

CHINESE COLLEGE STUDENTS' GENDER SELF-ESTEEM AND TRANSPREJUDICE

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ABSTRACT

The aim of this study was to examine transprejudice of college students from mainland China. Moreover, this study allowed us to determine if gender self-esteem, which may contribute to transprejudice in Western countries or individualistic societies, is also a significant contributor to transprejudice in mainland China, or a collectivistic society. We explored possible gender differences in transprejudice, and possible differences in prejudice towards transwomen and transmen. Additionally, we used Social Identity Theory to examine the possible relationship between gender self-esteem and transprejudice. Hypotheses were as follows: 1) heterosexual men would endorse more transprejudice than heterosexual women; 2) heterosexual men and women would report more prejudice against transwomen than transmen; and 3) heterosexual men who endorse higher levels of gender self-esteem would endorse more transprejudice, whereas heterosexual women's transprejudice would not be related to their gender self-esteem. The final sample consisted of 148 college students from mainland China. Participants completed the Chinese versions of the Genderism and Transphobia Scale, the Collective Self-Esteem Scale, the Social Desirability-17 Scale, and the demographic questionnaire.

The results demonstrated that men reported more transprejudice than women. Moreover, women reported more violence towards, teasing of, and discomfort with transwomen than transmen. Men also reported more teasing of and discomfort with

transwomen than transmen, but men's violence rating did not discriminate significantly between transwomen and transmen. Furthermore, gender self-esteem was not a predictor of transprejudice for men or for women. Because so far no research on transprejudice has been conducted on samples from mainland China, this study may contribute to the literature of transprejudice in China and to the cross-cultural research on transprejudice. This study may also contribute to the awareness of what factors can affect Chinese people's prejudice and violence against transpeople, which in turn can lead to more effective interventions to decrease transprejudice in mainland China.

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Chinese College Students' Gender Self-esteem and Transprejudice

There is substantial research on sexual and gender minorities, who challenge the traditional social norms of gender and sexuality, including attitudes toward gay men and lesbian women (Altemeyer, 2001; Ford, Brignall, VanValey, & Macaluso, 2009; Herek, 1988, 2000; Whitley, 2009) and attitudes toward transpeople (Antoszewski, Kasielska, Jędrzejczak, & Kruk-Jeromin, 2007; Gerhardstein & Anderson, 2010; King, Winter, & Webster, 2009; Martin, 1990; Winter, 2006; Winter et al., 2009; Winter, Rogando-Sasot, & King, 2007; Winter, Webster, & Cheung, 2008). However, research on attitudes toward transpeople is rather limited, compared with research on attitudes toward homosexuals. Moreover, most studies on attitudes toward transpeople have been conducted on Western samples (Antoszewski et al., 2007; Gerhardstein & Anderson, 2010; Martin, 1990), and so far no such research has been conducted on samples from mainland China. The aim of this study is to examine transprejudice of college students from mainland China. Moreover, this study allows us to determine if gender self-esteem, which may contribute to transprejudice in Western countries or individualistic societies, is also a significant contributor to transprejudice in mainland China, or a collectivistic society.

Terminology Related to Transpeople

The World Health Organization (1992) defined the term *transsexualism* as a desire to acquire the physical characteristics of the opposite sex by hormonal and surgical reassignment because of persistent discomfort with one's anatomic sex and gender role of the assigned sex. The American Psychiatric Association (2000) offers a definition for the term *gender identity disorder* in the revised fourth edition of the Diagnostic and Statistical

Manual of Mental Disorders (DSM-IV-TR), classifying gender identity disorder as a strong and persistent identification with the other gender, accompanied by clinical distress or social impairment related to the gender or the gender role of the assigned sex. Using these definitions can be problematic because they either ignore those who do not intend to undergo sex reassignment surgeries or they carry connotations of a mental disorder (Winter, 2009; Winter et al., 2009).

King et al. (2009) mentioned that the term *transgender* referred to people who strongly identify themselves as the gender they were not assigned at birth, including those who prefer to undergo hormone therapy or surgery and those who prefer to transgress gender in less permanent ways. They also used the term *transpeople* to describe both transsexuals and transgender people. Winter (2009), Winter et al. (2009), and Winter et al. (2008) defined transpeople as individuals who self-identify as the gender they were not assigned at birth, engage in gender variant behaviors, and adopt the social roles associated with their chosen gender. This definition of transpeople was used in the current study. Moreover, Winter (2009) and Winter et al. (2009) used the term *transwomen* to refer to those whose birth-assigned gender is male but self-identify as female, and the term *transmen* to refer to those whose birth-assigned gender is female but self-identify as male. The terms transmen and transwomen were also used in the current study.

The terminology more widely used in the literature to describe antipathy towards transpeople is *transphobia*, which is defined as an emotional disgust, irrational fear, or hatred toward people who do not conform to social gender norms (Hill & Willoughby, 2005). The term transphobia refers to fear or aversion to cross-dressers, feminine men,

masculine women, transgender individuals, and transsexuals. The use of this term can be problematic because it diverts the attention from the feelings of the victims to the feelings of the perpetrators, and emphasizes that fear is a major aspect of people's responses to transpeople whereas in fact it is only a minor component of people's responses (King et al., 2009; Winter, 2009). King et al. (2009) suggested using the term *transprejudice*, which provides the rationale for the pathologization and social discrimination of transpeople, and they defined transprejudice as "the negative valuing, stereotyping and discriminatory treatment of individuals whose appearance and/or identity does not conform to the current social expectations or conventional conceptions of gender" (p. 20). The term transprejudice was used in the current study to describe negative attitudes toward transpeople.

Gender Differences in Attitudes toward Transpeople

Antipathy toward transpeople is a common finding in both Western and Eastern societies, and often leads to discrimination and violence against transpeople in families, schools, workplaces, and wider societies (King et al., 2009; Winter et al., 2008). Previous studies regarding gender effects upon attitudes toward transpeople in both Western and Eastern societies are discussed here.

Martin (1990) investigated 80 undergraduate students in America to examine their attitudes toward sissies (boys with nontraditional gender roles) and tomboys (girls with nontraditional gender roles) and to explore the possible reasons for different evaluations of sissies and tomboys. It was demonstrated that men, compared with women, were less accepting of and perceived less social acceptance for children with nontraditional gender roles, and that people had more negative attitudes toward sissies than toward tomboys.

Additionally, sissies were perceived to be less well-adjusted and as more likely to become homosexuals when they grew up than tomboys.

Antoszewski et al. (2007) examined the knowledge about transsexualism in a sample of college students in Poland, and determined what rights (e.g., marriage, children adoption, and free medical care) the participants would grant to transsexual people. The results demonstrated that the knowledge of participants about transsexualism was comparable with that of their foreign counterparts, and that participants who believed that transsexualism has a biological cause reported more positive attitudes than those who believed that transsexualism has environmental origins. In addition, women had more positive attitudes toward transsexuals and a greater understanding of transsexual needs than men.

Gerhardstein and Anderson (2010) used a sample of heterosexual undergraduate students in America to examine their evaluations of transsexual characters and attitudes toward transpeople as a function of participant's gender and the transperson's gender. Participants rated vignettes with images of hypothetical transsexual individuals and completed questionnaires measuring transprejudice, sexual prejudice, and social desirability. Gerhardstein and Anderson (2010) found that men reported more negative general evaluations of the transsexual character than women, but the general evaluations of men and women did not discriminate significantly between transwomen and transmen characters. They also found that men reported more transprejudice than women and more violence, teasing, and discomfort towards transwomen than transmen, whereas women did not discriminate between transwomen and transmen for the violence, teasing, and discomfort ratings. Gerhardstein and Anderson (2010) suggested that because participants

read brief descriptions and saw images of these transsexual characters, they had specific information about transpeople. This additional knowledge may have helped to reduce prejudice toward the transsexual individual, particularly the transwoman. In the other measure of transprejudice where there was very little personal information about the target person (i.e., three pairs of items from the Genderism and Transphobia Scale), men reported more transprejudice towards transwomen than transmen.

Winter et al. (2008) sampled 203 undergraduate students in a Hong Kong university to examine gender differences in attitudes toward transpeople, as well as attitudes toward transwomen compared with transmen. Participants were required to complete a Chinese version of the Genderism and Transphobia Scale. The results demonstrated that men reported more transprejudice than women, and that men were more disposed to violence as well as ridicule toward transpeople, compared to women. Moreover, based on the analysis of three pairs of items that compared people's attitudes toward transwomen with attitudes toward transmen, Winter et al. (2008) found that women and men reported more negative attitudes toward transwomen than transmen. In contrast, Gerhardstein and Anderson (2010) found a similar result but only for men.

King et al. (2009) investigated Hong Kong Chinese people's attitudes toward transpeople as well as the relationship between their attitudes and their previous contact with transpeople. In this study, 856 Hong Kong Chinese residents were asked to provide answers to the Chinese Attitudes toward Transgenderism and Transgender Civil Rights Scale (CATTGRS) via telephone interviews. King et al. (2009) found that the term Hong Kong people most commonly use to describe transpeople is "yen yiu," which means

“human monster.” Also, men scored higher than women on one of the transprejudice factors, “gender essentialism,” which measures the cultural gender belief as well as morality in Chinese society surrounding gender variant behaviors. For example, one item is “It is morally wrong for a man to present himself as a woman in public in Chinese society.” Moreover, they also found that previous contact with transpeople could reduce transprejudice.

The research of Winter et al. (2009) explored the perceptions concerning transwomen and factors underlying transprejudice by using samples of undergraduate students in five Asian societies and two Western societies. The research findings demonstrated that in all seven societies, Singapore, Malaysia, Hong Kong, Thailand, Philippines, United States, and United Kingdom, men reported higher levels of transprejudice compared with women. Their findings also revealed five factors underlying transacceptance or transprejudice, which were a belief that transwomen are mentally ill; a perception that transwomen should not be treated as women and have women’s rights; rejection of contacts with transwomen among family and teachers ; rejection of contact with transwomen among peers; and a belief that transwomen are sexually deviant. Winter et al. (2009) suggested that participants’ perceiving transwomen as men with a mental illness may provide a rationale for transprejudice.

Some studies used actual transpeople as participants. Winter (2006) investigated 195 transwomen in Thailand, examining their beliefs about the attitudes of their parents toward them and the attitudes of the Thai society toward transwomen in general, as well as their beliefs about the origin of their transwomen status. Participants reported that their mothers

had more positive attitudes toward their transgender status than fathers, and that Thai people overall held favorable attitudes toward transwomen. Moreover, most transwomen believed that inborn biology had played a role in their transgender status.

Another study that was similar to the Thai study (Winter, 2006) was conducted in the Philippines by Winter et al. (2007). They used a questionnaire that closely paralleled the one used in the Thai study to examine the perceptions of Filipino transwomen regarding both their parents' and society's attitudes toward them, as well as their beliefs about the origin of their transwomen status. Participants reported that fathers consistently held more negative attitudes toward their transgender status than mothers, and that Filipino society held unfavorable attitudes toward transpeople. Also, most participants considered inborn biology as the most important factor underlying their transgender status.

Based on the above studies, people in both Western and Eastern societies tend to have negative attitudes toward transpeople. Moreover, men tend to report more transprejudice than women, and people tend to report more prejudice against transwomen than transmen.

Social Identity Theory (SIT)

Social Identity Theory (SIT) is a theory of intergroup conflict, and it can be used to explain prejudiced attitudes and discriminatory behaviors by moving away from an individual or interpersonal approach to a focus on social groups (Tajfel & Turner, 1986).

A *social group* is defined as a collection of individuals who classify themselves as members of the same social category; people in a social group achieve social consensus about the evaluations of their group and group membership (Tajfel & Turner, 1986). *Social*

identity consists of an individual's self-concept which derives from his or her membership in one or more groups, including gender, ethnicity, occupation, and sexual orientation groups (Luhtanen & Crocker, 1992; Tajfel & Turner, 1986). Luhtanen and Crocker (1992) used the terms *collective identity* and *collective self-esteem*, which are similar to the term social identity because all of them refer to the aspects of identity that associate with social group memberships and the values placed on those groups.

Tajfel and Turner (1986) put forward some assumptions of SIT. People strive for a positive social identity, which is determined through favorable comparisons between the ingroup, or one's own group, and the relevant outgroups, or the groups to which a person does not belong. Individuals perceive their ingroup as distinct in positive ways from relevant outgroups. If the positive distinctiveness of the ingroup is threatened by the relevant outgroup, people in the dominant ingroup may try to do everything possible to maintain their superiority, which can include negative attitudes or violent behaviors toward the relevant outgroup.

SIT and People's Attitudes toward Sexual Minorities

Abrams, Carter, and Hogg (1989) were the first researchers to use SIT to help understand sexual prejudice. Abrams et al. (1989) stated that SIT assumes that when a comparison is made between ingroup and outgroup members, ingroup members will feel threatened if the outgroup has similar characteristics to the ingroup, as the similarity threatens the ingroup distinctiveness. They also suggested that the distinctions between heterosexual men and gay men are based on several stereotypical attributes, such as femininity; if a man has many feminine characteristics, he could be categorized as gay.

Therefore, they hypothesized that if a person labeled as homosexual possesses heterosexual attributes, social distance as well as reduced liking would be expected from a heterosexual man, because the intergroup distinctions and the heterosexual man's social identity are threatened. However, if a man labeled as homosexual possesses homosexual attributes, there would be no threat to intergroup distinctions or a heterosexual man's social identity, and thus there would be less dislike.

To test these hypotheses, Abrams et al. (1989) first required several undergraduate students to write down their images of different social groups, including the groups "heterosexual men" and "gay men." These stereotypical images were then sorted into heterosexual and homosexual categories, which were used in the experiment to describe the attributes of a target male. In the experiment, 134 male undergraduate students were first given an introduction, which described the study as focusing either on group salient condition (mentioning that the target belongs to a social group) or on individual salient condition (mentioning the target as an individual, not as a group member). Then participants were asked to read a description about a male student with either stereotypically heterosexual traits or stereotypically homosexual traits. The target was labeled as heterosexual or homosexual at the end of the description. After reading the description, the students completed the dependent measures related to liking and social distance towards the target. The results demonstrated that when the target was labeled as homosexual but had heterosexual attributes, the target was rated as less likeable, compared with the heterosexual label condition. Abrams et al. (1989) also found that the homosexual label overrode the stereotype information in determining attraction to the target person and

increased the salience of the intergroup distinction between heterosexual people and homosexual people. The findings were in line with SIT, suggesting that when group membership is salient, outgroup members who display ingroup characteristics may threaten the ingroup distinctiveness which may result in prejudice against the relevant outgroup.

Schmitt, Lehmiller, and Walsh (2007) used a social identity approach to explore whether the labels applied to same-sex relationships would affect support for their legality. They mentioned that according to SIT, ingroup status is based on comparisons between the ingroup and the relevant outgroups. When members of the valued ingroup perceive a relevant outgroup threat to the positive distinctiveness of the ingroup identity, they will deliberately attempt to maintain the status boundaries. They hypothesized that the same-sex marriage label would be less supported and perceived as more threatening to the heterosexual identity than the civil union label, and that perceptions of heterosexual threat, or threat to heterosexual social identity, would mediate the effect of the relationship label on support for the laws.

To test these hypotheses, they conducted two experiments using heterosexual college students as participants. In both experiments, participants were presented with one hypothetical law that offered same-sex partners the same rights as the opposite-sex married couples. The label applied to the law was either *civil union* or *marriage*. The design and materials were nearly identical in the two experiments except that in Experiment 1 the perception of threats to heterosexual rights was used to measure heterosexual threat whereas in Experiment 2 the identity of heterosexuals as a group was used to measure heterosexual threat. Schmitt et al. (2007) found that same-sex marriages were less

supported and perceived as more threatening to the heterosexual identity than same-sex civil unions. The results also demonstrated that heterosexual threat partially mediated the association between the same-sex relationship labels and the support for their legality. The marriage law was more threatening to the positive distinctiveness of the heterosexual identity by raising the same-sex relationship to the same level as the opposite-sex relationship. This could result in heterosexual people's prejudice against homosexuals. The results suggest that SIT is useful for understanding people's support for or opposition to same-sex relationships.

Falomir-Pichastor and Mugny (2009) examined the relationship between sexual prejudice and heterosexual men's need to maintain a positive and distinct gender self-esteem (i.e., the importance of gender to a person's self-identity), and explained that relationship using SIT. As discussed previously, SIT proposes that group members are motivated to perceive their ingroup as distinct in positive ways from the relevant outgroups. Gay men, the relevant outgroup, share the same biological sex category with heterosexual men. Therefore, this relevant outgroup threatens heterosexual men's ingroup identity by threatening the positive distinctiveness of the ingroup. Falomir-Pichastor and Mugny (2009) indicated that according to SIT and previous research findings (e.g., Herek, 1986, 1987), heterosexual men, more than heterosexual women, should derive their gender self-esteem from their group membership as a heterosexual man. Heterosexual men then have to struggle more than heterosexual women to differentiate their group from homosexuals and maintain their positive distinctiveness. This may result in heterosexual men's higher levels of sexual prejudice than heterosexual women.

Falomir-Pichastor and Mugny (2009) proposed three hypotheses and designed five studies to test these hypotheses. Studies 1 and 2 were conducted to test the hypothesis that sexual prejudice would be more related to heterosexual men's gender self-esteem than to heterosexual women's gender self-esteem. The results demonstrated that sexual prejudice was related to heterosexual men's gender self-esteem but not to heterosexual women's gender self-esteem, and that heterosexual men's sexual prejudice increased as their gender self-esteem increased. Studies 3 and 4 tested the hypothesis that the relationship between men's gender self-esteem and sexual prejudice would be stronger among heterosexual men who are motivated to distance themselves from homosexuals. The findings showed that attitudes toward homosexuals were more negative among heterosexual men who had stronger motivations to distance themselves from homosexuals, and that sexual prejudice was related to heterosexual men's gender self-esteem when psychological distance was high but not when the distance was low. Study 5 was designed to test the hypothesis that heterosexual men's sexual prejudice would no longer be related to their gender self-esteem when differentiation between homosexuals and heterosexuals was highlighted. Participants were told that gay men and heterosexual men shared the same or different biological bases. It was demonstrated that sexual prejudice was no longer predicted by heterosexual men's gender self-esteem when participants were told that gay men and heterosexual men were biologically different. These findings supported the assumption of SIT, indicating that in order to maintain a positive gender identity that is distinguishable from that of gay men, heterosexual men who endorse higher levels of gender self-esteem will have more sexual prejudice.

The current study used SIT to help explain transprejudice. There has been little previous research using SIT to explain transprejudice. However, homosexuality and transgenderism are both violations of traditional gender norms, and Nagoshi et al. (2008) found that sexual prejudice was significantly correlated with transprejudice. Therefore, the findings of research examining attitudes toward gay men and lesbian women can be cautiously used to make predictions about the factors that influence attitudes toward transpeople. Additionally, Glotfelter and Anderson (2012) found that, as with sexual prejudice, gender self-esteem was correlated with heterosexual men's but not heterosexual women's transprejudice.

Present Study

China is considered a collectivistic society (Oyserman, Coon, & Kemmelmeier, 2002). People in collectivistic societies may be more likely than people in individualistic societies to use their social positions, such as social status or roles, as a way to distinguish themselves from others (Becker et al., 2012). However, in determining some behaviors such as verbal or physical aggression, people's ingroup/outgroup status is more important than whether they come from an individualistic or a collectivistic society (Forbes, Collinsworth, Zhao, Kohlman, & LeClaire, 2011). Ingroup/outgroup status may be important in both collectivistic and individualistic societies for predicting aggression. Gender self-esteem (i.e., the importance of one's gender group to one's self-concept) as a predictor of transprejudice has not been studied in a collectivistic society. Therefore, it is of interest to determine whether gender self-esteem, which may contribute to transprejudice in Western countries or individualistic societies, is also a significant contributor to

transprejudice in college students from mainland China, or a collectivistic society. In this study we explored possible gender differences in transprejudice, and possible differences in prejudice towards transwomen and transmen. Additionally, we used Social Identity Theory to examine the possible relationship between gender self-esteem and transprejudice. We mainly examined heterosexual (heterosexual only and heterosexual mostly) students' gender self-esteem and transprejudice due to the very small numbers of participants with other sexual orientations. Based on the previous literature several hypotheses were tested:

1. Heterosexual men would endorse more transprejudice than heterosexual women.
2. Heterosexual men and heterosexual women would report higher levels of transprejudice toward transwomen than transmen.
3. Heterosexual men who endorse higher levels of gender self-esteem would endorse more transprejudice, whereas heterosexual women's transprejudice would not be related to their gender self-esteem.

This study may contribute to the awareness of what factors can affect prejudice and violence toward transpeople which in turn can lead to more effective interventions to decrease transprejudice and violence.

Method

Design

This study used a correlational design. The predictor variables were participant's gender, participant's gender self-esteem, and the interaction between gender and gender self-esteem. The criterion variables were prejudice towards transmen and transwomen.

It is generally accepted that a medium effect size is appropriate because it represents an effect that is noticeable to the careful observer (Cohen, 1992). An a priori power analysis indicated a necessary sample size of approximately 84 participants to find a medium effect size with α of .05 and power of .80 (Cohen, 1992). The current sample exceeded this minimum sample size.

Participants

The data were gathered from an online survey, and participants were a snowball sample consisting of 281 college students from mainland China, including those who were studying in different regions of mainland China and those who were studying in America. The data of 133 participants were excluded due to such factors as missing responses on multiple measures ($n = 118$), not identifying one's gender or sexual orientation ($n = 9$), identifying one's gender as something other than male or female ($n = 1$), or identifying one's current sexual orientation as something other than heterosexual only or heterosexual mostly ($n = 5$). The analyses were based on the data of the remaining 148 participants. The final sample was composed of 79 (53.4%) females and 69 (46.6%) males. Of those who reported their age ($N = 140$), ages ranged from 19 to 31 years with the average age of 23.68 years ($SD = 1.84$). Two participants did not report the country they were attending university in; of those who did ($N = 146$), 86.3% were studying in China, 10.3% were studying in America, and 3.4% were studying in other countries. Three participants did not report year in school; of those who did ($N = 145$), 2.8% were sophomores, 6.2% were juniors, 22.8% were seniors/fifth graders, and 68.3% were postgraduates. Of those who indicated their monthly household income, 11% reported earning more than 20000 China

Yuan, 15.8% reported earning 10000- 20000, 22.6% reported earning 5000-10000, 34.9% reported earning 2000-5000, and 15.8% reported earning less than 2000 China Yuan.

Moreover, 133 (89.9%) participants self-identified as heterosexual only, and 15 (10.1%) participants self-identified as heterosexual mostly. We conducted analyses both including and excluding heterosexual mostly.

Measures

All of the following questionnaires were translated into Chinese and back-translated into English by a bilingual translator.

Genderism and Transphobia Scale (GTS). The Genderism and Transphobia Scale (GTS; Hill & Willoughby, 2005) is a 32-item scale designed to measure prejudice towards those who do not conform to gender norms, such as transpeople. There are two subscales. The first subscale is Transphobia/Genderism. It has 25 items that examine general attitudes towards transpeople; for example “Men who cross-dress for sexual pleasure disgust me.” The second is the Gender-bashing subscale and it has 7 items that examine more violent attitudes towards transpeople; for example “I have behaved violently towards a woman because she was too masculine.” Participants rated each item on a Likert-type scale from 1 (Strongly Disagree) to 7 (Strongly Agree). Scores range from 32 to 224 for the total scale, 25 to 175 for the Genderism/Transphobia subscale, and 7 to 49 for the Gender-bashing subscale. Higher scores indicate more transprejudice.

Hill and Willoughby (2005) found good internal consistency for the total scale ($\alpha = .96$), for the Transphobia/Genderism subscale ($\alpha = .95$), and for the Gender-bashing subscale ($\alpha = .87$). Alpha coefficients in the current study were .92 for the total scale, .90

for the Genderism/Transphobia subscale, and .76 for the Gender-bashing subscale. In addition, the GTS can also be used to compare people's attitudes toward transwomen with attitudes toward transmen based on three matched pairs of items. Matched items 2 and 20, 6 and 13, and 25 and 29 are identically worded except for the gender of the target person. For example, Items 2 and 20 state "I have behaved violently towards a [woman/man] because [she/he] was too [masculine/feminine]." See Appendix A.

Collective Self-Esteem Scale (CSE). The Collective Self-Esteem Scale (CSE; Luhtanen & Crocker, 1992) is a 16-item scale designed to measure social identity across groups (e.g., gender, race, religion, ethnicity, and socioeconomic class). This scale was altered in the current study to measure collective self-esteem toward one's gender group (gender self-esteem). Luhtanen and Crocker (1992) suggested that minor alterations of the instructions and wording of the original scale in order to assess collective self-esteem for a particular social group are acceptable. The scale includes four subscales; each subscale consists of four items. The Membership subscale measures the degree to which one person reports he or she is a worthy member of his or her gender group; for example, "I am a worthy member of my gender group." The Private subscale measures individual's positive judgments of the gender group that the individual belongs to; for example, a reverse coded item in this subscale is "I often regret that I belong to my gender group." The Public subscale assesses how one person judges other people's evaluations of his or her gender group; for example, "In general, others respect the gender group that I am a member of." The Identity subscale measures the importance of one's gender to one's self-concept; for example, "In general, belonging to my gender group is an important part of my

self-image.” Participants rated each item on a Likert-type scale from 1 (Strongly Disagree) to 7 (Strongly Agree). Scores range from 4 to 28 for each subscale, and 16-112 for the total scale. Higher scores indicate higher gender self-esteem.

Luhtanen and Crocker (1992) found that overall, reliability was adequate ($\alpha=.83$ to .88) and the total scale and subscales were internally consistent. Test-retest reliability with a 6-week delay was adequate for all subscales with Pearson correlations ranging from .58 for the Membership subscale to .68 for the Identity subscale. Alpha coefficients in the current study were .89 for the total scale, .73 for the Membership subscale, .77 for the Private subscale, .80 for the Public subscale, and .72 for the Identity subscale. See Appendix B.

Social Desirability Scale-17 (SDS-17). The Social Desirability Scale-17 (SDS-17; Stöber, 2001) has 16 true and false items designed to measure the tendency to answer questions in a socially desirable way. The scale consists of items intended to reflect socially sanctioned behaviors that rarely occur; for example, one item is “I always admit my mistakes openly and face the potential negative consequences.” Items answered true are scored with 1, and those answered false are scored with 0. Six items are reverse coded. Higher scores indicate that the participant responds in a more socially desirable way.

Stöber (2001) found adequate convergent validity, discriminant validity, and good internal consistency with α ranging from .74 to .80. The current study’s internal consistency was $\alpha = .75$. The original scale consisted of 17 items; however, in several separate studies, Stöber found that one item addressing the use of illegal drugs was not highly correlated

with the corrected item total score. Therefore, this item was removed, leaving 16 items. See Appendix C.

Demographic questionnaire. Participants provided information on their gender, age, nationality, major, year in school, sexual orientation, the country they are attending university in, and their monthly household income. Regarding sexual orientation, participants rated their present self-identification on a Likert-type scale from 1 (Heterosexual Only) to 7 (Homosexual Only; Klein, Sepekoff, & Wolf, 1985). See Appendix D.

Procedure

A link to take the online survey that was developed using Qualtrics was sent to all of the international students from mainland China at Indiana State University. These students were then asked to provide the link for the study to other Chinese college students in America or mainland China who might be interested in participating. After clicking on the link, participants were routed to an Indiana State University webpage where they could read an informed consent form (see Appendix E). If they were at least 18 years old and volunteered to participate in this study, they could click on a link that said “I agree”. After being routed to the Indiana State University website, participants completed the Genderism and Transphobia Scale, the Collective Self-Esteem Scale, and the Social Desirability Scale-17 in a random order. The demographic questionnaire was completed last. Completion of the questionnaires took approximately 20 minutes. After the measures were completed, participants were provided with a written debriefing statement (see Appendix F). The translated Chinese versions of all materials were used.

Results

Before analyzing data, outliers were identified using z-scores ($z > |2.58|$; Tabachnick & Fidell, 1996). Analyses were done both including and excluding outliers. Outliers were included in the final analyses because the findings were similar with and without outliers. Moreover, analyses were done including and excluding data of heterosexual mostly participants. The results with and without heterosexual mostly participants were similar; therefore, data of heterosexual mostly participants were included in the final analyses.

Correlations between Subscales

Correlation coefficient between the Transphobia/Genderism subscale and Gender-bashing subscale was .614, $p < .001$. See Table 1 for Pearson correlation coefficients between the subscales of CSE.

Gender Comparisons

The first hypothesis was that there would be gender differences in transprejudice with heterosexual men endorsing more transprejudice than heterosexual women. Because Genderism/Transphobia and Gender-bashing subscales were significantly correlated with each other, we used a multivariate analysis of covariance (MANCOVA) to test for differences in transprejudice as a function of gender, using the two subscales as dependent variables and gender as the independent variable while statistically accounting for social desirability as the covariate. The multivariate test for gender was significant, $F(2, 143) = 11.200$, $p < .001$, partial $\eta^2 = .135$. The multivariate test for social desirability was not significant, $F(2, 143) = .686$, $p = .505$, partial $\eta^2 = .010$. Univariate analysis indicated significantly higher levels of transprejudice on the GTS and two subscales for men

compared to women. Table 2 presents the univariate results for gender differences in transprejudice. Table 4 presents the means and standard deviations for transprejudice by gender of the participants.

Attitudes toward Transwomen Compared with Transmen

The second hypothesis was that heterosexual men and heterosexual women would report higher levels of transprejudice toward transwomen than transmen. To test this hypothesis three separate repeated measures MANCOVAs were done with gender as the between subjects variable, the three pairs of items comparing attitudes toward transwomen and transmen from the GTS as the within subjects variables, and social desirability as the covariate. Paired-samples t- tests were done for men and women separately to compare their prejudice against transwomen versus transmen. The three pairs of items assessing violence, ridicule, or discomfort towards transwomen or transmen from the GTS were the paired variables. Also, independent-samples t- tests were done to compare men's and women's scores for each of the six items that assess violence, ridicule, or discomfort toward transwomen or transmen. See Table 3 for the results of the MANCOVAs and Table 4 for the means and standard deviations for attitudes toward transwomen and transmen by gender of the participants.

Multivariate results indicated no significant interaction between participant's gender and gender of the transperson for violence ratings, $F(1, 145) = .229, p = .633$, partial $\eta^2 = .002$, and no significant interaction between social desirability and gender of the transperson for violence ratings, $F(1, 145) = 2.887, p = .091$, partial $\eta^2 = .020$. Social desirability did not have a significant effect on participants' violence towards transpeople,

$F(1, 145) = .464, p = .497, \text{partial } \eta^2 = .003$. However, there was a significant difference between participants' violence towards transwomen and participants' violence towards transmen. The between-subjects tests indicated that there was a significant gender difference in violence towards transpeople.

A paired-samples t-test comparing violence towards transwomen versus transmen showed that women reported significantly more violence towards transwomen than transmen, $t(78) = -2.575, p = .012, d = -.290$. Men's violence rating did not discriminate significantly between transwomen and transmen, $t(68) = -1.328, p = .189, d = -.160$. An independent-samples t-test showed that men had significantly higher violence scores than women for both transwomen, $t(146) = 2.333, p = .021, d = .379$, and transmen, $t(146) = 3.071, p = .003, d = .492$.

Multivariate results indicated no significant interaction between participant's gender and gender of the transperson for teasing, $F(1, 145) = .039, p = .844, \text{partial } \eta^2 = .000$. Social desirability did not have a significant main effect on participants' teasing of transpeople, $F(1, 145) = 2.614, p = .108, \text{partial } \eta^2 = .018$. However, there was a significant interaction between social desirability and gender of the transperson for teasing, $F(1, 145) = 9.347, p = .003, \text{partial } \eta^2 = .061$. There was also a significant difference between participants' teasing of transwomen and teasing of transmen. The between-subjects tests indicated a significant gender difference in teasing transpeople.

A paired-samples t-test comparing participants' teasing of transwomen and teasing of transmen showed that both men, $t(68) = 7.099, p < .001, d = .855$, and women, $t(78) = 8.444, p < .001, d = .950$, reported significantly more teasing of transwomen than transmen.

Also, men's scores were significantly higher than women's for teasing transmen, $t(146) = 3.030, p = .003, d = .486$, and for teasing transwomen, $t(146) = 1.951, p = .050, d = .318$. Moreover, because the interaction between social desirability and gender of the transperson for teasing was significant, zero-order correlations were calculated between SDS-17 scores and scores of the two items measuring teasing of transwomen and transmen. The results demonstrated that social desirability scores were significantly negatively correlated with scores of teasing transwomen $r(146) = -.216, p = .008$, but not transmen, $r(146) = .048, p = .564$. Moreover, the negative relationship between social desirability and teasing transwomen was only found for men, $r(67) = -.315, p = .008$, but not for women, $r(77) = -.151, p = .184$.

Multivariate results indicated no significant interaction between participant's gender and gender of the transperson for discomfort ratings, $F(1, 144) = .110, p = .741$, partial $\eta^2 = .001$, and no significant interaction between social desirability and gender of the transperson for discomfort ratings, $F(1, 144) = .038, p = .846$, partial $\eta^2 = .000$. Social desirability did not have a significant effect on participants' discomfort with transpeople, $F(1, 144) = .119, p = .731$, partial $\eta^2 = .001$. However, there was a significant difference between participants' discomfort with transwomen and discomfort with transmen. The between-subjects tests indicated a significant gender difference in discomfort towards transpeople.

A paired-samples t-test comparing discomfort with transwomen versus transmen showed that both men, $t(67) = 6.629, p < .001, d = .804$, and women, $t(78) = 7.582, p < .001, d = .853$, reported significantly more discomfort with transwomen than transmen.

Also, men had significantly higher discomfort scores than women for both transwomen, $t(146) = 2.244, p = .026, d = .357$, and transmen, $t(145) = 2.338, p = .021, d = .381$.

Gender Self-esteem and Transprejudice

To analyze possible associations between gender self-esteem and transprejudice, zero-order correlations were calculated between CSE and GTS scores for men and women separately. The results showed that the correlations between CSE and GTS, CSE and Transphobia /Genderism, and CSE and Gender-bashing were not significant for either men or women (see Table 5). To determine if there would be differences in associations between gender self-esteem and prejudice towards transwomen versus transmen, zero-order correlations were calculated between CSE scores and the scores of the three pairs of items in the GTS that assess violence, teasing, and discomfort toward transpeople. It was demonstrated that for men and women, there were no significant correlations between CSE and the items that assess violence towards, teasing of, and discomfort with transwomen or transmen (see Table 5).

Multicollinearity revealed no problems. Therefore, simultaneous multiple regression analyses were calculated for women and men with CSE subscale scores as the predictors and GTS scores as the criterion variable, in order to examine the associations between the CSE subscales (Membership, Private, Identity, and Public) and transprejudice for women and men. For men, the regression on GTS scores was not significant, $R^2 = .007, F(4, 60) = .110, p = .979$. None of the CSE subscale scores were significant predictors in the regression. For women, the regression on GTS scores was also not significant, $R^2 = .005, F(4, 72) = .088, p = .986$. None of the CSE subscales were significant predictors of

transprejudice in women. Table 6 presents the multiple regression results for CSE subscales on transprejudice.

Discussion

Our first hypothesis that heterosexual men would endorse more transprejudice than heterosexual women was supported in the current study. Several representative studies examining gender differences in transprejudice (e.g., Antoszewski et al., 2007; Gerhardtstein & Anderson, 2010; Martin, 1990; Winter, 2006; Winter et al., 2008) were discussed in the introduction section, and all of these studies found that heterosexual men reported more transprejudice than heterosexual women. Research on prejudice towards gay men and lesbian women has also found that heterosexual men reported more negative attitudes toward gay men and lesbian women, compared to heterosexual women (e.g., Glotfelter & Anderson, 2012; Herek, 1988, 2000; Nagoshi et al., 2008).

Falomir-Pichastor and Mugny (2009) indicated that heterosexual men struggle more than heterosexual women to differentiate their group from homosexuals and maintain their positive distinctiveness, which may result in heterosexual men's higher levels of sexual prejudice than heterosexual women. This may also help explain heterosexual men's higher levels of transprejudice than heterosexual women. Winter et al. (2008) also indicated that heterosexual men may invest more in maintaining traditional gender norms and gender roles, compared to heterosexual women. Men may feel more threatened by those who do not conform to the traditional gender norms, such as gay men, lesbian women, transwomen, and transmen. Thus men may try to do everything possible to eliminate the threat, which may result in men's more negative attitudes and behaviors toward the gender

non-conforming groups than women. In addition, China is a country with more than a 5000-year traditional culture, in which Confucianism, Taoism, and Buddhism are always prevalent (Winter et al., 2008). All of these ideologies and religions emphasize traditional gender roles and traditional moral norms (Winter et al., 2008). For thousands of years, Confucianism has been considered as an orthodox philosophy that advocates male dominance, male superiority, a preference for sons, and devotion to families (Winter et al., 2008; Xie, 1994). Xie (1994) mentioned that the ideas that “men are superior to women” and “among three cases of unfilial piety, having no son would be the worst” (p. 14) are central to Confucianism. Both of these ideas have had great influence on the formation of Chinese social norms and family norms. In traditional Chinese culture, men have higher social and family status than women. Therefore, it is possible that compared to women, men are more afraid of losing social power and struggle more to maintain their status, which may result in men’s more negative attitudes toward those who challenge the traditional social and family norms and roles.

In addition, Nagoshi et al. (2008) found that for both men and women, sexual prejudice and transprejudice were strongly associated with their endorsing such traditional social values: right-wing authoritarianism (i.e., a belief that people should obey authority and traditional social norms and that the aggressive actions of authority are legitimate), religious fundamentalism (i.e., complying with the fundamental belief system of religion, having a special relationship with God, and strongly objecting to the forces of evil), and hostile sexism (i.e., holding negative attitudes toward women). They also found that rape myth acceptance (i.e., endorsing supportive attitudes toward sexual coercion and

aggression) and benevolent sexism (i.e., holding positive attitudes toward women who conform to the conventional gender roles), which reflect beliefs in traditional gender roles, were more closely associated with women's sexual prejudice and transprejudice, compared with men. Aggression proneness (i.e., disposition towards physical and verbal aggression, anger, and hostility) was related to men's but not women's sexual prejudice and transprejudice. Therefore, men's endorsing traditional social views (i.e., right-wing authoritarianism, religious fundamentalism, and hostile sexism) and aggression proneness may help explain heterosexual men's high levels of transprejudice in our study. The support of traditional social views and conservative gender roles may help explain heterosexual women's transprejudice in our study.

It was also hypothesized that both heterosexual men and heterosexual women would report higher levels of prejudice against transwomen than transmen. This hypothesis was supported for heterosexual women and partially supported for heterosexual men. Women reported significantly more violence towards, teasing of, and discomfort with transwomen than transmen. Men also reported significantly more teasing of and discomfort with transwomen than transmen, but men's violence ratings did not discriminate significantly between transwomen and transmen. In addition, men's scores were significantly higher than women's on the item assessing teasing of transmen, and on the items assessing violence towards as well as discomfort with both transwomen and transmen. However, men's and women's scores did not differ significantly on the item measuring teasing of transwomen. Gerhardstein and Anderson (2010), Glotfelter and Anderson (2012), and Winter et al. (2008) also used the three pairs of items in the GTS to examine participants'

violence, teasing, and discomfort toward transwomen and transmen. Gerhardtstein and Anderson (2010) found that men reported more violence towards, teasing of, and discomfort with transwomen than transmen, whereas women did not discriminate between transwomen and transmen for the violence, teasing, and discomfort ratings. Glotfelter and Anderson (2012) found that men reported more violence towards, teasing of, and discomfort with transwomen than transmen; women reported more teasing of transwomen than transmen, more discomfort with transmen than transwomen, and similar levels of violence towards transwomen and transmen. Winter et al. (2008) found that men and women reported more violence, teasing, and discomfort toward transwomen than transmen. Moreover, previous research examining attitudes toward gay men versus lesbian women (e.g., Glotfelter & Anderson, 2012; Herek, 1988, 2000) also found that heterosexual men reported more negative attitudes toward gay men than lesbian women, whereas heterosexual women reported similar attitudes toward gay men and lesbian women.

Based on the above research findings, heterosexual men tend to report higher levels of prejudice against transwomen than transmen, and higher levels of prejudice against gay men than lesbian women. Heterosexual women's attitudes toward transwomen and transmen are more inconsistent and varied, compared with heterosexual men. However, heterosexual women tend to report similar attitudes toward gay men and lesbian women. Nagoshi et al. (2008) stated that hypermasculinity, which reflects a fear of being considered feminine and losing male social power, may activate heterosexual men's anxieties about their masculinity when they meet gender non-conforming people, especially gay men and transwomen. This may help explain heterosexual men's higher levels of prejudice against

gay men and transwomen, compared to lesbian women and transmen. Nagoshi et al. (2008) also indicated that sexual orientation is very important for men's gender identity but not for women's gender identity. Men's prejudices based on gender identity and on sexual orientation are driven by common ideologies, but this is not the case for women. Gender identity is separate and different from sexual orientation for women, and women's motivations for transprejudice are more complicated than for men. This would help to explain heterosexual women's inconsistent reports of prejudice against transwomen and transmen.

In the current study, women reported more violence towards, teasing of, and discomfort with transwomen than transmen; men also reported significantly more teasing of and discomfort with transwomen than transmen. Traditional Chinese culture advocates male dominance, male superiority, and a preference for sons (Winter et al., 2008; Xie, 1994). In such a culture, greater expectations are placed on men, and men bear more responsibilities in the society as well as in the family, compared to women. Furthermore, Winter et al. (2008) stated that Chinese people place a high value on families. Men have the responsibility to find a wife and raise a family, and women have the responsibility to find a husband and bear his children. Xie (1994) also mentioned that having no children is considered to be the worst case of unfilial piety in traditional Chinese culture. Transwomen and transmen cannot have their own biological children after the sex reassignment surgery, which challenges Chinese family values. Moreover, transwomen, compared to transmen, violate more social, cultural, and family norms. Therefore, Chinese men and women may endorse more negative attitudes toward transwomen than transmen.

In the current study, men's scores were significantly higher than women's on the items assessing violence towards both transwomen and transmen. Winter et al. (2008) and Glotfelter and Anderson (2012) also found that men reported more violence towards transpeople than women. Moreover, Nagoshi et al. (2008) found that physical aggression was only related to men's but not women's sexual prejudice and transprejudice. The reason men endorse more violence towards transpeople may be that men are more disposed toward violence in general (Strueber, Lueck, & Roth, 2006; U.S. Department of Justice, 2008). Strueber et al. (2006) mentioned that among the risk factors for violent behaviors, male gender is the most important one. They also mentioned that men tend to engage in direct, overt physical aggression, whereas women tend to engage in covert aggression. In this study, men's violence rating did not discriminate significantly between transwomen and transmen. This may also be due to men's greater disposition towards violence in general. In addition, heterosexual men may feel so threatened by gender variant people that they behave violently toward these people, regardless of the gender of the target, in order to maintain their male social power and superiority.

Furthermore, Chinese men reported more teasing of transwomen than transmen. However, there was a negative relationship between social desirability and teasing transwomen, but this relationship was only found for men. This study used self-report measures, so participants' responses may be biased in a socially desirable way, especially when the purpose of the research is apparent. Chinese men who had higher social desirability scores tended to show more socially sanctioned behaviors. Therefore, these

males may try to demonstrate less negative attitudes toward transwomen, even though they still have a prejudice against transwomen.

The third hypothesis was that heterosexual men who endorse higher levels of gender self-esteem would endorse more transprejudice, whereas heterosexual women's transprejudice would not be related to their gender self-esteem. This hypothesis was partially supported. For men and women, gender self-esteem was not a predictor of transprejudice, and gender self-esteem was not associated with their prejudice against transwomen and transmen. Moreover, none of the CSE subscales were significant predictors of transprejudice, for both men and women. The findings for heterosexual men were different from the findings of previous research examining the relationships between gender self-esteem and transprejudice or sexual prejudice (Falomir-Pichastor & Mugny, 2009; Glotfelter & Anderson, 2012). Falomir-Pichastor and Mugny (2009) found that heterosexual men's sexual prejudice increased as their gender self-esteem increased, but sexual prejudice was not related to heterosexual women's gender self-esteem. Glotfelter and Anderson (2012) found that gender self-esteem was correlated with heterosexual men's but not heterosexual women's transprejudice.

SIT proposes that when members of the valued ingroup perceive a relevant outgroup threat to the positive distinctiveness of the ingroup identity, they will deliberately attempt to maintain their positive distinctiveness. Sexual orientation is less important to heterosexual women than to heterosexual men (Nagoshi et al., 2008), so women are less likely to derive their gender self-esteem from their group membership as a heterosexual woman and differentiate their group from homosexuals, compared to heterosexual men.

Additionally, women have lower social status than men, and the female gender is often perceived as less valuable than the male gender; thus, women may feel less threatened by gender non-conforming groups, compared to men. These may help explain the consistent finding that there is no association between women's gender self-esteem and transprejudice.

However, the findings that heterosexual men's transprejudice was not related to their gender self-esteem cannot be explained by SIT. Becker et al. (2012) indicated that people in collectivistic societies may be more likely than people in individualistic societies to use their social positions, such as social status and kinship ties, as a way to distinguish themselves from others. Thus, it is possible that Chinese men and women are more likely to use social status and kinship ties than gender group identity to differentiate themselves from others. Another reason may be that Chinese students are not familiar with the term gender self-esteem, so they may have had difficulty understanding the items in the Collective Self-esteem Scale.

Strengths and Limitations

A number of strengths are evident in this study that should be highlighted. First, this study contributes to the awareness of factors that affect prejudice and violence toward transpeople which in turn can lead to more effective interventions to decrease transprejudice and violence. Second, most previous studies of transprejudice have been conducted on Western samples, whereas this study used college students from mainland China to examine transprejudice. This study also allowed us to determine if gender self-esteem, which may contribute to transprejudice in Western countries or individualistic

societies, was also a significant contributor to transprejudice in mainland China, or a collectivistic society. Third, previous research using Social Identity Theory to help understand prejudice has focused on homosexual people but not transpeople. This study used SIT as a framework to help explain the associations between gender self-esteem and transprejudice. Moreover, this study explored possible gender differences in transprejudice, and possible differences in prejudice towards transwomen and transmen, emphasizing the importance of considering the gender of both the participants and the transpeople in exploring transprejudice. In addition, the sample in this study consisted of Chinese college students who were studying in different regions of mainland China and in America, which increases the generalizability of the results obtained. Finally, this study included a measure of social desirability, which could reduce the likelihood for participants' responses to be biased by social desirability.

Several limitations of the current study should also be noted. The first limitation is the use of self-report measures. Self-report measures may not accurately examine how participants think or behave in a real-life setting, and participants' responses may be biased, especially when the purpose of the research is apparent. Second, all of the participants were college students from mainland China, so the age range was limited to 19-31 years. Also, the sample was predominately from China's main nationality, Han. Both the restricted age and nationality limit the generalizability of the results. Third, transprejudice may also exist among gay men, lesbian women, and bisexual people. Hence, another limitation is analyzing data from heterosexual only and heterosexual mostly participants. Additionally, only three pairs of items were used to examine attitudes toward transwomen versus

transwomen. Future research should use more valid and reliable measures to examine attitudes toward transwomen compared with attitudes toward transmen.

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Table 1

Zero-order Correlations between the Subscales of CSE

	Membership	Private	Public	Identity
Membership				
Private	.501***			
Public	.529***	.608***		
Identity	.424***	.616***	.477***	

Note. CSE = Collective Self-Esteem Scale.

*** $p < .001$.

Table 2

Univariate Results for Gender Differences in Transprejudice

<u>Measures</u>	Gender	
	<i>F</i>	<i>Partial η^2</i>
GTS	22.533***	.135
Gender-bashing	12.536***	.080
<u>Transphobia/Genderism</u>	<u>21.332***</u>	<u>.129</u>

Note. The degrees of freedom were 1 and 144.

*** $p \leq .001$.

Table 3

Univariate Results for Items on the GTS Comparing Attitudes toward Transwomen or Transmen and Gender Differences in Attitudes toward Transwomen and Transmen

	<u>Gender of Transperson</u>		<u>Gender of Participant</u>	
	<i>F</i>	<i>Partial η^2</i>	<i>F</i>	<i>Partial η^2</i>
Violence	6.784**	.045	9.826**	.063
Teasing	52.041***	.264	8.854**	.058
Discomfort	13.963***	.088	6.875**	.046

Note. GTS = Genderism and Transphobia Scale.

** $p \leq .01$. *** $p < .001$.

Table 4

Means and Standard Deviations (in parentheses) for Transprejudice and Attitudes towards Transwomen and Transmen by Gender of Participant

<u>Measures</u>	<u>Men</u>	<u>Women</u>
GTS	128.75 (21.94)	109.26 (27.10)
Gender-bashing	20.51 (6.10)	16.96 (6.06)
Transphobia/Genderism	108.24 (18.14)	92.30 (22.96)
<u>Violence</u>		
Transwomen	2.55 (1.24)	2.08 (1.23)
Transmen	2.33 (1.36)	1.76 (.89)
<u>Teasing</u>		
Transwomen	4.16 (1.55)	3.63 (1.71)
Transmen	2.66 (1.32)	2.08 (1.03)
<u>Discomfort</u>		
Transwomen	5.29 (1.42)	4.73 (1.57)
Transmen	4.00 (1.59)	3.37 (1.67)

Note. Higher scores indicate higher levels of transprejudice.

Table 5

Zero-order Correlations between Gender Self-Esteem and Transprejudice and Prejudice against Transwomen and Transmen for Men and Women

<u>Measures</u>	CSE	
	Men	Women
GTS	-.029	.055
Gender-bashing	-.151	-.028
Transphobia/Genderism	.016	.072
<u>Violence</u>		
Transwomen	-.166	-.010
Transmen	-.108	-.194
<u>Teasing</u>		
Transwomen	-.109	.105
Transmen	-.113	.024
<u>Discomfort</u>		
Transwomen	.159	.175
Transmen	-.156	.172

Note. GTS = Genderism and Transphobia Scale; CSE = Collective Self-Esteem Scale.

Table 6

Multiple Regression Results for CSE Subscales on Transprejudice

Predictors	GTS					
	Men			Women		
	<i>F</i>	<i>p</i>	<i>Partial η²</i>	<i>F</i>	<i>p</i>	<i>Partial η²</i>
Membership	.203	.654	.003	.011	.916	.000
Private	.146	.704	.002	.024	.877	.000
Public	.196	.660	.003	.164	.687	.002
Identity	.040	.842	.001	.000	.989	.000

Note. GTS = Genderism and Transphobia Scale; CSE = Collective Self-Esteem Scale.

Appendix A

Genderism and Transphobia Scale

Use the following scale to indicate how much you agree or disagree with the statements below. If you have not experienced a situation described in one or more of the statements please imagine how you would react and indicate your response.

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

1. _____ I have beat up men who act like sissies.
2. _____ I have behaved violently towards a woman because she was too masculine.
3. _____ If I found out that my best friend was changing their sex, I would freak out.
4. _____ God made two sexes and two sexes only.
5. _____ If a friend wanted to have his penis removed in order to become a woman, I would openly support him.*
6. _____ I have teased a man because of his feminine appearance or behavior.
7. _____ Men who cross-dress for sexual pleasure disgust me.
8. _____ Children should be encouraged to explore their masculinity and femininity.*
9. _____ If I saw a man on the street that I thought was really a woman I would ask him if he was a man or a woman.
10. _____ Men who act like women should be ashamed of themselves.
11. _____ Men who shave their legs are weird.
12. _____ I cannot understand why a woman would act masculine.
13. _____ I have teased a woman because of her masculine appearance or behavior.
14. _____ Children should play with toys appropriate to their own sex.
15. _____ Women who see themselves as men are abnormal.
16. _____ I would avoid talking to a woman if I knew she had a surgically created penis and testicles.

17. _____ A man who dresses as a woman is a pervert.
18. _____ If I found out that my lover was the other sex, I would get violent.
19. _____ Feminine boys should be cured of their problems.
20. _____ I have behaved violently towards a man because he was too feminine.
21. _____ Passive men are weak.
22. _____ If a man wearing makeup and a dress, who also spoke in a high voice, approached my child, I would use physical force to stop him.
23. _____ Individuals should be allowed to express their gender freely.*
24. _____ Sex change operations are morally wrong.
25. _____ Feminine men make me feel uncomfortable.
26. _____ I would go to a bar that was frequented by females who used to be males.*
27. _____ People are either men or women .
28. _____ My friends and I have often joked about men who dress like women
29. _____ Masculine women make me feel uncomfortable.
30. _____ It is morally wrong for a woman to present herself as a man in public.
31. _____ It is all right to make fun of people who cross-dress.
32. _____ If I encountered a male who wore high-heeled shoes, stockings, and makeup, I would consider beating him up.

* items are reverse scored

Appendix B

Collective Self-Esteem Scale

We are all members of different social groups or social categories, such as gender, race, ethnicity, and socioeconomic status. Please respond to the following statements on the basis of how you feel about your gender group (for example, women or men) and your membership in your gender group. Use the following scale to indicate how much you agree or disagree with the statements.

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

1. _____ I am a worthy member of my gender group.
2. _____ I feel I don't have much to offer to my gender group.*
3. _____ I am a cooperative participant in my gender group.
4. _____ I often feel I'm a useless member of my gender group.*
5. _____ I often regret that I belong to my gender group.*
6. _____ In general, I'm glad to be a member of my gender group.
7. _____ Overall, I often feel that the gender group of which I am a member is not worthwhile.*
8. _____ I feel good about my gender group.
9. _____ Overall, my gender group is considered good by others.
10. _____ Most people consider my gender group, on the average, to be more ineffective than other social groups.*
11. _____ In general, others respect the gender group that I am a member of.

12. ____ In general, others think that the gender group I am a member of is unworthy.*
13. ____ Overall, my gender group membership has very little to do with how I feel about myself.*
14. ____ The gender group I belong to is an important reflection of who I am.
15. ____ The gender group I belong to is unimportant to my sense of what kind of a person I am.*
16. ____ In general, belonging to my gender group is an important part of my self-image.

* items are reverse scored

Appendix C

The Social Desirability Scale-17

Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you respond *true*; if not, respond *false*.

- | | | |
|--|------|-------|
| 1. I sometimes litter.* | True | False |
| 2. I always admit my mistakes openly and face the potential negative consequences. | True | False |
| 3. In traffic I am always polite and considerate of others. | True | False |
| 4. I always accept others' opinions, even when they don't agree with my own. | True | False |
| 5. I take out my bad moods on others now and then.* | True | False |
| 6. There has been an occasion when I took advantage of someone else.* | True | False |
| 7. In conversation I always listen attentively and let others finish their sentences. | True | False |
| 8. I never hesitate to help someone in case of emergency. | True | False |
| 9. When I have made a promise, I keep it – no ifs, ands, or buts. | True | False |
| 10. I occasionally speak badly of others behind their back.* | True | False |
| 11. I would never live off other people. | True | False |
| 12. I always stay friendly and courteous with other people, even when I am stressed out. | True | False |
| 13. During an argument I always stay objective and matter-of-fact. | True | False |
| 14. There has been at least one occasion when I failed to return an item that I borrowed.* | True | False |
| 15. I always eat a healthy diet. | True | False |
| 16. Sometimes I only help because I expect something in return. * | True | False |

* items are reverse coded.

Appendix D

Demographic Questionnaire

Please answer the following questions.

Age: _____ Nationality: _____ Major: _____

Gender: _____

1. Male
2. Female
3. Other (please specify) _____

Do you identify as a transgender person?

1. Yes
2. No

Current Sexual Orientation: _____

1. Heterosexual Only
2. Heterosexual Mostly
3. Heterosexual More
4. Heterosexual/Homosexual Equally
5. Homosexual More
6. Homosexual Mostly
7. Homosexual Only
8. Other (please specify) _____

What country are you attending university in? _____

1. China
2. United States
3. Other (please indicate which country) _____

Year in School: _____

1. First-Year
2. Sophomore
3. Junior
4. Senior or Fifth Grade
5. Postgraduate

What is your total monthly household income? _____

1. More than 20000 RMB
2. 10000-20000
3. 5000-10000
4. 2000-5000
5. Less than 2000

Appendix E

Informed Consent

You are being asked to participate in a study on attitudes and behaviors toward sexual and gender minority groups. This research is being conducted by graduate student, Bing Chen, and Dr. Veanne Anderson of the Department of Psychology at Indiana State University. Your participation in this study is entirely voluntary. Please read the following information carefully before deciding whether or not to participate.

PARTICIPANT REQUIREMENTS

To participate in this study, you must be at least 18 years old.

PROCEDURE

If you volunteer to participate in this study, you will click on a link below that says “I agree” and you will be routed to an Indiana State University website where you will be asked to answer questions about your attitudes and behaviors toward sexual and gender minority groups. You will also be asked questions about your age, nationality, gender, sexual orientation, year in school, major, and household income. The survey will take approximately 20 minutes to complete. Your responses to the questionnaire will be kept in a secure database and we will not be collecting any identifying information. Only the researchers will have access to this database and it will be secured with a password.

PARTICIPANT RISKS AND BENEFITS

Risks of participation are minimal and not expected to be greater than what you encounter in everyday activities. You may experience some mild anxiety when completing some of the questions due to examining your own attitudes. By participating in this study you will benefit by learning about scientific psychological research and having a chance to evaluate some of your beliefs. In addition, the benefits to society include the contribution to our understanding of attitudes towards individuals.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary and you may choose to withdraw at any time without consequence. Your responses will not be entered into the database until the end of the survey, when you click “Submit.” If you decide to withdraw in the middle of the survey, you may do so. You may also refuse to answer any questions you do not want to answer.

RIGHTS OF RESEARCH PARTICIPANTS

This project has been reviewed and determined to be exempt, due to minimal risk to you as a participant, by the Institutional Review Board (IRB) of Indiana State University. The study has been determined to adequately safeguard the participant’s privacy welfare, civil liberties, and rights. If you have any questions about your rights as a research participant, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Institutional Review Board, Indiana State University, 114 Erickson Hall, Terre Haute, IN. U.S.A. 47809; by phone at (812) 237-8217; or by email at irb@indstate.edu.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about this research, please contact the project supervisor, Veanne Anderson, Department of Psychology, Indiana State University at (812) 237-2459, or by email at vanderson1@indstate.edu. You may also contact the primary researcher, Bing Chen, by email at bchen1@sycamores.indstate.edu.

Please print a copy of this form for your records and click “I agree” below to begin the study.

Appendix F

Written Debriefing

In this study we are interested in college students' perceptions of transgender people, such as people who cross-dress and transsexual people, and how those perceptions are influenced by gender self-esteem. Previous research indicates that gender self-esteem, or the importance of gender to a person's self-identity, is associated with attitudes towards gay men and lesbian women. We are interested in whether gender self-esteem is also related to attitudes toward transgender people.

Thank you for your participation in this study. If you have any questions or if you are interested in the results of the study please contact Veanne N. Anderson, Department of Psychology at 812-237-2459. You can also email her at vanderson1@indstate.edu.

Also, please do not discuss this study with your friends because they may be participating in it in the future.