THE ROLE OF PROTOTYPICALITY THREAT IN MEN’S EVALUATIONS OF TRANSGENDER WOMEN

By

Alexandria Jaurique

A Thesis Presented to

The Faculty of Humboldt State University

In Partial Fulfillment of the Requirements for the Degree

Master of Arts in Psychology: Academic Research

Committee Membership

Dr. Amber M. Gaffney, Committee Chair

Dr. Heather J. Smith, Committee Member

Dr. Christopher L. Aberson, Committee Member

Dr. Christopher L. Aberson, Graduate Coordinator

May 2019
Abstract

THE ROLE OF PROTOTYPICALITY THREAT IN MEN’S EVALUATIONS OF TRANSGENDER WOMEN

Alexandria Jaurique

All social groups have a prototype that provides a guideline of behaviors and attitudes that embody what it means to be a member of that group (Hohman et al., 2017). Men as a gender group are no exception to the use of a prototype as a basis for evaluating group members (Marques & Páez, 1994). When a man feels like a non-prototypical group member (i.e., peripheral) he is more likely to derogate deviant ingroup members compared to outgroup members. This is because peripheral group members are more likely to engage in behaviors aimed at achieving and maintaining a positive social value for this group (men) compared to the outgroup (women; Doosje & Ellemers, 1997). Research has found that cisgender men perceive transgender women to be effeminate gay men (Gazzola & Morrison, 2014). Therefore, men should perceive transgender woman as ingroup deviants. As a result, peripheral men should derogate transgender women more than transgender men and other cisgender men compared to prototypical men. The current study (N = 181) found that men made to feel peripheral who viewed a transgender woman target or a cisgender man target were more likely to negatively evaluate the target than men made to feel prototypical. There was no difference in evaluations of transgender man targets between peripheral and prototypical men. These results have important implications for men’s treatment of transgender women such as the negative effects of
stigmatization on transgender women and the potential for more severe outcomes for
transgender women in response to men’s threatened masculinity.
Table of Contents

Abstract .............................................................................................................................. ii
Table of Contents ............................................................................................................ iv
List of Tables .................................................................................................................. iv
List of Appendices ......................................................................................................... v
The Role of Prototypicality Threat in Men’s Evaluations of Transgender Women .......1
Literature Review ........................................................................................................... 3
  Social Identity ............................................................................................................... 3
  Prototypicality ............................................................................................................... 5
  Precarious Manhood ................................................................................................... 8
  Subjective Group Dynamics ....................................................................................... 12
  Gender Differences in Transgender Prejudice ............................................................. 14
  Perceptions of Transwomen ....................................................................................... 16
  Overview of the Current Research ........................................................................... 17
Hypotheses ..................................................................................................................... 18
  Hypothesis 1a .............................................................................................................. 18
  Hypothesis 1b .............................................................................................................. 18
  Hypothesis 1c .............................................................................................................. 18
  Hypothesis 2a .............................................................................................................. 18
  Hypothesis 2b .............................................................................................................. 19
  Hypothesis 2c .............................................................................................................. 19
Method ............................................................................................................................ 19
  Design .......................................................................................................................... 19
  Participants .................................................................................................................... 19
  Measures ....................................................................................................................... 20
  Procedure ...................................................................................................................... 21
Results ............................................................................................................................. 22
  Assumptions for Primary Hypotheses ..................................................................... 22
  Hypothesis 1 ................................................................................................................. 23
  Hypothesis 2 ................................................................................................................. 26
Discussion ....................................................................................................................... 26
List of Tables

Table 1. ........................................................................................................................................... 25
List of Appendices

Appendix A ........................................................................................................................................ 44
Appendix B ........................................................................................................................................ 45
Appendix C ........................................................................................................................................ 47
Appendix D ........................................................................................................................................ 50
The Role of Prototypicality Threat in Men’s Evaluations of Transgender Women

Violence against transgender people (transpeople) is a public health, social justice, and human rights issue (Lombardi, Wilchins, Priesing, & Malouf, 2001; Wirtz, Poteat, Malik, & Glass, 2018). There are a multitude of ways that transpeople experience disproportionate and systematic discrimination. For example, they are subject to housing discrimination (Grant et al., 2011; Herman, 2013), employment discrimination (Badgett, Lau, Sears, & Ho, 2007; Dietert & Dentice, 2009; Grant et al., 2011), discrimination in health care settings (Stotzer, Silverschanz, & Wilson, 2013), and discrimination in the criminal justice system (Stotzer, 2014). Twenty three percent of transpeople report catastrophic levels of discrimination (i.e., experiencing three or more major life-disrupting events due to bias and discrimination; Grant et al., 2011). Transwomen report the highest level of discrimination when compared to lesbian, gay, and bisexual people (Grant et al., 2011). Because of the myriad of troubling statistics regarding transpeople’s experiences it is first important to understand how a person’s gender identity shapes who they are.

Gender is a social identity that comes with its own set of rules and norms. Being a part of a group based on gender gives people information on how they “should” behave and think. Gender identity is a person’s perception of their own gender (Wilchins, 2002) while birth-assigned sex is the assignment of infants to binary categories (male or female) based on the appearance of external genitalia and/or chromosomes (Tate, Ledbetter, & Youssef, 2013). Transgender is a term that indicates when a person’s gender identity does not match the biological sex doctors assigned them at birth (Norton & Herek, 2013).
People who were assigned male at birth but identify as women are transgender women (transwomen). People who were assigned female at birth but identify as men are transgender men (transmen; American Psychological Association, 2012). Originating from the prefix “cis” meaning “on this side of,” cisgender is when a person’s gender identity matches their biological sex assigned at birth (American Psychological Association, 2015). Transgender people have often been targets of violence due to their perceived deviation from gender roles (or from gender prototypes).

Prejudice against transpeople (transprejudice) is a “societal discrimination and stigma of individuals who do not conform to traditional norms of sex and gender” (Sugano, Nemoto, & Operario, 2006, p. 217). Current evidence suggests that cisgender men hold more prejudices against transpeople, and in particular against transwomen, than they do toward cisgender women (Hill & Willoughby, 2005). Other research suggests the role of masculinity predicts prejudice toward gender non-conforming people (Bosson, Weaver, Caswell, & Burnaford, 2012), however, there is a dearth of research on the role of masculinity in prejudice against transgender people. The current work seeks to fill that void by assessing from a social identity approach (Tajfel & Turner, 1979), how threats to men’s masculine prototypicality will affect prejudice against transgender people. More specifically, using subjective group dynamics model (Abrams, Marques, Bown, & Henson, 2000), this research examines if men perceive transgender women as ingroup deviants, and as a result, derogate transgender women as a way to maintain a positive social identity. To better understand the lived experiences of transpeople and the
prejudice against them, researchers must understand how men’s sense of masculinity identity forms and the effects of threats to said identity.

**Literature Review**

**Social Identity**

Social identity and group membership may play key roles in understanding how and why men’s masculinity leads to prejudice and derogation of transpeople, specifically transwomen. A psychological group is “a collection of people that share the same social identification or define themselves in terms of the same social category membership” (e.g., men, Republicans; Turner, 1984, p. 530). Social identity research delineates three factors: cognitive, evaluative, and emotional (Tajfel, 1978). The cognitive factor incorporates the people’s knowledge that they belong to a specific social category. Self-categorization theory, which is derived from social identity theory, posits that people classify themselves into ingroups and outgroups (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). When individuals identify with their ingroup, they feel psychologically attached to being members of that group. Turner (1984) suggests that highly identified group members share emotions, beliefs, and attitudes with other group members and tend to behave uniformly because of their shared social identity. Social categories include internal and external criteria whereby people categorize themselves (internal) as members of social groups and other people categorize them into groups (external). Men’s identification with their gender (ingroup), which is the extent to which men believe that they are actually members of the group, is the internal component. The external
component refers to social categorization, which is a societally shared representation that classifies men as a cohesive group (Tajfel, 1978).

The evaluative aspect of social identity gives information about whether that social category is viewed positively or negatively, and in-turn, is related to satisfaction with their social identity. For instance, people who categorize themselves as men will feel satisfied with their social identity because of the positive social value of the group. Lastly, the emotional factor refers to the affective responses that result from the cognitive and evaluative factors. There are many affective responses that result from being in a group with a positive or negative social value. For example, when a person perceives their group as having positive social value their group membership becomes a positive aspect of their self-concept. People part of negative valued groups are more likely to have low self-esteem than those part of positively valued groups (Tajfel, 1978; Turner & Brown, 1978; Tajfel & Turner, 1986). However, members of devalued groups do not always have lower self-esteem. If group members perceive the negative social value to be unjust, they will begin to question the social structures that devalue their group (Tajfel, 1978; Tajfel & Turner, 1986; Turner & Brown, 1978).

According to Tajfel (1978), social interactions are on a continuum of interpersonal to intergroup. Interpersonal interactions are based on personal characteristics while intergroup situations are based on people’s group memberships (Tajfel, 1978; Tajfel & Turner, 1986). Identification with a group occurs when group memberships are salient. For example, men (the ingroup) can easily distinguish the boundaries of their group when women (the outgroup) become salient. This clear
understanding of group boundaries leads to group identification, in this case men would identify more with their group when women as a group are salient (Tajfel, 1978). The intergroup context determines the social value of the in-group and outgroup (Tajfel, 1978; Tajfel & Turner, 1986). When women are cognitively salient, men have an outgroup to which they compare themselves. This comparison allows men to determine their in-group’s social value. This highlights the comparative nature of the cognitive and evaluative aspects of social identity. When women are salient men who identify with their group will be likely to take on the attributes most closely associated with “men.”

**Prototypicality**

Prototypes are “a collection of attributes that define both what representative group members have in common and what distinguishes the ingroup from relevant outgroups” and are essential in understanding how men’s status within a group can affect their attitudes and behaviors (e.g., attitudes towards transwomen; Hohman et al., 2017, p. 125). Group prototypes describe and prescribe group members’ beliefs, opinions, and behaviors. Social norms are a part of the group prototype and therefore people look to group norms as a guide for their behavior (Terry & Hogg, 2001; Terry, Hogg, & White, 2000). Terry et al., (2000) argue that people construct group norms with the goal of establishing intergroup distinctiveness. The metacontrast principle outlines criteria for the categorization of people into a group. That is, the differences between the people of the potential group are smaller than the differences between other non-group people (Turner et al., 1987). For example, some men are closer to the prototype (e.g., masculine men) and some are further away from the prototype (e.g., gay men; Turner et al., 1987). Each
group has a prototype that allows for this comparison and leads to groups having prototypical and peripheral members.

Depersonalization is a process wherein a person identifies with a salient group and takes on the attributes of their group (Turner et al., 1987). Group members engage in behaviors and base their beliefs on the social norms associated with that group. This process creates a drive to decrease the differences within the group and increase the differences between the ingroup and the outgroup (Turner et al., 1987). For example, when women are salient, men will behave in a uniform way in an effort to differentiate their behavior from women (the outgroup; Tajfel, 1978; Turner et al., 1987). Hogg and Turner (1987) found that when a person’s gender group membership is salient, stereotypically gendered attributes become salient to their self-image. Researchers also found that under the same conditions, people are more likely to endorse traditional sex-roles (Abrams & Hogg, 1990).

When depersonalization happens, the group prototype is the basis of positive feelings about the self as a group member and positive judgements of other group members (Hogg, 2000). Strongly identified group members are more likely to engage in behaviors to protect the group identity and those low in group identification are more likely to protect individual identities (Doosje & Ellemers, 1997). Group members’ prototypicality can be threatened in a variety of ways including feedback from other people about one’s prototypicality and changes in the group identity and prototype (Turner et al., 1987). In order for the person to resolve the threat, they will increase support for the group identity, become more likely to conform to group norms, and
engage in the “policing” of other group members to ensure the maintenance of the group’s positive social value (Noel, Wann, & Branscombe, 1995). Therefore, when peripheral group members strongly identify with their group, they are more likely to derogate deviant ingroup members than outgroup members as a way to increase the positive value of their social group and show loyalty to the group and its norms (Schmitt & Branscombe, 2001). This is because deviant ingroup members are more of a threat to the positive distinctiveness of the group than outgroup members.

Research by Schmitt and Branscombe (2001) exemplifies this process whereby peripheral group members derogate deviant ingroup members (versus being more likely to derogate any outgroup member). In this experiment, the researchers first manipulated participants’ prototypicality within their gender group (i.e., made them feel either like a prototypical or a peripheral group member) and then manipulated whether participants read a vignette about either a masculine gay man (prototypical ingroup member) or effeminate gay man (deviant ingroup member). Participants were then asked to report their general liking of the person in the vignette. Results indicated that men made to feel like peripheral group members were more likely than men made to feel prototypical to derogate the effeminate gay man than the masculine gay man than men who feel prototypical (Schmitt & Branscombe, 2001). This shows that ingroup deviants are more likely to be derogated in an effort to reestablish men’s prototypicality than prototypical group members. Researchers from other psychological perspectives (i.e., the precarious manhood literature) have also studied this process (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). The two literatures use different foundational theories, but the
manipulations are similar, with masculinity threat conditions and control conditions of the precarious manhood literature being interchangeable with the peripheral conditions and prototypical conditions of the prototypicality literature, respectively.

**Precarious Manhood**

The precarious manhood line of research complements the prototypicality research by providing more evidence for the outcomes related to men feeling like peripheral group members. Manhood is a social status that men must earn through displays of continuous displays of public proof (e.g., physical aggression; Vandello et al., 2008). In some non-western cultures, the path to manhood does not ambiguously come about at some point during a boy’s maturation, instead the culture has very specific feats of bravery or pain tolerance that the boy must complete or endure to gain their manhood status (e.g., killing a lion, enduring circumcision without anesthesia; Saitoti, 1986; Spencer, 1965; Vandello et al., 2008). In western cultures, men can easily lose their social status (at least temporarily) and when men lose that status they are no longer prototypical members of that group.

According to the precarious manhood thesis, manhood consists of three tenets (Vandello & Bosson, 2013). First, men earn their manhood through engaging in social milestones (e.g., being able to financially support a family). Second, once earned, men can easily lose their manhood status. Third, maintaining the status of manhood requires public demonstrations that reaffirm one’s masculinity (Vandello & Bosson, 2013). In contrast, the rites of passage that girls must achieve to reach womanhood are biological and physical rather than social (Vandello et al., 2008). Vandello and his colleagues
(2008) asked university students to explain how one might lose their womanhood and manhood. They found that reasons for a loss of womanhood were more difficult for students to generate and were more closely related to physical factors (e.g., having a hysterectomy or mastectomy) rather than social factors. Contrarily, a loss of manhood status relates to social shortcomings such as an inability to provide for his family or how feminine his behaviors and attitudes are. Whereas a woman who engages in social or physical transgressions can damage her reputation, these transgressions are less likely to threaten her status as a woman in the same way that men lose their social status (Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009). Because of the ease at which men’s masculinity can be threatened, much of the literature has focused on the effects of this threat on men’s behaviors, attitudes, and emotions.

Researchers have used a variety of manipulations to experimentally test the effects of men losing their manhood status. To maintain their masculine status, men must avoid behaviors associated with women and femininity (e.g., caregiving; Bosson et al., 2009). One common manipulation of masculinity threat includes assigning men to either braid hair (threat condition) or braid ropes (control condition). Bosson et al. (2009) found that men who had their masculinity threatened were not only more likely to choose a physically aggressive punching task rather than a puzzle task but also found that threatened men’s punches were significantly harder than that of non-threatened men. This suggests that threatened men are more likely to engage in physical aggression than non-threatened men.
Another common manipulation of masculinity threat is having men answer a gender knowledge inventory that consists of stereotypical feminine (e.g., childcare, fashion) and masculine (e.g., sports, home repair) topics. After the test, the men receive false feedback that either places them in the 27th percentile (masculinity threat) or 83rd percentile (control condition) compared to other men (Bosson et al., 2012). Schmitt and Branscombe (2001) employed a similar gender threat manipulation though in the context of group member prototypicality. To make students feel that they are either prototypical men or peripheral men, researchers told them to respond to questions that would measure their level of gender prototypicality (Schmitt & Branscombe, 2001). The men then received false feedback that indicated that they were either low (peripheral condition) or high (prototypical condition) in masculinity (Schmitt & Branscombe, 2001). The feedback men received in the low masculinity condition (e.g., masculinity threat condition, peripheral condition) indicated that their gender identity (based on the gender knowledge inventory) was closer to the responses of women (27th percentile). This feedback tells them that they are further away from the prototype and closer to the relevant outgroup (women) and therefore threatens their masculinity and makes them feel like a peripheral group member. On the other hand, the high masculinity condition provides men with feedback indicating that their responses were closer to those of a prototypical man (83rd percentile).

There are two primary outcomes resulting from men’s threatened masculinity: negative attitudes toward groups associated with femininity (e.g., gay men) and public reaffirmation of masculinity. When threatened men are more likely to report negative
attitudes and affect toward groups that threaten their masculinity (e.g., gay men, Dahl, Vescio, & Weaver, 2015). Heterosexuality is a core part of men’s masculine sense of self (Glick, Gangl, Gibb, Klumpner, & Weinberg, 2007) and research shows that threatened men report more negative affect toward gay men and more homophobic attitudes than non-threatened men (Dahl et al., 2015; Willer, Rogalin, Conlon, & Wojnowicz, 2013). Men attempted to distance themselves from effeminate gay man (compared to masculine gay men) more when their masculinity was threatened than when it was not threatened (Dahl et al., 2015). These outcomes coincide with the goal of maintaining heterosexuality and distancing themselves from femininity.

Threatened men also engage in public reaffirmation of their masculinity in an attempt to regain their social status. Threatened men are not only more likely to choose physically aggressive tasks but during those tasks, they also demonstrate more aggressive behavior than non-threatened men (Bosson et al., 2009). Threatened men were more likely to sexually harass women co-workers (i.e., sending pornographic material) than non-threatened men (Maass, Cadinu, Guarnieri, & Grasselli, 2003). Interestingly, they found that there was an increase in post-test gender identification for those men that sexually harassed co-workers following a gender threat (Maass et al., 2003). This arguably supports both the precarious manhood thesis and the prototypicality threat approach in that after a threat to masculinity (prototypicality threat) men engage in masculinity affirming behaviors as a way to regain their manhood (their status as a prototypical group member).
Subjective Group Dynamics

Subjective group dynamics (Marques, Abrams, Páez, & Hogg, 2001; Marques & Páez, 1994; Marques, Páez, & Abrams, 1998) is based on aspects of social identity theory and self-categorization theory. As social identity theory posits, people strive for a positive social identity. Subjective group dynamics theorizes that people can only attain a positive social identity if their subjective representation of the group’s norms help them achieve positive distinctiveness (Marques & Páez, 1994). Thus, for a man to achieve a positive social identity, his representation of the norms associated with men (the ingroup) have to coincide with what he perceives will help men achieve positive distinctiveness relative to a relevant outgroup (women).

Having a deviant ingroup member threatens the positive value placed on the salient social identity. Therefore, group members derogate deviant ingroup members (Marques et al., 2001; Marques & Páez, 1994). As previously discussed, group members depersonalize and take on the group’s prototype and this is one way for them to positively differentiate the ingroup from the outgroup. However, in some circumstances a prominent ingroup member will embody characteristics that go against the goal of positively differentiating the ingroup from the outgroup. For example, people categorize gay men as men but because they deviate from the prototype (heterosexuality) their categorization as a man hinders positive differentiation between men and women (the outgroup) and threatens the goal of achieving and maintaining a positive social identity (Glick et al., 2007; Marques et al., 2001). Group members will derogate other group members that threaten positive social identity (Marques & Páez, 1994). However,
peripheral group members are more likely than prototypical group members to engage in behaviors to protect the group identity and maintain a positive social identity. Therefore, peripheral group members are more likely to derogate ingroup deviants (Glick et al., 2007).

Research shows that men report general negative affect toward gay men because of gay men’s deviation from the group prototype in two ways: sexual orientation (homosexuality) and personality (degree of effeminacy). While sexual orientation would remain constant for self-reported gay men, personality and external presentation varies (Glick et al., 2007). Glick and colleagues (2007) found that men who feel peripheral are more likely to derogate effeminate gay men compared to masculine gay men. This distinction is important because of the close relationship between perceptions of effeminate gay men and perceptions of transwomen.

Gazzola and Morrison (2014) found that cisgender people perceive transwoman to be gay men. This means that while transwoman self-identify as women, others are categorizing them as men. Cisgender people often endorsed the belief that transwomen were gay men who were “dressing in women’s clothes” - in other words, cisgender people perceive transwomen as effeminate gay men (Gazzola & Morrison, 2014). Given the evidence regarding peripheral group members’ derogation of effeminate gay men, it follows that we will observe a similar process with respect to transwoman targets. Cisgender men who feel like peripheral group members will be more likely to derogate transwomen compared to prototypical men. This is because their peripheral status makes
them more likely to derogate perceived deviant ingroup members (transwomen) to maintain a positive and distinct social identity.

Another potential reason for the perception of transwomen as deviant ingroup members is the negative connotations associated with being a woman. Research shows that cisgender men perceive transwomen to be men (specifically gay men) therefore cisgender men would consider transwomen to be “men” that want to become women. The perception that transwomen have decided to identify with a group that has a lower social status than the sex they were assigned at birth could be a reason that cisgender men see them as deviant. Regardless of whether cisgender men perceive transwomen as deviant because they consider them to be transitioning to a lower status group (but, in essence, still perceiving them as men) or because they perceive them to be gay men, the process and the result remains the same. In both situations, cisgender men continue to perceive transwomen as men that have deviated from the norms of the group and therefore men should consider transwomen to be deviant ingroup members. The categorization of transwomen as deviant ingroup members will likely lead to peripheral cisgender men being more likely to derogate transwomen than transmen because they are more likely to police the boundaries of the group than prototypical group members. This process has more support because of the reported gender differences in transprejudice and perceptions of transwomen.

**Gender Differences in Transgender Prejudice**

Cisgender men are more prejudiced against transpeople than cisgender women. National probability samples show gendered differences both in the United States and in
Sweden (Landén & Innala, 2000; Norton & Herek, 2013). However, results from a probability sample in Hong Kong found no significant difference between men and women indicating that cultural context might play a role in attitudes toward transpeople (King, Winter, & Webster, 2009).

Convenience samples support the findings that men report more transprejudice than women. Researchers in the United Kingdom found that men were more against granting transpeople rights (e.g., ability to get a new birth certificate with the appropriate gender indicator) than women (Tee & Hegarty, 2006). A sample that included participants from China, Malaysia, Singapore, Thailand, Philippines, United Kingdom, and United States found that men were more prejudiced toward transwomen across each of the countries (Winter et al., 2009).

In North America, male undergraduates from the United States and Canada reported more prejudice toward transpeople than female undergraduates (Hill & Willoughby, 2005; Nagoshi et al., 2008). A sample of Canadian parents provided similar findings (Hill & Willoughby, 2005). These findings corroborate results from national probability samples and provide considerable evidence that cisgender men have higher rates of prejudice toward transpeople than cisgender women. This clear gender difference in prejudice is the reason that the current work focuses solely on how threats to men’s masculinity effects transpeople. While men report more prejudice toward transpeople in general, research shows that men’s reactions differ when the target is a transwoman rather than a transman.
Perceptions of Transwomen

Overall transphobia is higher in cisgender men than women, yet cisgender men also perceive transwomen as threats in a different way than they perceive transmen (Norton & Herek, 2013). There are three aspects of masculinity that associate the perceived gender deviation of transwomen with threats to masculinity: hypermasculinity, feelings of threatened heterosexuality, and renouncement of femininity.

Nagoshi and colleagues (2008) define hypermasculinity as physical aggression and aggression proneness. While this definition is limiting, it is consistent with the literature on hypermasculinity and corresponds to the outcomes recorded in the precarious manhood literature (Bosson et al., 2009). Bosson et al. (2009) found that men resolve the feelings of loss of social power associated with threatened masculinity by engaging in displays of physical aggression (in other words hypermasculinity). When researchers controlled for authoritarianism and religious fundamentalism, hypermasculinity predicted transprejudice in men but not in women. There is a positive relationship between hypermasculinity and anti-gay prejudice. Moreover, there is a positive relationship between anti-gay prejudice and transprejudice (Nagoshi et al., 2008).

A similar reason for transprejudice is the possibility of transwomen threatening heterosexual men’s masculinity (Nagoshi et al., 2008; Winter et al., 2009). Cisgender people often perceive transpeople as the gender assigned to them at birth; in this case, people perceive transwomen as men (Gazzola & Morrison, 2014). Not only are transwomen perceived as men, but more specifically people perceive them as gay men. A
convenience sample of Canadian undergraduates reported that a common stereotype associated with transpeople is that they are gay (Gazzola & Morrison, 2014). Interestingly, cisgender people were more likely to report that they believe transwomen were gay men (28%) than they were to report the belief that transmen were gay women (19%; Gazzola & Morrison, 2014). These findings provide some evidence that people perceive transwomen as gay men. The perception that transwomen are gay men threatens heterosexual men’s sexual orientation (Nagoshi et al., 2008; Winter et al., 2009). Because heterosexuality is a core facet of masculinity, men should consider a threat to their heterosexuality as a threat to men’s masculine prototype (Glick et al., 2007; Pascoe, 2011). In turn, research shows that masculinity threat relates to negative affect and prejudice toward the relevant outgroup (Glick et al., 2007; Bosson et al., 2009).

The final aspect of masculinity is the requirement of men to distance themselves from actions, feelings, things, or people that are feminine or gender non-conforming (Bosson, Prewitt-Freilino, & Taylor, 2005; Pascoe, 2011). Because of the perception that transwomen are men, if transwomen display conventionally feminine behaviors then men will consider them a threat to their masculinity. Therefore, cisgender men would be likely to distance themselves from transwomen to maintain the positive social identity of their group and reaffirm their masculinity.

**Overview of the Current Research**

The current study assesses the role of prototypicality threat in the evaluations of ingroup deviants. Specifically, this study seeks to clarify the process behind men’s negative evaluations of transwomen. When men feel that they are peripheral (i.e, non-
prototypical) group members, they are more likely to engage in behaviors that will maintain the positive social value of the group than prototypical men (Noel et al., 1995). One such way is to derogate ingroup deviants because they are especially threatening to the positive social value of the group compared to outgroup members (Marques & Páez, 1994). In the case of transwomen, cisgender people often perceive them as gay men (Gazzola & Morrison, 2014). Therefore, I hypothesize that men who feel peripheral in their masculine identity will be more likely to derogate a transwomen than will prototypical men. On the other hand, peripheral and prototypical men will not differ in their evaluations of transmen targets and cisgender men targets.

**Hypotheses**

**Hypothesis 1a.** Those made to feel peripheral will be more likely to negatively evaluate the target than those made to feel prototypical.

**Hypothesis 1b.** Those who view the transwoman target will more negatively evaluate the target than those that view the transman or cisman target.

**Hypothesis 1c.** There will be an interaction between prototypicality and target gender on target evaluations. In the transwoman target condition, those who feel peripheral will more negatively evaluate the target than those who feel prototypical. In the transman and cisman conditions, there will not be a difference in evaluations of the target between peripheral and prototypical participants.

**Hypothesis 2a.** Those made to feel peripheral will report more negative attitudes toward transpeople than those made to feel peripheral.
**Hypothesis 2b.** Those who view the transwoman target will report more negative attitudes toward transpeople than those that view the transman target or cisman target.

**Hypothesis 2c.** There will be an interaction between prototypicality and target gender on attitudes toward transpeople. In the transwoman target condition, those who feel peripheral will report more negative attitudes toward transpeople. In the transman and cisman target conditions, there will not be a difference in the reported attitudes toward transpeople.

**Method**

**Design**

The current experiment is a 2 x 3 between-groups experimental design. The independent variables are prototypicality (prototypical group member vs. peripheral group member) and target gender identity (transgender woman vs. transgender man vs. cisgender man).

**Participants**

The full sample included 281 participants from Amazon’s Mechanical Turk. Each participant received $0.45. Of the 281 participants that started the survey, 225 consented to the use of their data. Participants were removed if they did not indicate that they identify as heterosexual or as a cisgender man. I removed participants if they spent less five minute or more than one hour to complete the survey. It is not possible for them to have read everything in under five minutes and if the participant spent more than one hour it is likely that the prime was no longer salient.
Finally, after participants finished the prototypicality manipulation in which they receive false feedback about the Gender Knowledge Inventory they completed two attention checks. The first attention check asked “did you score closer to the feminine or masculine gender identity?” For the peripheral condition, the correct answer is feminine and for the prototypical condition the correct answer is masculine. I removed participants if they did not answer correctly. The second attention check asked the participants to indicate what percent of the masculine and feminine questions they got correct. For the peripheral condition they should have indicated 27% masculine and 83% feminine. For the prototypical condition they should have indicated 83% masculine and 27% feminine. If they accurately remembered that the lower percent was between 20-29 and the upper percent was between 80-89, then I included them in the analyses. After removing participants that did not meet the criteria explained above, the final sample was 181.

**Demographics.** Every participant included in the sample identified as heterosexual and as a cisgender man. In addition, the sample was 75.1% White, 45.3% middle class, 42.5% received a bachelor’s degree, and 35.4% Democrats, 30.5% Independents, and 26.5% Republican. The average age of the participants was 40 with a range of 18-71.

**Measures**

**Target evaluations.** Participants evaluated one target, either a transwoman, transman, or cisgender man. For the target, participants were presented with a Facebook “About You” section to read and then will be asked to rate 12 traits of the target on a 1 (strongly disagree) to 9 (strongly agree) Likert-type scale. It was a reliable scale (α =
The traits included eight positive traits (friendly, kind, helpful, honest, intelligent, good, warm, and considerate), four negative traits (cold, bad, self-centered, and selfish), and one item assessing global liking (“Overall, I like this person”; Eidelman & Biernat, 2003). See Appendix A.

**Attitudes toward transgender people.** Participants reported their attitudes toward transgender people using a 20-item scale (Walch, Ngamake, Francisco, Stitt, & Shingler, 2012). Example items include “I avoid transgender individuals whenever possible” and “I would feel comfortable working closely with a transgender individual.” Participants respond on a 1 (strongly disagree) to 7 (strongly agree) Likert scale. It was a reliable scale ($\alpha = .96$). See Appendix B.

**Demographics.** Participants reported their race/ethnicity, socioeconomic status, education level, and age. See Appendix E.

**Procedure**

Participants accessed the study using Amazon’s Mechanical Turk. The link directed participants to the survey on Qualtrics and they first completed the informed consent. If they chose to continue, they reported their gender to ensure that only cisgender men complete the survey. The participants received instructions indicating that they would complete a bundle of three surveys, the first one is about how men’s memory of gender relevant information is related to gender identity. In this section participants responded to a gender identification scale (See Appendix C), then completed the gender knowledge inventory (See Appendix D) and once completed they received their “scores” (false feedback). If they were in the peripheral condition, their results indicated that the
questions related to masculine identity were 27% correct and questions related to feminine identity were 83% correct. Whereas, the results for the prototypical condition indicated that questions related to masculine identity were 83% correct and questions related to feminine identity were 27% correct. After they received their feedback, as an attention check they answered whether they scored closer to feminine or masculine gender identity. As an additional attention check, participants answered what percent correct they received for the feminine/masculine questions.

Participants then went on to the second “study” in which the cover story was about how people present themselves on social media. Each participant was randomly assigned to see one Facebook “About You” section. For each one, the target was either a transwoman, transman, or cisgender man. After viewing the Facebook page, they completed a target evaluation (See Appendix A). The third “study” was about measuring individual differences on a variety of attitudes. Participants then completed the Attitudes toward Transgender People Scale (See Appendix B). Finally, they viewed the debriefing form and received instructions on how to collect their compensation through Amazon Mechanical Turk.

**Results**

**Assumptions for Primary Hypotheses**

**Target evaluation.** I examined normality visually using a histogram and QQ-plot and statistically using a 99% CI around the skew and kurtosis statistics. The confidence interval around the skew statistic is 99% CI [-0.17, 0.56] and around the kurtosis statistic is 99% CI [-0.81, 0.31]. All indicated that the target evaluation variable is normally
MEN’S EVALUATIONS OF TRANSGENDER WOMEN

distributed. I tested homogeneity of variance by examining the sample size ratio and variance ratio. The largest to smallest sample size ratio (36:23) has a 1.5:1 ratio which is under the maximum 2:1 for sample size. The largest to smallest variance ratio (1.01:0.45) has a 2.24:1 ratio which is under the maximum for variance. This shows that the target evaluation dependent variable meets all the assumptions to test Hypothesis 1 with no transformations.

**Attitudes toward transpeople.** The 99% CI interval around the skew statistic is [0.08, 0.66] and the confidence interval around the kurtosis statistic is [-0.87, 0.45]. To visually examine the normality, I used a histogram and a QQ-plot. The visual and statistical assessments indicated an issue with normality. To correct for this, I used the square root transformation on the variable. The confidence interval around the skew statistic for the transformed variable is 99% CI [-0.23, 0.32] and around the kurtosis statistic is 99% CI [-1.03, -0.31]. While the kurtosis of the transformed variable is still problematic, the normality of the transformed variable is better than the original variable, the log transformation, or the inverse transformation. I assessed the homogeneity of variance using the transformed variable. The sample size ratio is 1.5:1 (36:23) which is under the maximum 2:1 ratio. The variance ratio 2.3:1 (0.16:0.07) is under the maximum 4:1. I used the square root transformed variable for Hypothesis 2.

**Hypothesis 1**

I conducted a two-way analysis of variance to assess the effect of prototypicality and target gender on evaluations of the target. There was partial support for hypothesis one. Results indicate there is a main effect for prototypicality, $F(1, 175) = 6.19, p = .014,$
\( \eta^2 = .03 \). Those who feel peripheral \((M = 4.9, SD = 0.73)\) evaluate the target more negatively than those that feel prototypical \((M = 5.22, SD = 0.89)\). This finding supports hypothesis 1a. There is no main effect for target gender, \(F(2, 175) = 0.67, p = .511, \eta^2 = .007\). There is no difference in evaluations of the target depending on whether the participant viewed a transwoman target \((M = 5.08, SD = 0.85)\), a transman target \((M = 4.98, SD = 0.82)\) or a cisgender man target \((M = 5.15, SD = 0.81)\). This finding does not support hypothesis 1b. These results are qualified by an interaction between prototypicality and target gender, \(F(2, 175) = 3.32, p = .038, \eta^2 = .036\).

A simple effects test clarifies the interaction to show that when viewing the transwoman target, those who feel peripheral more negatively evaluate the target than prototypical participants, \(F(1, 113.5) = 6.39, p = .012, \eta^2 = .032\). For participants who viewed the transman target, those in the peripheral condition did not significantly differ from those in the prototypical condition in their evaluations of the target, \(F(1, 113.5) = 0.44, p = .506, \eta^2 = .002\). When viewing the cisgender man target, those who feel peripheral more negatively evaluate the target than those that feel prototypical \(F(1, 113.5) = 5.99, p = .015, \eta^2 = .034\). See Table 1 for the cell means and standard deviations. These results provide partial support for hypothesis 1c. Overall, men who felt peripheral more negatively evaluated the target than men who felt prototypical, but only when the target was a transwoman or a cisgender man. However, peripheral men and prototypical men had no difference in evaluations when the target was a transman.
Table 1.

*Means and standard deviations for cells*

<table>
<thead>
<tr>
<th></th>
<th>Peripheral</th>
<th></th>
<th>Prototypical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Transwoman</td>
<td>4.86</td>
<td>0.67</td>
<td>5.41</td>
<td>1.01</td>
</tr>
<tr>
<td>Transman</td>
<td>5.05</td>
<td>0.79</td>
<td>4.92</td>
<td>0.84</td>
</tr>
<tr>
<td>Cisman</td>
<td>4.89</td>
<td>0.74</td>
<td>5.39</td>
<td>0.81</td>
</tr>
</tbody>
</table>
Hypothesis 2

I conducted a two-way analysis of variance to analyze the effect of prototypicality and target gender on attitudes toward transpeople. There was no support for hypothesis two. Results indicated that there was no main effect for prototypicality $F(1, 175) = 0.002, p = .966, \eta^2 = .00$. There are no differences between those who feel peripheral ($M = 3.17, SD = 1.33$) and those who feel prototypical ($M = 3.18, SD = 1.49$) in their attitudes toward transpeople. There was also no main effect for target gender $F(2, 175) = 0.432, p = .650, \eta^2 = .004$ where there were no differences in attitudes toward transpeople between participants who viewed the transwoman target ($M = 3.25, SD = 1.28$), the transman target ($M = 3.04, SD = 1.32$), and the cisgender man target ($M = 3.23, SD = 1.41$). There was no interaction between prototypicality and target gender, $F(2, 175) = 0.829, p = .438, \eta^2 = .009$. Overall, men who felt peripheral reported no difference in their attitudes toward transpeople compared to men who felt prototypical, regardless of whether they viewed a transwoman, transman, or cisgender man target.

Discussion

Based on previous literature, I expected that men who were made to feel peripheral (i.e., less masculine than other men in their gender identity group therefore placing them in the margins of their gender group) would be more likely to negatively evaluate transwomen than would men who felt prototypical (i.e., having the “proper level” of masculine traits, making them representative of their gender). However, I did not expect peripheral and prototypical men to differ in their evaluations of transmen or differ in their evaluations of cisgender men. I intended for the cisgender man portrayed in
the current study to be a neutral descriptor (not a deviant group member) and therefore negatively evaluating him should not increase for peripheral group members compared to prototypical group members. As for transmen, research shows that cisgender people often perceive transpeople as their sex assigned at birth (female sex assigned at birth in the case of transmen; Gazzola & Morrison, 2014). Therefore, cisgender men should perceive transmen as outgroup members. Peripheral men should thus not negatively evaluate them more than prototypical men (Abrams et al., 2000). The data partially supports this hypothesis.

Peripheral men, indeed, more negatively evaluated transwomen than did prototypical men. Although, unexpectedly, peripheral men were also more likely to negatively evaluate other cisgender men than were prototypical men. A few methodological limitations could have led to this finding. First, the sample size was not ideal. For adequate (.80) power the sample should be 200 men; however, we fell short of this number, reaching only 181 participants. It is plausible that with an adequate number of participants, this finding might change. Second, participants could have perceived information in the cisgender man target description charged that I deemed neutral or innocuous, leading peripheral men to also negatively evaluate the target. The goal was for the Facebook “About You” sections to be as identical as possible while maintaining believability. To ensure that believability, instead of including a sentence about their gender transition similar to the transwoman and transman target description, the cisgender man’s final sentence was about his employment. This could be the aspect of the description that was not as neutral as intended.
In addition to methodological limitations, peripheral men could have perceived the cisgender man target as a threat. According to the precarious manhood literature, men with threatened masculinity are more likely to engage in behaviors to rectify their perceived lost status (Vandello et al., 2008). One such behavior might be the negative evaluation of any other men as a way to elevate themselves. Particularly, in this case where the status of the target was not explicitly clear. I did not use language in the target description that clearly indicated the status of the cisgender man target within the larger gender group therefore leaving that up to the interpretation of the participant. Future studies should be explicit about the target’s status to ensure it is constant across participants. Including a measure of perceived prototypicality of the target would also allow for future researchers to more fully understand the process that could explain this result. While results regarding cisgender man targets did not follow the hypothesized outcome, the findings regarding transwomen were consistent with the literature.

Theoretically, the finding that peripheral men are more likely to negatively evaluate transwomen follows the pattern of expected results. Research shows that cisgender men perceive transwomen as men (Gazzola & Morrison, 2014), however, cisgender men are likely to consider transwomen to be deviant ingroup members because of their perceived gender deviation (Norton & Herek, 2013; Schmitt & Branscombe, 2001). The current study found the same pattern of results for transwomen and cisgender men wherein peripheral men more negatively evaluate them than prototypical men. Whereas there was no difference in evaluations between peripheral and prototypical men when the target was a transman. The similar findings for transwomen and cisgender men
provides evidence that men perceive transwomen in a similar way to their perceptions of ingroup members (the cisgender male target). The lack of difference in evaluations of transmen between peripheral and prototypical men might indicate that cisgender men perceive transmen as outgroup members and therefore men who feel peripheral in their gender group are not able to rectify their status by derogating transmen. The subjective group dynamics literature supports the finding that when a person feels peripheral in their group, they are more likely to derogate ingroup deviant (compared to outgroup members) than prototypical group members (Abrams et al., 2000). Below, I outline the far-reaching implications of this finding, all of which impact the well-being of transwomen.

First, the negative effects of stigmatization are prevalent in the literature surrounding experiences of transpeople (Brewster, Velez, DeBlaere, & Moradi, 2012; Grant et al., 2011; McLemore, 2018; McLemore, 2015). One such act that can induce feelings of stigmatization is misclassification of the transperson’s identity (i.e., misgendering; McLemore, 2015). Generally, identity misclassification occurs when others do not accurately recognize a person’s social identity (Bosson et al., 2005; Prewitt-Freilino & Bosson, 2008). Specifically, misgendering a transperson can manifest in ways such as incorrect pronoun use (intentionally or unintentionally; McLemore, 2018). McLemore (2015), found that the misgendering of a transperson relates to increased feelings of stigma, perceptions of discrimination, and psychological distress in transgender people. Men’s perceptions of transwomen as ingroup deviants (i.e., gender deviant men) is not only incorrect but can be deeply harmful to transwomen’s life experiences and psychological well-being.
Second, derogating transwomen allows threatened men to police the boundaries of their group to regain their status. While this would theoretically happen for any perceived ingroup deviant this is particularly concerning for transwomen due to the heightened level of transphobia and violence against them that occurs (Wirtz et al., 2018). Transwomen not only experience the most discrimination and harassment compared to other members of the LGBT community, but they also are disproportionately the victims of murder compared to other transgender and gender-non-conforming people (Grant et al., 2011; Transrespect versus Transphobia, 2019). While negative target evaluations seem relatively harmless, the precarious manhood literature has also outlined concerning negative outcomes in response to threatened masculinity such as sexual harassment and physical aggression (Bosson et al., 2009; Maass et al., 2003). The current study only measured target evaluations, but future studies should examine peripheral men’s willingness to engage in more directly harmful actions against transwomen as a way to maintain the positive social value of their group and to regain their standing within the group.

While the results found that peripheral men more negatively evaluated transwomen targets than did prototypical men, this finding in conjunction with the same result for a cisgender man targets, indicates a need for future studies to clarify the psychological process at play. While the results of the current study show that men who feel peripheral derogate transwomen and cisgender men more than men who feel prototypical, these results do not provide an empirical explanation as to why this is the case. There are potentially two ways to examine this, 1) assessing the target in the
vignette’s closeness with men as a group or 2) measuring how similar participants feel transwomen as a group are to men as a group.

The Inclusion of Other in Self (IOS; Aron, Aron, & Smollan, 1992) could be one solution to elucidating this process. Researchers could include the IOS with one circle representing “Men” and the other as representing the name of the target (i.e., Jack). Another option would be to have one circle as “Self” and the other as the name of the target. Both would provide information about how the participants who are cisgender heterosexual men perceive the closeness of the target and men. Researchers would then be able to determine if men perceive the transwomen target to be closer to men than transmen. Measuring this would allow researchers to examine the mediating role of men’s perceptions of that specific target’s group membership.

Another potential way to examine the underlying process is to pre-test measure (before the manipulations) men’s perceptions of transwomen and transmen’s group membership. This allows researchers to see if men perceive transwomen (as a group) to be similar to men (as a group) and also examine this for transmen. This gets at men’s perceptions of transwomen as an entire group rather than using the target evaluated in the study as a proxy for the entire group. It would allow for an understanding of whether the cisgender men in the study perceive transwomen as men, and therefore ingroup deviants. Research supports that cisgender men do, in fact, perceive transwomen as men (Gazzola & Morrison, 2014). And by the subjective group dynamics literature that provides evidence for peripheral group members derogating ingroup deviants more than outgroup members (Abrams et al., 2000). This variable would then be a participant variable that
allows for a different understanding of the process behind men’s perceptions of
transwomen than using the IOS.

The IOS allows for a clearer causal path because the completion of the IOS would
be after the viewing and evaluation of the target and therefore clearly usable as a
mediating variable. On the other hand, evaluating men’s preconceived perceptions of
transwomen and transmen’s group membership might provide a fuller explanation of the
process by which peripheral men derogate transwomen more than prototypical men. Both
avenues provide valuable information, should be pursued, and would be supported by the
literature.

Future studies should also consider group identification. Much of the literature
argues that group identification is a crucial aspect of this process (Doosje & Ellemers,
1997). As a moderator, men who identify strongly with their gender and who are made to
feel peripheral will be more likely to derogate transwomen (compared to transmen and
cisgender men) than men who are made to feel prototypical (Schmitt & Branscombe,
2001). This process would not occur if the participant does not identify strongly with his
gender. Group identification could be measured as a participant variable and included as
how much cisgender genuinely identify with their gender or could be manipulated and
included as a third independent variable.

In addition to examining target evaluations, the current study examined how
prototypicality and target gender interact to affect attitudes toward transpeople.
Following the same pattern as the previous hypothesis, I expected men who feel
peripheral to report more negative attitudes when viewing a transwoman target compared
to a transman or cisgender man target and for this difference to be nonexistent when the participant felt prototypical. Research provides evidence that peripheral men report more negative attitudes toward non-masculine groups or groups related to femininity (Dahl et al., 2015). Cisgender men perceive transwomen as gay men and/or gender deviant men, which are groups that people consider related to femininity (Gazzola & Morrison, 2014). Therefore, it follows that peripheral men should report more negative attitudes toward transpeople than when viewing a transwoman target, but the current study did not support this hypothesis. In addition to the methodological limitations outlined for the previous hypothesis, there might be other explanations as to why there was not a significant interaction for attitudes toward transpeople, including social desirability, believability, and a genuine lack of effect.

One explanation for the non-significant result is social desirability. Participants could be concealing their true attitudes because of an understanding that prejudicial attitudes are not acceptable to outwardly display. This could encourage peripheral group members to choose more positive responses and therefore negate any significant differences in attitudes toward transpeople between peripheral and prototypical men. Another potential issue is the believability of the study. It might appear suspicious to participants who viewed a transgender target and then receive a scale measuring attitudes toward transpeople and this suspicion could have affected their responses. Future studies should attempt to increase the believability of the study by adapting the cover story.

While statistical power, social desirability, and/or believability could all be factors that are impeding the ability to detect a significant effect, the more convincing answer is
that there is simply no effect to detect. Research has shown that peripheral men report more negative attitudes toward feminine-associated groups than prototypical men, but researchers have only found that effect for groups such as gay men (Dahl et al., 2015). I hypothesized that the same pattern would hold for transwomen because of evidence supporting the notion that men perceive transwomen as gay men (Gazzola & Morrison, 2014). While cisgender men often perceive transwomen to be gay men there are other prejudices such as transphobia that might be affecting the hypothesized relationship.

Although the current study has limitations, it is an important starting point for understanding how threatened masculinity plays a role in negative outcomes surrounding transwomen. The partial support for the first hypothesis provides an interesting first step in understanding how men who feel peripheral evaluate and perceive transgender targets. It was unexpected to find the same result for transwomen and cisgender men targets; however, this finding allows researchers the future opportunity to parse out the true process that is happening. While the second hypothesis was not supported, it helped clarify that the same process is not happening for gay men and transwomen as targets and provides incentive for future studies to examine a more nuanced understanding of men’s attitudes toward transpeople. It is important to continue to examine this process to understand more fully why threatened men derogate transwomen and begin to work toward mitigating the negative effects on transwomen.
References


Appendices

Appendix A

Target Evaluations

(Eidelman & Biernat 2003)

1. I think this person is friendly.
2. I think this person is kind.
3. I think this person is helpful.
4. I think this person is honest.
5. I think this person is intelligent.
6. I think this person is good.
7. I think this person is warm.
8. I think this person is considerate.
9. I think this person is cold.
10. I think this person is bad.
11. I think this person is self-centered.
12. I think this person is selfish.
13. Overall, I like this person.
Appendix B

Attitudes toward Transgender Individuals Scale (Walch et al., 2012)

1. It would be beneficial to society to recognize transgender individuals as normal
2. Transgender individuals should not be allowed to work with children
3. Transgender individuals are immoral
4. All transgender bars should be closed down
5. Transgender individuals are a viable part of our society
6. Transgender individuals are a sin
7. Transgender individuals endangers the institution of the family
8. Transgender individuals should be accepted completely into our society
9. Transgender individuals should be barred from the teaching profession
10. There should be no restrictions on transgender individuals
11. I avoid transgender individuals whenever possible
12. I would feel comfortable working closely with a transgender individual
13. I would enjoy attending social functions at which transgender individuals were present
14. I would feel comfortable if I learned that my neighbor was a transgender individual
15. Transgender individuals should not be allowed to cross dress in public
16. I would like to have friends who are transgender individuals
17. I would feel comfortable if I learned that my best friend was a transgender individual
18. I would feel uncomfortable if a close family member became romantically involved with a transgender individual

19. Transgender individuals are really just closeted gays

20. Romantic partners of transgender individuals should seek psychological treatment
Appendix C

Gender Knowledge Inventory

(Bosson, Vandello, Burnaford, Wasti, & Weaver, 2008)

1. NBA star Steve Nash is from:
   1- South Africa  2- Canada

2. Cesare Catini sells a product that you wear on your:
   1- Face  2- Feet

3. A dime is what kind of play in football?
   1- Defensive  2- Offensive

4. Botox temporarily erases wrinkles by:
   1- Skin Hydration  2- Muscle Paralysis

5. The name of the Carolina NHL team is:
   1- Thrashers  2- Hurricanes

6. The company first to develop hair coloring was:
   1- Clairol  2- L'Oreal

7. What team did Bob Gibson pitch for as a Cy Young winner in 1970?
   1- Cardinals  2- Yankees

8. The cocktail known as the Fluffy Pink Slipper contains:
   1- Cranberry Juice  2- Coconut Milk

9. Which action is legal in Pride Fighting but illegal in the Ultimate Fighting Championship?
   1- Kicking an opponent on the ground  2- Elbow striking

10. Children typically start to teethe when they are over or under 1 year old?
    1- Over  2- Under

11. A motorcycle engine turning at 8000 rpms generates an exhaust sound at:
    1- 4000 rpms  2- 8000 rpms

12. Toilet training should start around the age of:
    1- 36 months  2- 12 months

13. To help an engine produce more power you should:
1. Inject the fuel  
2. Reduce displacement

14. Children should not be given which medication?
   1. Ibuprofen  
   2. Aspirin

15. What do you call the small gap left between bricks at the bottom of a cavity wall to let water drain out?
   1. Straight channel  
   2. Weephole

16. How many cups of water does it take to cook 1 cup of rice?
   1. 2 cups  
   2. 3 cups

17. Karate originated as a martial art in:
   1. Japan  
   2. China

18. Leftovers that contain dairy can be safely kept at room temperature for up to:
   1. 4 hours  
   2. 2 hours

19. The first people to use primitive flamethrowers in battle were:
   1. Greeks  
   2. Turks

20. If you don’t have baking powder, you substitute baking soda plus:
   1. Salt  
   2. Cream of Tarter

21. Polyvinyl chloride is often used in the home for what?
   1. Cleansing agent  
   2. Siding material

22. A roux is best described as a:
   1. Sauce  
   2. Cake

23. If you need to replace the tank ball in a toilet, ask for a:
   1. Flapper  
   2. Ball cock

24. Compared to men, women need more:
   1. Iron  
   2. Zinc

25. The paste used for soldering joints is called:
   1. Gel  
   2. Flux

26. During pregnancy, morning sickness usually occurs in which trimester?
   1. Second  
   2. First

27. When choosing insulation, the R-value should be:
1- High  2- Low

28. What was the first website devoted to women?
   1- Glamnet.com   2- Ivillage.com

29. Hugh Hefner first published Playboy magazine in:
   1- 1963   2- 1953

30. Who has written the most romance novels?
    1- Betty Hale Hyatt   2- Dame Barbara Cartland

31. What is Jean Claude Van Damme's name in "Bloodsport"?
    1- Frank Dux   2- Louis Burke

32. Which magazine was founded first?
    1- Vogue   2- Cosmopolitan
Appendix D

Demographics

1. What is your gender identity?
   a. Woman
   b. Man
   c. Transgender woman
   d. Transgender man
   e. Non-binary
   f. Other: please specify

2. Choose which race/ethnicity that best describes you.
   a. White
   b. Black or African American
   c. American Indian or Alaska Native
   d. Asian
   e. Native Hawaiian or Pacific Islander
   f. Hispanic/Latino
   g. Biracial
   h. Other: please specify

3. Which of the following best describes your sexual orientation?
   a. Heterosexual (straight)
   b. Homosexual (gay)
   c. Bisexual
   d. Other: please specify
   e. Prefer not to say

4. What is your age?