two bipolar, orthogonal dimensions – positive-negative and strong-weak personality traits – with "*positivity* and *strength*...fundamental in guiding categorization of lesbians" (p. 177).

Brambilla, Carnaghi, and Ravenna (2011) also attempted to categorize lesbian stereotypes according to the stereotype content model using a sample of 70 Italian heterosexual undergraduate students. Participants were asked what they thought the generally held societal beliefs toward lesbians were utilizing the a 5-point rating scale to answer questions about lesbian warmth, competence, status, cooperation, and competitiveness as had been performed in previous studies of the SCM (e.g., Fiske et al., 2002). Brambilla et al. (2011) found that lesbians were rated generally as neutral on warmth and competence, like previous literature on gay men as a social group (Fiske et al., 2002). However, when evaluating lesbian subgroups (i.e., feminine lesbians, butch lesbians, outed lesbians, and closeted lesbians) using a repeated-measures analysis of variance (ANOVA), Brambilla et al. (2011) found variation in how subgroups were rated on dimensions of warmth and competence, which were similar to findings

in Clausell and Fiske's (2005) study of the SCM applied to gay male subgroups. For example, feminine lesbians were perceived as higher in warmth in comparison to butch lesbians and closeted lesbians, with no statistically significant difference between levels of warmth in comparison to outed lesbians. In general, each subgroup's level of competence and warmth were fairly similar to one another, except for butch lesbians, whose level of warmth was lower than their level of competence (Brambilla et al., 2011). Like Geiger et al. (2006), these findings support the notion that stereotypes among lesbian subgroups should be evaluated separately.

Bisexual men and women. Following the breadth of stereotype research conducted on gay men and lesbians, the literature on the stereotypes of bisexual women and men has increased in recent years. Spalding and Peplau (1997) sought to enhance understanding of 353 heterosexual undergraduate student participants' social perceptions of bisexuals in relationships. Participants were assigned to conditions and asked to read a description of a relationship of bisexual, homosexual [sic], or heterosexual adults. Given information about the target person, their partner, and the relationship in this description, the participant was then asked to rate relationship-related characteristics of the target, the partner, and the couple. Spalding and Peplau (1997) found several notable differences for bisexual targets in comparison to heterosexual and homosexual [sic] targets, namely that bisexual individuals are stereotyped as more likely to transmit a sexually transmitted disease in comparison to heterosexual and homosexual [sic] individuals. Additionally, participants believed bisexual individuals were more likely to cheat in comparison to heterosexual individuals and less likely to be able to sexually satisfy a same-sex partner who was a gay man or lesbian woman. The authors found no difference between perceptions of bisexual men and women; however, they noted differences would likely be found

in assessing stereotypical personality or physical traits, which were not assessed in their study (Spalding & Peplau, 1997).

Eliason (2001) examined a list of 23 commonly held stereotypes about bisexual people using a sample of 229 undergraduate student participants who were asked to respond whether they agreed, disagreed, or were unsure in response to these 23 items. Sample items include "Bisexuals tend to have more sexual partners than heterosexuals" and "Bisexuals are more psychologically well-adjusted than heterosexuals" (Eliason, 2001). Male participants were more likely than female participants to endorse some of these 23 stereotyped beliefs about bisexuality. In general, participants were in greatest agreement with the stereotype that "bisexuals have more flexible attitudes about sex than heterosexuals" with 76 percent of participants endorsing this item. Almost two-thirds (63%) of participants disagreed that in comparison to heterosexuals, bisexuals were more psychologically well-adjusted. Additionally, over one-third (39%) of participants agreed that "bisexuals are more confused about their sexuality than heterosexuals" and 30 percent agreed that "bisexuals are more confused about their sexuality than gays/lesbians" (Eliason, 2001, p. 147). Generally, of the 23 items, many did not receive strong agreement or disagreement, with participants frequently responding, "don't know." It is possible that "heterosexual students do not have clear-cut beliefs about bisexuals" (Eliason, 2001, p. 146); however, this is only speculation. In responding to surveys more generally, the responses of "don't know" and "unsure" give little to no information to a researcher.

Burke and LaFrance (2016) were the first to examine how bisexual people ascribe stereotypes to fellow bisexuals. Three hundred forty-six bisexual participants were randomly assigned to a condition in which they were asked to evaluate a target group (heterosexual men, heterosexual women, bisexual men, bisexual women, homosexual [sic] men, and homosexual

[sic] women depending on the condition) in an identical context. Participants rated the group in their respective condition on 28 traits using a prompt “On average, (condition) are (adjective)” with sample items including “sincere,” “competent,” “untrustworthy,” and “decisive” (Burke & LaFrance, 2016, p. 250). In general, the authors determined that bisexual individuals hold different stereotypes in comparison to heterosexual men and women, gay men, and lesbians, about bisexual people on dimensions of gender, sexual behavior, and valence of traits.

Transgender men and women. In a time in which the research on stereotypes of gay, lesbian, and bisexual stereotypes has become relatively rich in comparison, the ‘forgotten’ members of the LGBT community have received less attention in stereotype research. To this point, there exist two published studies in this domain. While research on transgender stereotypes is limited, it is likely that stereotypes of transgender people are present, complex, and evolving given the increasing prevalence of transgender personas on television and discussion of transgender legal rights in the media. It is also likely that the stereotypes of transgender women and men differ given the differences that have immerged in the stereotypes of other LGBT male-identified and female-identified subgroups (e.g., gay men, lesbians). The first study performed by Antoszewsi, Kasielska, and Kruk-Jeromin (2009) examined stereotypes of transgender men using a Polish undergraduate student sample – a publication that is only available in Polish.

Recently, Gazzola and Morrison (2014) examined both societal and personally-endorsed stereotypes of transgender men and women. In their first study, the researchers facilitated focus group discussions with a sample of 16 Canadian undergraduate student participants divided into three focus groups of all men, all women, and a mixed-gender group. Participants were asked to generate traits associated with transgender people, and researchers extracted eight themes from the topic analysis – gendered personality and behaviors, sexed body shape, rejected by society,

mental illness, sex reassignment surgery, gay and lesbian, and primacy of birth sex versus gender identity – each with associated traits. In the next study, a sample composed of 274 Canadian undergraduate students was asked to rate the degree to which traits from the first study and additional descriptors of behaviors, personality traits, and physical characteristics were typical of transgender men and women.

Participants were asked to provide these ratings using an 11-point Likert scale from the perspective of cultural stereotypes as well as from their own perspective in the participants' personal endorsement of the stereotypes. Stereotypes and counterstereotypes were determined by examining the proportion of participants who rated a trait as highly characteristic (rating of 9 or higher) or not characteristic (rating of 3 or lower), respectively (Gazzola & Morrison, 2014). Thus, Gazzola and Morrison (2014) sought to determine traits that were associated with transgender men and women and traits that were not associated with them.

The authors categorized traits as cultural stereotypes and counterstereotypes if they were endorsed by 50 percent or more of participants. Thus, the stereotypes of transgender men included gay, confused, abnormal, outcast, and sex reassignment surgery, with 52-60 percent of participants indicating 9, 10, or 11 for these traits. The cultural counterstereotypes included abusive, attractive, smelly, criminal, and spiritual with 52-57 percent of participants indicating 1, 2, or 3 on the Likert scale for these traits. Cultural stereotypes of transgender women included wears women's clothes, wears make up, gay, abnormal, born in wrong body, and confused with 51-72 percent of participants rating these traits with a 9 or higher. The counterstereotypes of transgender women were determined to be sexy, attractive, smelly, abusive, violent, criminal, poor, lazy, and spiritual with ratings of 3 or lower from 50-74 percent of participants (Gazzola & Morrison, 2014).

The authors performed no multidimensional scaling or cluster analysis, which has typically been useful in examining stereotype content and dimensions (e.g., Geiger et al., 2006), and thus, would be helpful in future research. Additionally, the cultural underpinnings of stereotypes and prejudice would suggest that the findings in the previous studies conducted in Canada and Poland may not hold up cross-culturally for stereotypes in the U.S.

Present Study

Given the paucity of research about transgender stereotypes, this study examines stereotypes of transgender people as a collective social group. Additionally, similarities and differences in stereotypes of transgender men and transgender women as subcategories of the larger transgender community are explored. Although there are likely to be similarities in perceptions of traits common among transgender individuals collectively, each of these subgroups "carries distinct social burdens and promises" (Butler, 2004, p. 6), and attitudes toward these subgroups are different (Worthen, 2013). In short, utilizing a card sort method of examining stereotypes, this study seeks to answer the following question: What are the stereotypic traits of transgender people as a social group and of the subgroups of transgender women and transgender men, specifically?

Research highlights the multidimensional nature of stereotypes across a range of social groups, including the possibility of several different components (e.g., Ashmore, Del Boca, & Wohlers, 1986) and subtypes that exist within a specific social category (e.g. Six & Eckes, 1991; Geiger et al., 2006). According to Stangor and Lange (1994), as stereotypes are formed, they are cognitively stored with certain content associated with them. The stereotype content model (SCM; Fiske et al., 2002) provides a framework for understanding perceptions toward various social groups and displays cross-cultural validity (Cuddy et al., 2009). The SCM proposes that

stereotypes of social groups are differentiated on two orthogonal dimensions of the personality traits of competence (high-low) and warmth (high-low), with each quadrant eliciting a certain emotion in the perceiver (Fiske et al., 2002). Those in the low competence-low warmth social groups tend to evoke disgust in the perceiver of these social groups and thus, more extreme negative responses, such as violence, harassment, and discrimination, which are all too common issues faced by transgender individuals (Grant et al., 2011; James et al., 2016). Harris and Fiske (2006, 2007) argue that such groups who fall into the category of low warmth and low competence are dehumanized, making it easier to engage in harmful behavior toward this social group.

However, Gazzola and Morrison (2014) suggested that these dimensions do not hold up for transgender men and women, proposing an alternative 'social-distancing' factor. The pervasiveness of violence, discrimination, and harassment toward transgender people in the U.S., however, would suggest that the transgender community may be perceived stereotypically as low-warmth, low-competence according to the SCM (Fiske et al, 2002), and thus be viewed with disgust as less-than-human (Harris & Fiske, 2006, 2007). It is unclear how Gazzola and Morrison's (2014) method for assessing transgender stereotypes led them to their conclusions on these dimensions given the lack of structural data analysis. It is hypothesized that stereotypes of transgender individuals include a predominance of negative traits (Hypothesis 1a). It is also hypothesized that stereotypes of transgender individuals fall along low competence, low warmth dimensions of the stereotype content model (Hypothesis 1b). However, given that the SCM has been limited in its application to transgender women and men, it also be important to examine any potential difference between these two groups on dimensions of warmth and competence

(Hypothesis 1c). Thus, this research aims to provide greater clarity to the dimensions of transgender stereotypes as they relate to the SCM and their general valence.

Additionally, previous research on gender stereotypes suggests masculine and feminine dimensions are present when categorizing traits, occupations, physical appearance, and activities of 'stereotypical' women and men (e.g., Bem, 1974; Deaux & Lewis, 1984; Hudak, 1993; Glick, Wilk, & Perreault, 1995). Constructs of masculinity and femininity have also been conceptualized as the base for stereotypes of gay men and lesbian women (e.g., Taylor, 1983). In fact, Deaux and Lewis (1984) noted in their research that descriptions of men that had more feminine qualities were assumed to be gay, showing that gender related information is closely linked to sexual orientation. The expectations of gender are culturally imbedded, and there has been extensive research in gender stereotypes, sexism, and the impact of gender prejudice (e.g., Six & Eckes, 1996; Spence, Helmreich, & Stapp, 1973). Accordingly, it would be important to examine how dimensions of masculinity and femininity translate to societal stereotypes of transgender women and men, especially given the salience of gender and gender role nonconformity for transgender individuals. It is predicted that stereotypes of transgender women is significantly different from stereotypes of transgender men on dimensions of masculinity and femininity. Specifically, it is expected that transgender men are rated higher in masculinity and lower in femininity in comparison to transgender women (Hypothesis 2a).

Given that transgender individuals are, by definition, transgressing gender norms and gender roles (e.g., Bornstein, 1994), it may also be useful to examine the extent to which gender stereotypes of cisgender men and women are different from gender stereotypes of transgender men and women. It is hypothesized that transgender women and men are stereotyped in meaningfully different ways on dimensions of masculinity and femininity in comparison to their

cisgender counterparts. Specifically, it is expected that transgender women and men are each rated higher in masculinity and lower in femininity in comparison to cisgender women, and higher in femininity and lower in masculinity in comparison to cisgender men (Hypothesis 2b).

It is anticipated that these findings align with the masculinity and femininity findings in previous stereotype literature of lesbian, gay, and bisexual individuals, which often appear to invoke an implicit inversion theory of gender role beliefs (e.g., Kite & Deaux, 1987; Blashill & Powlishta, 2009). Additionally, Gazzola & Morrison's (2014) identification of "gay" as a stereotype for both transgender women and men further reifies the conflation of gender and sexual orientation that exists in society. Thus, it is expected that exploration of the dimensions of masculinity and femininity can serve as a basis for future research examining stereotypes of the subgroups of lesbian, gay, bisexual, and transgender people.

Additionally, previous researchers have highlighted the importance of warmth and competence dimensions in the stereotype content model (Fiske et al., 2002), that these qualities of warmth and competence are generally desirable, and that warmth is a feminine quality and competence is a masculine quality according to gender stereotype literature (Rosenkrantz et al., 1968). Thus, it is important to examine how content dimensions of stereotypes overlap or differentiate from one another as it applies to stereotypes of transgender women and men (Hypothesis 3).

Furthermore, in alignment with previous findings about predictors of prejudice and endorsement of stereotypes of social outgroups, such as need for closure (e.g., Nelson, 2002), and specifically about predictors of anti-transgender prejudice (e.g., Tebbe & Moradi, 2012; Tebbe et al., 2014), this study examines potential predictors of transgender stereotype dimensions and endorsement. Examining the relationship between participant endorsement of

stereotypes and other participant characteristics provides validity evidence for the transgender stereotype taxonomy as well as greater insight into the relationship between stereotypes and potential correlates.

Men tend to evaluate transgender men and women more negatively than do women potentially because transgender individuals are perceived as posing a threat to traditional social values that heterosexual men tend to hold more strongly (e.g., Nagoshi et al., 2008; Tee & Hegarty, 2006; Winter et al., 2008). Transgender individuals do not fit into the gender expectations of their birth sex, which can be confusing and met with rejection by people raised in a culture with strict gender roles, who see themselves fitting these roles. Thus, participant sex, gender self-concept, and sex role attitudes are examined as potential predictors of how traits are categorized across the four groups of transgender women, transgender men, cisgender women, and cisgender men (Hypothesis 4a). Additionally, study of stereotype endorsement and prejudice generally yields positive correlations with need for closure (Nelson, 2002). Given the ambiguity that may exist in the categorization of a transgender person in the ‘appropriate’ gender, it is expected that participants’ cognitive closure impacts how traits are categorized across the four groups of transgender and cisgender women and men. (Hypothesis 4b).

Previous researchers have identified a relationship between stereotype endorsement and social distance (e.g., Steffensmeier & Steffensmeier, 1974) as well as prejudice and stereotype endorsement (e.g., Tebbe et al., 2014). Thus, as another means of examining intergroup relationships in addition to using a measure of transphobia, social distance is assessed using an adapted version of the Bogardus (1925) Social Distance Scale. It is expected that lower acceptance of social relationships and higher transphobia predicts trait categorization across the four groups of transgender and cisgender women and men (Hypothesis 4c).

CHAPTER 3

METHODS

Participants

The sample for this study was drawn from the undergraduate student population at Iowa State University, who were enrolled in one or more courses in the Department of Psychology and Communication Studies. Several prior studies in the research of stereotypes utilize predominantly college undergraduate student populations, such as the two known published studies of transgender stereotypes (Gazzola & Morrison, 2014; Antoszewsi et al., 2009). Participants in this study were recruited utilizing the Sona system, which allows for the awarding of course credit in exchange for study participation. There were 555 total participants in this study. Participants who did not complete all parts of the study and outliers were removed, leaving a total of 412 participants upon which the participant descriptions and statistical analyses are based.

Of the 412 participants who completed all parts of the study, 270 identified as female and 142 identified as male. Four hundred nine of these participants identified as cisgender. The age of participants ranged from 18 to 37 years (M = 19.17, SD = 2.58). The majority of participants (79%) identified as white/European American, 8 percent as Asian, Asian American, or Pacific Islander, 5 percent as multiethnic, 4 percent as African or African American, and 3 percent as Hispanic/Latino American. Ninety-three percent of participants identified as heterosexual. Fifty-one percent of participants identified as middle class and 35 percent as upper middle class. Sixty-six percent of the sample identified as Christian and 26 percent identified as non-religious.

Thirty-nine percent of participants acknowledge that they personally know someone who identifies as transgender.

Measures

Trait sort

Gordin et al. (2001) note that when traits are presented to participants instead of asking them to engage in a stereotype generation tasks, there is a reduction in participant hesitation to reveal their thoughts about stereotypic traits. Thus, an extensive, representative list of trait adjectives was provided to participants to ensure thorough examination of transgender stereotype content with reduced participant hesitation to sort stereotypic traits.

The starting point for this study was comprised of a list of 555 trait adjectives from Anderson (1968), which have been utilized as a base for previous research in stereotype selection (e.g., Larose, Tracy, & McKelvie, 1993; Anderson, 2015), items from the Bem Sex Role Inventory (BSRI; Bem, 1974), and items identified as transgender stereotypes by Gazzola and Morrison (2014). This research focused exclusively on stereotypic personality traits as researchers have noted that other stereotyped categories, such as occupations and physical appearance, should be examine separately (e.g., Deaux & Lewis, 1984). Subsets of these personality traits have been examined in prior literature regarding characterization of masculinity and femininity (Bem, 1974), social impressions of another person's personality (Rosenberg, Nelson, & Vivekananthan, 1968; Rosenkrantz et al., 1968) and the stereotype content model warmth-competence dimensions (Fiske et al., 2002).

Trained undergraduate research assistants provided their rating of each trait's characterization of masculinity, femininity, transgender, likability, transgender woman, a transgender man, a cisgender woman, and a cisgender man. Based on these ratings, 64 traits were

selected based on their representativeness of the levels of these rating dimensions. Specifically, the list of BSRI traits were used as a starting point for traits used in this study. The BSRI contains 60 traits, with a balance of masculine, feminine, and gender-neutral traits. Phrases used in the BSRI, such as “Acts as a leader” were removed and replaced with an appropriately masculine, feminine, or gender-neutral single-word personality trait based on research assistant ratings, with appropriate variability in likability. In addition to these 60 traits, the top four personality traits indicated by Gazzola and Morrison (2014) as stereotypic of transgender men and women were selected to provide the sum of 64 traits utilized in this study.

Participants in the study were asked to sort 64 selected traits into four categories in the first part of the study. Participants sorted the traits on the societal perceptions of transgender women, transgender men, cisgender women, and cisgender men. The original list of 555 trait adjectives, BSRI items and stereotypes identified by Gazzola and Morrison (2014) are located in the appendices in the Appendix D, C, and E, respectively. The selected 64 traits utilized for the remainder of the study in sorting and rating are noted in bold print in the appropriate Appendices.

Trait rating

In the second part of the study, which was an online survey sent a week after the in-lab trait sorting activity, participants rated each of the 64 traits on the extent to which the trait is a positive to negative characteristic and the general perception of “warmth” and “social status” if a person held this characteristic. Participants rated the terms on a 7-point Likert scale from 1=negative to 7=positive as a general characteristic, from 1=low warmth to 7=high warmth, and from 1=low social status to 7= high social status. Such ratings are similar to previous studies in

stereotypes (e.g., Madon et al., 1997). Traits selected for the sort and rating procedures are available in Appendix C, D, and E and are noted in bold print.

Need for cognitive closure

Participants' need for cognitive closure, or intolerance of cognitive ambiguity, was measured utilizing the shortened and revised version of Kruglanski, Webster, & Klem's (1993) Need for Closure Scale (NFC) developed by Roets and Van Hiel (2011). The NFC encompasses five facets/subscales – order, predictability, decisiveness, ambiguity, and close-mindedness. The NFC asks respondents to rate items on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree), with higher scores being indicative of higher levels of close-mindedness and less comfort with ambiguity. Example items include "I don't like situations that are uncertain" and "I dislike unpredictable situations." Tested on a sample of 1583 participants, Roets and Van Hiel (2011) developed the NFC-R-S, which is a 15-item measure with high internal consistency (α = .87) and high test-retest reliability (r = .79). The NFC-R-S is highly comparable to the original NFC (r = .95). The NFC-R-S items are available in Appendix H.

Gender self-concept and social desirability

Participants' gender self-concept and social desirability in responding was evaluated using the Bem Sex Role Inventory (BSRI; Bem, 1974). The BSRI asks respondents to rate themselves on 60 personality characteristics (e.g., Self-reliant, Compassionate, and Friendly) using a 7-point Likert scale ranging from 1 (Never or almost never true) to 7 (Almost always true), providing scores on three subscales – Masculinity, Femininity, and Social Desirability – whose Cronbach's alphas equal .86, .82, and .75, respectively. In measuring the difference between masculinity and femininity, there is an additional score for Androgyny, which Bem (1974) described as the presence of both masculine and feminine traits. The Androgyny scale has

high internal consistency (α = .86). The BSRI has high test-retest reliability: Masculinity (*r* = .90); Femininity (*r* = .90); Androgyny (*r* = .93); and, Social Desirability (*r* = .89). The BSRI items are available in Appendix C.

Views of sex roles

Participants' views of traditional sex roles were evaluated using the 25-item Attitudes toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973). The AWS asks respondents to answer each statement on a 4-point Likert scale from 1 (agree strongly) to 4 (disagree strongly), with some questions being reverse scored. Items include "Women should worry less about their rights and more about becoming good wives and mothers" and "A woman should be as free as a man to propose marriage." A high score on the AWS indicates a pro-woman, egalitarian attitude while a low score indicates a traditional, conservative attitude toward sex roles. The AWS displays high internal consistency (α = .89) according to validation studies conducted by Daugherty and Dambrot (1986). The AWS items are available in Appendix I.

Anti-transgender prejudice

Participants' anti-transgender prejudice was evaluated using the 22-item Genderism and Transphobia Scale-Revised (GTS-R; Tebbe, Moradi, & Ege, 2014) based on Hill and Willoughby's (2005) original Genderism and Transphobia Scale. The GTS-R asks respondents to rate items on a 7-point Likert scale ranging from 1 (strongly agree) to 7 (strongly disagree), with appropriate items being reverse scored. A high score on the GTS-R is indicative of transgender acceptance while a low score is indicative of higher levels of anti-transgender prejudice. Example items include "If I found out my best friend was changing their sex, I would freak out" and "Masculine women make me feel uncomfortable." The GTS-R has high internal consistency

(α = .94) and includes subscales of Genderism/Transphobia and Gender-Bashing, whose Cronbach's alphas equal .94 and .86, respectively. The GTS-R is available in Appendix J.

Social distancing

An adaptation of the Social Distance Scale developed originally by Bogardus (1925) was utilized to determining how close participants prefer members of different social groups (e.g., transgender women) to be in relationship to themselves. In the original version (Bogardus, 1925), participants select from seven options with varying degrees of social distance from 1 = close kin by marriage to 7 = prefer to exclude them from my country for each respective social group. For this study, participants were asked to respond "yes" or "no" to six social groups in the LGBT community (e.g., transgender men, bisexual women) for each level of social distance (e.g., as my friend, as my coworker). Responses of "yes" were scored as 1 and "no" scored as 0 with appropriate reverse scoring. Scores were calculated as a proportion of acceptance of all seven possible relationships. A social distance score for all relationships was calculated for each LGBT social group in addition to a summary score for all LGBT groups collectively. High scores (closer to 1.00) indicate higher acceptance of the potential relationships with each social group whereas low scores (closer to .00) are indicative of rejection of potential relationships with these social groups. The Social Distance Scale used in this study is available in Appendix K.

Procedure

This study examines transgender stereotypes using established methods of assessing stereotypes by examining perceptions of societally-held beliefs of transgender stereotypes. A focus group of undergraduate research assistants was asked to generate definitions and stereotypes of transgender, transgender women, and transgender men. The researcher used this focus group to help shape stereotype content and hypotheses. In the primary study, participants

engaged in an in-lab sorting activity of traits believed to be generally held societal beliefs as well as an online survey in which they rated these traits on characteristic valence (positive to negative), warmth, and social status. In the card sort, participants were asked to assign traits to categories of transgender women, transgender men, cisgender women, and cisgender men. With 64 traits total, participants were asked to sort 16 traits to each category. Then, participants were asked to complete measures of their gender self-concept and the social distance for groups within the LGBT community.

Within one week of completing the in-lab sorting activity and surveys, participants were asked to complete an online survey in which they rated each trait as a general positive/negative trait, how warm someone is perceived to be if they have this trait, and the social status of someone perceived to hold this trait. Along with rating these traits, participants were asked to complete measures that assess the potential predictors of stereotype endorsement (e.g., anti-transgender prejudice, need for closure, attitudes toward women).

Data Analytic Approach

Data collected in the lab was entered in the CS Pro software, and data collected online through Qualtrics was downloaded. Data for the first and second part of the study was combined. Data analyses were conducted using IBM Statistical Package for the Social Sciences 23 (SPSS) and SYSTAT. Means and standard deviations were calculated for all variables in this study. Means for participant variables in addition to demographic variables included gender self-concept, cognitive closure, transphobia, attitudes toward women, and social distance. Means for trait rating on general valence, warmth, and status were calculated. Counts were calculated to determine the number of times each trait was sorted into each of the four categories. Means for participants' idiographic rating of traits on each dimension for each category were also

calculated to provide a unique sense of how participants rated the traits they sorted on dimensions of valence, warmth, and social status. Ratings were also calculated for individual participants on the gender dimension, utilizing an established scoring system for the traits predetermined as masculine, feminine, and gender-neutral according to the Bem Sex Role Inventory (Bem, 1974) and research assistant ratings.

Pearson chi-square

A Pearson chi-square was used to determine if there was an observable difference in how the 64 traits were sorted among the four categories in comparison to sorting by chance (Chernoff & Lehmann, 1954). With 412 participants each sorting the 64 traits into the four categories of transgender women, transgender men, cisgender women, and cisgender men, it would be expected that each trait would be sorted into each category approximately 103 times if the traits were sorted by chance.

A count that exceeded 50 percent more than the expected count of 103 times (i.e., 155 or more) was indicative of that trait being disproportionately assigned to that category. A count that fell below 50 percent less than the expected count of 103 times sorted into a category (i.e., 52 or fewer) was indicative of a trait being disproportionately underutilized for that category. Additionally, where the count for two categories exceeded 70 percent of the total number of possible times a trait could be sorted (288 of 412 times), and when the trait was evenly distributed among these two categories (40/60 percent maximum) and differentiated from the remaining two categories, this trait was also included with the list of traits being disproportionately assigned to the respective categories. Traits were disproportionately assigned to a category if they were perceived by participants as a societal stereotype of this respective

category. Hence, the traits that were disproportionately assigned to a category could therefore be explained as stereotypes of the respective category.

The first two research questions examine the content dimensions and interrelations of stereotypes of transgender people, aiming to provide greater clarity to transgender stereotypes as they relate to the stereotype content model (SCM), general valence, and gender dimensions of femininity and masculinity. Counts and means of trait associations with specific categories (e.g., transgender men) were analyzed to determine the most popular traits representing the content of transgender stereotypes. Each trait was rated and categorized on the dimensions of valence, warmth, and social status and were predetermined to be masculine, feminine, or gender-neutral. Counts were calculated of the general perception of the trait and means were calculated of participant idiographic ratings of each content dimension of the traits they assigned to the four categories.

It was hypothesized that transgender stereotypes would include a predominance of negative traits (Hypothesis 1a) and that stereotypes of transgender individuals will fall along low competence, low warmth dimensions of the SCM (Hypothesis 1b). Given that the SCM has been limited in its application to transgender women and men, this research examined potential difference between these two groups on content dimensions of warmth and competence as well (Hypothesis 1c). Additionally, it was hypothesized that stereotypes of transgender women are significantly different from stereotypes of transgender men on dimensions of masculinity and femininity (Hypothesis 2a), and that transgender women and men are rated differently on the dimensions of masculinity and femininity in comparison to their cisgender peers (Hypothesis 2b). Realizing that previous researchers have highlighted the importance of warmth and competence dimensions in the stereotype content model (Fiske et al., 2002) and warmth as a

feminine quality and competence as a masculine quality in gender stereotype literature (Rosenkrantz et al., 1968) as well as the notable desirability of these qualities when they align with one's gender role, it was important to examine the interrelation of stereotype content dimensions. Thus, Hypothesis 3 examined how the stereotype content dimensions of warmth, competence, valence, femininity, and masculinity were interrelated or differentiated from one another as it applies to transgender stereotypes.

Structural data analyses

To examine the content of and interrelations among the stereotypes, a combination of cluster analysis and multidimensional scaling were performed to give structure to the data and facilitate interpretation of the stereotype grouping and content.

Hierarchical cluster analysis of stereotype traits. Hierarchical cluster analysis was used to group categories of transgender stereotypes in an interpretative framework for understanding key features and content domains of stereotypes. Cluster analysis is a multivariate statistical procedure that serves as a mean of classifying data into relatively homogenous groups (Aldenderfer & Blashfield, 1984), and thus, serves as another means for grouping stereotype traits.

Multidimensional scaling of trait interrelations. Multidimensional scaling was used to evaluate the dimensional structure underlying individual differences in the endorsement and evaluation of transgender stereotypes. Multidimensional scaling (MDS) is a class of techniques that is utilized to determine how similar or different two constructs are in relationship to one another (Kruskal & Wish, 1978). Thus, once stereotype traits are grouped together using cluster analyses, their interrelations can be examined using MDS. Collectively, these statistical procedures provide a greater understanding of the transgender stereotype taxonomy in

examination of how certain stereotypes may be grouped together as well as how stereotypic traits relate to one another in examination of the first three hypotheses.

Analysis of variance

Means comparison analyses were utilized to examine group differences of stereotype content between groups of transgender women, transgender men, cisgender women, and cisgender men as well as the relationships between participant variables and their sorting of traits. Given that traits were sorted into categories and each trait was predetermined to be masculine, feminine, or gender-neutral as well as rated on dimensions of valence, warmth, and social status, a score was calculated for each participant for each category (e.g., transgender women) on these trait content dimensions (e.g., warmth). Mean scores for each of the content dimensions of traits for each category were calculated. Additionally, participants completed measures of cognitive closure, gender self-concept, anti-transgender prejudice, gender role attitudes, and social distance, and mean scores were calculated for each measure.

Repeated measures analysis of variance (ANOVA) and analysis of covariance (ANCOVA) were subsequently utilized to determine how categories differ on content dimensions of valence, warmth, social status, and gender based on the traits sorted into these categories as well as how participant variables may account for the variance in trait sorting. In general, ANOVA is a statistical procedure used to analyze the differences among group means and their associated procedures, such as the variation that occurs among and between groups (Scheffé, 1959). Like ANOVA, additional means comparisons analyses, such as analysis of covariance (ANCOVA), were used to examine covarying participant variables' impact on potential differences in stereotype content dimensions among the various categories of transgender men, transgender women, cisgender men, and cisgender women. Repeated measures

ANOVA and ANCOVA were utilized because the categories are not independent from one another in the card sort – a trait is sorted into one category could not be sorted into another category. These analyses allow for the examination of general differences in summary ratings of valence, warmth, social status and gender for the traits sorted across categories as well as if there are participant variables that influence the trait categorization and rating between the four categories.

Bivariate correlations

A bivariate correlation conveys the co-occurrence of, or relationship between, two variables, and is represented by a correlation coefficient, or Pearson's *r*, from -1 to +1. The closer a number is to zero, the weaker the correlation, with zero being indicative of no relationship between the two variables (Lane et al., 2018). These analyses were utilized as a follow up to ANCOVA outcomes that indicated certain participant variables were influential in the respective model. The bivariate correlation analyses aid the interpretation of the ANCOVA results when assessing the impact of each participant variable on the four categories' summary ratings on a specific content dimension (e.g., warmth). Additionally, bivariate correlation was used to assess the relationship between summary content dimension ratings of traits assigned to the four categories to analyze possible interrelations of stereotype content dimensions.

CHAPTER 4

RESULTS

The research questions in this study examined the stereotypes of transgender women and transgender men – how they compare to one another and to the stereotypes of cisgender women and men on content dimensions of valence, warmth, social status and gender. The analyses used to examine these stereotypes included calculating descriptive statistics (e.g., count, mean), bivariate correlation, Pearson chi-squared test, cluster analysis, and multidimensional scaling. In addition to the content dimensions of stereotypes, participant variables were analyzed using repeated measures analysis of covariance and bivariate correlation.

Trait Descriptive Statistics

Trait assignment

A Pearson chi-squared test was utilized to determine if there were significant differences in how each of the 64 traits were assigned to each of the four categories of transgender women, transgender men, cisgender women, and cisgender men. Participants' sorting of traits displayed a significant difference in distribution across the four categories with χ^2 (3, N = 412) ranging from 18.00, $p < .001$ to 972.99, $p < .001$. Thus, no traits were deemed to be assigned equally across the four categories, and meaningful conclusions may be drawn in how traits were disproportionately assigned to the four categories of transgender women, transgender men, cisgender women, and cisgender men. Participants were asked to assign traits to categories based on what they believed societal stereotypes for each of these categories to be, and therefore, the traits disproportionately assigned to a specific category may be interpreted as stereotypes of this category. There were also traits disproportionately underrepresented in a category. These traits

may have been assigned disproportionately to one category, leaving one or more other categories deficient in this trait being assigned to them. The significance of this underrepresentation could indicate that the specific category in which the trait is underrepresented is a counterstereotype for that category, or it could mean that the category in which the trait is underrepresented is just not as strongly stereotyped has having the trait in question. Thus, underrepresented traits were utilized cautiously to provide additional context to the stereotyped traits.

Transgender women. Eighteen of the 64 traits were assigned disproportionately to transgender women, with a range of 127 – 257 times the trait was assigned to transgender women. Of these traits assigned to transgender women, 16 (89 percent) were also assigned disproportionately to another one of the four categories, including 11 traits in common with transgender men, three traits in common with cisgender women, and two traits in common with cisgender men. The 11 traits shared with transgender men were *gay, abnormal, outcast, confused, individualistic, insecure, secretive, unsystematic, yielding, adaptable,* and *unpredictable.* Of these 11 traits, four of these traits were those identified by Gazzola and Morrison (2014) to be stereotypes of both transgender women and men (*abnormal, outcast, gay, confused*). While these four traits were disproportionately assigned anywhere from 163-218 times to one of the transgender groups, they were assigned only 1-18 times to one of the cisgender groups. The three traits shared with cisgender women were *cheerful, talkative,* and *sensitive.* The two traits shared with cisgender men were *proud* and *humorous.* The only two traits that were disproportionately assigned to only transgender women were *theatrical* and *creative*.

Transgender men. Sixteen of the 64 traits were assigned disproportionately to transgender men, with a range of 123 – 218 times the trait was assigned to transgender men. Of

these traits, 13 (81 percent) were also assigned disproportionately to another one of the four categories, including 11 traits in common with transgender women. These 11 traits shared with transgender women were *gay, abnormal, outcast, confused, individualistic, insecure, secretive, unsystematic, yielding, adaptable,* and *unpredictable.* Three of the four traits previously identified by Gazzola and Morrison (2014) to be stereotypes of both transgender women and men (*abnormal, outcast, confused*) were the most frequently assigned traits to the category of transgender men. Transgender men shared 1 trait in common with cisgender men – *self-reliant* – and no traits in common with cisgender women. Thus, four traits were disproportionately assigned to the category of transgender men alone – *shy, solemn, rebellious,* and *inefficient*.

Cisgender women. Twenty-one of the 64 traits were assigned disproportionately to cisgender women, with a range of 145 – 313 times the trait was assigned to cisgender women. Of these traits, only four were also assigned disproportionately to another one of the four categories, including three traits in common with transgender women (*sensitive, talkative,* and *cheerful*) and one trait in common with cisgender men (*reliable*). There were no traits in common with transgender men. Most traits (81 percent) were therefore assigned disproportionately exclusively to cisgender women.

Cisgender men. Nineteen of the 64 traits were assigned disproportionately to cisgender men, with a range of 150 – 377 times the trait was assigned to cisgender men. Of these traits, only four were also assigned disproportionately to another one of the four categories, including two traits in common with transgender women (*humorous, proud*), one trait in common with transgender men (*self-reliant*), and one trait in common with cisgender women (*reliable*). Most traits (79 percent) were therefore assigned disproportionately exclusively to cisgender men.

Trait dimensions

Each of the 64 traits was categorized by their content dimensions. The dimensions of valence (i.e., positive, negative), warmth, and social status were determined by participant cumulative ratings of each trait. Trait gender dimensions (masculine, feminine, and gender-neutral) were predetermined. The categorization of each trait on each of these content dimensions provided a means of comparing the four categories of transgender women, transgender men, cisgender women, and cisgender men with one another on specific dimensions.

Trait valence. The valence of each trait was rated by participants, and traits were subsequently categorized as positive, negative, or valence-neutral by examining distribution of ratings and measures of central tendency. There were 36 traits deemed to be positive, 17 negative traits, and 11 traits that were neither positive nor negative, or valence-neutral. Of the positive traits, 15 were disproportionately assigned to cisgender women, 12 were disproportionately assigned to cisgender men, seven were disproportionately assigned to transgender women, and two were disproportionately assigned to transgender men. Of the negative traits, 10 were disproportionately assigned to transgender men and seven were disproportionately assigned to transgender women. Cisgender women and cisgender men were each disproportionately assigned three negative traits. Of the valence-neutral traits, transgender men, transgender women, and cisgender men were each disproportionately assigned four traits. Three valence-neutral traits were disproportionately assigned to cisgender women.

Overall, there was a disproportionate number of positive-valence traits assigned to categories of cisgender women and men in comparison to transgender women and men, providing support to Hypothesis 1a. Fifteen of the 21 traits (71 percent) assigned to cisgender women were deemed positive and 12 of the 19 traits (63 percent) assigned to cisgender men were

deemed positive. Thus, of the 64 traits, 42 percent were positive traits assigned to a cisgender category – 23 percent were assigned to cisgender women and 19 percent to cisgender men. On the other hand, seven of the 18 traits (39 percent) disproportionately assigned to transgender women were deemed positive and two of the 16 traits (13 percent) disproportionately assigned to transgender men were deemed positive. Therefore, only 14 percent of the 64 traits were positive traits assigned to the transgender categories – 11 percent were assigned to transgender women and three percent were assigned to transgender men.

Similarly, the categories of transgender women and men were disproportionately assigned negative traits, providing further support to Hypothesis 1a. Of the 18 traits disproportionately assigned to transgender women, 7 were deemed negative-valence (39 percent). Of the sixteen traits disproportionately assigned to transgender men, 10 were deemed negative in valence (62 percent). Twenty-seven percent of the 64 traits were negative traits assigned to a transgender category – 11 percent were assigned to transgender women and 16 percent were assigned to transgender men. On the other hand, cisgender women and cisgender men were each disproportionately assigned three negative-valence traits, yielding 14 percent and 16 percent of their total number of traits disproportionately assigned to these categories. Of the 64 traits, 6 (9 percent) were negative traits assigned to a cisgender category.

Overall, a positive trait was three times more likely to be assigned to a cisgender category than a transgender category. Of the positive traits assigned to transgender categories, a positive trait was three times more likely to be assigned to transgender women than transgender men. A negative trait was three times more likely to be assigned to a transgender category than a cisgender category. Of the negative traits assigned to transgender categories, a negative trait was one and a half more times as likely to be assigned to transgender men in comparison to

transgender women. Across categories, transgender men were assigned the highest number of negative traits and lowest number of positive traits. These findings provide significant support to Hypothesis 1a that the traits considered stereotypical of transgender individuals include a predominance of negative traits as opposed to positive traits.

Trait warmth. The warmth of each trait was rated by participants, and traits were subsequently categorized as high-warmth, low-warmth, or warmth-neutral by examining distribution of ratings and measures of central tendency. Trait warmth represents the 'warmth' dimension of the stereotype content model (SCM; Fiske et al., 2002) when examining the hypotheses in this study.

There were 28 traits deemed to be high in warmth, 18 low-warmth traits, and 17 traits that were neither high nor low in warmth, or warmth-neutral. Of the high-warmth traits, 19 were disproportionately assigned to cisgender women, six were disproportionately assigned to transgender women, three were disproportionately assigned to cisgender men, and one was disproportionately assigned to transgender men. Of the low-warmth traits, 10 were disproportionately assigned to transgender men, eight were disproportionately assigned to transgender women, and seven were disproportionately assigned to cisgender men. No low-warmth traits were disproportionately assigned to cisgender women. Of the warmth-neutral traits, nine were disproportionately assigned to cisgender men, five were disproportionately assigned to transgender men, four were disproportionately assigned to transgender women, and two were disproportionately assigned to cisgender women.

When examining the warmth of traits assigned to the four categories, cisgender women far exceeded the number of high-warmth traits assigned to any other category. Cisgender women were disproportionately assigned 19 high-warmth traits of the 21 traits in total assigned to them.

Thus, 30 percent of all 64 traits were warm traits assigned to cisgender women, with 90 percent of the traits assigned to cisgender women high in warmth. Cisgender women were also assigned the fewest traits rated low (0) or neutral (2) in warmth, so overall, cisgender women were distinctly high in warmth.

Transgender women were disproportionately assigned the second highest number of high-warmth traits of all categories. These six traits composed 33 percent of the 18 traits assigned to transgender women and nine percent of all traits. However, transgender women were also assigned the second highest number of low-warmth traits. These eight low-warmth traits composed 44 percent of the traits disproportionately assigned to transgender women. In combination with the four neutral-warmth traits, which composed 22 percent of traits disproportionately assigned to transgender women, there generally appears to be an overall perception of neutral warmth, with a slight edge of low-warmth traits, in transgender women. These findings do not align with the expectation of Hypothesis 1b that transgender women would be low on the warmth dimension of the SCM.

Unlike transgender women, transgender men seemed to be distinctly low in warmth, which does support Hypothesis 1b. Of the 16 traits disproportionately assigned to transgender men, only one was high in warmth and 10 were low-warmth traits. In fact, transgender men were disproportionately assigned the fewest number of high-warmth traits – only two percent of all 64 traits were high warmth traits assigned to transgender men. Transgender men were also assigned the highest number of low-warmth traits across the four categories with 63 percent of traits assigned to this category being low in warmth. The remaining five traits assigned to transgender men were considered neutral-warmth. The higher number of low-warmth traits and lower number of high-warmth traits assigned to transgender men in comparison to transgender women

reveals a slight difference in perception on the SCM warmth dimension, providing clarity to Hypothesis 1c.

In comparison to the other categories, the traits assigned to cisgender men reveal a tendency toward low to neutral warmth. Of the 19 traits disproportionately assigned to cisgender men, nine were neutral in warmth, seven were low-warmth, and three were high-warmth. Thus, on the dimension of warmth of traits assigned to cisgender men, 47 percent were neutral, 37 percent were low, and 16 percent were high in warmth.

Trait social status (competence). The social status of each trait was rated by participants, and traits were subsequently categorized as high-status, low-status, or status-neutral by examining distribution of ratings and measures of central tendency. Social status represents the 'competence' dimension of the stereotype content model (Fiske et al., 2002) when examining the hypotheses in this study as competence represents the level of societal respect for a social group. Thirty-six traits were deemed to be high in social status, 14 traits were considered low-status traits, and 13 traits that were neither high nor low in social status, or status-neutral. Of the high-status traits, 15 were disproportionately assigned to cisgender men, 14 were disproportionately assigned to cisgender women, seven were disproportionately assigned to transgender women, and two were disproportionately assigned to transgender men. Of the low-status traits, eight were disproportionately assigned to transgender men, six were disproportionately assigned to transgender women, three were disproportionately assigned to cisgender women, and two were disproportionately assigned to cisgender men. Of the status-neutral traits, six were disproportionately assigned to transgender men, five were disproportionately assigned to transgender women, four were disproportionately assigned to cisgender women, and two were disproportionately assigned to cisgender men.

When comparing the four categories, cisgender men and women were generally much higher in status than transgender women and men as was predicted by Hypothesis 1b. The traits disproportionately assigned to cisgender men include 15 high-status traits, which composed 79 percent of traits assigned to this category. Cisgender men were also assigned low numbers of neutral-status (2) and low-status (2) traits, composing only six percent of all traits. Similarly, of the 21 traits assigned to cisgender women, 14 were high-status, composing 67 percent of traits assigned to this category. Like cisgender men, cisgender women were also assigned a relatively low number of low-status (3) and neutral-status (4) traits.

The social status of the traits disproportionately assigned to transgender women was more evenly mixed with seven high-status, six low-status, and five neutral-status traits. Thus, the perceived social status of the traits disproportionately assigned to transgender women is generally neutral in comparison to the generally high status of the cisgender categories, which does not align with the prediction by Hypothesis 1b that transgender women would low on the competence dimension of the SCM.

On the other hand, transgender men were more distinctly low in status, which does align with Hypothesis 1b and indicates potential differences between the two transgender categories for Hypothesis 1c. Only two of the 16 traits disproportionately assigned to transgender men were high in status, eight were low-status and six were neutral-status traits. With half of the traits assigned to this category designated as low in status and another 38 percent as neutral-status, transgender men were assigned the fewest number of high-status traits – three percent of all traits were high status traits assigned to transgender men. Transgender men therefore display a leaning toward low on the competence dimension of the stereotype content model (SCM; Fiske et al., 2002) as predicted.

Trait gender. Traits used in this study were pre-determined to be masculine, feminine, or gender neutral according to their placement in the Bem Sex Role Inventory's (Bem, 1974) subscales and ratings by research assistants. There were 20 traits deemed to be masculine, 20 feminine traits, and 24 traits that were neither masculine nor feminine, or gender-neutral. Of the masculine traits, 17 were disproportionately assigned to cisgender men, three were disproportionately assigned to transgender women, and two were disproportionately assigned to transgender men. None of the masculine traits were disproportionately assigned to cisgender women. Of the feminine traits, 14 were disproportionately assigned to cisgender women, six were disproportionately assigned to transgender women, and three were disproportionately assigned to transgender men. Cisgender men were not disproportionately assigned any of the feminine traits. Of the gender-neutral traits, 11 were disproportionately assigned to transgender men, nine were disproportionately assigned to transgender women, six were disproportionately assigned to cisgender women, and two were disproportionately assigned to cisgender men.

In general, cisgender women and cisgender men were assigned traits in a way that would suggest they are perceived to be very different from one another in terms of masculinity and femininity. However, transgender women and men were not as clearly distinguishable on these dimensions. In fact, gender-neutral traits (e.g., *unpredictable, adaptable*) were predominant among categories of transgender women and transgender men. Thus, there is support for Hypothesis 2b in assessing differences on the gender content dimension between the transgender categories and their cisgender counterparts.

When examining the stereotypes of transgender women, nine traits were gender-neutral, six were feminine, and three were masculine. Thus, 14 percent of all 64 traits assigned were gender-neutral traits assigned to transgender women, and these traits composed half of the 18

traits assigned to transgender women. The six feminine traits represent nine percent of all 64 traits and one-third of the 18 traits assigned to transgender women.

Like transgender women, gender-neutral traits composed the majority of the 16 traits disproportionately assigned to transgender men – 11 of these traits were gender-neutral, while three were feminine and two were masculine. Thus, 17 percent of the 64 traits were gender-neutral traits assigned to transgender men, representing 69 percent of the 16 traits assigned to this category. Three feminine traits compose five percent of all traits assigned across categories and 19 percent of traits assigned to transgender men.

In attempting to distinguish these two categories on the gender content dimension per Hypothesis 2a, it is notable that there were twice as many feminine traits assigned to transgender women (6) as there were to transgender men (3). This indicates that transgender women may be perceived as higher in femininity in comparison to transgender men. Traits that were distinctly underrepresented in the two categories were also examined to provide more insight into the gender dimensions of transgender women and transgender men. Of the 10 traits that were underrepresented in the category of transgender women, six were masculine, two were feminine, and two were gender-neutral. Of the 10 traits underrepresented in the category of transgender men, six were masculine, three were feminine, and one was gender-neutral. The two transgender groups were practically indistinguishable when looking through this lens of underrepresented traits. Overall, gender-neutral traits dominated both categories, while distinctly masculine and feminine traits were fewer in these categories, though transgender women were assigned feminine traits twice as frequently as transgender men, making it difficult to assess differences for Hypothesis 2a.

Cisgender women and men were much more clearly distinguishable from one another and from all categories on the gender dimensions, providing clarity to Hypothesis 2b. Of the 21 traits disproportionately assigned to cisgender women, 14 were feminine, six were gender-neutral, and none were masculine. Thus, 22 percent of all 64 traits assigned were feminine traits assigned to cisgender women, and these traits composed 67 percent of the 21 traits assigned to cisgender women. Similarly, several of the masculine traits (e.g., *athletic*, *dominant*) were underrepresented in their assignment to cisgender women with no masculine traits being assigned to this category.

For cisgender men, results were similar, but in the reverse. Of the 19 traits disproportionately assigned to cisgender men, 17 were masculine, two were gender neutral, and none were feminine. Thus, 27 percent of all 64 traits assigned were masculine traits assigned to cisgender men, and these traits composed 89 percent of the 19 traits assigned to cisgender men. In fact, of all traits used in the card sort task, the top six most frequently assigned traits to any category were six masculine traits (*dominant, athletic, competitive, masculine, aggressive, forceful*) disproportionately assigned to cisgender men. These traits were assigned at least 200 percent more frequently than would be expected if the sorting were random (range of 315-377 times the trait was sorted into the cisgender men category). Similarly, several of the feminine traits (e.g., *sensitive*, *affectionate*) were underrepresented in their assignment to cisgender men with no feminine traits being assigned to this category.

Category dimension ratings. Dummy coding was used to provide a means of analyzing participant idiographic ratings of the traits they assigned to the four categories. Mean scores for each category on each of the content dimensions of valence, warmth, and social status were calculated based on participants' individual sorting of each trait into one of the four categories

and subsequent rating of the trait on its valence, warmth, and social status. These idiographic ratings of valence, warmth, and social status were calculated by multiplying the participant ratings of a trait with the dummy coding of whether they sorted that trait into a specific category. Given that the gender dimension of traits was predetermined, masculine, feminine, and gender-neutral traits were multiplied by one, negative one, and zero, respectively. Means and standard deviations were calculated for the valence, warmth, status, and gender scores of each category. Thus, in addition to knowing the dimensions of traits by general participant rating as well as how they were assigned to each category, these mean idiographic ratings provide a summary score on each dimension for each category.

Valence. Cisgender women had the highest average valence rating of traits assigned to this category with a mean of 83.4 (*SD* = 12.8), signifying that, on average, participants were disproportionately assigning traits they rated as positive to the category of cisgender women. They were followed by transgender women with a mean valence rating of traits assigned to this category of 72.8 (*SD* = 12.9), cisgender men's stereotype trait valence with a mean of 72.2 (*SD* = 12.1), and transgender men with a mean of 70.9 (*SD* = 12.4). Thus, when comparing ratings of traits assigned to each category with the general dimension categorization of traits assigned to each category, transgender men understandably have the lowest valence rating in addition to having the fewest number of positive traits and highest number of negative traits assigned to them. Further examination of the types of traits assigned to these categories in comparison to the valence ratings reveals that both transgender women and men have much lower valence ratings for traits assigned to them as might be expected given the distribution of traits, providing support for Hypothesis 1a. Cisgender men, on the other hand, were rated as low as the transgender categories, which is somewhat inconsistent with the distribution of traits assigned to this

category. The highest valence rating for cisgender women is consistent with the types of traits assigned to this category – the highest number of positive traits and lowest number of negative traits among the four categories were assigned to cisgender women.

Table 1

Valence Dimension of the Transgender and Cisgender Women and Men Stereotypes

Category*	Positive			Neutral			Negative			Summary Valence Rating	
	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	Mean	SD
Transgender women (18)	**7**	39	11	**4**	22	6	**7**	39	11	72.8	12.9
Transgender men (16)	**2**	13	3	**4**	25	6	**10**	63	16	70.9	12.4
Cisgender women (21)	**15**	71	23	**3**	14	5	**3**	14	5	83.4	12.8
Cisgender men (19)	**12**	63	19	**4**	21	6	**3**	16	5	72.2	12.1

Note. Number of traits assigned to category in parentheses.

Warmth. In addition to cisgender women having the highest valence rating of traits assigned to them, participants assigned traits they rated higher in warmth disproportionately to cisgender women. Thus, cisgender women also had the highest overall warmth rating with a mean of 84.5 (*SD* = 12.2). Transgender women received the second highest average rating for warmth of traits assigned to them with a mean of 70.6 (*SD* = 12.4). They were followed by transgender men whose stereotypes had an average warmth rating of 67.5 (*SD* = 12.5) and cisgender men whose stereotypes had a mean warmth rating of 60.9 (*SD* = 13.7). For the most part, these ratings are consistent with the quality of traits assigned to each category based on the general ratings of individual traits, and subsequent categorization as high, low, or neutral on each dimension. There is, however, somewhat of a discrepancy for the categories of transgender men

and cisgender men. While transgender men were disproportionately assigned the lowest number of high-warmth traits and the highest number of low-warmth traits, their warmth rating was higher than cisgender men. This indicates that participants were disproportionately assigning traits to cisgender men that they perceived as lower in warmth.

The ratings of the warmth dimension of traits reveals only partial support for hypotheses 1b and 1c in the application of the SCM to transgender women and men. While both transgender categories were disproportionately assigned the highest number of low-warmth traits, transgender women were disproportionately assigned an almost equivalent number of high-warmth traits. The summary rating on warmth for transgender women was also the second highest of the four groups, though just below the average rating of warm traits among the four categories (70.9). Thus, transgender women appear to be perceived as more neutral in terms of warmth as opposed to low in warmth as predicted by Hypothesis 1b. This is slightly different from the perception of transgender men, who were assigned the lowest number of high-warmth traits, highest number of low-warmth traits, and achieved the second lowest warmth rating of traits assigned to the four categories. This indicates support for Hypothesis 1b, which predicted low warmth, as well as provides insight for Hypothesis 1c to examine any distinctions between the two transgender categories when the SCM is applied. Warmth of traits assigned by count and by summary rating are available in Table 2.

Table 2

Warmth Dimension of the Transgender and Cisgender Women and Men Stereotypes

Category	High			Neutral			Low			Summary Warmth Rating	
	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	Mean	SD
Transgender women (18)	**6**	33	9	**4**	22	6	**8**	44	13	70.6	12.4
Transgender men (16)	**1**	6	2	**5**	31	9	**10**	63	16	67.5	12.5
Cisgender women (21)	**19**	90	30	**2**	10	3	**0**	0	0	84.5	12.2
Cisgender men (19)	**3**	16	5	**9**	47	14	**7**	37	11	60.9	13.7

Note. Number of traits assigned to category in parentheses

Social status. The traits disproportionately assigned to cisgender men were rated highest on average in social status with a mean of 76.5 (*SD* = 12.4), with cisgender women following with a mean social status rating of traits assigned to them of 74.6 (*SD* = 12.5). The average social status rating for traits assigned to transgender women was 67.5 (*SD* = 11.9) and the average social status rating for traits assigned to transgender men was 65.5 (*SD* = 11.4). These summary social status ratings of the traits assigned to each of the four categories are consistent with the sorting of traits designated at high, neutral, or low in social status.

Transgender categories not only had higher numbers of low-status traits and lower numbers of high-status traits assigned to them, they also had lower social status ratings for the traits assigned to them. This provides support for Hypothesis 1b's prediction that transgender women and men would be low on the competence dimension of the SCM. Additionally, examination of differences between these two categories on the competence (social status) dimension of the SCM per Hypothesis 1c reveals that transgender women are slightly higher on

the competence dimension in comparison to transgender men. The social status of traits assigned by count and by summary rating are available in Table 3.

Table 3

Competence (Social Status) Dimension of Transgender and Cisgender Women and Men Stereotypes

Category	High			Neutral			Low			Summary Social Status Rating	
	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	Mean	SD
Transgender women (18)	**7**	39	11	**5**	28	8	**6**	33	9	67.5	11.9
Transgender men (16)	**2**	13	3	**6**	38	9	**8**	50	13	65.5	11.4
Cisgender women (21)	**14**	67	22	**4**	19	6	**3**	14	5	74.6	12.5
Cisgender men (19)	**15**	79	23	**2**	11	3	**2**	11	3	76.5	12.4

Note. Number of traits assigned to category in parentheses.

Gender. Gender was a predetermined dimension of each trait given their location on the Feminine, Masculine, and Social Desirability scales of the Bem Sex Role Inventory (Bem, 1974) and research assistant ratings. Scores for each participants' sorting of these gendered traits were calculated for each category with masculine traits equivalent to 1, feminine traits equal to -1, and gender-neutral traits equal to 0. These calculations produced a single score for each category on the gender dimension, and thus, facilitated comparisons between categories on this dimension. Cisgender men were rated highest (more masculine) with a mean of 9.38 (*SD* = 3.24). The mean score for gender for transgender men was -0.240 (*SD* = 3.53), which is indicative of a generally gender-neutral perception. Transgender women received a mean score of -1.53 (*SD* = 3.47), and thus, were deemed to be generally gender-neutral with a slight leaning toward feminine. The traits disproportionately assigned to cisgender women were feminine traits with a mean gender

rating of -7.61 (*SD* = 3.17). These summary ratings of the four categories on the gender dimension are consistent with the count of traits designated at masculine, feminine, or gender-neutral.

Comparison of summary ratings on the gender dimension provides another helpful lens through which to examine the second hypotheses, which aim to explore nuances of the gender dimensions when comparing the transgender categories to one another and to their cisgender counterparts. Hypothesis 2a received partial support. While there appears to be support that transgender women are rated higher in femininity than transgender men as demonstrated by having the twice the number of feminine traits assigned and a slightly more feminine summary rating, the category of transgender men is not as masculine as predicted. In fact, transgender men appear to be perceived as relatively gender-neutral.

The comparison of transgender categories with the cisgender categories yielded full support for Hypothesis 2b. When comparing the traits themselves or the gender ratings for the four categories, both transgender women and men were more masculine and less feminine than cisgender women as well as less masculine and more feminine than cisgender men. Both transgender categories did not align as strongly with a binary gender role stereotype as their cisgender counterparts – cisgender men were clearly highest in masculinity and cisgender women were clearly highest in femininity. The gender of traits assigned by count and by summary rating are available in Table 4.

Table 4

Gender Dimensions of Transgender and Cisgender Women and Men Stereotypes

Category	Feminine			Neutral			Masculine			Summary Gender Rating	
	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	#	Category %	% of all 64 traits	Mean	SD
Transgender women (18)	**6**	33	9	**9**	50	14	**3**	17	5	-1.53	3.47
Transgender men (16)	**3**	19	5	**11**	69	17	**2**	13	3	-.240	3.53
Cisgender women (21)	**14**	67	22	**6**	29	9	**0**	0	0	-7.61	3.17
Cisgender men (19)	**0**	0	0	**2**	11	3	**17**	89	27	9.38	3.24

Note. Number of traits assigned to category in parentheses.

Interrelations of general trait dimensions. In examining Hypothesis 3, relationships between the dimensions of valence, warmth, social status, and gender were explored among the traits. Of the 36 positive traits, there was a relatively even distribution across the gender dimensions with 13 feminine, 13 masculine, and 10 gender-neutral traits. There was significant overlap in positive valence and warmth with 25 high-warmth, nine neutral-warmth, and two low warmth traits. Additionally, of the 36 positive traits, 33 traits (92 percent) were deemed high-status and three were neutral status, with no low status traits among the positive traits. Overall, positive valence was highly interrelated with high warmth and high social status, but not overwhelming associated with one gender dimension or another.

Of the 17 negative traits three were feminine, four were masculine, 10 were gender-neutral. These negative traits were predominately low status and low warmth traits. In total, the 17 traits were composed of 14 low-status and 3 neutral-status traits, with no overlap with high status traits. Fifteen of these negative traits, or 88 percent, were deemed low-warmth, with only

one trait each of neutral-warmth and high-warmth traits. Thus, trait negative valence was interrelated with low-warmth and low-status as well as having a leaning toward gender-neutrality. This demonstrates an overall relationship between valence and warmth as well as between valence and social status.

Of the 20 masculine traits in this study, a majority – 16 traits (80 percent) – were considered high in social status. Likewise, of the 20 feminine traits, 16 (80 percent) were considered high-warmth and 11 (55 percent) were considered high-status. Only three of the masculine traits were consider high in warmth. Thus, there appears to be significant overlap in the trait dimensions of femininity and high warmth as well as significant overlap in the trait dimensions of masculinity and high social status.

Given the emphasis on examining perceptions of transgender women and men in this study, it is necessary to examine overlap in the trait dimensions specifically among traits assigned to transgender women and men. Of the seven positive traits assigned to transgender women, five were deemed high in both warmth and social status. The seven negative-valence traits disproportionately assigned to transgender women were low in both warmth and social status. Transgender men were assigned two positive traits, one of which was deemed high in both warmth and social status. The nine negative-valence traits assigned to transgender men were also low in both warmth and social status, except one of which was neutral in social status. Transgender women were disproportionately assigned two traits considered both feminine and high in warmth (*cheerful*, *creative*). Transgender men were assigned no traits deemed to be both feminine and high-warmth. To serve as a comparison point, cisgender women were assigned 13 traits deemed to be both feminine and high in warmth, and cisgender men were assigned 11 traits that were both masculine and high in social status.

Of the masculine traits, 16 were considered high in social status, which is indicative of the interrelatedness of the two dimensions. However, analysis of the specific traits assigned to each category reveals that for transgender men, only one trait was considered both masculine and high in social status (*individualistic*). Transgender women were disproportionately assigned four traits that were considered both masculine and high in social status (*cheerful, creative, individualistic, and humorous*). On the contrary, cisgender men were disproportionately assigned 13 traits deemed both masculine and high in social status. See Appendix N for a table of the dimensions of valence, warmth, status, and gender for each of the 64 traits used in this study.

Idiographic trait dimension ratings. In addition to examining each trait independently to determine overlap in the dimensions of valence, warmth, social status, and gender, the mean ratings for each category on each of these dimensions were also analyzed using bivariate correlations to provide further clarity for Hypothesis 3. Correlation analyses of trait ratings on each dimension for each category allowed for examination of how the two transgender categories were related to one another on a specific stereotype content dimension, how different dimension ratings of traits assigned to the same category were related to one another, and how the stereotype content for each transgender category compared to their cisgender counterparts.

Across all dimensions, the ratings of traits assigned to transgender women and men were correlated. Trait valence ratings were positively correlated with $r = .364$, $p < .001$, warmth ratings were positively correlated with $r = .257$, $p < .001$, social status ratings were positively correlated with $r = .326$, $p < .001$, and gender ratings were inversely related with $r = -.545$, $p < .001$. These weak positive correlations display similarity in how the traits disproportionately assigned to the two categories were rated in terms of valence, warmth, and social status. However, there is a moderate inverse relationship in terms of their levels of masculinity and

femininity – transgender women's combined score yields a leaning toward femininity and away from masculinity, whereas transgender men's combined score indicates gender neutrality with a slight leaning toward femininity. These differences align with Hypothesis 2a and the similarities in other ratings provides partial support for hypotheses 1a, 1b, and 1c.

Additionally, the gender of the traits assigned to transgender women and men was compared to the gender of the traits assigned to their cisgender counterparts to further analyze Hypothesis 2b. Transgender women's gender ratings were correlated with cisgender men's stereotype gender ratings with $r = -.336$, $p < .001$ and with cisgender women's stereotype gender ratings $r = -.145$, $p < .01$. Transgender men's stereotype gender ratings were correlated with cisgender men's stereotype gender ratings with $r = -.175$, $p < .001$ and with cisgender women's stereotype gender ratings $r = -.337$, $p < .001$. Thus, as transgender women and men's masculinity increased, or femininity decreased, there was an inverse relationship with their cisgender peers. This finding is similar to the relationship between cisgender women and men's gender ratings, which were correlated with one another with $r = -.457$, $p < .001$. Thus, cisgender women and men are clearly different from one on the dimension of gender, with each of their transgender peers being more like the group that shared their biological sex. Transgender women and men appear to fall along less extreme ends of masculinity and femininity of their stereotypes in comparison to cisgender women and men as predicted by Hypothesis 2b.

In the examination of stereotype content dimensions interrelations to test Hypothesis 3, positive valence correlated with high warmth of traits assigned to transgender women with $r = .722$, $p < .001$ and for traits assigned to transgender men with $r = .680$, $p < .001$. Valence and social status ratings were also positively correlated for the transgender categories, with these two content dimensions of transgender women's stereotypes correlated at $r = .536$, $p < .001$ and

transgender men's correlation on these two dimensions at $r = .571$, $p < .001$. These results indicate a moderate to strong correlation between valence and the dimensions of the stereotype content model (SCM). The two dimensions of the SCM have a moderate correlation when examining each dimension for each category – warmth and social status (competence) ratings of transgender women's stereotypes had a moderate positive correlation with $r = .509$, $p < .001$ and transgender men's warmth and status ratings of their stereotypes had a moderate positive correlation with $r = .520$, $p < .001$.

Hypothesis 3 also sought to examine the correlation between warmth and gender as well as social status and gender given that Hypothesis 1 specifically explored the nuances of the SCM in application to transgender individuals and Hypothesis 2 explored perceptions of masculinity and femininity in application to transgender individuals. As it pertains to the competence dimension, the social status rating of traits assigned to transgender women was weakly correlated with the gender rating of traits assigned to this category with $r = .103$, $p < .05$, and there was no correlation between transgender men's ratings of social status and gender. Therefore, higher social status does not have the strength of relationship with higher masculinity as would be predicted when applied to transgender women and men. Further exploration of these two dimensions of traits assigned to cisgender women and men revealed a weak correlation between status and gender ratings of cisgender men's stereotypes with $r = .211$, $p < .001$ and no correlation between social status and gender ratings of cisgender women's stereotypes. As such, there is minimal evidence to support a strong relationship between social status, or competence, and masculinity for all categories.

On the other hand, there was more evidence that warmth and gender ratings were related with the correlation for transgender women's stereotype ratings on these two dimensions $r = -$

.227, $p < .001$ and the correlation for transgender men's stereotypes on these two dimensions $r = -.306$, $p < .001$. These means indicate that a tendency toward masculinity is inversely related to warmth, or a tendency toward femininity is positively moderately correlated with high warmth. Further evidence for the relationship between gender and warmth is provided by examination of the stereotypes of the cisgender categories. Warmth and gender ratings of cisgender men's stereotype traits were correlated with $r = -.293$, $p < .001$, and warmth and gender ratings of cisgender women's stereotype traits were correlated with $r = -.337$, $p < .001$. Thus, a similar pattern of moderate correlations between femininity and higher warmth, or masculinity and lower warmth, is apparent across categories.

Table 5

Correlation of Summary Ratings for Transgender Trait Dimensions

	1	2	3	4	5	6	7	8
TW Valence	_							
TM Valence	.364***	_						
TW Warmth	.722***	.183***	_					
TM Warmth	.211***	.680***	.257***	_				
TW Status	.536***	.112*	.509***	.122*	_			
TM Status	.098*	.571***	.174***	.520***	.326***	_		
TW Gender	-.065	.008	-.227***	.120*	.103*	-.080	_	
TM Gender	.037	-.008	.179***	.306***	.012	.080	-.545***	_

Note. TW = Transgender women, TM = Transgender men, * $p < .05$; ** $p < .01$; *** $p < .001$.

Structural Analyses of Traits

Hierarchical cluster analysis and multidimensional scaling were utilized to provide a greater understanding of the taxonomy of traits disproportionately assigned to transgender women, transgender men, cisgender women, and cisgender men. The goal in examining how certain traits are grouped together as well as how these traits relate to one another provides further clarity to the first three hypotheses. The rate of co-occurrence of a trait with each of the subsequent 63 traits in a category was calculated for all 64 traits used in this study, and subsequently, utilized to examine clustering and the dimensions upon which the 64 traits were clustered.

Cluster analysis

Hierarchical cluster analysis (HCA) was used to group the 64 traits into relatively homogenous categories (Aldenderfer & Blashfield, 1984). Three high-order clusters with a similarity at the 0.8 distance emerged, with the 64 traits broken down into groups of 24, 18, 22 traits. The first cluster of 24 traits, including traits such as *feminine, jealous, sensitive,* and *warm,* was composed primarily of those predetermined as feminine traits and generally rated as positive, high in warmth, and high in social status by participants. This cluster contained all 21 traits disproportionately assigned to the category of cisgender women, three traits disproportionately assigned to transgender women, and one trait disproportionately assigned to cisgender men. This first cluster did not contain any traits disproportionately assigned to transgender men.

The second cluster of 18 traits, including *abnormal, unpredictable, insecure,* and *confused*, was composed primarily of traits predetermined as gender-neutral and generally rated as negative in valence, low to neutral in warmth, and low to neutral in social status. This second

cluster contained 11 traits disproportionately assigned to both categories of transgender women and men and an additional two traits disproportionately assigned to transgender women only as well as four traits disproportionately assigned to transgender men only. None of these traits were disproportionately assigned to either category of cisgender women and men.

The third cluster of 22 traits, including *masculine, aggressive, ambitious,* and *decisive*, was predominantly composed of traits predetermined at masculine and generally rated by participants as positive, low to neutral in warmth, and high in social status. Eighteen of these traits were disproportionately assigned to the category of cisgender men and two of these traits were disproportionately assigned to transgender women. The clustering, therefore, reveals a pattern of exclusive, if not almost exclusive, designation of cisgender women stereotypes in the first cluster, transgender women and men stereotypes in the second cluster, and cisgender men stereotypes in the third cluster. See Figure 1.

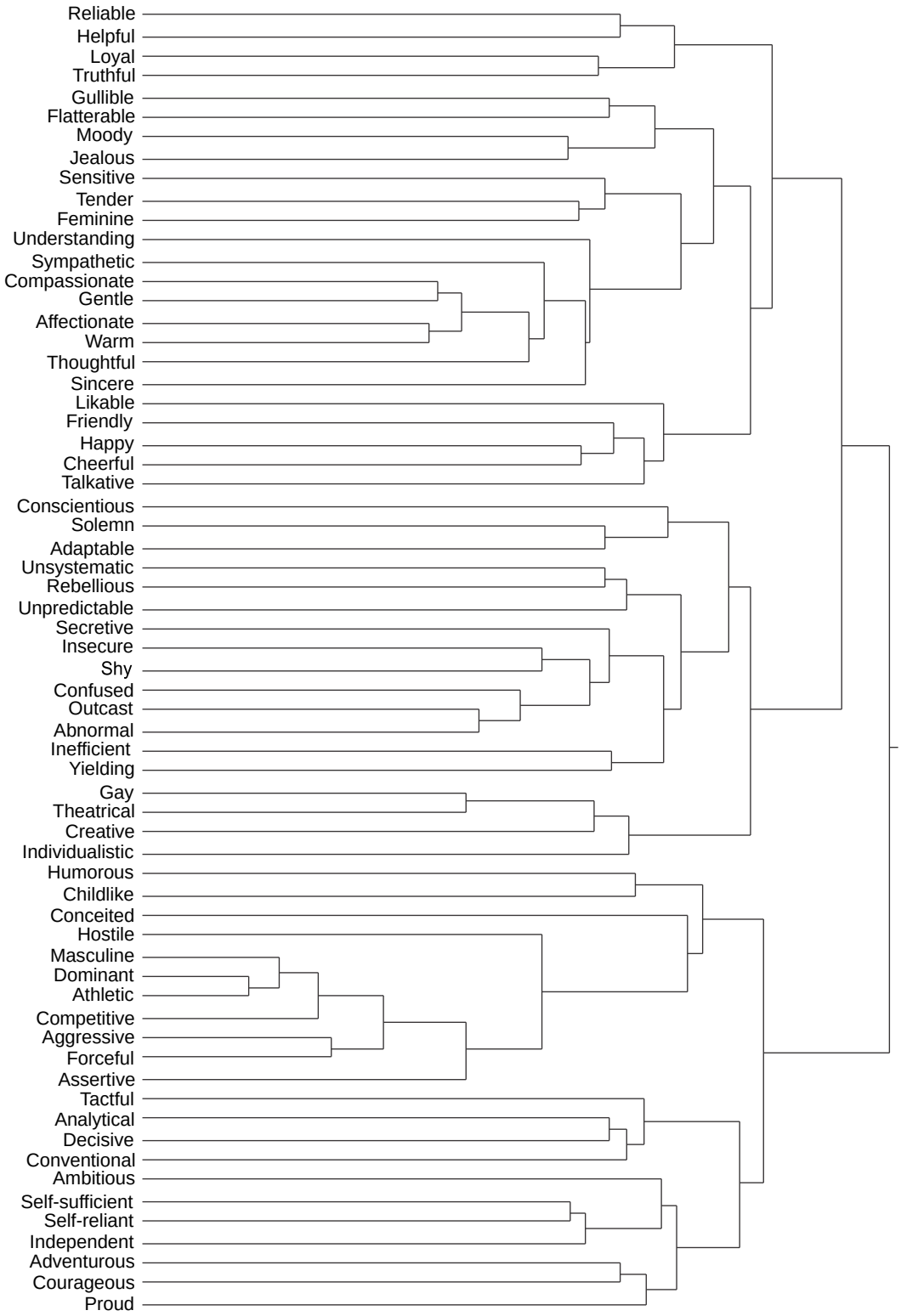

Figure 1. Hierarchical Clustering of Trait Adjectives

Multidimensional scaling

Multidimensional scaling (MDS) was used to evaluate the dimensional structure underlying the 64 traits in this study, and specifically the interrelations of the two constructs that emerged (Kruskal & Wish, 1978). The MDS procedure used a 64 X 64 matrix to reveal a two-dimensional solution as the best fit for the data. The two dimensions accounted for 82 percent of the variance, signifying an excellent fit.

The first dimension included those traits predetermined as feminine, such as *sensitive, sympathetic,* and *gentle,* on one end and those traits predetermined as masculine, such as *athletic, dominant,* and *forceful,* on the opposite end. Thus, the first dimension was determined to be the gender dimension on which traits were sorted. The second dimension, orthogonal to the first, aligned with valence, or likability – there were positive traits on one end including *reliable, likable,* and *loyal* and negative traits on the other end of this dimension including *abnormal, unsystematic,* and *outcast*. In examining the two dimensions in relationship to one another, traits that were situated toward the midpoint of the gender dimension and lower end of the valence dimension were those traits that were disproportionately assigned to both transgender women and men. On the other hand, the traits deemed as more positive were scattered along the gender dimension, with the masculine end including those traits disproportionately assigned to cisgender men and the feminine end encompassing those traits disproportionately assigned to cisgender women. See Figure 2.

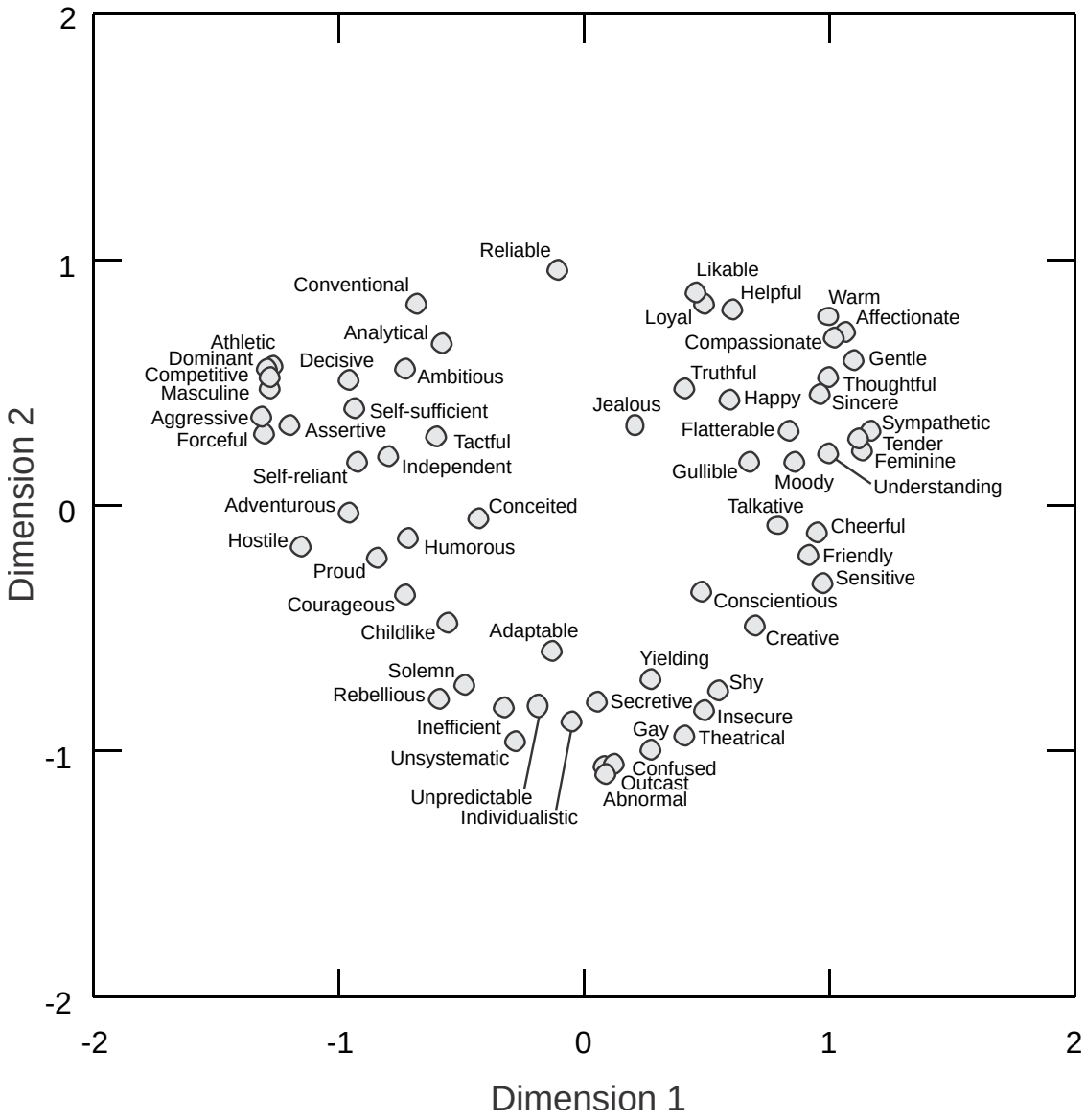

Figure 2. Multidimensional Scaling Results for Trait Adjectives

The results of the MDS and cluster analyses indicates that participants have generally categorized traits into three groups, with three high-level clusters produced by the HCA and the two-dimensional solution of the MDS having three subgroups that aligned with the HCA. These include one group of traits that is generally stereotypical of cisgender men and one group that is stereotypical of cisgender women. The ‘other’ group includes those traits that do not fit into either of these categories because they are not traits that align with the gender binary in either

direction and they are qualities low in valence. The traits in this group are the socially undesirable, non-gendered stereotypes of transgender women and men. This finding provides support for hypotheses 1a and 1b's prediction that traits for these two categories are predominantly negative in valence and in the low-low quadrant of the SCM. Given that the grouping of traits assigned to transgender women and men are overwhelming interrelated, there is greater difficulty distinguishing these two categories from one another on the dimensions of warmth, competence, and gender as expected by hypotheses 1c and 2a. These structural analyses provide further support for Hypothesis 2b that transgender women and men are less extreme on the dimensions of masculinity and femininity as their cisgender counterparts because the traits assigned to them are disproportionately gender-neutral.

Participant Variables

The fourth hypothesis examined the relationship between stereotypes and participant variables. Such examination is necessary to provide validity evidence for the stereotype taxonomy, and more importantly, to provide clarity to the relationship between stereotypes and prejudice, and their associated predictors. The relationships between participant variables (e.g., gender self-concept, transphobia) and trait sorting was analyzed using Pearson chi-square tests, repeated measures analysis of covariance of the means of the ratings of traits assigned to the four categories, and bivariate correlations between individual participant variables and trait dimension ratings. This section provides a description of each participant variable, followed by statistical model analyses of repeated measures ANCOVA and bivariate correlation to assess the relationship between these participant variables and stereotype trait sorting and rating.

Participant sex. Of the 412 participants, 270 identified as being assigned female at birth and 142 identified as being assigned male at birth, and these participants were predominantly

cisgender. A Pearson chi-square test of participant sex with their trait sorting revealed a significant difference in how 23 traits were sorted among the four categories between male and female participants. Five of these traits were disproportionately assigned to both categories of transgender women and men (*secretive, adaptable, unpredictable, confused, unsystematic*). Five additional traits that were disproportionately assigned to transgender women were sorted differently by sex (*talkative, creative, cheerful, theatrical, humorous*). Two additional traits assigned to transgender men were also sorted differently by participant sex (*solemn, inefficient*). Please, see Appendix O for a description of these differences.

Additionally, summary idiographic ratings for traits assigned to the four categories were calculated for male and female participants. Means and standard deviations for each dimension for male and female participants are available in Table 6. Differences in how these traits were sorted among the four categories provides support to Hypothesis 4a.

Table 6

Trait Dimension Ratings by Category and Participant Sex

	Valence		Warmth		Status		Gender	
Category	Female	Male	Female	Male	Female	Male	Female	Male
Transgender Women	72.8 (12.9)		70.6 (12.4)		67.5 (11.9)		-1.53 (3.47)	
	74.3 (13.3)	69.8 (11.6)	71.4 (12.4)	69.1 (12.1)	67.8 (12.2)	66.8 (12.3)	-1.62 (3.43)	-1.36 (3.57)
Transgender Men	70.9 (12.4)		67.5 (12.5)		65.5 (11.4)		-.240 (3.53)	
	71.2 (12.6)	70.5 (12.1)	67.4 (12.3)	67.7 (13.0)	64.6 (10.9)	67.1 (12.4)	-.052 (3.26)	-.599 (3.99)
Cisgender women	83.4 (12.8)		84.5 (12.2)		74.6 (12.5)		-7.61 (3.17)	
	84.5 (12.8)	81.3 (12.6)	85.9 (12.3)	81.9 (11.8)	74.3 (12.8)	75.2 (12.0)	-7.84 (3.19)	-7.16 (3.11)
Cisgender men	72.2 (12.1)		60.9 (13.7)		76.5 (12.4)		9.38 (3.24)	
	69.7 (11.3)	77.0 (12.3)	58.4 (12.7)	65.6 (14.2)	75.3 (12.4)	78.9 (12.1)	9.51 (3.04)	9.12 (3.57)

Note. Total means are in the first row of each category, and the means by participant sex are in the second row of each category. Standard deviations are in parentheses.

Personal knowledge of transgender people. All participants were asked if they personally knew someone who was transgender. Two hundred fifty-one (61 percent) responded that they did not know a transgender person. A Pearson chi-square test of participant personal knowledge of a transgender person with their trait sorting revealed no significant difference in how traits were sorted among the four categories between participants who personally know a transgender person and those who do not. Knowledge of transgender individuals therefore did not impact the sorting of traits into the four categories.

Gender self-concept. Means and standard deviations were calculated for the Masculine, Feminine, and Social Desirability subscales of the Bem Sex Role Inventory (BSRI; Bem, 1974). The mean on the Masculine scale was 4.74 (*SD* = .768), the mean score on the Feminine scale was 4.83 (*SD* = .703), and the mean score on the Social Desirability scale was 4.54 (*SD* = .429). Using the sample in the current study, the BSRI was determined to be reliable with a Cronbach alpha of .87 for the Masculinity Scale, .83 for the Femininity Scale, and .61 for the Social Desirability Scale.

Social distancing. Counts, means, and standard deviations were calculated for the adapted version of the Social Distance Scale (Bogardus, 1925), providing social distance scores for each LGBT social group (transgender men, transgender women, lesbians, gay men, bisexual men, and bisexual women) and each question within the scale. Total scores for each social group were calculated as a proportion of 1.00 for the acceptance of all total relationships. Additionally, a total score was calculated for the acceptance of all types of relationships for all LGBT social groups.

Using the sample in the current study, the social distance scale showed excellent reliability with a Cronbach alpha of .92. For all LGBT groups, the mean social distance was .89

(*SD* = .138), meaning that the average acceptance of any type of social relationship with any groups was approximately 89 percent. The general trend was that a closer relationship (e.g., relation by marriage, friendship) was acceptable to fewer participants in comparison to more distant relationships (e.g., visitors or citizens of one's country) and that participants preferred more social distance on average between themselves and transgender women and men. The following summarizes the each of the social relationship preferences for each LGBT social group.

The mean social distance for transgender men was .85 (*SD* = .201). Regarding the type of relationship participants would have with transgender men, 54 percent of participants indicated they would welcome a familial relationship by marriage, 78 percent would welcome a friendship, 89 percent would welcome a relationship as a coworker, and 89 percent would welcome a relationship as a neighbor. Ninety-seven percent would welcome transgender men as visitors as well as citizens of their country, and 96 percent would not exclude transgender men from their country.

The mean social distance for transgender women was .85 (*SD* = .198). Regarding the type of relationship participants would have with transgender women, 54 percent of participants indicated they would welcome a familial relationship by marriage, 76 percent would welcome a friendship, 89 percent would welcome a relationship as a coworker, and 89 percent would welcome a relationship as a neighbor. Ninety-seven percent would welcome transgender women as visitors as well as citizens of their country, and 96 percent would not exclude transgender women from their country.

The mean social distance for lesbian women was .91 (*SD* = .127). Regarding the type of relationship participants would have with lesbian women, 63 percent of participants indicated

they would welcome a familial relationship by marriage, 89 percent would welcome a friendship, 98 percent would welcome a relationship with a lesbian coworker, and 95 percent would welcome a relationship as a neighbor. Ninety-nine percent would welcome lesbians as visitors as well as citizens of their country, and 97 percent would not exclude lesbians from their country.

The mean social distance for gay men was .92 (*SD* = .129). Regarding the type of relationship participants would have with gay men, 63 percent of participants indicated they would welcome a familial relationship by marriage, 93 percent would welcome a friendship, 77 percent would welcome a gay coworker, and 95 percent would welcome a relationship as a neighbor. Ninety-nine percent would welcome gay men as visitors as well as citizens of their country, and 97 percent would not exclude gay men from their country.

The mean social distance for bisexual men was .92 (*SD* = .138). Regarding the type of relationship participants would have with bisexual men, 68 percent of participants indicated they would welcome a familial relationship by marriage, 90 percent would welcome a friendship, 96 percent would welcome a relationship as a coworker, and 94 percent would welcome a relationship as a neighbor. In relationship to their status in the participants' country, 99 percent would welcome bisexual men as visitors, 99 percent would welcome them as citizens, and 97 percent would not exclude bisexual men from their country.

The mean social distance for bisexual women was .89 (*SD* = .139). Regarding the type of relationship participants would have with bisexual women, 62 percent of participants indicated they would welcome a familial relationship by marriage, 89 percent would welcome a friendship, 97 percent would welcome a bisexual woman as a coworker, and 93 percent would welcome a relationship as a neighbor. In relationship to their status in the participants' country, 97 percent

would welcome bisexual women as visitors, 99 percent as citizens, and 97 percent would not exclude bisexual women from their country.

The social distance scores for transgender women and men were determined to be highly correlated with one another ($r = .961$, $p < .001$) and highly correlated with the total LGBT social distance score ($r = .920$ for transgender women and $r = .908$ for transgender men). As such, the total social distance score was utilized for additional analyses in the current study.

Transphobia. Means and standard deviations were calculated for the Gender-Bashing subscale and Genderism and Transphobia subscale as well as the total scale of the Genderism and Transphobia Scale-Revised (GTS-R; Tebbe et al., 2014). The mean of the total GTS-R was 5.43 (*SD* = 1.22), with a mean of 6.29 (*SD* = 1.04) on the Gender-Bashing subscale and a mean score of 5.18 (*SD* = 1.39) on the Genderism and Transphobia subscale. Using the sample in the current study, the GTS-R demonstrated excellent reliability with a total Cronbach alpha of .96, and Cronbach alpha of .89 and .96 for the Gender-Bashing subscale and Genderism and Transphobia subscale, respectively.

Need for cognitive closure. The mean and standard deviation were calculated for the Need for Closure Scale-Revised-Short (NFC-R-S; Roets & Van Hiel, 2011). The mean of the NFC-R-S was 3.99 (*SD* = .654). Using the sample in the current study, the NFC-R-S demonstrated reliability with a Cronbach alpha of .82.

View of sex roles. The mean and standard deviation were calculated for Attitudes toward Women Scale (AWS; Spence, Helmreich, & Stapp; 1973). The mean of the AWS was 3.33 (*SD* = .476). Using the sample in the current study, the AWS demonstrated excellent reliability with a Cronbach alpha of .91.

Statistical Model Analyses

Repeated measures analysis of variance

An analysis of covariance was utilized to compare the means for each dimension calculated from the participant ratings and sorting of each trait. The categories of transgender women, transgender men, cisgender women, and cisgender men into which participants sorted traits were not independent from one another, so repeated measures analysis of variance (ANOVA) and analysis of covariance (ANCOVA) were used to compare the means for valence, warmth, social status, and gender ratings of traits assigned to the respective categories (Scheffé,1959). Thus, the valence rating means for all four categories were compared to one another, the warmth ratings means for all four categories were compared to one another and so on. To examine the fourth hypotheses, participant sex was entered as a between-subjects factor, and other variables tested as covariates for each model included participant cognitive closure, transphobia, sex-role attitudes, gender self-concept, social distance with LGBT groups, and social desirability. These analyses examined the difference between the category means as well as determined the amount of variance in these means accounted for by the participant variables. Bivariate correlations of the influential participant variables with the dimension ratings across the four categories were conducted to provide clarity in understanding of the relationship between participant variables and the trait sorting and rating.

Valence. The categories differed in terms of valence ratings of traits assigned to them, and participant sex, transphobia, and traditional gender role beliefs accounted for significant variance in valence means across categories, providing support to Hypothesis 4a and 4c. Before any participant variables were entered in the model, the category differences in valence ratings were significant with $\eta p^2 = .196$, $F(3, 412) = 100$, $p < .001$. Once participant sex was entered as

a between-subjects factor and other participant variables as covariates, the best fitting model for revealed that participant transphobia with $\eta p^2 = .047$, $F(3, 412) = 20.0$, $p < .001$, gender role attitudes with $\eta p^2 = .023$, $F(3, 412) = 9.47$, $p < .001$, and sex with $\eta p^2 = .026$, $F(3, 412) = 11.0$, $p < .001$ were significant. Once these variables were accounted for, the differences between the four categories' valence means remained significant with $\eta p^2 = .007$, $F(3, 412) = 3.03$, $p < .05$.

Participant sex was correlated with valence ratings of the traits assigned to cisgender men $r = .286$, $p < .001$, cisgender women $r = -.122$, $p < .05$, and transgender women $r = -.167$, p = .001, signifying that male participants in comparison to female participants were more likely to rate traits assigned to transgender women and cisgender women lower in valence and traits assigned to cisgender men higher in valence, providing support to Hypothesis 4a. There were significant correlations between participant sex role attitudes and their valence ratings of traits assigned to cisgender women $r = .240$, $p < .001$, valence ratings of traits assigned to transgender women $r = .151$, $p < .01$, and valence ratings of traits assigned to transgender men $r = .113$, $p < .05$. Lower scores on the AWS (Spence, Helmreich, & Stapp, 1973), which measures sex role attitudes, are indicative of more traditional sex role beliefs, and thus, these findings indicate that more traditional sex role beliefs are correlated with lower valence ratings of traits assigned to cisgender women, transgender women, and transgender men, providing support to Hypothesis 4a. Additionally, transphobia, as measured by the GTSR (Tebbe et al., 2014), correlated with the valence rating of traits assigned to transgender women $r = .281$, $p < .001$ and to transgender men $r = .235$, $p < .001$. Lower scores on this measure are indicative of intolerance of gender nonconformity, and thus, these findings indicate that greater transphobia is directly related to lower valence ratings of the traits assigned to transgender women and men, providing support to Hypothesis 4c.

Table 7

Analysis of Covariance Summary for Valence Ratings

Source	Sum of Squares	df	Mean Square	F	Partial Eta Squared
Category	1128.79	3	375.93	3.03*	.007
Transphobia	7452.97	3	2484.32	20.02***	.047
Sex role attitudes	3524.44	3	1174.81	9.47***	.023
Sex	4096.44	3	1365.48	11.00***	.026
Error	151894.39	1224	124.10		

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

Warmth. The categories differed in terms of warmth ratings, and participant sex, masculinity, transphobia, traditional gender role beliefs, and LGBT group social distance accounted for significant variance in warmth means across categories, providing support for Hypotheses 4a, 4b, and 4c. Before any participant variables were entered in the model, the category differences in warmth ratings were significant with $\eta p^2 = .412$, $F(3, 412) = 288$, $p < .001$. Once participant sex was entered as a between subjects factor and other participant variables as covariates, the best fitting model for revealed that participant transphobia with $\eta p^2 = .010$, $F(3, 412) = 4.18$, $p < .01$, gender role attitudes with $\eta p^2 = .042$, $F(3, 412) = 17.7$, $p < .001$, participant masculinity with $\eta p^2 = .008$, $F(3, 412) = 3.14$, $p < .05$, LGBT group social distance with $\eta p^2 = .008$, $F(3, 412) = 3.24$, $p < .05$, and sex with $\eta p^2 = .017$, $F(3, 412) = 7.1$, $p < .001$ were significant. The differences between the four categories were no longer significant with the

participant variables in this model accounting for the variance in warmth ratings across categories with $\eta p^2 = .000$, $F(3, 412) = .177$, $p = .912$.

Further examination revealed a correlation of participant sex with the warmth rating of traits assigned to cisgender men with $r = .250$, $p < .001$ as well as cisgender women with $r = -.156$, $p < .01$. This indicates that male participants in comparison to their female counterparts were more likely to rate the traits they assigned to cisgender men higher in warmth, and female participants were more likely to rate the traits they assigned to cisgender women higher in warmth, providing support to Hypothesis 4a. There was a weak positive correlation between participant masculinity and the warmth ratings of traits assigned to cisgender men $r = .296$, $p < .001$, providing partial support to Hypothesis 4a.

Sex role attitudes were correlated with the warmth ratings of traits assigned to cisgender women $r = .280$, $p < .001$ and cisgender men $r = -.278$, $p < .001$. Lower scores on the AWS are indicative of more traditional gender role attitudes, and thus, there is a direct correlation between traditional gender role attitudes and low-warmth rating of traits assigned to cisgender men as well as high-warmth rating of traits assigned to cisgender women, providing support to Hypothesis 4a. The correlation between transgender women's stereotype warmth rating and transphobia were correlated with $r = .146$, $p < .01$. Given that lower scores on the GTSR are indicative of higher levels of transphobia, this indicates that higher transphobia is directly correlated with lower warmth ratings for stereotypes of transgender women, providing support to Hypothesis 4c.

Additionally, social distance for all LGBT social groups, as measured by the adaptation of the Bogardus (1925) Social Distance Scale, was correlated with the warmth ratings of traits assigned to cisgender men with $r = -.139$, $p < .01$ and to transgender women with $r = .141$, $p <$

.01. Given that higher social distance scores indicate greater acceptance of varying levels of relationships with LGBT social groups, this greater acceptance of LGBT relationships was weakly correlated with higher warmth ratings of traits assigned to transgender women and lower warmth ratings of traits assigned to cisgender men, providing partial support to Hypothesis 4c.

Table 8

Analysis of Covariance Summary for Warmth Ratings

Source	Sum of Squares	df	Mean Square	F	Partial Eta Squared
Category	67.48	3	22.49	.177	.000
Transphobia	1585.72	3	528.58	4.16**	.010
Sex role attitudes	6739.32	3	2246.44	17.67***	.042
Masculinity	1197.09	3	399.03	3.14*	.008
Social distance	1235.05	3	411.68	3.24*	.008
Sex	2703.32	3	901.11	7.09***	.017
Error	154856.10	1218	127.14		

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

Social status. The categories differed in terms of social status (competence) ratings of traits assigned to them, and participant sex accounted for significant variance in social status means across categories, providing partial support to Hypothesis 4a. Before any participant variables were entered in the model, the category differences in social status ratings were significant with $\eta p^2 = .203$, $F(3, 412) = 104$, $p < .001$. Once participant sex was entered as a between subjects factor it was determined to have significance with $\eta p^2 = .008$, $F(3, 412) = 3.36$, $p < .05$. No other participant variables accounted for significant variance in the social status

ratings, going against the predictions of Hypothesis 4b and 4c and meaning Hypothesis 4a was only partially supported. Participant sex was correlated with the social status rating of traits assigned to cisgender men with $r = .140$, $p < .01$ as well as transgender men with $r = .103$, $p < .05$. This provides support for Hypothesis 4a because male participants were more likely to rate cisgender and transgender men higher in social status. Once participant sex was accounted for, the differences between the four categories' valence means remained significant with $\eta p^2 = .195$, $F(3, 412) = 99.6$, $p < .001$. Thus, these groups are perceived differently in the social status of their stereotypes regardless of individual participant differences that may shape their perceptions.

Table 9

Analysis of Covariance Summary for Social Status (Competence) Ratings

Source	Sum of Squares	df	Mean Square	F	Partial Eta Squared
Category	33944.06	3	11314.69	99.62***	.195
Sex	1146.34	3	382.12	3.36**	.008
Error	139704.64	1230	113.58		

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

Gender. The categories differed in terms of gender rating of traits assigned to them, and participant traditional sex role beliefs accounted for significant variance in gender stereotype means across categories, providing partial support for Hypothesis 4a. Before any participant variables were entered in the model, the category differences in stereotype gender ratings were significant with $\eta p^2 = .767$, $F(3, 412) = 1354$, $p < .001$. Once participant sex was entered as a between-subjects factor and other participant variables as covariates, the best fitting model revealed that participant sex role attitudes were influential with $\eta p^2 = .015$, $F(3, 412) = 6.10$, $p < .001$. Unlike other content dimension summary ratings, participant sex was not determined to

account for variance in the gender ratings of the four categories with $\eta p^2 = .002$, $F(3, 412) = .859$, $p = .462$. Once these variables were accounted for, the differences between the four categories' gender rating means remained significant with $\eta p^2 = .021$, $F(3, 412) = 8.88$, $p < .001$.

Sex role attitudes were correlated with the gender rating of traits assigned to cisgender women $r = -.218$, $p < .001$ and cisgender men $r = .153$, $p < .01$. This indicates that more traditional sex role attitudes are correlated with the rating the traits assigned to cisgender women higher in femininity and the traits assigned to cisgender men higher in masculinity, providing support to Hypothesis 4a.

Table 10

Analysis of Covariance Summary for Stereotype Gender Ratings

Source	Sum of Squares	df	Mean Square	F	Partial Eta Squared
Category	394.34	3	131.45	8.88***	.021
Sex role attitudes	271.18	3	90.39	6.10***	.015
Sex	38.17	3	12.72	.859	.002
Error	18172.20	1227	14.81		

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

Uninfluential variables. Need for cognitive closure, as measured by the Need for Closure Scale-Revised-Short (NFC-R-S; Roets & Van Hiel, 2011), was not found to account for significant variance in any model, meaning Hypothesis 4b was not supported. Additionally, participant feminine gender self-concept and social desirability as measured by the Bem Sex Role Inventory (BSRI; Bem, 1974) did not account for significant variance in either model. This means Hypothesis 4a was not fully supported and that social desirability did not play a significant role in how participants sorted traits into the four categories.

CHAPTER 5

DISCUSSION

The findings in the current study suggest that perceptions of societal stereotypes indicate transgender women and men are not perceived as 'real' women and men, but they are collectively cognitively categorized as 'the other.' Undoubtedly, the shared attribute of their transgenderism is a notable difference from the cisgender categories that simplified the cognitive categorization of these two groups into one (Nelson, 2002; Yzerbyt & Rocher, 2002), particularly from the perspective of a sample of predominantly cisgender women and men. The sheer number of traits disproportionately assigned to both transgender women and men provides evidence of their perceived conflation with one another. While cisgender men and women were perceived as clearly distinct from one another with only one overlapping trait disproportionately assigned to each group, most traits assigned to each transgender category were assigned to both transgender women and men.

In addition to the perceived stereotypes assigned to transgender women and men, the content of their stereotypes, which was addressed by the research questions in this study, were generally gender-neutral, reinforcing a perception of transgender women and men not fitting the 'stereotypical' gender roles. The content of transgender stereotypes was also rated as negative, low to neutral in warmth, and low in social status by participants – a clear image of undesirability according to the stereotype content model. Given the current sociopolitical milieu of disproportionate mistreatment of transgender individuals in healthcare, education, the workplace (e.g., James et al., 2016) and the legal system (Lloyd, 2013) in the U.S., these stereotypes about transgender individuals may come as no surprise. As the current study has

shown, these beliefs are shaped by sex, anti-transgender prejudice, traditional gender role attitudes, social distance, and masculinity. A discussion of the implications and suggestions for future research will follow the analyses of the hypotheses, particularly as they provide understanding and facilitate addressing the discrimination, prejudice, and violence disproportionately endured by transgender individuals in U.S. society.

Research Questions

Valence and the stereotype content model

Negative evaluation. The first hypotheses examined the general perception of societal stereotypes of transgender women and men as a social group by assessing the general content of valence, warmth, and social status, or competence, of the traits associated with these categories. Given the pervasive mistreatment of transgender individuals in U.S. society, it was hypothesized that stereotypes of transgender individuals would include more negative traits when compared to cisgender individuals (Hypothesis 1a) and that these stereotypes associated with transgender women and men would place them in the low-low quadrant of the stereotype content model (Hypothesis 1b). It was also suggested that there would be variations in how transgender women and men may fit into the SCM (Hypothesis 1c), and analyses revealed minimal differentiation in comparison to their cisgender counterparts. Unsurprisingly, the support of these hypotheses overwhelming suggests negative perceptions of transgender women and men.

Negative-valence traits were two to four times more likely to be categorized into a transgender category. Correspondingly, positive traits were disproportionately assigned to cisgender categories at a rate of almost two to five times that of transgender categories. Additionally, examination of the mean idiographic valence ratings of the traits participants assigned to the four categories revealed differences in perceived valence across categories, with

transgender women and men falling on the lower end. The unlikable traits were assigned to what can only be understood as the unlikable categories. In fact, the traits assigned to cisgender women were rated significantly more positively than the traits assigned to the other three categories, which makes sense given the sample was predominantly cisgender women. Unsurprisingly, there is notable ingroup favoritism as would be suggested by social identity theory (Tajfel & Turner, 1979, 1986). In general, fewer positive traits and more negative traits were associated with the clear outgroup – transgender women and men – with participants' perceptions of societal stereotypes suggesting cisgender women as the favorite of the four categories.

Social rejection. Along with the perceptions of possessing negative traits, the 'othering' of transgender women and men is apparent when the SCM dimensions are applied to these social groups – similar to previous applications to fellow members of the LGBT community. It was hypothesized that stereotypes of transgender individuals would be categorized in the low competence - low warmth quadrant of the stereotype content model (Hypothesis 1b). Like previous applications of this model to other groups of men and women (e.g., Fiske et al., 2002), it was also predicted that differences may exist in the categorization of transgender women and men in the stereotype content model (Hypothesis 1c). Much like these previous applications of the SCM, the context of each social group in relationship to one another served as a means of interpreting potential similarities and differences in evaluations of warmth and competence for each social group. Thus, the findings in the current study introduced an understanding of how the social groups of transgender women and transgender men may relate to previous findings in the application of the SCM to groups of (cisgender) "women" and "men" as well as their LGBT community counterparts of "gay men" and "lesbians."

Cisgender women in the current study were assigned traits considered both high in warmth, suggesting they are likable, and high in competence, suggested they are respected, which replicated findings in the SCM's assessment of (cisgender) "women" as a social group (e.g., Cuddy et al., 2009). The traits disproportionately assigned to this group were overwhelming rated high in warmth and social status, and the summary idiographic ratings revealed that the traits assigned cisgender women were the highest of the four categories in warmth and the second highest for status, falling just short cisgender men. While the perception of cisgender women was very much in line with previous applications of the SCM to the social group of "women" (e.g., Cuddy et al., 2009), the current study's findings made it very clear that this does not include transgender women.

Transgender women were assigned the second highest number of high-warmth traits as well as the second highest number of low-warmth traits. This more neutral leaning on the warmth dimension of the SCM does not align with the prediction that transgender women as a social group would align with the low-low dimensions of the SCM; however, it is a clear indication of their difference in comparison to cisgender women. The difference between transgender women and their cisgender counterparts was further reinforced by their perception of embodying traits lower in social status, or the competence dimension of the SCM. While the social status of the traits disproportionately assigned to transgender women included parity in the distribution of high, neutral, and low-status traits, the summary idiographic ratings revealed transgender women as the second lowest in terms of social status, just above transgender men. The categorization of transgender women as neutral warmth-low competence on the SCM does not align with the expectation of low-low, but it does suggest they are distinct from their high warmth-high competence cisgender women counterparts and transgender men in the current

study. It also indicates potential similarity in perceptions between transgender women and gay men and lesbians who have been found to be more neutral in warmth and competence (e.g., Brambilla et al., 2011).

While transgender women were not categorized as predicted in the low-low cluster of the SCM, transgender men were assigned traits perceived as low in both warmth and competence. In fact, transgender men were disproportionately assigned the fewest number of high-warmth traits and highest number of low-warmth traits across the four categories, making their categorization as low on the warmth dimension of the SCM undeniable. Furthermore, the idiographic ratings revealed they were second-lowest on warmth to cisgender men. The stereotypes of transgender men yielded the lowest mean rating in social status as well as the fewest number of high-status traits and highest number of low-status traits of the four categories, providing a clear indication that they are low in the SCM competence dimension as well. Thus, transgender men appear to fit in the low-low grouping of the SCM with other social groups considered to be social outgroups, such as “homeless people” and “drug addicts,” as predicted. Not only would it seem that transgender men are perceived as social outsiders, it is clear they are not like (cisgender) “men” studied in previous applications of the SCM.

Previous findings have suggested that (cisgender) “men” tend to be positioned midway between high and low on the dimension of warmth and high on the dimension of competence (e.g., Cuddy et al., 2009), and these findings were reinforced by the current study. Cisgender men were disproportionately assigned the highest number of traits rated high in social status and fewest number of traits rated low in social status. Similarly, the summary idiographic ratings of traits on social status revealed that traits assigned to cisgender men were perceived as generally high in social status. On the other hand, the summary idiographic trait ratings revealed cisgender

men were the lowest in warmth of the four categories, being assigned the highest number of neutral-warmth traits, second highest number of low-warmth traits, and second lowest number of high-warmth traits in comparison to the other categories. Thus, the perception of stereotypes of cisgender men in the current study is consistent with previous categorizations of "men" in the SCM, and these perceptions are clearly different from the perceptions of stereotypes of transgender men as well as transgender women. These alignment of cisgender men in the high competence – low/neutral warmth suggests that they are highly respected, as might be expected in a patriarchal culture.

The differences in the perception of stereotypes of transgender women and men versus their cisgender counterparts are important to note given the limited application of the SCM to transgender social groups thus far. Both transgender women and men are perceived as lower in social status compared to their cisgender peers, and higher in warmth than cisgender men as well as lower in warmth in comparison to cisgender women. While there is a slight difference in perception of warmth of traits assigned to transgender women and men, there is a clear distinction of being low in social status for both categories, suggesting that they are both clearly not respected social groups. These findings reinforce a distinction from their fellow LGBT community members – gay men and lesbian women – as well given the SCM's previous applications to these LGBT subgroups.

While there are differences between these LGBT subgroups according to the SCM, the previous applications of the SCM to gay men and lesbian women suggests that they are not like the 'traditional' categories of (heterosexual) "women" and (heterosexual) "men" either. For example, in Fiske et al. (2002), a fifth cluster emerged in the SCM, in which all social groups that fell into that cluster, such as gay men, were at the midway point of both dimensions of

warmth and competence. Similarly, lesbians have been rated as neutral on warmth and competence in previous research (Brambilla et al., 2011). However, when evaluating subgroups of lesbian women or gay men, there are variations in how these subgroups stack up against one another on the SCM dimensions of warmth and competence. (Brambilla et al., 2011; Clausell & Fiske, 2005). For this reason, it may come as no surprise that the findings in the current study reveal slight differentiation between transgender women and men, who are both subgroups of transgender community. Transgender women were perceived as more neutral in warmth, suggesting overlap with gay men and lesbian women on this dimension. Notably, *gay* was the second-most consistently assigned trait to transgender women. This suggests the need for continued examination of societal perceptions of transgender individuals, who may be confused with other members of the LGBT community in addition to transgender categories being cognitively and socially organized with one another.

The absence of gender in trans stereotypes

Not only are transgender women and men perceived to hold stereotypes in alignment with societal outsiders in terms of valence, warmth, and social status of stereotypes, they were also perceived to possess traits that are not distinguishable in terms of masculinity and femininity – unlike 'traditional' categories of cisgender women and men. While it was anticipated that transgender men and women would not be gendered in the same way that cisgender men and women as previous research on lesbians and gay men would indicate (e.g., Niedlich et al., 2015), it was expected that gender would be more strongly manifested in the content of transgender stereotypes. In fact, this study revealed a near absence of gender in the perceptions of transgender women and men, for whom gender is so salient. Across categories, masculinity and

femininity were easily discernible for the cisgender categories, but the same could not be said of perceived transgender stereotypes.

While masculine traits were overwhelmingly assigned to cisgender men and feminine traits were overwhelmingly assigned to cisgender women, transgender women and transgender men each were disproportionately assigned only a few of these gendered traits (2-6 traits) and were instead dominated by gender-neutral traits. Twice as many feminine traits were assigned to transgender women as there were to transgender men, perhaps providing partial support to the hypothesis addressing differences between these two categories in terms of masculinity and femininity. Perhaps this suggests that transgender women are perceived as more feminine than transgender men and be slightly more similar to their cisgender women peers than the other 'men' categories. When discerning the difference in gender, the count for masculine traits was relatively low for both transgender groups. Thus, transgender men were not perceived as slightly masculine in the same way transgender women were perceived as slightly feminine. The gender dimension summary ratings of the traits assigned to these categories further highlighted the disparity in gendering of the four categories. While cisgender women's score reflected the most extreme leaning toward femininity and away from masculinity and cisgender men's stereotypes reflected the most extreme leaning toward masculinity and away from femininity, transgender women and men's stereotypes indicated they embody gender-neutrality, with transgender women only slightly more feminine than transgender men. This near absence of gendered personality traits associated with transgender women and men is likely very different from how transgender women and men perceive their own experience, especially given the salient incongruence between their gender identity and the gender expectations placed upon them at birth.

Given transgender women and men's perception of being neither masculine nor feminine, they clearly differed in terms of femininity and masculinity in comparison to their cisgender counterparts at the extreme ends of these dimensions. By societal standards, these extremes represent the picture of what 'real' men or 'real' women must embody – if they do not embody these traits, they are not worthy of the title 'man' or 'woman'. Thus, if transgender women and men are perceived as being non-gendered, their humanity is inherently reduced (Butler, 2004), yielding negative social evaluation and prejudice for not fitting the stereotypical perceptions of men and women (Hill & Willoughby, 2005; Tebbe et al., 2014). This absence of gender in the stereotypes of trans individuals may therefore provide insight into their social rejection. Hence, the examination of the interrelations of the gender dimension with the other stereotype dimensions of valence, warmth, and competence examined in this study was essential.

Stereotype content dimension interrelations

As prior stereotype research has found, stereotypes are formed with specific content associated with them and this content differentiates groups, particularly in effort to ensure the image of ingroup members is more positive (Stangor & Lange, 1994; Tajfel, 1981) – the findings in the current study were no different. Structural analyses of the stereotype traits revealed three distinct groups – one group of traits generally rated as masculine and positive, one rated as feminine and positive, and one rated as gender-neutral and negative. Given the pervasiveness of gender binary ideology and favoritism toward individuals who fit the ideal, it comes as no surprise that the three groupings aligned with the traits disproportionately assigned to cisgender men, cisgender women, and both transgender categories, respectively. Cisgender women and cisgender men seemed to have conjured clear and distinct images of 'stereotypical' and likable men and women in the minds of a predominantly cisgender sample. Transgender women and

men, on the other hand, seemed to conjure one collective image of gender-neutral, negative-valence, low/neutral-warmth, and low-social status stereotypes, suggesting the interrelation of the content of traits assigned to these categories.

In comparison to cisgender categories, transgender women and men were assigned lower numbers of positive, high-warmth, and high-status traits, and their stereotypes had generally lower valence, warmth, and social status idiographic ratings, suggesting that valence is related to the stereotype content dimensions of warmth and competence. It is pertinent to note that significantly fewer masculine and feminine traits were assigned to both transgender women and men, making it difficult to draw meaningful conclusions when comparing the gender dimensions and the SCM dimensions of warmth and competence. Transgender women and men were assigned only a few feminine traits and subsequently, the warmth of their stereotypes was reflected by the shortage of perceived femininity. There were significant correlations between transgender men and women's gender ratings and their warmth ratings in the expected direction to provide support to the close relationship between warmth and femininity of stereotypes.

While transgender women and men were assigned only a few feminine traits, they were assigned even fewer masculine traits. The relationship between gender and social status dimensions were not as robust as expected, showing only weak correlations with one another transgender women and cisgender men, and not at all for transgender men and cisgender women. While the findings reveal correlations on these dimensions of the SCM and gender dimensions, they are clearly distinct constructs. Overall, it is important to exercise caution in making conclusions about the interrelations of transgender stereotype content dimensions given the limited number of masculine and feminine traits assigned to the transgender categories.

With the limited number of feminine and masculine traits and positive traits assigned to transgender women and men, it is clear is that transgender women and men are not perceived like cisgender women and men in terms of these stereotype dimensions nor warmth nor social status. These dissimilarities from their cisgender counterparts and in effect their place as a social outgroup aligns with Kate Bornstein's (1994) suggestion that "This culture attacks people on the basis of being or not being correctly gendered" (p. 79). Cisgender women and men, who were 'correctly' gendered as stereotypical women and men in this study, were disproportionately assigned traits positively evaluated in valence and social status. However, transgender women and men are not (cisgender) 'man' nor (cisgender) 'woman', they are distinctly 'the other.' Consequently, they experienced all the repercussions as a social outgroup in the current study, such as their stereotypes being conflated with one another and generally rated lower on valence, warmth, and social status.

Differentiating between transgender women and men

While the interrelationship of social perceptions of transgender women and men are demonstrated clearly in this study, there were also some slight differences noted in the valence, warmth, and gender dimensions of the stereotype content of these groups, particularly when examining the quality of the traits assigned to them. Transgender women were perceived to be more neutral in warmth (as opposed to low for transgender men) in terms of low-, neutral-, and high-warmth traits assigned as well as by the summary idiographic ratings of traits assigned. Additionally, transgender women were assigned positive traits, and feminine and masculine traits with greater frequency than transgender men, though differences in these dimensions was minimal in comparison to the cisgender categories' differences from one another.

While the differences between transgender women and men in this study are minimal and deserve further analysis, any apparent differences between the societal stereotypes of transgender men and transgender women could be a matter of visibility and familiarity in the media given the media holds great influence in the development of stereotypes (Kashima et al., 2008). Media representation of transgender characters on television or film and public visibility of real-life transgender individuals has primarily centered on images of transgender women. Examples include Laverne Cox's cover story in TIME magazine (Steinmetz, 2014) and her character Sophia Burset in *Orange is the New Black* (Cavalcante, 2017), which contributed to her rise to fame. Another image that may more readily come to the minds of the public is Caitlyn Jenner, particularly given her previous visibility as an Olympic gold-medalist and regular appearances on *Keeping Up with the Kardashians* prior to her public transition (Smith, 2015). In addition, transgender women characters are spotlighted in award-winning movies, such as *Dallas Buyers Club* (2013) and *The Danish Girl* (2015), in comparison to minimal visibility of transgender men on the movie screen (Smith, 2015). Perhaps one of the more notable films starring a transgender man was *Boys Don't Cry* (1999), a movie produced almost two decades ago, with minimal visibility of transgender men in the media since (Cavalcante, 2017). The images of transgender women may be the most readily available images of transgender individuals as a collective group, and thus, people may more easily hold distinguishable, and relatively more positive, gendered perceptions of transgender women as opposed to transgender men.

While the findings the current study suggest very slight differences in perception of these two groups, there is an overwhelming similarity in the stereotypes of transgender women and men. The findings in the current study overwhelming support the conclusion that transgender women and men are perceived as a single group of outsiders because they are not like

‘stereotypical’ cisgender women and men, who are evaluated more favorably and in line with society’s gender binary expectations. They appear to be cognitively organized and socially categorized as one group based on their shared transgender identity, and thus, participants were able to come up with minimal differentiation in their perceptions of stereotypes of the two subgroups. Analysis of participant characteristics and attitudes provided greater insight into the evolutions of the three stereotype groupings of cisgender women, cisgender men, and transgender.

Shaping stereotype perceptions

As expected, participant sex and gender, sex role attitudes, and transphobia were shown to be consistently related to the sorting of traits participants perceived to be societal stereotypes of transgender women, transgender men, cisgender women, and cisgender men. While these findings aligned with the fourth hypothesis and previous literature that has demonstrated the impact of participant variables on knowledge of cultural stereotypes (e.g., Gordjin et al., 2001), there were other participant characteristics that did not impact the sorting of traits as expected.

Participant sex and gender. Both male and female participants, who identified predominantly as cisgender, provided higher ratings for cisgender categories across the board. This aligns with social identity theory (SIT; Tajfel & Turner, 1979) in that people tend to favor people who are like them on important dimensions (e.g., gender) and hold less favorable attitudes toward people who are not like them. The impact of social identity favoritism is particularly made clear by the fact that female participants rated the traits assigned to cisgender men much lower than male participants rated traits they assigned to this cisgender men. Additionally, female participants’ rating of traits assigned to cisgender women was higher than male participants’ rating of traits assigned to this category. In addition to the appearance of

favoritism toward their respective genders, in comparison to their female counterparts, male participants provided lower valence ratings for transgender women and men and lower warmth and social status ratings for transgender women. This finding aligns with previous literature that has found cisgender men to have higher levels of explicit prejudice (e.g., Dozo, 2015; Ekehammar, Akrami, & Araya, 2003).

In summary, participants appear to hold a more favorable perception toward groups that are 'like them' – whether that likeness is collectively being cisgender (and not transgender) or being a cisgender woman versus a cisgender man. A sample of predominantly transgender women and men may be expected to produce similar results for their respective social identity groups. While the analyses revealed the impact of participant sex and gender in their perception of transgender categories on dimensions of valence, warmth, and social status, participant sex was not determined to account for variance in the gender ratings of the four categories. Thus, other participant variables (e.g., sex role attitudes) provide better insight into the perception of gender of the traits assigned to the four categories.

Sex role attitudes. As predicted, the measure of sex role attitudes was a significant predictor for how traits were sorted among the four categories in terms of perceived trait valence, warmth, social status, and gender (Hypothesis 4a). In fact, the measure of traditional sex role attitudes was the only significant variable accounting for variance in the model examining gender dimension of trait summary ratings across categories. These significant findings are unsurprising given the pervasiveness of gender role ideology in U.S. society (e.g., Hill & Willoughby, 2005; Bem, 1981) and the task of this study involved sorting traits into gendered categories. The greatest impact of traditional sex role attitudes was on the ratings of the

cisgender categories, indicating that these two categories served as the ‘model’ of stereotypical women and men.

The findings indicate that participants’ varying levels of embracing the binary gender role ideals influences how they assigned personality traits, which are at the core of gender stereotypes (Rosenkrantz et al., 1968), to the four gendered categories. Cisgender women and men are the ‘traditional’ gender categories, and transgender women and men are do not conform to the role of the sex assigned to them at birth. Thus, the impact of sex role attitudes on stereotype trait assignment may be indicative of the perception of transgender individuals as not aligning with sex role expectations – at least not as much as their cisgender counterparts. Thus, as anticipated in this study, masculine traits were disproportionately assigned to cisgender men, feminine traits were disproportionately assigned to cisgender women, and those traits that did not belong in either of these ‘traditional’ men and women categories were disproportionately assigned to either transgender men or women.

Furthermore, given that the cisgender categories are generally understood to identify and express themselves in a way that is ‘appropriate’ for their gender, ratings of warmth and social status were impacted in a way that aligns with gender roles. Those traits considered to be high in warmth, such as *warm* and *compassionate,* were also predominantly feminine traits and assigned disproportionately to cisgender women. Those traits considered to be high in social status, such as *decisive* and *competitive*, were predominantly masculine traits and assigned disproportionately to cisgender men. Additionally, traits that were rated more positively were disproportionately assigned to the two cisgender categories – another advantage to gender role conformity, which supports assertions that transgender individuals are negatively evaluated for not being ‘correctly’ gendered (e.g., Hill & Willoughby, 2005). In line with the impact of sex role attitudes are

specific attitudes toward individuals who do not fit the gender they were assigned at birth – transphobia.

Transphobia. Participants' level of transphobia was consistent in its ability to account for variance in how traits were sorted among the four categories. These findings support the current study's approach to examining transgender stereotypes, understanding the consistent link between prejudice and beliefs about social groups. In alignment with prior literature (e.g., Gordjin, Koomen, & Stapel, 2001), it appears that participants' own level of prejudice influences their knowledge of cultural stereotypes, which was the task they were given in the current study. Similar to the relationship of sex role attitudes with stereotyping, the correlation of transphobia with stereotyping aligns with a value of genderism, which "perpetuates negative judgments of people who do not present as a stereotypical man or woman" (Hill & Willoughby, 2005, p. 534).

Accordingly, it is particularly important to note the relationship between transphobia and the specific dimensions of stereotypes that were impacted – positive traits, high-warmth traits, and high-social status traits, which are generally desirable qualities. These traits were sorted less frequently to transgender categories as a participant's level of transphobia increased and hence, these findings are indicative that transgender social groups are perceived in less favorable terms – more negative, lower in warmth, and lower in social status.

Furthermore, examination of the correlation between transphobic attitudes and cisgender groups revealed that higher transphobic attitudes (lower GTSR score) has a direct relationship with high warmth, valence, and status ratings for cisgender men. Thus, the relationship of transphobia to the perceptions of cisgender men was in direct opposition to the perceptions of transgender social groups. This comes as no surprise given that U.S. society is a cisnormative,

patriarchal culture shaping transphobic and sexist beliefs – cisgender men are inherently ‘favored’ over transgender individuals, especially when transphobic attitudes are stronger.

Not everything shapes stereotype perceptions

While some participant differences appeared to shape the perception of stereotypes across the categories as predicted, stereotype perceptions were not significantly influenced by select participant variables. In general, the sorting of traits was not affected by participant gender self-concept, need for closure, social distance, or personal knowledge of a transgender person.

Gender self-concept. Gender self-concept did not play as significant a role in the way traits were sorted and rated as predicted. In fact, only in the model for trait warmth ratings did participant self-endorsed masculinity show a marginally significant influence in how traits were sorted on perceived warmth, accounting for less than one percent of the variance in the warmth of traits assigned to the four categories. Thus, any differences in perceived valence, warmth, social status, or gender is not attributable to participants’ own gender self-concept.

These findings are counter to Bem’s (1974) finding that people who are highly congruent with traditional sex roles themselves also tend to value traditional sex roles in other people. In fact, the current study signifies that the perceptions of transgender and cisgender women and men are uninfluenced by participant’s own self-endorsed sex role conformity. Accordingly, it would be expected that the most masculine man and the most feminine woman may hold very similar societal views about which personality traits are ‘appropriate’ for transgender and cisgender women and men because of ideals about the gender binary that pervade society. While more explicit measures of sex role attitudes (AWS) and attitudes about gender nonconformity (GTSR) did have greater influence over stereotype assignment in the current study, further examination of stereotypes of transgender and gender nonconforming individuals may still

consider participant gender self-concept as an influential variable. This could be particularly illuminating when examining perceptions of subgroups of transgender individuals who align more with the societal gender binary than other transgender subgroups (e.g., genderqueer).

Need for cognitive closure. Need for closure did not impact how traits were sorted into the four categories as predicted (Hypothesis 4b). Given that the measure of cognitive closure is a general measure of preferences for certainty and reduced ambiguity, the task of sorting traits into four distinct categories itself may not have necessarily put participants in an ambiguous situation requiring certainty. In fact, the clear designation of traits into the three groups that emerged in structural analyses reveals that traits quite certainly 'belonged' into the categories of cisgender women, cisgender men, and 'other.' Thus, it is possible that the task itself did not elicit any potential need for closure to complete the study because transgender women and men were perceived very clearly and unambiguously as different (and less desirable) from cisgender women and men.

Social distance. In addition to transphobia, social distance was utilized as a measure of anti-transgender prejudice. No published research has utilized an adaptation of the Bogardus (1925) Social Distance Scale to transgender individuals, and thus, this was a new method of examining prejudice toward this social group. Social distance was expected to impact the sorting of traits across the four categories given the suggestion by Gazzola and Morrison (2014) that a social-distancing factor accounted for transgender stereotypes as well as that the SCM (Fiske et al., 2002) suggests people socially distance themselves and dehumanize social groups in the low-low quadrant (e.g., drug addicts) of the model. The findings in the current study do not support the adapted Social Distance Scale as a significant predictor of trait card-sorting, however. This

was true for the social distance score for transgender women alone, transgender men alone, and the entire LGBT social group distance score.

Both social distance and transphobia were utilized as measures for assessing anti-transgender prejudice in the current study, and transphobia and social distance measures were significantly correlated at approximately $r = .6$ for both transgender women and men. Thus, it is possible that any possible additional variance in stereotype sorting that could be accounted for by anti-transgender prejudice was not addressed by anything new in the Social Distance Scale. In fact, the version of the Social Distance Scale used in the current study had not been developed and tested for transgender individuals prior to this study, and thus, the scale itself could use further examination. Additional validation procedures of a social distance scale for transgender individuals may offer unique insight into the perceptions of, attitudes about, and actions against transgender individuals – particularly as the content dimensions of traits associated with them suggest they are socially rejected in U.S. society.

Personal knowledge of a transgender person. It was important to examine participants' personal knowledge of transgender individuals because the perceptions of and prejudice toward a social group may be shaped without having had actual interactions with the social group (e.g., Allport, 1954; Kashima et al., 2008), and intergroup contact theory (Allport, 1954) suggests stereotypes may be dissuaded by personal contact with an outgroup member. Categorization of transgender stereotypes was surprisingly not impacted by participants' personal contact with transgender individuals in the current study. However, it is important to note that participants were asked to sort the traits based on their perceptions about societal stereotypes – not stereotypes they personally endorsed. It is possible that knowledge of transgender individuals could impact personally-endorsed stereotypes. Thus, it would be important to continue to ask

participants about their personal affiliation, particularly the frequency and nature of contact, with transgender individuals when assessing their beliefs about transgender individuals.

Implications and Future Directions

With a goal of enhancing the understanding of the cognitive origins of anti-transgender prejudice as previous stereotype scholars have suggested (Geiger et al., 2006; Nelson, 2002), this study has provided insight into the beliefs about transgender women and men in U.S. society that had previously been relatively unexplored. It is apparent that transgender individuals are highly stigmatized, devalued, and discriminated against in the U.S. (e.g., Grant et al., 2011). With this new knowledge of transgender stereotypes added to the literature in anti-transgender prejudice, the aim, as with other studies of stereotypes of minority groups, is to enhance interventions to counter prejudice, discrimination, and violence.

The perception of transgender women and men as more similar than different, means they are not distinguishable like ‘traditional’ categories of cisgender women and men. With this lack of distinction in stereotypes, they are also perceived as non-gendered and negative, which is no surprise given how society penalizes individuals for not being the ‘appropriate’ gender they were assigned. Transgender women and men are clearly perceived as outcasts. This image of transgender women and men is particularly helpful for anyone providing education on transgender identity and expression, advocating for transgender rights, and working alongside or serving transgender individuals. There has been an upsurge of transgender visibility in popular media in the U.S. in recent decades, and advocates have argued for more positive images, specifically by transgender actors (Smith, 2015), knowing the immense impact media has on the development and maintenance of stereotypes (e.g., Kashima et al., 2008). Individuals should be invited to question their beliefs about transgender and gender nonconforming people as well as

how the societal gender binary ideals have influenced these perceptions. Furthermore, it would serve transgender and gender nonconforming individuals if the media, legislators, and other individuals who hold influence in shaping societal attitudes and beliefs promoted the normalization and inclusion of transgender individuals and acknowledged the different identities and unique experiences of members of the transgender community.

Healthcare providers also have a responsibility to address transphobic attitudes and beliefs that impact their patients' experience of minority stress (Hendricks & Testa, 2012). This is particularly important given the long-standing psychiatric diagnosis of Gender Identity Disorder, now Gender Dysphoria, that has advanced the stigmatization of transgender individuals (Davy, 2015) and perhaps the 'othering' of transgender women and men apparent in this study. As such, the perceptions among individuals who make such diagnoses could be particularly useful, especially given that health providers' perceptions of patients have been shown to be impacted by patients' gender (e.g., Seem & Clark, 2006). It is also the responsibility of mental health clinicians and their supervisors to have more knowledge about the perceptions and pressures their clients may experience to provide culturally-competent care (Singh & dickey, 2017). Transgender stereotypes and their associated content discovered in this study indicate a generally undesirable 'othering' of transgender individuals, who do not fit a specific sex role. As mental health providers, it is important to utilize this information when examining the pressures transgender individuals may experience externally and internally regarding their gender identity and expression. It could also be useful to identify the manifestation of the perceptions of transgender individuals in the healthcare setting, especially because transgender individuals report having negative experiences and/or fear having negative experiences in healthcare (James et al., 2016; Grant et al., 2011).

The categories of transgender women and men were clearly othered in being denied gendered, warm, competent, and positive attributes in the current study. However, the various forces of oppression that exist in U.S. society, such as sexism, racism, and ageism would suggest that the experiences of marginalization and stereotyping may be different for transgender individuals of differing races, ages, etc., particularly when stereotypes often arise from easily visibility attributes (e.g., gender, race, age). This argument is supported by the U.S. Transgender Survey results indicating that transgender people of color, particularly transgender women of color, experience higher rates of poverty, unemployment, harassment, and violence (James et al., 2016). Additionally, given that age has its own impact on social perceptions (Dionigi, 2015), it could be helpful to examine the stereotypes of transgender individuals at varying ages, particularly given the age of coming out often shapes the transgender individual's lived experience. In the current study, while transgender women were assigned slightly more gendered, positive, and warm traits in comparison to transgender men, these differences were far less distinct than the differences between cisgender women and men on the same dimensions. This would suggest that experiences of transgender women and transgender men among other individuals in the transgender and gender nonbinary community are perceived as very similar. Thus, it is important to acknowledge the limitation of this study to examine only two categories of transgender individuals, which participants undoubtedly made assumptions about regarding race and age among other characteristics. It would therefore be important to continue examining transgender stereotypes, specifically different identities in the transgender community, and how they differ at the intersections of race, age, ability, class, etc.

Other indications that stereotypes of transgender individuals are unlike the stereotypes of cisgender women and men, who are presumably heterosexual, would suggest it could be useful

to explore stereotypes of transgender individuals in conjunction with other members of the LGBT community. Previous literature has shown differing findings for lesbians and gay men whether they are examined as one social group or as their subtypes (Brambilla et al., 2011; Clausell & Fiske, 2005), and suggests the need for future applications of the SCM to the LGBT community to provide clarity to the content of the stereotypes. The social distance scale used in the current study revealed slight differences in relationship preferences among various LGBT subgroups and thus, it could be helpful to examine differences in perceptions of these subgroups. The social distance scale was not shown to have the predicted impact on the card sorting in this study, however, and the scale itself needs to be examined more thoroughly.

Furthermore, the 64 personality traits utilized for the current study displayed clear differentiation on dimensions of gender, valence, warmth, and competence as well as significant variation in their sorting into the four categories of transgender women, transgender men, cisgender women, and cisgender men. This affirms previous stereotype research indicating that stereotypes are cognitively stored with certain content associated with them and that organization of these stereotypes and their associated content ensure groups are distinct (e.g., Stangor & Lange, 1994). However, this list of traits was not exhaustive and some of the 64 traits that were not disproportionately assigned to either category. As previous research on gender stereotypes has shown (e.g., Deaux & Lewis, 1984; Six & Eckes, 1991), utilizing different stereotype traits that represent additional personality traits as well as physical appearance, occupations, and other domains generally associated with stereotypes could provide more nuanced understanding of how stereotyped information about transgender individuals is organized in the human mind. Similarly, it could be helpful to explore counterstereotypes and the strength with which stereotypes are associated with a specific social group. Some traits disproportionately assigned to

a category were overwhelmingly underrepresented in one or more other categories. It is unclear what this underrepresentation implies – a counterstereotype, a difference in strength of stereotype or something else. A different approach to stereotype research methodology could provide more insight, such as asking participants to sort traits based on perceived counterstereotypes or utilize a Likert scale to determine stereotype perceptions among other techniques.

It could also be useful to examine the stereotype beliefs of diverse samples. The current sample's relatively homogeneity as predominantly cisgender, female, heterosexual, middle-to-upper class, Christian, white undergraduate students at a university in the Midwest is by no means representative of all perceptions of transgender individuals. Postsecondary education has been shown to reduce prejudice levels (Wagner & Zick, 1995) and social identity clearly impacts perceptions of social groups (Tajfel & Turner, 1979). Thus, more diverse samples could provide more clarity in how stereotypes may or may not differ among different populations. Notably, the gender binary ideology that pervades U.S. society influences perceptions of transgender women and men as well as cisgender women and men. These beliefs about gender vary from culture to culture (Kessler & McKenna, 1978), and thus, it could be helpful to assess stereotypes that exist in other cultures as well. Additionally, it could be helpful to explore stereotypes held by individuals who identify in the LGBT community, specifically exploring the stereotypes transgender and gender nonconforming individuals believe exist about themselves. Prior research has demonstrated that bisexual individuals have different perceptions of themselves in comparison to non-members of this stereotyped group (e.g. Burke & LaFrance, 2016), and thus, the same could be true for transgender individuals. More importantly, such examination of perceived stereotypes of themselves could offer insight into the experience of minority stress and

transphobia that may be internalized (Hendricks & Testa, 2012) – invaluable knowledge in the provision of culturally competent care.

Summary and Conclusions

The current study's examination of the structure and content dimensions of transgender stereotypes, specifically in comparison to cisgender stereotypes, provided a new avenue for understanding how transgender women and men are perceived. The consistent grouping of transgender women and men stereotypes together into a category that was distinct from both cisgender women stereotypes and cisgender men stereotypes indicates that transgender women and men are organized cognitively and socially as one – the other. This social group of outsiders does not align with the gender binary, and as such, their stereotypes are not gendered, negative, and lower in warmth and social status, especially when viewed through the lens of traditional sex roles and prejudice. Transgender women and men are clearly not the kind of people U.S. society wants using a public restroom.

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APPENDIX A: INFORMED CONSENT DOCUMENT

Title of Study: Perceptions of Sex and Gender

Investigators: Elizabeth TenBrook, M.P.A., M.S.
Patrick Ian Armstrong, Ph.D.

This is a research study being conducted by the Identity Development Laboratory, Department of Psychology, Iowa State University. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time. As indicated in our course syllabus, participation in experiments is one option for earning experimental credit.

INTRODUCTION

The purpose of this study is to learn more about the general perceptions of gender and sex, and specifically, stereotypes of transgender individuals and cisgender (not transgender) individuals. For the purposes of distinguishing these categories of people in this study, cisgender individuals include those whose sense of personal identity and gender identity corresponds with their birth sex (e.g., a biological male who identifies as a man). Transgender individuals include those whose sense of personal identity does not correspond with their birth sex (e.g., a biological female who identifies as a man). It is not important if you hold these stereotypes; we are looking for what stereotypes actually exist in the collegiate culture about transgender and cisgender individuals.

You are being invited to participate in this study because you are currently enrolled in a course in Iowa State University's Department of Psychology. You should not participate if you are under age 18.

DESCRIPTION OF PROCEDURES

If you agree to participate, you will be asked to complete an online survey and activity here in the Identity Development Laboratory. Within one week after completing this first part, you will receive an e-mail with a link to the remaining portion of the study to be completed online. Your participation will last for 90 minutes total—60 minutes for the first part and 30 minutes for the second part.

RISKS

While participating in this study you may experience the following risks or discomforts: There are no know physical, legal, pain, or privacy risks in this study. This study may be inconvenient due to the time it takes to complete the assessments. Although unlikely, there is also the potential for minimal psychological and emotional discomfort as you complete the assessments about attitudes and beliefs about sex and gender. Completing these assessments may bring up questions for you about your own beliefs. To minimize these risks, you will receive contact information counseling services in case you would like to seek out these services. You may end your participation at any time. You may skip and question that you do not wish to answer or that makes you feel uncomfortable.

BENEFITS

If you decide to participate in this study, there will be no direct benefit to you. It is hoped that the information gained in this study will benefit society by contributing to the understanding of general stereotypes in the college culture of transgender and cisgender people. Ultimately, the information gained in this study could benefit future researchers interested in a standardized taxonomy of gender and gender nonconformity stereotypes.

COSTS AND COMPENSATION

You will not have any costs associated with participation in this study. You will receive SONA credits as compensation for your time to complete the assessments for this study. You will receive two SONA credits for completing the first part of the study and one SONA credit for completing the second part of the study.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason. You can skip any questions that you do not wish to answer. If you decide not to participate in this study or to leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled. To earn research credits for your course, there are alternatives to completing the study that are described in your course syllabus.

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies, auditing departments of Iowa State University, and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy study records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken. Only the faculty member and research assistants on this project will have access to the data. Participants will be assigned a unique code, and participants' name, student number, and email address will be removed once this code is assigned and data has been entered. A separate document containing the key, which links each participant to their unique code, will be stored in a separate electronic file on the password-protected computer in a password-protected document. All data will be stored in locked offices and labs and on password-protected computers. The key linking participant identifying information and unique code will be destroyed at the conclusion of data collection and prior to publication. De-identified data will be stored for five years after the results are published and then will be destroyed. Your individual answers will be combined with those obtained from other participants and reported as a group. If the results are published, your identity will remain confidential.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study.

- For further information ***about the study,*** contact Patrick Armstrong, Ph.D., at 515-294-8788, pia@iastate.edu.
- If you have any questions *about the rights of research subjects or research-related injury*, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames, Iowa 50011.

PARTICIPANT SIGNATURE

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document, and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

Participant's Name (printed): _____

Participant's Student Number: _____

_____ _____

(Participant's Signature) (Date)

APPENDIX B: DEMOGRAPHICS QUESTIONNAIRE

1) First & Last Name:_____

2) Net-ID: _____
(you will be contacted at your ISU email address to complete the second part of this study)

3) Age: _____

4) Sex assigned at birth

Female
Male
Intersex

5) What is your current gender identity?

Woman
Man
Trans woman
Trans man
Genderqueer
Agender
Prefer to self-describe:_____

6) What is your ethnic/cultural identity? (Select all that apply)

Asian/Asian American/Pacific Islander
African/African American
Arab/Arab American
Hispanic/Latino American
Native American/American Indian
White/European American
Other:_____

7) Which of the following best describes your sexual orientation?

Heterosexual/Straight
Bisexual
Gay
Lesbian
Asexual
Queer
Pansexual
Other:

8) Which label best describes your social class?

Lower class
Lower middle class
Middle class
Upper middle class
Upper class

9) With what religion do you currently identify?

Buddhism
Christianity
Hinduism
Islam
Judaism
Taoism
Unitarian Universalist
Other:_____
Not religious

10) Do you personally know anyone who is transgender?

Yes
No

APPENDIX C: BEM SEX ROLE INVENTORY (BSRI; BEM, 1974)

Please indicate how well each of the following characteristics describes you. The scale ranges from 1 (“Never or almost never true”) to 7 (“Almost always true”).

Traits selected for evaluation by participants in the current study are noted in **bold**.

Self-reliant
Yielding
Helpful
Defends own beliefs
Cheerful
Moody
Independent
Shy
Conscientious
Athletic
Affectionate
Theatrical
Assertive
Flatterable
Happy
Strong personality
Loyal
Unpredictable
Forceful
Feminine
Reliable
Analytical
Sympathetic
Jealous
Leadership ability
Sensitive to others’ needs
Truthful
Willing to take risks
Understanding
Secretive
Makes decisions easily

Compassionate
Sincere
Self-sufficient
Eager to soothe hurt feelings
Conceited
Dominant
Soft spoken
Likable
Masculine
Warm
Solemn
Willing to take a stand
Tender
Friendly
Aggressive
Gullible
Inefficient
Acts as a leader
Childlike
Adaptable
Individualistic
Does not use harsh language
Unsystematic
Competitive
Loves children
Tactful
Ambitious
Gentle
Conventional

APPENDIX D: LIST OF 555 TRAIT ADJECTIVES (ANDERSON, 1968)

Traits selected for evaluation in the current study are noted in **bold**.

Able	Humble	Rude	Cautious
Absent-minded	Humorless	Sad	Changeable
Abusive	**Humorous**	Sarcastic	Charming
Accurate	Hypochondriac	Satirical	Cheerful
Active	Idealistic	Scheming	Childish
Admirable	Ill-Mannered	Scientific	Choosy
Adventurous	Ill-Tempered	Scolding	Clean
Aggressive	Illogical	Scornful	Clean-Cut
Agreeable	Imaginative	Self-Assured	Clear-Headed
Aimless	Imitative	Self-Centered	Clever
Alert	Immature	Self-Conceited	Clownish
Ambitious	Immodest	Self-Concerned	Clumsy
Amiable	Impolite	Self-Confident	Cold
Amusing	Impractical	Self-Conscious	Comical
Angry	Impressionable	Self-contented	Companionable
Annoying	Impulsive	Self-Controlled	Competent
Antisocial	Inaccurate	Self-Critical	Complaining
Anxious	Inattentive	Self-Disciplined	Composed
Appreciative	Incompetent	Self-Possessed	Compulsive
Argumentative	Inconsistent	Self-Reliant	Conceited
Artistic	Indecisive	Self-Righteous	Confident
Attentive	Independent	Self-Satisfied	Conforming
Authoritative	Indifferent	Self-Sufficient	Conformist
Average	Individualistic	Selfish	Congenial
Bashful	Inefficient	Sensible	Conscientious
Belligerent	Inexperienced	**Sensitive**	Conservative
Blunt	Informal	Sentimental	Considerate
Boastful	Ingenious	Serious	Consistent
Boisterous	Inhibited	Shallow	Constructive
Bold	Innocent	Sharp-Witted	Conventional
Boring	Inoffensive	Short-Tempered	Convincing
Bossy	Inquisitive	Showy	Cool-Headed
Bragging	Inquisitive	Shrewd	Cooperative
Bright	**Insecure**	Shy	Cordially
Brilliant	Insincere	Silent	**Courageous**
Broad-Minded	Insolent	Silly	Courteous
Calm	Insulting	Sincere	Cowardly
Candid	Intellectual	Skeptical	Crafty
Capable	Intelligent	Skilled	**Creative**
Careful	Interesting	Skillful	Critical
Careless	Intolerant	Sloppy	Crude
Casual	Inventive	Sly	Cruel

Cultured	Modest	Touchy	Moral
Cunning	Moody	Cynical	Moralistic
Curious	Smart	Daredevil	Naive
Irrational	Smug	Daring	Narrow-Minded
Irreligious	Snobbish	Daydreamer	Neat
Irresponsible	Sociable	Deceitful	Neglectful
Irritable	Social	Decent	Negligent
Irritating	Soft-Hearted	Deceptive	Nervous
Jealous	Soft-Spoken	**Decisive**	Neurotic
Jumpy	Solemn	Definite	Nice
Kind	Sophisticated	Deliberate	Noisy
Kind-hearted	Spendthrift	Demanding	Nonchalant
Kindly	Spirited	Dependable	Nonconfident
Lazy	Spiteful	Dependent	Nonconforming
Level-Headed	Sportsmanlike	Depressed	Noninquisitive
Liar	Squeamish	Dignified	Normal
Lifeless	Stern	Diligent	Nosey
Light-Hearted	Stingy	Direct	Obedient
Likable	Strict	Disagreeable	Objective
Listless	Strong-Minded	Disciplined	Obliging
Literary	Stubborn	Discontented	Obnoxious
Lively	Studious	Discourteous	Observant
Logical	Suave	Discreet	Obstinate
Lonely	Submissive	Discriminating	Offensive
Lonesome	Subtle	Dishonest	Old-Fashioned
Loud-Mouthed	Superficial	Dishonorable	Open-Minded
Loyal	Superstitious	Dislikable	Opinionated
Lucky	Suspicious	Disobedient	Opportunist
Maladjusted	Sympathetic	Disrespectful	Optimistic
Malicious	Systematic	Dissatisfied	Orderly
Materialistic	Tactful	Distrustful	Ordinary
Mathematical	Tactless	Disturbed	Original
Mature	Talented	Dominating	Outgoing
Mean	**Talkative**	Domineering	Outspoken
Meddlesome	Temperamental	Down-Hearted	Outstanding
Mediocre	Tender	Dull	Overcautious
Meditative	Tense	Eager	Overconfident
Meek	Theatrical	Earnest	Overcritical
Melancholy	Thorough	Easygoing	Oversensitive
Messy	**Thoughtful**	Eccentric	Painstaking
Methodical	Thoughtless	Educated	Passive
Meticulous	Thrifty	Efficient	Patient
Middleclass	Tidy	Egotistical	Perceptive
Misfit	Timid	Emotional	Perfectionistic
Moderate	Tiresome	Energetic	Persistent
Modern	Tolerant	Enterprising	Tough

Troubled	Enthusiastic	Petty	Unpleasant
Troublesome	Envious	Philosophical	Unpleasing
Trustful	Ethical	Phony	Unpoised
Trusting	Excitable	Pleasant	Unpopular
Trustworthy	Excited	Poised	Unpredictable
Truthful	Experienced	Polite	Unproductive
Ultra-Critical	Extravagant	Pompous	Unpunctual
Unaccommodat-ing	Exuberant	Popular	Unreasonable
Unadventurous	Fashionable	Positive	Unreliable
Unagreeable	Fault-Finding	Possessive	Unromantic
Unappealing	Fearful	Practical	Unruly
Unappreciative	Fearless	Precise	Unselfish
Unattentive	Fickle	Prejudiced	Unskilled
Uncivil	Finicky	Preoccupied	Unsociable
Uncompromising	Foolhardy	Prideful	Unsocial
Uncongenial	Foolish	Productive	Unsophisticated
Unconventional	Forceful	Profane	Unsporting
Uncultured	Forgetful	Proficient	Unsportsmanlike
Undecided	Forgiving	Progressive	Unstudious
Underhanded	Forward	Prompt	Unsympathetic
Understanding	Frank	**Proud**	Unsystematic
Unemotional	Friendly	Prudent	Untidy
Unenterprising	Frivolous	Punctual	Untiring
Unentertaining	Frustrated	Purposeful	Untrustworthy
Unenthusiastic	Generous	Purposeless	Untruthful
Unethical	Gentle	Quarrelsome	Unwise
Unfair	Gloomy	Quick	Upright
Unforgiving	Good	Quick-Witted	Vain
Unfriendly	Good-Humored	Quiet	Venturesome
Ungraceful	Good-Natured	Radical	Versatile
Ungracious	Good-Tempered	Rash	Vigorous
Ungrateful	Gossipy	Rational	Vivacious
Unhappy	Gracious	Realist	Vulgar
Unhealthy	Grateful	Realistic	Warm
Unimaginative	Greedy	Reasonable	Warm-Hearted
Unindustrious	Grouchy	**Rebellious**	Wasteful
Uninspiring	Gullible	Reckless	Weak
Unintellectual	Happy	Refined	Well-Bred
Unintelligent	Hard-Hearted	Relaxed	Well-mannered
Uninteresting	Headstrong	Reliable	Well-Read
Unkind	Heartless	Religious	Well-Spoken
Unkindly	Helpful	Resentful	Wholesome
Unlucky	Helpless	Reserved	High-Spirited
Unmethodical	Hesitant	Unobliging	High-Strung
Entertaining	Persuasive	Unobservant	Honest
	Pessimistic	Unoriginal	Honorable

Hopeful	Respectable	Wise	Worrier
Hostile	Respectful	Wishy-Washy	Worrying
Hot-Headed	Responsible	Withdrawing	
Hot-Tempered	Restless	Withdrawn	
Resigned	Righteous	Witty	
Resourceful	Romantic	Wordy	

APPENDIX E: PREVIOUSLY DOCUMENTED TRANSGENDER STEREOTYPES AND COUNTERSTEREOTYPES (GAZZOLA & MORRISON, 2014)

Traits selected for evaluation in the current study are noted in **bold**.

Stereotypes

Gay
Confused
Abnormal
Outcast
Sex reassignment surgery
Wear's women's clothes
Wears makeup
Born in wrong body

Counterstereotypes

Sexy
Attractive
Smelly
Abusive
Violent
Criminal
Poor
Lazy
Spiritual

APPENDIX F: TRAIT RATING QUESTIONS

1) How would you rate the following traits as a general characteristic of a person? (7-point Likert scale, 1 = negative, 7 = positive)
2) How would you rate the following traits based on a person's warmth if they held this characteristic? (7-point Likert scale, 1 = low warmth, 7 = high warmth).
3) How would you rate the following traits based on a person's social status if they held this characteristic? (7-point Likert scale, 1 = low social status, 7 = high social status)

APPENDIX G: CARD SORT DIRECTIONS

You have 64 cards, each with an adjective trait printed on it. These represent stereotype traits of certain groups of people. Based on what you know of the societal perceptions of the following four groups (cisgender men, cisgender women, transgender men, and transgender women), please, place these 64 cards into the following four categories. You are to sort these traits into the categories based on what you believe are generally held societal stereotypes – not your own personal beliefs. Each trait may go into only one category. The traits are to be divided evenly into the four categories – 16 cards must be sorted into each category. Please, complete this task to the best of your ability based on what you believe are societal stereotypes about transgender women, transgender men, cisgender women, and cisgender men.

Once you have sorted 16 cards into each category, please record that information on the answer sheet provided. There is a code found on each card of the respective trait – record this code on the answer sheet for the appropriate category. For your reference, definitions for these categories are included below.

<u>Definitions</u>

Cisgender man: a biological male at birth who currently identifies as a man

Cisgender woman: a biological female at birth who currently identifies as a woman

Transgender man: a biological female at birth who currently identifies as a man

Transgender woman: a biological male at birth who currently identifies as a woman

APPENDIX H: NEED FOR CLOSURE SCALE-REVISED-SHORT (NFC-R-S; ROETS & VAN HIEL, 2011)

Read each of the following statements and decide how much you agree with each according to your beliefs and experiences. Please respond according to the following scale.
Strongly disagree =1, Moderately disagree=2, Slightly disagree=3, Slightly agree=4, Moderately agree=5, Strongly agree=6

1. I don't like situations that are uncertain.
2. I dislike questions which could be answered in many different ways.
3. I find that a well ordered life with regular hours suits my temperament.
4. I feel uncomfortable when I don't understand the reason why an event occurred in my life.
5. I feel irritated when one person disagrees with what everyone else in a group believes.
6. I don't like to go into a situation without knowing what I can expect from it.
7. When I have made a decision, I feel relieved
8. When I am confronted with a problem, I'm dying to reach a solution very quickly.
9. I would quickly become impatient and irritated if I would not find a solution to a problem immediately.
10. I don't like to be with people who are capable of unexpected actions.
11. I dislike it when a person's statement could mean many different things.
12. I find that establishing a consistent routine enables me to enjoy life more.
13. I enjoy having a clear and structured mode of life.
14. I do not usually consult many different opinions before forming my own view.
15. I dislike unpredictable situations.

APPENDIX I: ATTITUDES TOWARD WOMEN SCALE (AWS; SPENCE, HELMREICH, & STAPP; 1973)

Instructions. The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement by indicating whether you (1) agree strongly, (2) agree mildly, (3) disagree mildly, or (4) disagree strongly. Please indicate your opinion by blackening either A. B. C, or D on the answer sheet for each item. (AS = regular scale; DS = reverse scored)

AS 1 Swearing and obscenity are more repulsive in the speech of a woman than of a man.
DS 2 Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.
DS 3 Both husband and wife should be allowed the same grounds for divorce.
AS 4 Telling dirty jokes should be mostly a masculine prerogative.
AS 5 Intoxication among women is worse than intoxication among men.
DS 6 Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
DS 7 It is insulting to women to have the "obey" clause remain in the marriage service.
DS 8 There should be a strict merit system in job appointment and promotion without regard to sex.
DS 9 A woman should be as free as a man to propose marriage.
AS 10 Women should worry less about their rights and more about becoming good wives and mothers.
DS 11 Women earning as much as their dates should bear equally the expense when they go out together.
DS 12 Women should assume their rightful place in business and all the professions along with men.
AS 13 A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
AS 14 Sons in a family should be given more encouragement to go to college than daughters. -
AS 15 It is ridiculous for a woman to run a locomotive and for a man to darn socks.
AS 16 In general, the father should have greater authority than the mother in the bringing up of children.
AS 17 Women should be encouraged not to become sexuallv intimate with anyone before marriage, even their fiances.
DS 18 The husband should not be favored bv law over the wife in the disposal of family property or income.
AS 19 Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.
AS 20 The intellectual leadership of a community should be largely in the hands of men.
DS 21 Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.
AS 22 On the average, women should be regarded as less capable of contributing to economic production than are men.

AS 23 There are many jobs in which men should be given preference over women in being hired or promoted.
DS 24 Women should be given equal opportunity with men for apprenticeship in the various trades.
DS 25 The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

APPENDIX J: GENDERISM & TRANSPHOBIA SCALE, REVISED (GTS-R; TEBBE, MORADI, & EGE, 2014)

Note: Gender-Bashing Items are 1, 2, 6, 14, 22. Genderism & Transphobia Items are 3-5, 7-13, 15-21

Please, respond to the following statements using the following scale:

1 = strongly agree, 2 = agree, 3 = somewhat agree, 4 = neither agree nor disagree, 5 = somewhat disagree, 6 = disagree, 7 = strongly disagree

1. I have beat up men who act like sissies.
2. I have behaved violently toward a woman because she was too masculine.
3. If I found out my best friend was changing their sex, I would freak out.
4. If a friend wanted to have his penis removed to become a woman, I would openly support him.
5. Men who cross-dress for sexual pleasure disgust me.
6. 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.
7. Men who act like women should be ashamed of themselves.
8. I cannot understand why a woman would act masculine.
9. Children should play with toys appropriate to their own sex.
10. Women who see themselves as men are abnormal.
11. I would avoid talking to a woman if I knew she had a surgically created penis and testicles.
12. A man who dresses as a woman is a pervert.
13. If I found out that my lover was the other sex, I would get violent.
14. I have behaved violently toward a man because he was too feminine.
15. If a man wearing make-up and a dress, who also spoke in a high voice, approached my child, I would use physical force to stop him.
16. Individuals should be allowed to express their gender freely.
17. Sex change operations are morally wrong.
18. Feminine men make me feel uncomfortable.
19. People are either men or women.
20. Masculine women make me feel uncomfortable.
21. It is morally wrong for a woman to present herself as a man in public.
22. If I encountered a male who wore high-heeled shoes, stockings, and make-up, I would consider beating him up.

APPENDIX K: SOCIAL DISTANCE SCALE (ADAPTED FROM BOGARDUS, 1925)

For the next section, you will provide your reactions to six groups of people in their relationship to you.

1. Remember to give your first feeling reactions in every case.

2. Give your reactions to each category as a group. Do not give your reactions to the best or the worst members that you have known, but think of the picture or stereotype that you have of the whole group.

3. For each of the following groups, please indicate if the relationship would be either acceptable or unacceptable to you by placing an X in the appropriate column.

As a close relation by marriage?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

As my friend?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

As my neighbor?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

As my coworker?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

As citizens in my country?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

As visitors in my country?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

Would you exclude them from your country?	Yes	No
Transgender Men	_____	_____
Transgender Women	_____	_____
Lesbians	_____	_____
Gay Men	_____	_____
Bisexual Men	_____	_____
Bisexual Women		

APPENDIX L: DEBRIEFING FORM

Perceptions of Sex and Gender Study Information and Debriefing Form
Patrick Ian Armstrong, Ph.D. & Elizabeth TenBrook, M.P.A., M.S.

Thank you for participating in the Perceptions of Sex and Gender study. We asked for your participation in this study because you are currently enrolled in a psychology class Iowa State University. This study is an investigation of social perceptions of individuals who are gender nonconforming (transgender) and gender conforming (cisgender) by Patrick Armstrong, Ph.D. and Elizabeth TenBrook, M.P.A., M.S. from the counseling psychology program, Department of Psychology, Iowa State University.

The aim of this study is to give greater understanding and context to the perceptions and treatment of transgender individuals. The purpose of this study is to examine attitudes toward and stereotypes of transgender and cisgender individuals. It is hoped that the information gained in this study will contribute to a greater understanding of societal perceptions of people who either do or do not conform to gender expectations. The hope is that this study will yield new information about how the theories of gender, stereotypes, and prejudice intersect and inform the treatment of and lived experiences by transgender individuals.

Please remember that your participation in this study is completely voluntary and that you may withdraw from this study at any time, for any reason. Your decision to participate or not participate in this study will not have an effect on your grade in any course you take as a student at Iowa State University. As mentioned before, all responses will be kept confidential. Only the faculty member and research assistants on this project will have access to the data. Participants will be assigned a unique code, and participants' name, student number, and email address will be removed once this code is assigned and data has been entered. A separate document containing the key, which links each participant to their unique code, will be stored in a separate electronic file on the password-protected computer in a password-protected document. All data will be stored in locked offices and labs and on password-protected computers. The key linking participant identifying information and unique code will be destroyed at the conclusion of data collection and prior to publication. De-identified data will be stored for five years after the results are published and then will be destroyed. Your individual answers will be combined with those obtained from other participants and reported as a group. If the results are published, your identity will remain confidential.

If you have any concerns about this study, please direct your questions to Patrick Armstrong, Ph.D. at 515-294-8788, pia@iastate.edu. If participation in this study raised personal concerns that you would like to discuss with a counselor, there are community resources listed below.

Community Resources Student Counseling Services: 3rd Floor Student Services Building, 294-5056 Eyerly Ball Community Mental Health Services: 2521 University Blvd, Suite 121, 290-3642

APPENDIX M TRAIT ASSIGNMENT TO CATEGORIES

Transgender men		**Transgender women**	
Disproportionately Assigned Traits	Underrepresented Traits	Disproportionately Assigned Traits	Underrepresented Traits
Outcast (218)	Dominant (11)	Theatrical (257)	Athletic (5)
Confused (215)	Athletic (20)	***Gay (198)***	Dominant (18)
Abnormal (213)	Competitive (21)	Creative (189)	Competitive (25)
Shy (200)	Masculine (36)	***Abnormal (185)***	Masculine (26)
Solemn (200)	Warm (36)	***Outcast (180)***	Aggressive (37)
Gay (198)	Affectionate (38)	***Individualistic (174)***	Forceful (40)
Unsystematic (187)	Aggressive (41)	*Cheerful (168)*	Warm (41)
Rebellious (183)	Reliable (46)	***Confused (163)***	Conventional (42)
Individualistic (175)	Compassionate (51)	***Insecure (158)***	Reliable (44)
Adaptable (173)	Forceful (52)	***Secretive (150)***	Loyal (50)
Unpredictable (170)		*Proud (149)*	
Yielding (163)		*Talkative (149)*	
Insecure (159)		***Unsystematic (139)***	
Inefficient (156)		*Humorous (139)*	
Secretive (153)		*Sensitive (138)*	
Self-reliant (123)		***Yielding (128)***	
		Adaptable (128)	
		Unpredictable (127)	

Cisgender men		**Cisgender women**	
Disproportionately Assigned Traits	Underrepresented Traits	Disproportionately Assigned Traits	Underrepresented Traits
Athletic (377)	Feminine (3)	Warm (313)	Gay (1)
Dominant (377)	Sympathetic (4)	Affectionate (303)	Masculine (3)
Competitive (352)	Outcast (5)	Gentle (284)	Aggressive (4)
Masculine (347)	Sensitive (5)	Compassionate (274)	Forceful (5)
Aggressive (330)	Abnormal (7)	Sympathetic (249)	Dominant (6)
Forceful (315)	Theatrical (7)	Feminine (239)	Abnormal (7)
Assertive (268)	Tender (10)	Thoughtful (239)	Outcast (9)
Hostile (213)	Shy (11)	Tender (227)	Athletic (10)
Conventional (212)	Affectionate (11)	Moody (222)	Rebellious (14)
Decisive (209)	Gentle (13)	Sincere (209)	Competitive (14)
Self-sufficient (195)	Gay (13)	Helpful (206)	Hostile (15)
Adventurous (187)	Insecure (14)	Flatterable (202)	Courageous (17)
Analytical (179)	Cheerful (16)	Likable (197)	Theatrical (17)
Ambitious (174)	Confused (16)	Loyal (192)	Confused (18)
Self-reliant (167)	Compassionate (18)	Gullible (189)	Proud (19)
Independent (160)	Understanding (19)	Understanding (189)	Unsystematic (21)
Humorous (159)	Thoughtful (19)	Jealous (168)	Humorous (21)
Reliable (157)	Moody (21)	*Sensitive (166)*	Individualistic (22)
Proud (150)	Creative (21)	*Reliable (165)*	Assertive (25)
	Sincere (22)	*Talkative (152)*	Solemn (33)
	Warm (22)	*Cheerful (145)*	Adventurous (33)
	Friendly (26)		Childlike (36)
	Talkative (33)		Adaptable (42)
	Flatterable (36)		Inefficient (45)
	Yielding (40)		Self-reliant (46)
	Individualistic (41)		
	Conscientious (46)		
	Gullible (47)		

Note. *Italics* denote traits disproportionately assigned to multiple categories; **Bold** denotes traits assigned to both transgender categories. Number of times the trait was disproportionately assigned to this category in parentheses

APPENDIX N: TRAIT CONTENT DIMENSIONS

Trait	**Gender** masculine = M feminine = F neutral = N	**Valence** positive = + negative = - neutral = N	**Warmth** high = H low = L neutral = N	**Social Status** high = H low = L neutral =N
Abnormal	N	-	L	L
Adaptable	N	+	H	H
Adventurous	M	+	H	H
Affectionate	F	+	H	H
Aggressive	M	-	L	L
Ambitious	M	+	N	H
Analytical	M	+	N	H
Assertive	M	N	L	H
Athletic	M	+	N	H
Cheerful	F	+	H	H
Childlike	F	-	N	L
Compassionate	F	+	H	H
Competitive	M	+	L	H
Conceited	N	-	L	N
Confused	N	-	L	L
Conscientious	N	+	H	N
Conventional	N	N	N	N
Courageous	M	+	H	H
Creative	F	+	H	H
Decisive	M	+	N	H
Dominant	M	N	L	H
Feminine	F	N	H	N
Flatterable	F	+	H	H
Forceful	M	-	L	N
Friendly	N	+	H	H
Gay	N	N	N	N
Gentle	F	+	H	N
Gullible	F	-	H	L
Happy	N	+	H	H
Helpful	N	+	H	H
Hostile	M	-	L	L
Humorous	M	+	H	H
Independent	M	+	N	H
Individualistic	M	+	N	H
Inefficient	N	-	L	L
Insecure	F	-	L	L
Jealous	N	-	L	L
Likable	N	+	H	H
Loyal	F	+	H	H
Masculine	M	N	N	H
Moody	N	-	L	L
Outcast	N	-	L	L
Proud	M	+	L	H
Rebellious	M	-	L	N
Reliable	N	+	H	H
Secretive	N	-	L	L
Self-reliant	M	+	N	H

Self-sufficient	M	+	N	H
Sensitive	F	N	H	N
Shy	F	N	N	L
Sincere	N	+	H	H
Solemn	N	N	N	N
Sympathetic	F	+	H	H
Tactful	N	+	N	H
Talkative	F	+	H	H
Tender	F	+	H	N
Theatrical	N	N	N	N
Thoughtful	F	+	H	H
Truthful	N	+	H	H
Understanding	F	+	H	H
Unpredictable	N	-	L	L
Unsystematic	N	-	L	L
Warm	F	+	H	H
Yielding	F	N	N	N
Trait	**Gender** masculine = M feminine = F neutral = N	**Valence** positive = + negative = - neutral = N	**Warmth** high = H low = L neutral = N	**Social Status** high = H low = L neutral =N

APPENDIX O: TRAIT ASSIGNMENT DIFFERENCES BY SEX FOR TRANSGENDER CATEGORIES

Trait	Transgender Category	Participant Sex Difference
Cheerful	Transgender Women	Between two predominant categories, female participants assigned 4:3 in favor of transgender women versus cisgender women and male participants assigned 5:4 to cisgender women versus transgender women
Theatrical	Transgender Women	Between two predominant categories of transgender women and transgender men, female participants assigned trait 2:1 and male participants assigned 2:3 in favor of transgender women versus transgender men
Unpredictable	Both	No difference in how this trait was assigned to transgender categories; however, female participants assigned least frequently to cisgender women and male participants assigned this trait least frequently to cisgender men
Creative	Transgender Women	Over half of female participants assigned trait to transgender women, which was almost two times as many times as the trait was sorted into any other category. The distribution of sorting this trait among the four categories by male participants was relatively flat.
Secretive	Both	No difference in how this trait was assigned to transgender categories; however, female participants assigned least frequently to cisgender women and male participants assigned this trait least frequently to cisgender men
Solemn	Transgender Men	Over half of female participants assigned trait to transgender men, which was two and a half times as many times as the trait was sorted into any other category. The distribution of sorting this trait among the four categories by male participants favored both transgender men and women relatively evenly.
Inefficient	Transgender Men	The distribution of sorting this trait among the four categories by male participants favored both transgender men and women relatively evenly. For female participants, transgender men were favored, with cisgender men and transgender men relatively even.
Adaptable	Both	The distribution of sorting this trait among the four categories by male participants favored both

		transgender men and women relatively evenly. Female participants assigned this to transgender men at a ratio of 3:2 compared to transgender women.
Unsystematic	Both	No difference in how this trait was assigned to transgender categories; however, female participants assigned to cisgender men at 5:1 ratio compared to cisgender women. Male participants assigned to cisgender categories relatively evenly.
Confused	Transgender Men	Both male participants and female participants assigned this trait disproportionately to the two transgender categories, with male participants' assignment relatively undifferentiated and female participants assigning the trait to transgender men at a ratio of 3:2 in comparison to transgender women.
Talkative	Transgender Women	The highest two categories disproportionately assigned this trait by both male participants and female participants were cisgender women and transgender women. Male participants assigned it more frequently to cisgender women and female participants assigned it more frequently to transgender women.
Humorous	Transgender Women	The highest two categories disproportionately assigned this trait by both male participants and female participants were cisgender men and transgender women. Male participants assigned it more frequently to cisgender men and female participants assigned it more frequently to transgender women.

APPENDIX P: PARTICIPANT VARIABLES (N = 412)

	Minimum	Maximum	Mean	SD
Masculine self-concept (7-point scale)	2.15	6.60	4.74	.768
Feminine self-concept (7-point scale)	2.70	6.45	4.83	.703
Sex role attitudes (4-point scale)	1.40	4.00	3.34	.476
Cognitive closure (6-point scale)	2.07	5.80	3.99	.654
Transphobia (7-point scale)	1.77	7.00	5.43	1.22
Social distance (proportion of 1.00)	.21	1.00	.89	.138

APPENDIX Q: INSTITUTIONAL REVIEW BOARD STUDY APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
3520 Lincoln Way, Suite 202
Ames, Iowa 50014
515 294-4566

Date: 8/30/2017

To: Elizabeth TenBrook
W112 Lagomarcino Hall

CC: Dr. Patrick Armstrong
W237 Lagomarcino Hall

From: Office for Responsible Research

Title: Perceptions of Sex and Gender

IRB ID: 17-355

Approval Date: 8/30/2017 **Date for Continuing Review:** 8/29/2019

Submission Type: New **Review Type:** Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials** in your research, **including the recruitment materials and informed consent documents that have the IRB approval stamp**.
- **Retain signed informed consent documents for 3 years after the close of the study**, when documented consent is required.
- **Obtain IRB approval prior to implementing** <u>any</u> **changes** to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- **Immediately inform the IRB of** (1) **all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks** to subjects or others.
- **Stop all research activity if IRB approval lapses**, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 202 Kingland, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.