

Elucidating Prejudice Toward Gender Non-Conformity

by

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## ABSTRACT

Prejudice and discrimination toward gender non-conforming individuals is prevalent and extreme in today's society (GLSEN, 2015). This prejudice can manifest in social exclusion, bullying, and victimization, or physical and sexual assault, and can result in negative social, psychological, academic, and physical health outcomes (e.g., depression, anxiety, suicidality; GLSEN, 2016; NCTE, 2016). Thus, it is important to understand the perpetrators of gender expression-based aggression and discrimination. In two studies, I addressed how and why people experience prejudice toward gender non-conforming individuals. Using an affordance management theoretical framework, Study 1 identified threats young adults perceived from gender non-conforming peers. There were differences in perceived threats to personal freedoms, social coordination, and values for gender conforming and non-conforming peers, and these perceptions differed by the political ideology of the perceiver. Study 2 explored children's threat perceptions associated with gender non-conformity. Children perceived threats to social coordination from gender non-conforming peers but not threats to moral values. Results from both studies supported the use of this theoretical framework for studying prejudice toward gender non-conformity. Together, these studies provide unique information about adults' and children's reasons for prejudice toward gender non-conforming peers.

## DEDICATION

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## TABLE OF CONTENTS

|  | Page |
|--|------|
| LIST OF TABLES .....                                     | vi   |
| LIST OF FIGURES .....                                    | vii  |
| CHAPTER  |      |
| 1 GENERAL INTRODUCTION .....                             | 1    |
| 2 STUDY 1 .....  | 6    |
| Introduction .....                                       | 6    |
| Method .....   | 17   |
| Results .....  | 20   |
| Discussion .....   | 34   |
| 3 STUDY 2 .....  | 43   |
| Introduction .....                                       | 43   |
| Method .....   | 50   |
| Results .....  | 53   |
| Discussion .....   | 60   |
| 4 GENERAL DISCUSSION .....                               | 68   |
| REFERENCES .....   | 72   |
| APPENDIX   |      |
| A MEASURES AND VIGNETTES PRESENTED TO ADULT              |      |
| PARTICIPANTS .....                                       | 123  |
| B MEASURES AND VIGNETTES PRESENTED TO CHILD PARTICIPANTS | 129  |
| C ITEMS INCLUDED ON EACH SCALE IN FINAL ANALYSES .....   | 135  |

## LIST OF TABLES

| Table  | Page |
|--|------|
| 1. Social Threats and Adaptive Emotional and Behavioral Responses.....                                   | 91   |
| 2. Hypothesized Threats and Emotional and Behavioral Responses Applied to Gender<br>Non-Conformity ..... | 92   |
| 3. Means and Standard Deviations of Men’s Ratings of Targets .....                                       | 93   |
| 4. Means and Standard Deviations of Women’s Ratings of Targets.....                                      | 94   |
| 5. Means and Standard Deviations of Non-Binary Participants’ Ratings of Targets ..                       | 95   |
| 6. Correlations Among Study Variables for Men and Women .....  | 96   |
| 7. Correlations Among Study Variables for Non-Binary Participants .....                                  | 98   |
| 8. Means and Standard Deviations of Target Ratings.....  | 100  |
| 9. Correlations Among Study Variables.....   | 101  |

## LIST OF FIGURES

| Figure  | Page |
|---|------|
| 1. Hypothesized Prediction of Behavioral Response to Gender Non-Conforming Peers .....  | 102  |
| 2. Participants' Mean Ratings of Liberal Values Stereotype by Target Gender and Target Conformity .....                           | 103  |
| 3. Participants' Mean Ratings of Social Non-Conformity Stereotype by Perceiver Gender, Target Gender, and Target Conformity ..... | 104  |
| 4. Men's Mean Ratings of Anti-Sociality Stereotype by Political Group and Target Conformity .....                                 | 105  |
| 5. Conservative Participants' Mean Ratings of Personal Freedoms Threat by Target Gender and Target Conformity .....               | 106  |
| 6. Participants' Mean Ratings of Personal Freedoms Threat by Perceiver Gender, Target Gender, and Target Conformity .....         | 107  |
| 7. Participants' Mean Ratings of Social Coordination Threat by Perceiver Gender and Target Conformity .....                       | 108  |
| 8. Participants' Mean Ratings of Values Threat by Political Group, Target Gender, and Target Conformity .....                     | 109  |
| 9. Non-Binary Participants' Mean Ratings of Anger by Target Gender and Target Conformity .....                                    | 110  |
| 10. Non-Binary Participants' Mean Ratings of Disgust by Target Gender and Target Conformity .....                                 | 111  |

| Figure  | Page |
|---|------|
| 11. Women’s and Non-Binary Participants’ Mean Ratings of Trust by Target Gender and Target Conformity .....                                 | 112  |
| 12. Non-Binary Participants’ Mean Ratings of Exclusion by Target Gender and Target Conformity .....   | 113  |
| 13. Estimated Model of Stereotypes, Threat Perceptions, Emotional Responses, and Behavioral Responses to Gender Non-Conforming Targets..... | 114  |
| 14. Mean Ratings of Weird Stereotype by Perceiver Gender and Target Conformity .....  | 115  |
| 15. Mean Ratings of Gay Stereotype by Target Gender and Target Conformity   | 116  |
| 16. Boys’ Mean Ratings of Social Coordination Threat by Target Gender and Target Conformity .....   | 117  |
| 17. Girls’ Mean Ratings of Discomfort by Target Gender and Target Conformity .....  | 118  |
| 18. Estimated Model of Stereotypes, Threat Perceptions, Emotional Responses, and Behavioral Responses to Gender Non-Conforming Targets..... | 119  |



## CHAPTER 1

### GENERAL INTRODUCTION

As many as 30% of children, adolescents, and adults in the U.S. are gender non-conforming (GNC), meaning that their gender expression (i.e., appearance, behavior, interests) does not align with traditional gender norms (Egan & Perry, 2001; GLSEN, 2015; NCTE, 2016; Martin, Andrews, England, Zosuls, & Ruble, 2016; Sandberg, Meyer-Bahlburg, Ehrhardt, & Yager, 1993). Many of these GNC individuals (around 60%, depending on the measure; GLSEN, 2015) experience a myriad of social sanctions because of their gender non-conformity, from peers (Horn, 2007), parents (Kane, 2006), and broader society (GLSEN, 2015). The specific types of poor treatment ranges from lack of social acceptance to teasing, bullying, victimization, and social exclusion, to physical and sexual assault (GLSEN, 2015; Greytak, Kosciw, Villenas, & Giga, 2016; Heinze & Horn, 2014; Horn, 2007; Kosciw, Greytak, & Diaz, 2009). This negative treatment can put GNC individuals at risk for poor academic, psychological, and physical health outcomes (Collier, van Beusekom, Bos, & Sandfort, 2013; GLSEN, 2015; Kosciw, Palmer, Kull, & Greytak, 2013; NCTE, 2016; Russell, Ryan, Toomey, Diaz, & Sanchez, 2011; Valentine & Shipherd, 2018; Ybarra, Mitchell, Kosciw, & Korchmaros, 2015). Thus, intervention is needed to improve the social environment and the well-being of GNC individuals. In two studies, I seek to elucidate the reasons for individuals' maltreatment of GNC peers.

#### **Peer Socialization of Gender**

From an early age and throughout life, individuals are aware of gender norms (i.e., what is socially appropriate for men and women or boys and girls to display) in

appearance, behaviors, and traits (Liben & Bigler, 2002; Martin & Halverson, 1981; Martin & Ruble, 2010) and are aware that these rules should be followed (Egan & Perry, 2001). Many people are uncomfortable with violation of these gender norms – displayed via verbal enforcement of gender norms (Xiao et al., 2019), homophobic name-calling toward gender non-conforming peers (Birkett & Espelage, 2015; Collier et al., 2013), or physical assault (Tomsen & Mason, 2001).

Although many social systems influence the well-being of GNC individuals (Bronfenbrenner & Morris, 2006), peers are especially important socializers in general (Harris, 1995) and for gender socialization (Ewing Lee & Troop-Gordon, 2011; Martin & Fabes, 2001; Martin & Kornienko, 2013); thus, peers are quite influential for GNC individuals' adjustment outcomes (Egan & Perry, 2001; Poteat, 2007; Smith & Leaper, 2005; Yunger, Carver, & Perry, 2004). For example, if GNC youth's gender identity or expression is accepted and affirmed, their adjustment outcomes mirror those of their gender conforming peers (Fast & Olson; Smith & Leaper, 2005). It is only when GNC individuals are in non-accepting or dangerous social environments that they experience such poor outcomes. Thus, to address the needs of GNC individuals and reduce the prejudice and discrimination they experience, it is important to understand the characteristics of the peer context – and by extension the characteristics of the peers – that contribute to more positive or negative social environments for GNC individuals.

### **Peer Prejudice Toward Gender Non-Conformity**

Much of the existing research on prejudice toward gender non-conformity (i.e., why individuals dislike gender non-conforming others) examines the targets of this victimization, their experiences, and the adjustment difficulties they face as a result

(Chmielewski, Belmonte, Fine, & Stoudt, 2016; Collier et al., 2013; Ghavami et al., 2016; GLSEN, 2015). Fewer studies are focused on the individuals victimizing GNC peers – the individuals having the prejudice. When attitudes and behaviors toward gender non-conforming others is assessed, it is often in conjunction with sexual orientation (Gordon & Meyer, 2007; Horn & Nucci, 2003; Lehavot & Lambert, 2007; Nagoshi, Adams, Terrell, Hill, Brzuzy, & Nagoshi, 2008; Simon, 1998). Thus, little research has examined the specific reasons for prejudice toward gender non-conformity in itself.

Individual characteristics such as religiosity (Collier, Bos, Merry, & Sandfort, 2013; Lindner, 2016) or social dominance orientation (Makwana, Dhont, De keersmaecker, Akhlaaghi-Ghaffarokh, Masure, & Roets, 2017; Mata, Ghavami, & Wittig, 2009), or intergroup contact (Collier et al., 2012) have been shown to relate to acceptance of gender non-conformity. However, such often combine gender expression and sexual orientation (Gordon & Meyer, 2007; Heinze & Horn, 2014). Although sexuality-related prejudice is likely related to individuals' attitudes toward and treatment of GNC peers, sexuality and gender expression are distinct constructs and should be studied separately to fully understand the beliefs and attitudes associated with gender non-conformity (Horn, 2007). The perceived reasons for gender non-conformity and sexuality may be different, so the reasons for their dislike may be different. Thus, I plan to examine prejudice toward gender non-conformity specifically, in an attempt to isolate reasons individuals treat GNC peers poorly – separately from attitudes toward their sexual orientation.

### **Children's Prejudice Toward Gender Non-Conformity**

Another limitation of the existing research on gender expression-related prejudice is that it has mostly been conducted with adults (Lehavot & Lambert, 2007; Parrott, 2009). Some research has explored gender expression-based harassment in adolescence (Horn, 2003), but this has again largely been connected with prejudice toward sexual minority peers (Heinze & Horn, 2014). Still less research has explored reasons for the relation between children's gender non-conformity and peer victimization. Children who do not conform to gender norms tend to be less liked, less popular, more socially excluded, and more victimized than gender conforming children (Craig, Peplar, Connolly, & Henderson, 2001; Killen & Rutland, 2011). This is especially true for gender non-conforming boys and youth of color (Ghavami et al., 2016; McCready, 2004; Peplau, Garnets, Spalding, Conley, & Venigas, 1998). Because of the influence of the peer environment for GNC children's well-being, causes of their maltreatment are important to examine.

A complication for studying this prejudice in children is that children are often not aware of stereotypical associations between gender non-conformity and sexual orientation (Craig et al., 2001; Mallet, Apostolidis, & Paty, 1997). Thus, other reasons for their attitudes toward GNC peers must be identified. Reasons for this negative peer treatment have been recently posited, such as that insecurity or questioning of one's own gender identity motivates victimization of GNC peers (Pauletti, Cooper, & Perry, 2014), but not enough research on this phenomenon has been conducted to draw strong conclusions. Other research has been conducted with children to evaluate their reasoning for social exclusion or prejudice toward peers based on social identities (Killen & Rutland, 2011), but this research has been focused on gender categories (i.e., boys and

girls) or conformity of gender groups (Mulvey & Killen, 2014) rather than gender expression of individual group members. Thus, we must explore other potential reasons for children's prejudice toward gender non-conformity.

### **The Present Studies**

Both lines of research (i.e., motivations for prejudice toward gender non-conformity in adults and in children) would likely benefit from a theoretical grounding that outlines reasons for experiencing such prejudice. I propose that affordance management theory (Neuberg, Kenrick, & Schaller, 2010; Schaller & Neuberg, 2012) could help illuminate the reasons for children's prejudice toward gender non-conformity and help distinguish adults' prejudice toward GNC peers from their prejudice toward sexual minorities. In short, this theory posits that there are specific reasons for the emotional and behavioral responses individuals experience toward others. It is possible that this framework will provide insight into the reasons behind individuals' emotional and behavioral responses toward GNC peers.

In two studies, I plan to explore whether this theoretical approach can identify reasons for adults' and children's prejudice toward gender non-conformity. In addition, because of many developmental differences between childhood and adulthood, I propose conducting one study with adults and one study with children, to identify the similarities and differences in the components of the affordance management process (i.e., stereotypes, prejudices, and behavioral responses) for children's and adults' prejudice toward gender non-conformity.

## CHAPTER 2

### STUDY 1

Prejudice and discrimination toward gender non-conforming individuals is prevalent and extreme in today's society (GLSEN, 2015). This prejudice can manifest in many ways from social exclusion, bullying, and victimization to physical and sexual assault, which can have profound effects for the gender non-conforming individuals who are the targets of this aggression, such as negative social, psychological, academic, and physical health outcomes (e.g., depression, anxiety, suicidality; GLSEN, 2016; NCTE, 2016). Because of the prevalence of aggressive and discriminatory acts toward this population and its negative impact on gender non-conforming individuals, it is important to understand the perpetrators of gender expression-based aggression and discrimination. Thus, this study addresses how and why people experience prejudice toward gender non-conforming individuals.

Although prejudice toward gender non-conformity is prevalent and harmful, there are still many gaps in the research. For example, many studies measure prejudice or discrimination toward sexual minorities or transgender individuals rather than non-conformity in gender expression or identity among cisgender individuals. Few studies examine gender expression specifically (Horn, 2007), and even fewer examine the perpetrator of gender expression-based bullying (Pauletti et al., 2014). In addition, there is little research examining the reasons for prejudice toward gender non-conformity. I attempt to bridge these gaps by focusing primarily on the perceiver (i.e., the person encountering a gender non-conforming individual) and their prejudices specifically toward gender non-conformity. Thus, I aim to identify the reasons for perceivers' dislike

of gender non-conforming individuals.

The purpose of the present study is to better understand stereotypes and prejudices toward gender non-conforming individuals. Specifically, I aim to identify the threats perceived to be posed by gender non-conforming individuals that relate to perceivers' reactions, attitudes, and behaviors toward them. In addition, I plan to establish the utility of the affordance management framework of stereotyping and prejudice for understanding prejudice toward gender non-conformity; this would allow researchers to apply research using that framework to inform interventions for aggression and discrimination toward gender non-conforming individuals.

### **Theoretical Framework**

To identify the specific prejudices people experience toward gender non-conforming individuals, I draw from evolutionary social psychological literature – specifically an affordance management framework (Neuberg et al., 2010; Schaller & Neuberg, 2012). One benefit of this theoretical approach for understanding prejudice toward gender non-conformity is that it allows us to predict behavioral outcomes like aggression from specific perceptions of and emotional responses to gender non-conforming individuals. This theoretical framework has been applied to other types of prejudices like those toward racial groups, obese individuals, or fundamentalist Christians (Cottrell & Neuberg, 2005), but it has not yet been applied to prejudice toward gender non-conformity. The present study seeks to establish this as a useful framework for understanding this type of prejudice. If we can establish that this theory is useful in understanding this form of prejudice, we can extend explorations into other research using this theory to ameliorate prejudicial responses toward target groups.

A general tenet of the affordance management framework is that humans have evolved cognitive mechanisms for detecting cues in their environment (including the social environment), identifying their most likely affordance (i.e., a threat or opportunity), and acting appropriately to manage those affordances (Cottrell & Neuberg, 2005; Cottrell & Park, 2013; Neuberg & Cottrell, 2006; Neuberg, Kenrick, & Schaller, 2010; Sng, Williams, & Neuberg, 2017). Specifically, if an individual encounters a threat in their environment (e.g., bear, fire, disease), they can take action to avoid or remove that threat. Potential threats posed by the social environment can be categorized into certain domains that elicit specific discrete emotional responses (known as *prejudices* in this approach; Cottrell & Neuberg, 2005). For example, if an individual encounters someone with an infectious disease, that represents a disease threat to the individual, which triggers a disgust emotional response. This relates directly to a specific behavioral response that allows the individual to appropriately manage the threat; that individual could avoid the person with the disease or attack them to remove the threat.

Because sociality (e.g., forming and maintaining helpful social relationships) is important to humans' survival, the effective functioning of one's social groups is an important underlying goal (Baumeister & Leary, 1995; Brewer & Caporael, 2006; Caporael, 1997; Sng et al., 2017). This means that individuals are attuned to threats and opportunities that would aid or hinder our achievement of that goal. Because of the dangers that come from social living and interdependence on other humans, we are not only attuned to cues for physically manifest threats (like physical safety threats, disease threats) but we also notice things that affect socially manifest threats (Ackerman, Huang, & Bargh, 2012; Brown, Neel, & Sherman, 2015; Cottrell & Neuberg, 2005; Sng et al.,



2017). These include things that affect the effective transmission of resources (like food, childcare, information; including trust and reciprocity – looking out for imposters or social loafers who would be a drain on group resources; Cosmides, 1989; Price, Cosmides, & Tooby, 2002). For an individual to survive, they need security of their physical health and safety, economic and material resources, and personal freedoms; but also desire to share trust, values, and social coordination with other group members (Cottrell & Neuberg, 2005).

In addition, we not only seek cues for threats or opportunities to ourselves as individuals, but also to threats or opportunities for our own social groups (e.g., family, tribe, village). These groups akin to the in-groups and out-groups as would be discussed by social identity theory (Tajfel & Turner, 1979). Generally, perceivers consider more positive social characteristics to be associated with in-group members and are skeptical of out-group members (and this skepticism, or uncertainty of their trustworthiness, is a threat – a risk not worth taking; Nesse, 2005; Neuberg, Kenrick, & Schaller, 2010; Schaller & Neuberg, 2012). Thus, indicators of group membership (in-group or out-group) are also important to notice, and group boundaries are important to enforce (if out-group members are able to infiltrate the in-group, it is possible that out-group threats will appear and affect the social coordination of the in-group). To summarize, when wanting to promote social coordination and in-group functioning, perceivers tend to be attuned to target characteristics (i.e., cues) that indicate group membership and that indicate likelihood to aid or hinder social coordination.

### **Identifying Affordances**

To identify affordance-relevant target characteristics and interpret them as

indicating a threat or opportunity, a perceiver proceeds through a social cognitive process from encountering the target through behaving toward that person (Crick & Dodge, 1994; Sng et al., 2017). We observe the target and make informal hypotheses about whether the target most likely poses a threat or opportunity to us and then feel and act toward them in a way consistent with the type of threat or opportunity we perceive them to pose.

One way to do this is by identifying the target's social groups. One of the most efficient ways to form affordance assessments about a target individual is to identify their social group membership. Given the limits on cognitive resources and the increased cognitive load associated with individuating (Fiske & Neuberg, 1990), thinking of a target as a group member is more cognitively efficient than thinking of them as an individual. This way, the perceiver can apply the wealth of existing knowledge they have about that particular social group to the target, without needing to invest the resources necessary to learn their characteristics specifically.

Because we cannot know someone's goals, intents, group membership, or affordances for sure, we guess based on the information we have. When encountering a new individual, a perceiver uses relevant cues to categorize the target into relevant social groups (Bigler & Liben, 2007; Crick & Dodge, 1994). The cues likely to be primarily attended to and encoded are cues that help identify important social groups. For example, because sex, age, and race are often particularly informative and socially relevant, cues signifying those categories are attended to and encoded first (Neuberg & Sng, 2013). These could include target characteristics like physical size, bone structure, secondary sex characteristics, and skin color. In the context of gender non-conformity, these cues are likely things like clothing, hair style, body movement, mannerisms, speech patterns,

and other behaviors that tend to be gender-typed and are often perceived to be associated with homosexuality (Blashill & Powlishta, 2009; Carrol & Gilroy, 2002; Frable, 1987; Freeman, Johnson, Ambady, & Rule, 2010; Johnson & Ghavami, 2011; Kite & Deaux, 1987; Madon, 1997; Rees-Turyn, Doyle, Holland, & Root, 2008; Toomey, Ryan, Diaz, Card, & Russell, 2013).

However, categorization into a social group is not necessary to manage an affordance posed by a target; instead, identifying social group membership is simply another piece of information helpful in predicting the likely implications of interacting with that individual (Schaller & Neuberg, 2012). We can just use the cues by themselves. For example, a target who appears large, strong, and angry could pose a threat to physical safety, regardless of their social identities. In the context of gender expression, non-conformity is threatening not only because it can be a cue to homosexuality, but also because it indicates a disregard for social norms (Anderson & Dunning, 2014; van Kleef, Wanders, Stamkou, & Homan, 2015). Thus, identifying a target loosely as a “non-conformer” can be enough to identify their affordance as a threat.

### **Specific Perceived Threats of Gender Non-Conformity**

From an evolutionary perspective, non-adherence to a group norm is a cue that an individual may not uphold the group’s values, may not be loyal to the group, and may be unpredictable (i.e., threats to trust relations; Brewer, 2007). Because of the salience and ubiquity of gender norms, violation of these norms may be perceived to be particularly threatening; an individual is likely presumed to be *choosing* to defy the group, indicating an unwillingness to cooperate (i.e., a threat to social coordination) and the deliberate promotion of values opposing their own (i.e., a values threat; Abrams & Rutland, 2008).

In addition, gender non-conformity threatens the security of boundaries between gender groups (Crozier, 2001; Sommers, 2000). If men have feminine characteristics and women have masculine characteristics, their utility for upholding and protect group values is less clear; thus, this blurring of gender group boundaries poses a risk.

In addition, because of other stereotypes associated with gender non-conformity, such as presumed sexuality or liberal political ideology, it is likely that people perceive gender non-conforming individuals to pose threats to their values (like religious, moral, or political beliefs) and personal freedoms (limiting their ability to live the way they want by imposing a value system on others; Anderson & Kanner, 2011; Makwana et al., 2017; Pinosof & Haselton, 2017). These threats, especially values threats, can also be perceived as a moral contagion (i.e., the gender non-conforming, gay, liberal person can “infect” others, who will then share those opposing values; Rozin, Haidt, & McCauley, 2008). In sum, gender non-conforming individuals would be perceived by some other individuals as exhibiting cues to norm non-conformity and to homosexuality, which would then be associated with threats related to social coordination, values, and personal freedoms.

### **Threat Management**

Because of the specific adaptive emotional and behavioral responses to these types of threats, establishing these as the threats perceived to be posed by gender non-conformity would allow us to understand why people aggress or discriminate toward gender non-conforming individuals in specific ways. For example, given that an underlying goal of individuals is to maintain group cohesion and group functioning (Feldman, 2003), the presence and potential social influence of a dangerous out-group member is an obstacle to achieving that goal; thus, perceivers would experience anger

toward this obstacle, to motivate behavioral removal of that obstacle (i.e., anger toward the gender non-conforming person, which motivates behaviors that would remove them from their environment or stop their ability to interact with their in-group; Cottrell & Neuberg, 2005; Neuberg et al., 2010). Relatedly, given that gender non-conformity could be a cue toward a value system that is deemed inconsistent with the perceiver's values, the target's values are an unpalatable moral contagion (Filip-Crawford, 2015); this triggers a disgust emotional response, which motivates the avoidance of the target or, secondarily, anger, to remove this contagion threat (i.e., avoid contact with the gender non-conforming individual or stop them from contaminating the in-group; Angyal, 1941; Cottrell & Neuberg, 2005; Rozin et al., 2008).

From a given threat and prejudice, we can predict perceivers' behavioral inclinations (see Table 1 for examples). For example, the adaptive behavioral response to anger is aggression, so that the perceiver may destroy or remove the obstacle to their goals and attempt to reacquire the desired outcome (Cottrell & Neuberg, 2005).

Reactions to specific types of anger-inducing threats such as a threat to social coordination would include restoring effective group functioning – this requires things like removing the social coordination threat, enforcing group boundaries to prevent re-contamination. A threat to trust relations should be addressed by minimizing damage caused by the violation – this would be like making sure that in-group members still uphold group values and that they can still be trusted. For a threat to personal freedoms, perceivers are motivated to protect or reclaim their compromised liberties. For moral contagion threats, perceivers are motivated to maintain and confirm their value system – they rally the troops to protect the group boundaries, remove the repulsive stimulus,

promote things related to their values, and reassure in-group members of their moral correctness.

This process of identifying threats and experiencing behavior-motivating emotions also varies by characteristics of the perceiver. Because of the different needs of different perceivers, the same target can pose a threat to some individuals while posing an opportunity to another. For example, the liberal political values associated with gender non-conforming individuals would pose a values threat to a politically conservative perceiver but not to a liberal perceiver. Thus, gender non-conformity may not represent a threat to some perceivers but may be perceived as particularly threatening to others. For this reason, it is crucial to consider perceiver characteristics in conjunction with target characteristics to accurately predict the affordances associated with gender non-conforming targets.

Consider an example of someone that may perceive political/religious values threats or social coordination threats from a gender non-conforming individual – a conservative Christian American (see Table 2; Cohrs & Asbrock, 2009; Cohrs & Ibler, 2009; Collier, Horn, Bos, & Sandfort, 2014; Lehavot & Lambert, 2007; Makwana et al., 2017; Nagoshi, Adams, Terrell, Hill, Brzuzy, & Nagoshi, 2008; Shaffer & Duckitt, 2013; Wang-Jones, 2016; Willoughby et al., 2011). This perceiver's emotional responses to a gender non-conforming target would be anger and disgust, and their behavioral inclinations would be for responses such as maintaining conservative American values, not voting for individuals with opposing (liberal) values, talking with other in-group members about why Christian values are correct and why LGBT agendas should be thwarted. Group boundary enforcement would also be essential – they should avoid or

remove individuals who do not conform to group norms, such as by avoiding contact with gender non-conforming individuals and keeping others from interacting with them, and limiting their access to friends/resources/power.

These strategies for goal attainment may include physical and relational aggression. Relational aggression examples could include spreading rumors about the gender non-conforming individual, excluding them from social activities, or teasing or bullying them, and physical aggression could include punching or kicking them. Although not an exact pattern, relational aggression strategies may serve to keeping gender non-conforming individuals from obtaining resources or attaining social status (and thus social influence), whereas physical aggression may be more appropriate for removing or destroying the obstacle or repulsive stimulus – (i.e., kill the gender non-conforming individual to keep them from taking my freedoms or spreading their disease; Tomsen & Mason, 2001). For example, this could be a parent removing a child from a class with a gay teacher to avoid contamination by unpalatable values.

Although different threat perceptions relate to different adaptive emotional responses, sometimes there is not a clear distinction of threat domains (Cottrell & Neuberg, 2005); for example, someone posing a values threat can also be posing a threat to social coordination. Thus, multiple emotional responses can sometimes be triggered by certain threats – anger and disgust for example. The associated behavioral inclinations would then be actions that would address multiple threats at once; for example, keeping the threatening target individual from talking to one's friends reduces their potential to contaminate one's in-group's values, reduces the degree to which they can disrupt the in-group's social coordination, etc. Thus, potential behavioral responses to gender non-

conforming individuals could be strategies like socially excluding them, keeping them out of positions of social or political power, or being physical aggressive toward them; all would reduce their ability to contaminate the in-group to some degree. This hypothesis connecting a moral contagion threat to physical aggression has been supported for anti-gay aggression (Filip-Crawford, 2015) and likely applies to gender non-conformity as well.

### **Present Study**

The purpose of the present study is to establish that a threat management framework is helpful for understanding prejudice toward gender non-conformity. I will do this by first identifying the threats perceived to be posed by gender non-conforming individuals. Thus, I explored how participants' stereotypes, threat perceptions, prejudices, and behavioral responses differed for gender conforming and gender non-conforming targets. I expected participants to report stronger a) stereotypes of liberal values, social non-conformity, and anti-sociality; b) perceived threats to personal freedoms, social coordination, and values; c) anger, disgust, and distrust; and d) likelihood of bullying and excluding gender non-conforming targets than gender conforming targets. I also expected these ratings to vary by perceiver gender, perceiver political ideology, and target gender; specifically, I expected these mean differences to be larger for male participants than for women and non-binary participants, larger for conservative participants, and larger for male targets than female targets.

In addition, to test the applicability of the threat management theoretical model to prejudice toward gender non-conformity, I examined the relations among stereotypes, threat perceptions, prejudices, and behavioral inclinations for gender non-conforming



targets. Specifically, I expected stereotypes of liberal values to predict perceived threats to personal freedoms and values, which would predict anger and disgust, which would predict bullying and exclusion. I hypothesized that these relations would differ for politically liberal and conservative participants; conservative participants would perceive these threats from liberal values stereotypes, whereas liberal participants would not. In addition, I expected stereotypes of social non-conformity to predict perceived threats to social coordination, which would predict anger and distrust, which would predict bullying and exclusion. I expected stereotypes of anti-sociality to predict perceived threats to personal freedoms and social coordination, which would predict anger and distrust, which would predict bullying and exclusion.

## **Method**

### **Participants**

Participants were 530 college students (68% women, 29% men, 2% non-binary; age 18-25 years,  $M_{\text{age}} = 21.32$ ,  $SD_{\text{age}} = 3.34$ ) at a large public university in the Southwestern U.S. They represented a variety of ethnic-racial (54% White, 14% multi-racial, 13% Latinx, 12% Asian, 4% Black, 1% Middle Eastern, 2% Other) and religious backgrounds (45% Christian, 24% Atheist, 31% other religions), political ideologies (82% Liberal or Moderate, 18% Conservative), and sexualities (75% Heterosexual, 16% Bisexual, 4% Other (mostly queer and pansexual), 3% Gay, 2% Lesbian). Participants were recruited via university websites, emails to classes in various schools (e.g., social sciences, engineering, business, law), and paper flyers posted around campus. Students were entered into a raffle for one of five \$50 Visa gift cards for participating.

### **Procedure**

Participants completed a 45-minute online survey including demographic measures as well as their stereotypes, prejudices, and behavioral inclinations toward hypothetical peers. First, participants were presented with a vignette describing a college student they were meeting for the first time. They were asked to take a moment to imagine this target and write a few sentences describing them and their feelings about them. They were then given a series of measures, presented with a second vignette, and asked to complete the same measures about the second target.

There are vignettes describing four types of targets: a gender typical man, gender typical woman, gender atypical man, and gender atypical woman. Descriptions of these targets included various aspects of gender typing: college major, a student club they were a part of, appearance (like clothing and hairstyle), hobbies or interests, and peer relationships. These gender-typed characteristics were manipulated to be traditionally masculine or feminine, corresponding to the type of target. Gender typing will be consistent across all domains (i.e., appearance, hobbies, and major were all masculine, not a combination of masculine and feminine). Below is an example of a gender typical woman vignette (see Appendix A for all vignette information).

*Brittany is a junior nursing major and an ASU cheerleader. She usually wears sundresses and always does her makeup. She likes going shopping and spending time with her friends.*

Participants were randomly assigned to read two vignettes: one of a gender typical target and one of a gender atypical target of one gender (i.e., participant 1 read and answered questions about a gender typical woman and then about a gender atypical woman). To avoid order effects, the presentation of these vignettes was counterbalanced,

such that some participants viewed the gender typical vignette first and some viewed the gender atypical target first. In addition, two sets of vignettes were created to avoid demand concerns such as participants expecting the research goals or responding in a socially desirable way (i.e., participants viewed one vignette from set 1 and one vignette from set 2).

## **Measures**

**Participant characteristics.** Participants completed a demographic questionnaire before rating their responses to the targets.

**Demographics.** Participants completed a set of questions including measures of gender, age, ethnic-racial background, and sexuality.

**Gender typicality.** In addition, students completed a short assessment of their perceived gender typicality – i.e., the degree to which they feel similar to their own or the other gender. This item was selected from the dual-identity gender typicality scale developed by Martin et al. (2017). One item measured their similarity to men, and one item measured their similarity to women; these items were then recoded into own- and other-gender similarity. Responses were recorded on a 5-point scale from 1 (*not at all*) to 5 (*very much*).

**Perceptions of targets.** Participants rated a variety of perceptions of each target presented, including their stereotypes, threat perceptions, prejudices, and behavioral inclinations toward them (see Appendix A for full list of items). They completed each of these measures for both the gender conforming and gender non-conforming target. Confirmatory factor analyses will be conducted to confirm that the items administered represent the constructs as expected.

**Stereotypes.** Participants rated the extent to which they believed each target to have a variety of characteristics, including other skills, traits, beliefs, motivations, or social group memberships that were not presented in the descriptions of the targets. Example items include “How likely is it that this person...is gay,” “...is a Christian,” “...has a lot of friends,” “...is good at math or science?” Students reported these stereotypes on 5-point scales from 1 (*not at all*) to 5 (*very much*).

**Threat perceptions.** Participants responded to several items intended to measure the threats they perceived targets to pose, including threats to social coordination (e.g., “How likely is it that this person would...fit into your friend group?”), trust (e.g., “...be loyal to you?”), values (e.g., “...have the same societal ideals as you?”), and personal freedoms (e.g., “...stop you from doing what you want?”). Participants reported the degree to which they perceived each threat from the target on a 5-point scale from 1 (*not at all*) to 5 (*very much*).

**Prejudices.** Participants provided ratings of their emotional reactions to each target presented. Example emotion items include “How much would you feel...angry at this person”, “...disgusted by this person?”, “...afraid of this person?”, “...contempt toward this person?” Students reported the degree to which they felt each emotion on a 5-point scale from 1 (*not at all*) to 5 (*very much*).

**Behavioral inclinations.** Participants also reported how much they felt inclined to behave in certain ways toward each target. Items were expected to represent behavioral inclination factors such as physical (e.g., “How much would you want to...beat up this person?”) or relational aggression (e.g., “...be rude to this person?”), social exclusion (e.g., “...avoid interacting with this person?”), and protecting their in-

group (e.g., "...keep your friends from interacting with this person?"). Responses were recorded on a 5-point scale from 1 (*not at all*) to 5 (*very much*).

## **Results**

### **Factor Analyses**

Exploratory factor analyses were conducted using a principal components factoring method (Brown, 2006). Stereotype items (see Appendix A) associated with gender non-conforming targets were entered into one analysis. Three factors were extracted: one representing values, one measuring social non-conformity, and one representing anti-sociality. All had eigenvalues over 1 and accounted for 67.7% of the total variance. After promax rotation, item loadings for each factor were above .4 and had low cross-loadings ( $< .3$ ). Items for these factors had strong internal consistency (values  $\alpha = .73$ , social  $\alpha = .67$ , anti-social  $\alpha = .84$ ). Items that did not load onto any factor, highly cross-loaded onto multiple factors, or were deemed theoretically less related to the identified factors were removed from subsequent analysis. A second factor analysis was conducted for the threat perception items for non-conforming targets; results indicated the presence of a personal freedoms threat factor ( $\alpha = .87$ ), social coordination threats ( $\alpha = .73$ ), and values threats ( $\alpha = .64$ ; 60.3% of the total variance). A third factor analysis was conducted using the behavioral response items for non-conforming targets; this revealed an exclusion factor ( $\alpha = .67$ ) and a bullying factor ( $\alpha = .85$ ; 72.1% of the total variance).

After factors were identified for non-conforming target items, similar factor analyses were performed for conforming target items. The same factors were identified for stereotypes (values  $\alpha = .75$ , social non-conformity  $\alpha = .50$ , anti-sociality  $\alpha = .80$ ;

66.4% of the total variance), threat perceptions (personal freedoms  $\alpha = .86$ , social coordination  $\alpha = .70$ , values  $\alpha = .64$ ; 58.9% of the total variance), and behavioral responses (exclusion  $\alpha = .66$ , bullying  $\alpha = .90$ ; 75.8% of the total variance) to conforming targets. Items corresponding to each factor were then averaged (with appropriate items reverse-coded), and these composite scores were used for subsequent analyses (see Tables 2-6 for scale means, standard deviations, and correlations and Appendix C for items included on each scale).

### **Research Goal 1: Mean Differences in Target Ratings**

The first research goal was to explore how participants' stereotypes, threat perceptions, prejudices, and behavioral responses differ by participant gender. I expected participants to report stronger a) stereotypes of liberal values, social non-conformity, and anti-sociality; b) perceived threats to personal freedoms, social coordination, and values; c) anger, disgust, and distrust; and d) likelihood of bullying and excluding gender non-conforming targets than gender conforming targets. I also expected these ratings to vary by perceiver gender, perceiver political ideology, and target gender; specifically, I expected these mean differences to be larger for male participants than for women and non-binary participants, larger for conservative participants, and larger for male targets than female targets. To test these hypotheses, I conducted a series of ANOVAs examining mean differences in the variables of interest by gender conformity of targets (gender conforming vs. gender non-conforming; within-subjects factor), perceiver gender (men vs. women vs. non-binary), perceiver political ideology (liberal vs. conservative), target gender (men vs. women), and all interactions of these factors.

**Stereotype: Liberal Values.** There was a main effect of target conformity such

that non-conforming targets were rated more likely to have liberal values than conforming targets,  $F(1, 445) = 31.457, p < .001, \eta_p^2 = .066$ . There was also a main effect of perceiver political group; conservative participants rated all targets as more likely to have liberal values than did liberal participants,  $F(1, 445) = 4.899, p = .027, \eta_p^2 = .011$ . In addition, there was a target conformity x target gender interaction,  $F(1, 445) = 18.786, p < .001, \eta_p^2 = .041$ ; non-conforming targets were rated more likely to have liberal values than were conforming targets, but this difference was larger for male targets,  $M_{diffman} = 1.165, M_{diffwoman} = .684$  (see Figure 2).

**Stereotype: Social Non-Conformity.** There was a main effect of target conformity,  $F(1, 439) = 26.656, p < .001, \eta_p^2 = .057$ ; non-conforming targets were rated as more socially non-conforming than conforming targets. There was a main effect of participant gender,  $F(3, 439) = 2.697, p = .045, \eta_p^2 = .018$ , such that men and women rated all targets as more likely to be socially non-conforming than did non-binary participants. In addition, the political group main effect,  $F(1, 439) = 4.685, p = .031, \eta_p^2 = .011$ , indicated that liberal participants rated all targets as being socially non-conforming than did conservative participants. There was also an interaction of participant gender, target gender, and target conformity,  $F(2, 439) = 5.289, p = .005, \eta_p^2 = .024$  (see Figure 3). The 2-way interaction of target gender and target conformity was significant for men,  $F(1, 134) = 4.017, p = .047, \eta_p^2 = .029$ , women,  $F(1, 296) = 2.932, p = .088, \eta_p^2 = .010$ , and non-binary participants,  $F(1, 9) = 8.440, p = .017, \eta_p^2 = .484$ . Men rated non-conforming targets as more socially non-conforming than conforming targets, but this difference was larger for female targets ( $M_{diffwoman} = 1.285, M_{diffman} = .875$ ); women ( $M_{diffman} = 1.524, M_{diffwoman} = 1.196$ ) and non-binary participants ( $M_{diffman} =$

1.900,  $M_{\text{diffwoman}} = 1.000$ ) rated non-conforming targets as more socially non-conforming than conforming targets, but this difference was larger for male targets.

**Stereotype: Anti-Sociality.** There was a main effect of target conformity,  $F(1, 424) = 5.237, p = .023, \eta_p^2 = .012$ ; non-conforming targets were rated as more anti-social than were conforming targets. However, this was subsumed by a target gender x target conformity interaction,  $F(1, 424) = 9.590, p = .002, \eta_p^2 = .022$ ; non-conforming male targets were rated as more anti-social than conforming male targets, but participants did not rate non-conforming women differently from conforming women. In addition, there was a marginal participant gender x participant political group x target conformity interaction,  $F(2, 424) = 2.727, p = .067, \eta_p^2 = .013$ . The participant political group x target conformity interaction was marginal for men,  $F(1, 131) = 3.276, p = .073, \eta_p^2 = .024$ , such that non-conforming targets were rated as more anti-social than conforming targets, but this difference was larger for conservative participants ( $M_{\text{diffcons}} = .796, M_{\text{difflib}} = .425$ ; see Figure 4). The participant political group x target conformity interaction was not significant for women,  $F(1, 284) = 2.124, p = .146, \eta_p^2 = .007$ , or non-binary participants,  $F(1, 9) = .050, p = .828, \eta_p^2 = .006$ ; non-conforming targets were rated as more anti-social than conforming targets, for both liberal and conservative women,  $F(1, 284) = 29.856, p < .001, \eta_p^2 = .095, M_{\text{diff}} = .504$ , and non-binary participants,  $F(1, 9) = 4.406, p = .065, \eta_p^2 = .329, M_{\text{diff}} = .567$ .

**Summary: Stereotypes.** In general, participants rated gender non-conforming targets as having more liberal values, being more socially non-conforming, and being more anti-social than gender conforming targets. This was especially true for gender non-conforming male targets. There were few differences in these ratings by perceiver



characteristics.

**Threat: Personal Freedoms.** There was a perceiver political group x target conformity interaction,  $F(1, 427) = 6.338, p = .012, \eta_p^2 = .015$ . When broken down by political group, liberal participants perceived greater personal freedoms threats from conforming targets than non-conforming targets,  $F(1, 350) = 6.501, p = .011, \eta_p^2 = .018$ ; conservative participants reported no difference in personal freedoms threats from conforming and non-conforming targets,  $F(1, 77) = 2.061, p = .155, \eta_p^2 = .026$ . When broken down by target conformity, conservative participants perceived greater personal freedoms threats from non-conforming targets than did liberal participants ( $M_{diff} = .392$ ); there was no political group difference in personal freedoms threat perceptions for conforming targets. However, this was subsumed by a marginal perceiver political group x target gender x target conformity interaction,  $F(1, 427) = 3.403, p = .066, \eta_p^2 = .008$ . The target gender x target conformity interaction was not significant for liberal participants,  $F(1, 350) = 1.337, p = .248, \eta_p^2 = .004$ ; they perceived greater personal freedoms threats from conforming targets than non-conforming targets,  $F(1, 350) = 6.502, p = .011, \eta_p^2 = .018$ . For conservative participants, the target gender x target conformity interaction was significant,  $F(1, 77) = 9.631, p = .003, \eta_p^2 = .111$  (see Figure 5). They perceived greater personal freedoms threats from non-conforming male targets than from conforming male targets ( $M_{diff} = .349, p < .05$ ) but reported no difference in personal freedoms threat perception for conforming and non-conforming female targets ( $M_{diff} = .208, p = .571$ ).

There was also a perceiver gender x target gender x target conformity interaction,  $F(2, 427) = 5.501, p = .004, \eta_p^2 = .025$  (see Figure 6). The target gender x target

conformity interaction was significant for men,  $F(1, 134) = 5.971, p = .016, \eta_p^2 = .043$ ; they perceived greater personal freedoms threats from conforming women than from non-conforming women ( $M_{diff} = .503, p < .001$ ) and from non-conforming men than from conforming men ( $M_{diff} = .279, p = .084$ ). The target gender x target conformity interaction was not significant for women,  $F(1, 284) = 2.101, p = .148, \eta_p^2 = .007$ ; they perceived greater personal freedoms threats from conforming targets of either gender than from non-conforming targets of either gender,  $F(1, 284) = 22.450, p < .001, \eta_p^2 = .073, M_{diff} = .377$ . For non-binary participants, the target gender x target conformity interaction was marginal (but had a large effect size),  $F(1, 9) = 4.530, p = .062, \eta_p^2 = .335$ ; they perceived greater personal freedoms threats from conforming men than from non-conforming men ( $M_{diff} = 1.240, p = .020$ ) but reported no difference in personal freedoms threat perceptions from conforming and non-conforming women ( $M_{diff} = .717, p = .212$ ).

**Threat: Social Coordination.** There was a marginal main effect of target conformity,  $F(1, 428) = 3.634, p = .057, \eta_p^2 = .01$ ; conforming targets were rated as greater threats to social coordination than were non-conforming targets. This was subsumed by a marginal perceiver gender x target conformity interaction,  $F(3, 428) = 2.336, p = .073, \eta_p^2 = .02$  (see Figure 7); men rated non-conforming targets as greater threats to social coordination than did women ( $M_{diff} = .159, p = .062$ ) and non-binary participants ( $M_{diff} = .687, p = .010$ ), and women rated targets higher than non-binary participants ( $M_{diff} = .528, p = .046$ ). There was a main effect of gender,  $F(3, 428) = 2.646, p = .049, \eta_p^2 = .02$ ; men ( $M_{diff} = .505, p = .017$ ) and women ( $M_{diff} = .495, p = .019$ ) rated targets as greater social coordination threats than did non-binary participants. There

was also a main effect of political group,  $F(1, 428) = 8.238, p = .004, \eta_p^2 = .02$ ; liberal participants perceived greater social coordination threats from targets than did conservative participants. There was also a perceiver gender x perceiver political group x target gender interaction,  $F(1, 428) = 3.985, p = .047, \eta_p^2 = .01$ . The political group x target gender interaction was marginal for men,  $F(1, 135) = 3.150, p = .078, \eta_p^2 = .02$ ; liberal men perceived greater social coordination threats from male targets than from female targets ( $M_{diff} = .231, p = .037$ ), whereas conservative men did not report differences in social coordination threats for male and female targets. The political group x target gender interaction, the political group simple effect, and the target gender simple effect were not significant for women and non-binary participants.

**Threat: Values.** There was a perceiver political group x target conformity interaction,  $F(1, 436) = 11.333, p = .001, \eta_p^2 = .025$ , such that liberal participants perceived greater threats to their values from conforming targets,  $F(1, 358) = 7.789, p = .006, \eta_p^2 = .021, M_{diff} = .454$ , and conservative participants perceived greater values threats from non-conforming targets,  $F(1, 78) = 3.775, p = .056, \eta_p^2 = .046, M_{diff} = .390$ . However, this was subsumed by a perceiver political group x target gender x target conformity interaction,  $F(1, 436) = 11.201, p = .001, \eta_p^2 = .025$  (see Figure 8); liberal participants perceived greater values threats from conforming than non-conforming targets, but this difference was larger for male targets,  $F(1, 358) = 8.703, p = .003, \eta_p^2 = .024, M_{diffmale} = .609, p = .002; M_{difffemale} = .247, p = .017$ . Conservative participants perceived greater values threats from non-conforming male targets than from conforming male targets,  $F(1, 78) = 7.591, p = .007, \eta_p^2 = .089, M_{diff} = .657$ , but there was no difference in perceived values threats from non-conforming and conforming female

targets,  $M_{\text{diff}} = .213$ ,  $p = .456$ .

**Summary: Threats.** Generally, participants perceived greater personal freedoms, social coordination, and values threats from gender conforming targets than from gender non-conforming targets. This was especially true for gender conforming male targets. In addition, there were differences in threat perceptions by participant political group. Liberal participants perceived greater threats from gender conforming targets than non-conforming targets, whereas conservative participants perceived greater threats from gender non-conforming male targets than from gender conforming targets.

**Emotion: Anger.** There was a main effect of target conformity,  $F(1, 422) = 4.450$ ,  $p = .035$ ,  $\eta_p^2 = .010$ ; in general, participants reported feeling more anger toward conforming targets than non-conforming targets. However, this was subsumed by a target gender x target conformity interaction,  $F(1, 422) = 4.817$ ,  $p = .029$ ,  $\eta_p^2 = .011$ ; participants reported more anger toward conforming male targets than toward non-conforming targets,  $M_{\text{diff}} = .450$ ,  $p = .002$ , but reported no difference in anger toward conforming and non-conforming female targets,  $M_{\text{diff}} = .081$ ,  $p = .557$ . This effect was also subsumed by the 3-way interaction of perceiver gender x target gender x target conformity,  $F(2, 422) = 3.960$ ,  $p = .020$ ,  $\eta_p^2 = .018$ . The target gender x target conformity interaction was marginal for non-binary participants,  $F(1, 9) = 3.721$ ,  $p = .086$ ,  $\eta_p^2 = .293$  (see Figure 9); they reported greater anger toward conforming male targets than toward non-conforming male targets,  $M_{\text{diff}} = 1.400$ ,  $p = .016$ , but reported no difference in anger toward conforming and non-conforming female targets,  $M_{\text{diff}} = .083$ ,  $p = .887$ . The target gender x target conformity interaction was not significant for perceiver men,  $F(1, 134) = .911$ ,  $p = .342$ ,  $\eta_p^2 = .007$ , and women,  $F(1, 279) = .448$ ,  $p =$

.504,  $\eta_p^2 = .002$ . Men reported marginally greater anger toward conforming targets than toward non-conforming targets,  $F(1, 134) = 3.203, p = .076, \eta_p^2 = .023, M_{\text{diff}} = .097$ ; women reported no difference in anger toward conforming and non-conforming targets,  $F(1, 279) = .716, p = .398, \eta_p^2 = .003$ .

**Emotion: Disgust.** There was a perceiver gender x target gender x target conformity interaction,  $F(2, 424) = 3.807, p = .023, \eta_p^2 = .018$ . The target gender x target conformity interaction and the target gender and target conformity simple effects were not significant for men or women. However, the target gender x target conformity interaction approached significance (and had a very large effect size) for non-binary participants,  $F(1, 9) = 3.068, p = .114, \eta_p^2 = .254$  (see Figure 10); non-binary participants reported greater disgust toward conforming male targets than toward non-conforming male targets,  $M_{\text{diff}} = 1.000, p = .042$ , but no difference in disgust toward conforming and non-conforming female targets,  $M_{\text{diff}} = .500, p = .352$ .

**“Emotion”: Trust.** There was a target gender x target conformity interaction,  $F(1, 423) = 3.890, p = .049, \eta_p^2 = .009$ , such that participants reported greater trust of non-conforming men than of conforming men,  $M_{\text{diff}} = .486, p = .021$ ; trust ratings did not differ for conforming and non-conforming women,  $M_{\text{diff}} = .225, p = .272$ . However, this was subsumed by a perceiver gender x target gender x target conformity interaction,  $F(2, 423) = 6.292, p = .002, \eta_p^2 = .029$ . The target gender x target conformity interaction was marginal for men,  $F(1, 135) = 3.301, p = .071, \eta_p^2 = .043$ ; men reported greater trust of non-conforming women than conforming women,  $M_{\text{diff}} = .437, p = .001$ . The target gender x target conformity interaction was significant for women,  $F(1, 279) = 4.193, p = .042, \eta_p^2 = .015$  (see Figure 11); they reported greater trust of non-conforming targets

than of conforming targets, but this difference was larger for male targets,  $M_{diffman} = .698$ ,  $p < .001$ ;  $M_{diffwoman} = .321$ ,  $p = .018$ . The target gender x target conformity interaction was also significant for non-binary participants,  $F(1, 9) = 5.007$ ,  $p = .050$ ,  $\eta_p^2 = .357$ ; they reported greater trust of non-conforming men than of conforming men,  $M_{diff} = 1.400$ ,  $p = .024$ , but reported no difference in trust of conforming and non-conforming women,  $M_{diff} = .083$ ,  $p = .897$ .

**Summary: Emotions.** In general, there were few differences in anger, disgust, and trust for perceiver men and women. However, non-binary individuals reported greater anger and disgust toward gender conforming men than gender non-conforming men and greater trust of gender non-conforming men than gender conforming men. In addition, women reported greater trust of gender non-conforming targets than conforming targets; this difference was larger for male targets.

**Behavior: Bullying.** There was a main effect of perceiver gender,  $F(3, 425) = 3.057$ ,  $p = .028$ ,  $\eta_p^2 = .021$ ; men were more likely to bully targets than were women. There was also a target gender x target conformity interaction,  $F(1, 425) = 4.346$ ,  $p = .038$ ,  $\eta_p^2 = .010$ ; however, the simple effects for target gender and target conformity were not significant.

**Behavior: Exclusion.** The perceiver gender x target conformity interaction was significant,  $F(3, 422) = 3.410$ ,  $p = .018$ ,  $\eta_p^2 = .024$ . When broken down by perceiver gender, women and non-binary participants reported that they were more likely to exclude conforming targets than non-conforming targets,  $M_{diffwomen} = .347$ ,  $p < .001$ , but this difference was larger for non-binary participants,  $M_{diffnb} = .778$ ,  $p = .135$ ,  $\eta_p^2 = .221$ . Men showed no difference in their reported likelihood of excluding conforming and non-

conforming targets,  $F(1, 135) = .257, p = .613, \eta_p^2 = .002$ . When broken down by target conformity, men were more likely to exclude non-conforming targets than were women ( $M_{diff} = .359, p < .001$ ) and non-binary participants ( $M_{diff} = .518, p = .048$ ); there were no perceiver gender differences in the likelihood of excluding conforming targets. There was also a target gender x target conformity interaction,  $F(1, 422) = 5.200, p = .023, \eta_p^2 = .012$ ; participants reported being more likely to exclude conforming male targets than non-conforming male targets,  $M_{diff} = .456, p = .008$ . However, both of these interactions were subsumed by the 3-way interaction of perceiver gender, target gender, and target conformity,  $F(2, 422) = 4.103, p = .017, \eta_p^2 = .019$ . The target gender x target conformity interactions were not significant for men or women. Only the simple effect of target conformity was significant for women,  $F(1, 278) = 22.071, p < .001, \eta_p^2 = .074$ ; they were more likely to exclude conforming targets than non-conforming targets. The target gender x target conformity interaction was significant for non-binary participants,  $F(1, 9) = 5.114, p = .050, \eta_p^2 = .362$  (see Figure 12). They were more likely to exclude conforming male targets than non-conforming male targets,  $M_{diff} = 2.000, p = .005$ , but reported no difference in the likelihood of excluding conforming and non-conforming women,  $M_{diff} = .167, p = .806$ .

**Summary: Behaviors.** There were no differences in the reported likelihood of bullying by target conformity. Men were more likely to exclude gender non-conforming targets than were women and non-binary participants. In addition, women and non-binary individuals were more likely to exclude gender conforming targets than gender non-conforming targets.

## **Research Goal 2: Examining the Process**

The second research goal was to establish the links between stereotypes, threat perceptions, prejudices, and behavioral inclinations for gender non-conforming targets. Specifically, I expected stereotypes of liberal values to predict perceived threats to personal freedoms and values, which would predict anger and disgust, which would predict bullying and exclusion. In addition, I expected stereotypes of social non-conformity to predict perceived threats to social coordination, which would predict anger and distrust, which would predict bullying and exclusion. I expected stereotypes of anti-sociality to predict perceived threats to personal freedoms and social coordination, which would predict anger and distrust, which would predict bullying and exclusion. To test the relations among these constructs, I conducted structural equation modeling analyses in Mplus 7.11 (Muthén & Muthén, 1998-2012) examining these specified paths (see Figure 13). I also expected the threats perceived to be posed by liberal values to differ for liberal and conservative participants such that conservative participants would perceive personal freedoms and values threats from liberal values and that liberal participants would not. Thus, I conducted a multi-group analysis by political group to test the invariance of the paths from liberal values to threats to personal freedoms and values for liberal and conservative participants. In addition, I tested for indirect effects to establish whether the specified threat perceptions and prejudices accounted for participants' behavioral inclinations toward gender non-conforming targets.

The specified model fit the data well (RMSEA = .10, CFI = .92, SRMR = .09). A likelihood ratio test indicated that the paths predicting social coordination threats and values threats varied by perceiver political group,  $\chi^2_{\text{diff}}(2) = 31.01, p < .001$ . For liberal perceivers, belief that non-conforming targets had liberal values was negatively related to



social coordination threats and was marginally negatively associated with values threats. For conservative perceivers, the belief that non-conforming targets have liberal values was not associated with perceived threats to social coordination and was positively related to perceived values threats. In addition, the belief that non-conforming targets are socially non-conforming was negatively related to personal freedoms threats. Stereotypes of anti-sociality were associated with threats to personal freedoms and to social coordination. Perceived threats to personal freedoms related to feelings of anger, disgust, and trust. Threats to social coordination were positively associated with anger and disgust and negatively related to trust. Values threats were negatively related to trust. Anger and disgust were related to bullying and exclusion. Trust was negatively related to exclusion.

Mediation analyses were conducted using the bootstrapping method (1000 draws) to identify the perceived threats and emotional responses that account for the relation between the stereotypes of non-conforming targets and behavioral responses to them. The relation of social non-conformity stereotypes to bullying was mediated by personal freedoms threats and anger,  $\beta = -.046 [-.076, -.024]$ , and personal freedoms threats and disgust,  $\beta = -.041 [-.074, -.016]$ . Social non-conformity and exclusion were mediated via three pathways; social non-conformity predicted personal freedoms threats and anger,  $\beta = -.034 [-.065, -.012]$ , threats to personal freedoms and disgust,  $\beta = -.054 [-.083, -.026]$ , and threats to personal freedoms and trust,  $\beta = .004 [.002, .009]$ . The belief that non-conforming targets are anti-social was associated with bullying via personal freedoms threats and anger,  $\beta = .071 [.034, .110]$  and personal freedoms threats and disgust,  $\beta = .057 [.022, .106]$ , social coordination threats and anger  $\beta = .006 [.002, .013]$ , and social

coordination threats and disgust,  $\beta = .007$  [.002, .017]. Stereotypes of anti-sociality were associated with exclusion via threats to personal freedoms and anger,  $\beta = .052$  [.018, .098], personal freedoms and disgust,  $\beta = .075$  [.040, .126], personal freedoms and trust,  $\beta = -.007$  [-.014, -.003], and via social coordination threats and anger,  $\beta = .004$  [.001, .011], social coordination threats and disgust,  $\beta = .009$  [.004, .021], and social coordination threats and trust  $\beta = .007$  [.003, .017].

In addition, because of the moderated path from liberal values to social coordination threat and liberal values to values threat, the mediated paths varied for liberal and conservative participants. For liberal participants, the relation of liberal values stereotypes to bullying was mediated by social coordination threat and anger,  $\beta = -.009$  [-.022, -.002], and social coordination threat and disgust,  $\beta = -.011$  [-.030, -.002]. In addition, liberal values related to exclusion via social coordination and anger,  $\beta = -.007$  [-.018, -.001], social coordination and disgust,  $\beta = -.014$  [-.033, -.003], and social coordination and trust,  $\beta = -.011$  [-.029, -.003]. For conservative participants, liberal values were related to exclusion via values threat and trust,  $\beta = .007$  [.002, .018].

**Summary.** Ratings of social non-conformity were related to perceptions of personal freedoms threats. Anti-sociality was related to personal freedoms threats and social coordination. Liberal values predicted threat perceptions differently for liberal and conservative perceivers; liberal values were negatively related to social coordination threats and values threats for liberal participants and were positively related to values threats to conservative participants. Generally, perceived threats to personal freedoms, social coordination, and values related to anger, disgust, and lack of trust toward targets. Anger, disgust, and lack of trust related to a greater likelihood of bullying and excluding

targets.

**Additional analyses.** Because the primary goal of this study is to identify the processes behind prejudice toward gender non-conforming peers, the previous set of analyses was conducted only on ratings for non-conforming targets. However, the theoretical framework employed in this study dictates that the process would look much the same for stereotypes, threat perceptions, emotions, and behaviors toward gender conforming peers as for non-conforming peers. Thus, I conducted additional analyses to explore the extent to which the model appeared similar for ratings of both types of targets.

I specified a structural equation model identical to what was reported above, including ratings of gender conforming targets rather than of non-conforming targets. The model fit the data well (RMSEA = .11, CFI = .91, SRMR = .08). Many of the relations among variables were similar to the previous model; for the sake of brevity, only paths different for gender conforming targets are presented here. Liberal values were negatively associated with a personal freedoms threat, and social non-conformity was associated with a social coordination threat. Personal freedoms threats, but not threats to social coordination or values, were associated with anger and disgust. Trust was positively associated with bullying.

## **Discussion**

The purpose of this study was to identify the threats perceived to be posed by gender non-conforming individuals and to establish the utility of a threat management framework for understanding prejudice toward these individuals. Using mean differences in participants' ratings of gender conforming and non-conforming targets, I found that

individuals believe non-conforming targets to be more liberal, more socially non-conforming, and more anti-social than gender conforming targets. In addition, individuals differentially perceived threats to personal freedoms, social coordination, and values from gender conforming and non-conforming targets and that these perceptions varied for liberal and conservative perceivers. I also found partial support for the utility of this theoretical framework for examining prejudice and discrimination toward gender non-conforming individuals.

### **Differences in Ratings of Gender Conforming and Non-Conforming Peers**

As expected, individuals reported that they believed gender non-conforming peers to have more liberal values, to be more socially non-conforming, and to be more anti-social than gender conforming peers, and this difference was more pronounced for gender non-conforming men. This supports previous research showing that adults expect gender non-conforming individuals to be gay and have liberal values, especially gender non-conforming men (Blashill & Powlishta, 2009; Deaux & Lewis, 1984; McCreary, 1994; Stern, West, Jost, & Rule, 2013). This also demonstrates that individuals have social and political associations with gender non-conformity. It will be important for future studies to include other domains of stereotypes such as social status, popularity, or presumed skill sets, to understand a broader range of perceptions of non-conforming adults.

We expected that, because participants believed non-conforming targets to be more liberal, personal freedoms, social coordination, and values threat perceptions would be greater for gender non-conforming targets, especially for conservative participants. This was the case for values threats but not for threats to social coordination or personal freedoms. However, by considering what liberal values would mean to liberal perceivers,

we can make sense of these findings. Generally, participants perceived greater personal freedoms, social coordination, and values threats from gender conforming targets than from gender non-conforming targets. This was especially true for gender conforming male targets. In addition, there were differences in threat perceptions by participant political group. Liberal participants perceived greater threats from gender conforming targets than non-conforming targets, whereas conservative participants perceived greater threats from gender non-conforming male targets than from gender conforming targets.

Thus, the findings mirror what we expected for conservative participants. It is possible that individuals consider gender conforming peers to be conservative, or at least less liberal than gender non-conforming peers. If this is the case, the fact that a majority of my sample was liberal likely accounts for the finding that overall, gender conforming targets posed greater threats than non-conforming targets. Participants could also perceive personal freedoms threats from gender conforming men because the majority of the individuals in positions of social and political power are gender conforming men, meaning that they have greater power to restrict the freedoms of others (Eagly & Wood, 1982; Powers & Reiser, 2005).

In general, there were few differences in anger, disgust, and trust for perceiver men and women. However, non-binary individuals reported greater anger and disgust toward gender conforming men than gender non-conforming men and greater trust of gender non-conforming men than gender conforming men. In addition, women reported greater trust of gender non-conforming targets than conforming targets; this difference was larger for male targets. The lack of differences in ratings for conforming and non-conforming targets could be related to the relatively low endorsement of these emotions

toward targets in general. These emotions could be perceived by participants to be too extreme or too negative to report on a survey (Tourangeau & Yan, 2007). In addition, given the perceived threats to values for conservative participants, I expected their mean differences on emotions to be larger also; however, this was not evident in my sample. This could be because a minority of participants were conservative; such differences might appear in a larger sample of conservative adults.

The finding that is most consistent across the ratings of emotional responses was that non-binary participants demonstrated the inverse of the expected pattern for male targets; they reported greater anger, disgust, and lack of trust toward gender conforming men than gender non-conforming men. This could be related to their personal freedom threat perception from gender conforming men. These emotions could also be in reaction to the fact that gender conforming men are often more aggressive and discriminatory toward transgender and non-binary individuals (Callahan & Zukowski, 2019). I was unable to test the specific relation of threat perceptions to emotional responses for non-binary individuals in this study because of the small (although representative, APA, 2015; NCTE, 2016) sample size of these participants; thus, it will be important to oversample this population in future studies to explore this link further.

I expected individuals to be more likely to bully and exclude gender non-conforming targets than conforming targets. There were no differences in the reported likelihood of bullying by target conformity. This could be because reports of bullying targets were low, possibly because of social desirability concerns. Perhaps because exclusion is a more socially acceptable option, participants reported levels of exclusion that more closely matched expectations. Men were more likely to exclude gender non-

conforming targets than were women and non-binary participants, which is consistent with previous research that men tend to be less accepting of gay men (Parrott, 2009; Parrott & Zeichner, 2005; Vincent, Parrott, & Peterson, 2011). In addition, women and non-binary individuals were more likely to exclude gender conforming targets than gender non-conforming targets. This aligns with findings that non-binary individuals experienced greater anger, disgust, and lack of trust of gender conforming targets, which likely contributes to their desire to socially exclude them. Alternately, this finding could be interpreted as these individuals being *less* likely to *include* gender conforming targets than non-conforming targets; thus, including measures of both inclusion and exclusion separately in future research will help illuminate this phenomenon.

Although not all of the differences in ratings of gender conforming and non-conforming targets matched what I expected, most of the findings are still consistent with the threat management theoretical framework. For example, overall, participants perceived greater threats from gender conforming targets than non-conforming targets. However, when we consider the pattern of findings for threat perceptions, there are many differences in perceptions by perceiver political group. This indicates that these targets mean something different to liberal and conservative perceivers, which is a key contribution of using this theoretical framework. From this theory, it is crucial to consider not only the characteristics of the target but also the significance of those characteristics to the perceiver.

This is also illustrated by finding different patterns of results for the stereotype and threat measures. there were few differences in the pattern of stereotypes by perceiver characteristics, which indicated that, in general, all participants held the same stereotypes

of gender non-conforming individuals. Inversely, threat perceptions varied by perceiver characteristics such as gender and political ideology. Thus, there is a difference between reporting the broader societal stereotypes associated with a target (i.e., base stereotypes) and reporting what threats that target might pose to you (i.e., threat perceptions; Pick, 2018). Researchers should be thoughtful when considering whether base stereotypes or threat perceptions would be most relevant for their research questions regarding prejudice.

### **Understanding the Process**

Many of the relations of stereotypes and threat perceptions matched expectations (see Table 2); Anti-sociality was related to personal freedoms threats and social coordination, and liberal values were related to values threats to conservative participants. One surprising finding was that stereotypes of social non-conformity did not relate to social coordination threats but to personal freedoms threats instead. It is possible that the items used to measure general non-conformity should be adjusted in future studies to more closely align with such a construct, which may clarify the relation to personal freedoms and social coordination threat perceptions.

In this study, anti-sociality stereotypes of gender non-conforming targets related to perceived personal freedoms threats and social coordination threats, but not values threats (which aligns with predictions described in Table 2); social coordination threats related to anger, disgust, and lack of trust; and, for conservative participants, values threats related to a lack of trust. Although these relations did not exactly match predictions (e.g., a values threat did not relate to a disgust emotional response; social coordination related to both anger and disgust), this does not necessarily negate the utility



of this framework for understanding gender non-conformity-related prejudice. Previous research using this framework (Cottrell & Neuberg, 2005) has demonstrated the specificity of threat perceptions and emotions using a much broader range of targets (e.g., Black men, Mexican Americans, and fundamentalist Christians), with more easily distinguishable threats (i.e., physical safety, economic resources, and personal freedoms, respectively) and associated emotions. The threats explored in this study are much more closely related; thus, it stands to reason that these stereotypes would relate to multiple threats and that these threats would relate to multiple emotional responses. When threat perceptions were associated with multiple emotional responses (e.g., personal freedoms threats relating to both anger and disgust), the findings also align with the secondary emotional responses appropriate for each threat (Cottrell & Neuberg, 2005; Mackie & Smith, 2002).

Anger and disgust emotional responses were associated with a greater likelihood of bullying and excluding targets; lack of trust was associated with the desire to exclude targets. These findings largely align with predictions. Anger generally motivates an aggressive behavioral response (Cottrell & Neuberg, 2005), which corresponds with bullying non-conforming peers in this context. Disgust motivates avoidance or rejection, which aligns with social exclusion. Because the threats included in this study elicited both of these emotional responses, it follows that both bullying and exclusion could be adaptive behavioral outcomes for managing the threats posed by gender non-conforming peers. It also makes sense that experiencing a lack of trust toward these targets related to wanting to exclude them; if these peers are excluded from the social group, perceivers would no longer be affected by their untrustworthy inclinations. Further exploration of

the situations in which these behaviors are more or less likely to follow from these prejudices is needed, but these findings demonstrate general support for the use of this theory.

### **Limitations and Future Directions**

This study was not without limitation. The data was collected at one time point; thus, the ability to examine the directionality in the threat management process is limited. However, this method is similar to previous research examining threat perceptions and prejudices toward targets (Cottrell & Neuberg, 2005). In addition, in the real world, this process – from being presented with a target, making a threat assessment, having an emotional reaction, and selecting a behavioral response – often occurs quite quickly; thus, the concurrent measurement aligns with the theoretical timeline. In future research, one could measure threat perceptions, prejudices, and behaviors differently and discern more temporal nuance. However, this design matched the research questions and was appropriate for an initial exploration of this prejudice.

There were also limits to the measures included in this study. One of the types of threats perceived to be posed by gender non-conformity is threats to one's values system. The stereotype measure most related to this threat perception was the belief that targets had liberal values. However, this factor was made up of items that represent different types of characteristics, such as religion, political ideology, and political activism. It is possible that if these stereotypes were analyzed separately, they might relate to threat perceptions in a more nuanced way; the same would be true if the types of values being threatened were examined independently. For example, the stereotype of political activism might relate to a personal freedom threat, religion relates to a religious value

threat, and political ideology relates to a societal value threat. Thus, future studies should investigate nuances in the values associated with gender non-conforming targets and the specific types of values threats they are perceived to pose.

In addition, I found that values threat perceptions would differ for liberal and conservative participants. This supports the idea that political liberalism is partially involved in prejudice toward gender non-conforming individuals. It is also possible that the perceived threats associated with gender non-conformity are representative of a broader sense of traditionalism that extends beyond political conservatism. For example, individuals that value adhering to established group norms and values (i.e., conventionalism) may contribute to these differing evaluations of gender non-conformity (Altemeyer, 1981; Duckitt, Bizumic, Krauss, & Heled, 2010; Kreindler, 2005; Vincent et al., 2011). Although political ideology served as a viable proxy for this construct, perhaps some findings could be enhanced by understanding the overall traditionalism of perceivers.

### **Theoretical Contribution**

The benefits of employing the affordance management perspective in this study were proposed to be specificity in the types of threats perceived to be posed by gender non-conforming targets – especially accounting for the relevant characteristics of the perceiver – and specificity in process-related predictions linking stereotypes to threat perceptions, to prejudices, to behaviors. Although the findings did not fully align with predictions, there was moderate support for the applicability of the threat management framework to prejudice toward gender non-conformity.

First, there were differences in the stereotypes and the threat perceptions

associated with these targets. Generally, all participants rated gender non-conforming targets to be more liberal, socially non-conforming, and anti-social. Threat perceptions differed for these targets for liberal and conservative perceivers. In addition, liberal values were associated with a threat to values for conservative individuals and lower values threat for liberal individuals. These differences demonstrate that it is important to distinguish between base and affordance stereotypes when studying prejudices (e.g., Pick, 2018); as seen here, the same base stereotype (i.e., that gender non-conforming targets have liberal values) can lead to different threat perceptions (i.e., values threat vs. no values threat) for different perceivers (i.e., liberals and conservatives). Thus, researchers should be thoughtful about whether base or affordance stereotypes about targets should be measured for their research questions. In addition, these findings illustrate the importance of considering the interaction of perceiver and target characteristics and the associated match or mismatch that would represent a threat or opportunity to the perceiver.

There was also support for this theoretical model from the analyses examining the process for prejudice toward gender conforming targets. There were a few differences in the paths between constructs for the gender conforming model than the non-conforming model, but these were often in line with what would be predicted from the theory. For example, social non-conformity was associated with a social coordination threat. In addition, liberal values were negatively associated with threats to personal freedoms, which was appropriate given that the majority of the sample was liberal. Future research should further explore the differences in the process and replicate these findings with other samples. The overall similarity between the two models supports the theory in that

the extent to which they hold those stereotypes about a target, the more they perceive those threats, experience those emotions, and select that behavior toward that target, whether the target is gender conforming or non-conforming.

This theory also allowed for the prediction of specific mediated paths between stereotypes and behavioral outcomes – i.e., the threat perceptions and emotions that accounted for these behaviors toward gender non-conforming targets. Although these mechanisms did not exactly match predictions, they can still be made sense of using this theoretical framework. Future work should isolate the aspects of these threats that relate to these emotions distinctly, so that the process can be more fully understood.

## **Conclusion**

This study demonstrates the need for future research using this theoretical perspective to examine prejudice toward gender non-conforming individuals. I found partial support for the specific prediction of the threats, emotions, and behavioral responses to non-conformity, which illuminates more nuance than studying general dislike or negativity toward non-conforming individuals. In addition, findings illustrate the need for examining relevant perceiver and target characteristics together to fully understand this process. Future studies would benefit from incorporating these theoretical tenets when attempting to examine this type of prejudice.

## CHAPTER 3

### STUDY 2

Gender non-conforming (GNC) youth – children whose identity, appearance, or behaviors do not fit within societal gender norms – are at risk for poor physical and mental health, academic, and social outcomes (GLSEN, 2015; NCTE, 2016). In general, these risks can be attributed to the lack of social acceptance these youth experience (Collier, van Beusekom, Bos, & Sandfort, 2013). For example, gender non-conforming children are often more socially excluded, bullied, and victimized than their gender conforming peers (Heinze & Horn, 2014; Horn, 2007; Martin, 1990; Toomey, Ryan, Diaz, Card, & Russell, 2010). Although research has established that the peer environment can strongly positively or negatively influence GNC youth’s outcomes, little work has been done to identify the specific reasons children are exclusive or aggressive toward their GNC peers. In addition, when prejudice toward GNC peers has been studied, it has often been in conjunction with prejudice toward sexual minorities and with adolescent or adult samples (Ghavami, Katsiaficas, & Rogers, 2016; Heinze & Horn, 2014; Horn, 2007). Thus, the purpose of this study is to explore motivations behind children’s treatment of GNC peers.

One theoretical framework that may be useful in understanding children’s prejudice toward gender non-conformity is the affordance management framework. This theory outlines specific types of threats (i.e., risks, dangers, costs) associated with social living and associated reactions (i.e. adaptive emotional and behavioral responses to them). In the context of gender non-conformity, we are able to hypothesize specific reasons for children’s “dislike” of GNC peers based on the threats they are perceived to

pose. This framework has been used to elucidate adults' prejudice toward social groups such as African Americans, Mexican Americans, and gay men (Cottrell & Neuberg, 2005), and recent research has attempted to establish its utility for understanding prejudice toward gender non-conformity (Study 1). However, this work has been conducted with adults and has not addressed considerations for understanding differences in how prejudice and behaviors toward gender non-conforming individuals would be different for children. Thus, this study aims to employ affordance management theory to identify the threats perceived to be posed by gender non-conforming children and the associated emotional and behavioral responses to them.

### **Theoretical Framework**

Assumptions underlying the affordance management framework include that humans have evolved mechanisms for detecting potential social risks and benefits and enacting an appropriate behavioral response (Cottrell & Neuberg, 2005; Neuberg et al., 2010). For example, if a target individual poses a risk of disease, a perceiver takes action to eliminate that threat (e.g., avoid or attack). Because of humans' social nature, these risks or benefits encompass threats or opportunity both to the self and to the social groups (e.g., family, tribe, peer group) of the perceiver (Baumeister & Leary, 1995; Brewer & Caporael, 2006; Caporael, 1997; Sng et al., 2017). For example, an individual is concerned with detecting cues for risks that could interfere with their ability to meet their own goals but also goals associated with effective group functioning (i.e., ability to communicate, share resources, cooperate, reciprocate), such as threats to social cohesion, social coordination, or trust and reciprocation within a group (Ackerman et al., 2012; Brewer & Caporael, 2006; Cottrell & Neuberg, 2005; Sng et al., 2017).

To identify whether a target individual poses a threat or opportunity to oneself or one's social group, individuals use a variety of affordance-relevant stereotypes (i.e., observed or assumed characteristics of the target related to a specific affordance) to form informal hypotheses about targets' potential risk or benefit to achieving a goal (Pick & Neuberg, 2019). In the context of gender non-conformity, research has shown that because of informal associates between adults' gender non-conformity and homosexuality or a liberal political ideology, adults perceive GNC peers to be associated with certain threats to their social groups, such as a threat to their value system or a threat to group members' personal freedoms (Study 1).

### **Affordance Management for Children**

The same theoretical framework can be used to examine children's prejudice toward gender non-conformity. Both adults and children employ the same type of social cognitive process from encountering a target individual to behaviorally interacting with that target (Crick & Dodge, 1994; i.e., encoding and interpreting targets' characteristics, identifying likely affordances, selecting social goals, and choosing a behavioral response). However, there are many developmental differences that necessitate that the content of children's stereotypes, prejudices, and behavioral responses to gender non-conforming peers likely differs from those of adults (Abrams & Killen, 2014; Crick & Dodge, 1994; Kenrick et al., 2010; Killen, 2007; Mulvey, Rizzo, & Killen, 2015; Neel, Kenrick, White, & Neuberg, 2015).

In general, affordance-relevant stereotypes of adult or adolescent gender non-conformity could include gender-typed skills or attributes (e.g., being good at sports or fashion), or associations with homosexuality or a liberal political ideology (Blashill &



Powlishta, 2009; Ghavami & Peplau, 2017). These stereotypes are expected to relate to affordances related to religious, political, and societal values. However, children do not yet have fully formed or detailed stereotypes about political or sexual identity groups (Craig, Peplar, Connolly, & Henderson, 2001; Mallet, Apostolidis, & Paty, 1997); thus, it is unlikely that these same stereotypes or threat perceptions would predict children's prejudice toward gender non-conforming peers.

For example, children do not have enough social experiences that include information about sexual or political identities to necessitate the development of detailed schemas about these identities (Crick & Dodge, 1994; Mallet et al., 1997). In addition, this information is not necessary yet for children to meet their goals. For example, children are generally motivated to socially interact with others, form and maintain friendships, gain social status, and maintain social group functioning (Kenrick et al., 2010; Killen, 2007; Neel et al., 2015; Rubin, Bukowski, & Parker, 2006; Rutland, Killen, & Abrams, 2010). Because sexual identities largely relate to mating needs and political identities relate to higher-order nuances in peer or mate selection, this information is not yet pertinent for children's goals. Thus, the difference in adults' and children's primary goals alters the affordances relevant for achieving or interfering with those goals, and the stereotypes related to those affordances. To understand the mechanisms behind children's prejudice toward GNC peers, we must consider the developmental needs and goals specific to children.

### **Children's Social Goals**

Because children in middle and late childhood are concerned with social coordination and healthy social group functioning (groups such as their family, class, or

friend group), they are likely attuned to threats to these goals such as threats to social cohesion, social coordination, and norm violation (Abrams & Killen, 2014; Hitti, Mulvey, Rutland, Abrams, & Killen, 2013; Killen, 2007; Mulvey, 2015; Rutland et al., 2010; Rutland & Killen, 2015). There are a number of ways any given peer could represent a threat to these social goals – group members must be able to communicate well with each other, have the skills needed to function in that group, can trust each other, and often have shared norms, values, and goals. The relevant affordances of gender non-conformity would include threats to those goals.

Existing research has established that children consider social coordination concerns in their reasoning about peer interactions. For example, children exclude others from a peer group because they do not have the proper skills to allow the group to function effectively (Killen & Rutland, 2011) or if they choose to not follow group norms (Abrams & Killen, 2014; Abrams & Rutland, 2008; Elenbaas & Killen, 2016; Killen, 2007; Killen & Rutland, 2011; Killen & Stangor, 2001; Rutland et al., 2010; Rutland & Killen, 2015). In this case, a peer's lack of skills necessitated their exclusion from a group; however, children often use other peer characteristics (like gender or race) to conduct this reasoning (Killen & Rutland, 2011).

### **Gender-Related Affordances for Social Coordination**

There are a number of ways a GNC peer could be perceived to threaten social group functioning. GNC youth look and behave in ways counter to gender norms, and children are sensitive to such violations in social norms (Hitti et al., 2013; Killen, Rutland, Abrams, Mulvey, & Hitti, 2012; Mulvey & Killen, 2014; Rutland et al., 2010; Xiao et al., 2019). Thus, children may make informal hypotheses about GNC peers that

extend this norm violation to other social coordination threats. For example, they may assume that the GNC peer may not follow the rules or expectations of the group, they may not have the appropriate skills needed to be a successful group member, or they may disrupt other group members' ability or willingness to follow the group norms (Abrams & Rutland, 2008; Killen, Mulvey, & Hitti, 2013). Children are also sensitive to violations of morality (Kohlberg, 1976). Thus, violation of gender norms could be perceived as an indicator of moral violation; if this child is willing to violate rules about gender norms, what other rules might they be willing to break? In addition, children are attuned to methods of gaining and losing social status (Rubin et al., 2006). Gender non-conforming children are rated as being less socially accepted and less popular than their gender conforming peers (Jewell & Brown, 2014) and are observed by children to experience discouragement or lack behavioral approval from adults (GLSEN, 2015). Thus, a perceiver may be concerned about a potential loss of social status from interacting with a gender non-conforming child.

### **Gender-Related Cues**

Gender is one of the primary cues children use to identify potential affordances for social coordination; children make differential social judgments of others based on gender including how they select friends, feel comfortable interacting with others (Zosuls et al., 2014), and expect to be accepted or be able to communicate effectively with peers (Andrews et al., 2016; Xiao et al., 2018). However, children attend not only to peers' gender to make these decisions; they also use gender typicality, or the degree to which a peer conforms to gender norms (Ghavami et al., 2016), to determine potential compatibility as a friend or to identify a target for gender expression-based victimization

(Cook et al., in preparation; DeLay et al., 2018; Horn, 2007).

### **Managing the Threat**

From this theoretical framework, a specific type of threat relates to a specific prejudicial reaction that is meant to motivate a certain type of behavior to manage the threat (see Tables 1 and 2). Thus, we should be able to predict children's specific emotional responses to gender non-conforming targets based on their threat perceptions. For example, a threat to social coordination may relate to anger, or a threat to morality may relate to disgust.

Because there are specific types of adaptive behavioral responses to these emotions and threat, we can also predict the specific types of behaviors children would engage in to manage the threat of a gender non-conforming peer. For example, if a GNC peer is perceived to have interfered with group functioning, a child would be motivated to avoid future interference and restore effective group functioning (Cottrell & Neuberg, 2005). This would mean the child would be inclined to socially exclude the GNC peer and reinforce the norms and behaviors appropriate for their group members. There is evidence of children engaging in these types of norm enforcing and norm violation sanctioning. For example, children as young as preschool explicitly tell their peers that they should not engage in a certain activity because of their gender (Xiao et al., 2019).

### **Present Study**

The purpose of this study was to identify specific threats children perceive to be posed by gender non-conforming peers using a threat management framework. My first research goal was to examine the differences in stereotype, threat perception, emotional response, and behavioral response ratings toward targets by perceiver gender, target

gender, and target gender conformity. I expected participants to report that non-conforming targets were more weird and more likely to be gay and to pose greater threats to morals and to social coordination. In addition, I expected participants to report greater feelings of anger, disgust, dislike, and discomfort and greater likelihood of excluding and bullying non-conforming targets. I also expected these differences to be larger based on perceiver gender and target gender. Specifically, I expected boys to have higher scores on these measures of stereotypes, threat perceptions, emotions, and behaviors, especially toward non-conforming boys.

Second, I hypothesized that target gender non-conformity would predict threat perceptions, threat perceptions would predict emotional responses, and emotional responses would predict behavioral responses. I expected beliefs that targets were weird or gay to relate to perceived threats to morals and to social coordination, which would relate to feelings of anger, disgust, dislike, and discomfort, which would in turn relate to inclinations to exclude and bully these targets. In addition, I expect these threat perceptions and emotional responses to mediate the relations between stereotypes of gender non-conformity and these behavioral responses.

## **Method**

### **Participants and Procedure**

Participants were 121 children (51% girls, 49% boys; K-6th grade; age 6-10 years,  $M_{\text{age}} = 7.92$ ,  $SD_{\text{age}} = 1.49$ ), from a variety of ethnic-racial backgrounds (42% White, 27% Black, 12% multi-racial, 11% Latinx, 7% Native American, 1% Asian), recruited from after-school programs and summer camps at five youth community centers (i.e., the YMCA and the Boys and Girls Club) in the Southwestern U.S. These centers serve

youth from Kindergarten through high school who attend a variety of schools in the area (primarily public and charter), many from low-income backgrounds (between 30%-68% of families who use their services receive financial assistance). A researcher visited the youth centers and obtained parental consent for each participant. Children then met individually with the researcher, provided assent, completed the roughly 30-minute survey, and received a small toy for participating. All questions were read aloud and responses were recorded by the researcher. Children were allowed to stop the survey at any time without penalty.

The survey consisted of demographic questions as well as stereotypes and emotional and behavioral responses (described below). After completing practice questions to familiarize themselves with the response scale, participants were presented with descriptions of a gender typical or gender atypical target child and completed all measures about that target. Descriptions included information about an unfamiliar peer with characteristics depicting a boy or girl who did or did not conform to gender norms, such as “Brittany is a girl your age who does activities girls usually do. She usually wears girly clothes, and most of her friends are girls” (see Appendix B for all vignettes). After completing all items about the first target, children were presented with a description of the opposing target (i.e., gender typical or gender atypical). Each child answered questions about two targets – a gender conforming and gender non-conforming peer of one gender (i.e., child 1 reported about a gender typical girl and a gender atypical girl; child 2 reported about a gender atypical boy and a gender typical boy). The order of targets presented to children was counterbalanced across participants.

**Pilot testing.** Vignettes and measures were unofficially piloted with a few

children in the appropriate age range that were personally known by the author. The author presented the children with two vignettes (one gender conforming target, one gender non-conforming target) and conducted an informal cognitive interview with the children (Drennan, 2003; Knafl, Deatrck, Gallo, Holcombe, Bakitas, Dixon, & Grey, 2007). Items were presented by the researcher verbally, and children were asked to verbally justify their numeric responses with reasons or other thoughts about the items. Many measures were deemed appropriate given the children's responses and understanding of the items' meaning; thus, these measures were retained for the final procedure.

However, a few changes were made to the original content of vignettes and items after these pilot sessions. Initially, the vignettes used a more parallel design to those used in Study 1 (i.e., gender-typed appearance, activities, and peer preferences were presented as specific examples, rather than general terms). An example vignette is: "Brittany is a girl who likes to wear dresses, read books, make bracelets, and spend time with her friends, Allie and Jessica." However, when answering questions about these targets, children justified their responses with information about the specific gender-typed activity listed (e.g., reading) rather than about the conformity or non-conformity to a gender norm that activity represented. For this reason, vignettes were changed to use more general language (i.e., "activities girls like to do") to avoid artifactual responses.

Similarly, measures were also piloted with these children. Items intended to measure threats to values were initially more detailed, and items intended to measure threats to personal freedoms were initially to be given to participants. However, after piloting, these items (e.g., "Would they want the world to work the same way you do,"

“Do you think this person would want to make you act like them”) were considered to have limited validity for child participants. Thus, the values items were condensed into the morals threat items, and the personal freedoms threats items were removed from the survey.

## **Measures**

Measures were designed to reflect a variety of domains of stereotypes, threats, emotional responses, and behavioral responses to these hypothetical peers (see Appendix B for full list of items). Because these measures have not been used previously, factor analyses were conducted to ensure accurate construct representation. Measures as described below reflect factors initially expected to be present.

**Stereotypes.** Items were included to measure children’s stereotypes about targets, including targets’ skills, interests, or traits. Example items include “How much do you think this person is kind?” and “How much do you think this person is good at playing soccer?”. Children rated their responses on a scale from 1 (*not at all*) to 5 (*very much*).

**Threat perceptions.** Items were included to assess the domains of threats perceived to be posed by targets, such as threats to social coordination or morality. Example items include “How much do you think this person would cooperate with you?” and “How much do you think this person can be trusted?”. Responses were recorded on a scale from 1 (*not at all*) to 5 (*very much*).

**Prejudices.** These items were intended to measure children’s emotional responses to target individuals, including anger, disgust, or discomfort toward targets. Example items are “How much would you be mad at this person?” and “How much



would you be nervous about spending time with this person?”. Children rated the degree to which they experienced each feeling on a scale from 1 (*not at all*) to 5 (*very much*).

**Behavioral responses.** Children also reported the degree to which they felt inclined to perform certain actions toward target individuals, such as excluding, teasing, or being physically aggressive toward them. Example items include “How much would you want to invite this person to hang out with your friends?” and “How much would you want to pick this person to be a leader?”. Responses were recorded on a scale from 1 (*not at all*) to 5 (*very much*).

## **Results**

### **Factor Analyses**

Exploratory factor analyses were conducted using a principal components factoring method (Brown, 2006). Stereotype items (see Appendix B) associated with gender non-conforming targets were entered into one analysis. No clear factors emerged from the stereotype data; thus, instead of using scale scores for stereotypes, items representing theoretically meaningful stereotypes (i.e., “weird” and “gay”) are used for analysis. A second factor analysis was conducted for the threat perception items for non-conforming targets; results indicated the presence of a social coordination threat factor and a morals threat factor. Each had an eigenvalue over 1, and together they accounted for 69.24% of the total variance. After promax rotation, item loadings for each factor were above .4 and had low cross-loadings ( $< .3$ ). Items for these factors had strong internal consistency (social coordination  $\alpha = .88$ , morals  $\alpha = .89$ ). Items that did not load onto any factor, highly cross-loaded onto multiple factors, or were deemed theoretically less related to the identified factors were removed from subsequent analysis. A third

factor analysis was conducted using the behavioral response items for non-conforming targets; this revealed an exclusion factor ( $\alpha = .77$ ) and a bullying factor (66.30% of the total variance). This bullying factor was comprised of only one item; thus, the bullying item was used on its own in subsequent analyses.

Similar factor analyses were performed for conforming target items. The same factors were identified for threat perceptions (social coordination  $\alpha = .93$ , morals  $\alpha = .92$ ; 67.4% of the total variance) and behavioral responses (exclusion  $\alpha = .80$ , bullying [1 item]; 60.1% of the total variance) to conforming targets. Items corresponding to each factor were then averaged (with appropriate items reverse-coded), and these composite scores were used for subsequent analyses (see Tables 7-8 for scale means, standard deviations, and correlations and Appendix C for items included on each scale).

### **Research Goal 1: Mean Differences in Target Ratings**

The first research goal was to examine the differences in stereotype, threat perception, emotional response, and behavioral response ratings toward targets by perceiver gender, target gender, and target gender conformity. I expected participants to report that non-conforming targets were more weird and more likely to be gay and to pose greater threats to morals and to social coordination. In addition, I expected participants to report greater feelings of anger, disgust, dislike, and discomfort and greater likelihood of excluding and bullying non-conforming targets. I also expected these differences to be larger based on perceiver gender and target gender. Specifically, I expected boys to have higher scores on these measures of stereotypes, threat perceptions, emotions, and behaviors, especially toward non-conforming boys. To test these hypotheses, I conducted a series of ANOVAs examining mean differences in these

variables by perceiver gender (boys vs. girls), target gender (boys vs. girls), target gender conformity (gender conforming vs. gender non-conforming; within-subjects factor), and all interactions of these factors.

**Stereotype: Weird.** There was a main effect of participant gender,  $F(1, 109) = 5.624, p = .019, \eta_p^2 = .049$ ; boys rated targets as more weird than did girls. There was also a main effect of target typicality,  $F(1, 109) = 8.458, p = .004, \eta_p^2 = .072$ ; non-conforming targets were rated as more weird than conforming targets. There was also a participant gender x target conformity interaction,  $F(1, 109) = 5.710, p = .019, \eta_p^2 = .050$  (see Figure 14); boys rated non-conforming targets as more weird than did girls,  $M_{diff} = .805, p = .004$ .

**Stereotype: Gay.** There was a main effect of target conformity,  $F(1, 100) = 7.671, p = .007, \eta_p^2 = .071$ ; participants rated non-conforming targets as more likely to be gay than conforming targets. There was also a marginal interaction of target gender and target conformity,  $F(1, 100) = 3.869, p = .052, \eta_p^2 = .037$  (see Figure 15); non-conforming boys were rated as more likely to be gay than conforming boys,  $M_{diff} = .878, p = .001$ ; there was no difference in the perceived likelihood of being gay for conforming and non-conforming girls.

**Stereotypes: Summary.** Overall, children rated gender non-conforming targets as more weird and more likely to be gay than gender conforming targets. This was especially true for gender non-conforming boy targets.

**Threat: Morals.** There were no significant differences in the ratings of targets' morals by participant gender, target gender, or target conformity.

**Threat: Social Coordination.** There was a main effect of gender,  $F(1, 107) =$

5.288,  $p = .023$ ,  $\eta_p^2 = .047$ ; boys rated targets as posing greater social threats than did girls. There was also a marginal interaction of target gender and target typicality,  $F(1, 107) = 2.644$ ,  $p = .107$ ,  $\eta_p^2 = .024$ . Non-conforming boys were perceived as greater threats to social coordination than conforming boys,  $M_{diff} = .279$ ,  $p = .136$ ; there was no difference in social threat perceptions for conforming and non-conforming girls. This was subsumed by a marginal 3-way interaction of participant gender, target gender, and target conformity,  $F(1, 107) = 2.853$ ,  $p = .094$ ,  $\eta_p^2 = .026$ . Boys rated non-conforming boys as greater social coordination threats than conforming boys,  $F(1, 51) = 4.698$ ,  $p = .035$ ,  $\eta_p^2 = .084$  (see Figure 16), but did not rate conforming and non-conforming girls differently. Girls did not rate targets differently by gender or conformity.

**Threats: Summary.** There were no differences in children's reports of moral threats from gender conforming and non-conforming targets. However, their perceptions of social coordination threats varied by gender and conformity; boys rated gender non-conforming boys as greater threats to social coordination than gender conforming boys.

**Emotion: Anger.** There was a marginal main effect of gender,  $F(1, 97) = 3.123$ ,  $p = .080$ ,  $\eta_p^2 = .031$ ; boys felt more anger than did girls. There was also a marginal main effect of target gender,  $F(1, 97) = 3.018$ ,  $p = .086$ ,  $\eta_p^2 = .030$ ; participants were more angry at girl targets than at boys. There were no differences in anger ratings by target conformity.

**Emotion: Disgust.** There was a main effect of gender,  $F(1, 94) = 8.641$ ,  $p = .004$ ,  $\eta_p^2 = .084$ ; boys reported being more disgusted by targets than did girls. There were no significant differences in ratings of disgust by target conformity.

**“Emotion”: Dislike.** There were no significant differences in feelings of dislike

toward targets by participant gender, target gender, or target conformity.

**“Emotion”: Discomfort.** There was a main effect of gender,  $F(1, 58) = 5.201$ ,  $p = .026$ ,  $\eta_p^2 = .082$ ; boys reported being more uncomfortable interacting with targets than did girls. There was also an interaction of perceiver gender x target gender,  $F(1, 58) = 4.761$ ,  $p = .033$ ,  $\eta_p^2 = .076$ ; boys reported being more uncomfortable around girls than around boys. There was a 3-way interaction of perceiver gender x target gender x target conformity,  $F(1, 58) = 3.544$ ,  $p = .065$ ,  $\eta_p^2 = .058$ . Girls reported being more uncomfortable around non-conforming boys than non-conforming girls,  $F(1, 34) = 4.715$ ,  $p = .037$ ,  $\eta_p^2 = .122$  (see Figure 17); in addition, they reported being more uncomfortable interacting with non-conforming boys than conforming boys,  $M_{diff} = .588$ ,  $p = .035$ . Boys did not rate targets differently by gender or conformity.

**Emotions: Summary.** Overall, children reported no differences in their experiences of anger, disgust, or dislike toward gender conforming and non-conforming targets. For discomfort, ratings differed by gender and conformity; boys reported feeling more discomfort toward girls than toward boys, and girls reported feeling more discomfort toward gender non-conforming boys than toward non-conforming girls and gender conforming boys.

**Behavior: Exclusion.** There was a main effect of gender,  $F(1, 103) = 2.943$ ,  $p = .089$ ,  $\eta_p^2 = .028$ ; boys were more likely to exclude targets than were girls. There were no differences in the reported likelihood of excluding targets based on target gender or conformity.

**Behavior: Bullying.** There were no significant differences in the likelihood of bullying based on perceiver gender, target gender, or target conformity.

**Behaviors: Summary.** There were no reported differences in children's desire to bully or exclude gender conforming and non-conforming targets.

### **Research Goal 2: Examining the Process**

The second research goal was to identify the relations among the stereotypes, threat perceptions, emotional responses, and behavioral responses to gender non-conforming targets. I expected beliefs that targets were weird or gay to relate to perceived threats to morals and to social coordination, which would relate to feelings of anger, disgust, dislike, and discomfort, which would in turn relate to inclinations to exclude and bully these targets. Thus, I conducted structural equation modeling analyses in Mplus 7.11 (Muthén & Muthén, 1998-2012) examining the specified paths (see Figure 18). In addition, mediation analyses were conducted using the bootstrapping method (1000 draws) to identify the perceived threats and emotional responses that account for the relation between the stereotypes of non-conforming targets and behavioral responses to them.

The model adequately fit the data (RMSEA = .187, CFI = .755, SRMR = .146). Beliefs that non-conforming targets were weird and that they were gay were positively associated with moral threats and with social coordination threats. Perceiving moral threats was related to feelings of anger and disgust. Threats to social coordination were associated with general dislike and anger toward non-conforming targets. Anger and discomfort with targets were associated with likelihood of excluding them. None of the emotional responses recorded were significantly related to the likelihood of bullying non-conforming targets.

None of the examined indirect effects were statistically significant in accounting

for the relation between stereotypes of being weird or of being gay and excluding or bullying targets. However, three mediation paths approached significance and were somewhat considered given the small sample size and associated lack of power. The relation between being perceived as weird was related to exclusion was mediated by threats to social coordination and anger  $\beta = .037$  [.005, .116], and moral threats and anger,  $\beta = .028$ , [.004, .089]. The relation of being perceived as gay and being excluded was mediated by a perceived morals threat and anger,  $\beta = .026$  [.003, .079].

**Summary.** The belief that gender non-conforming targets were weird related to perceptions of social coordination threats and moral threats, and the belief that these targets were gay was related to moral threats. Perceived threats to both social coordination and morals were related to experiencing anger toward these targets, which was related to wanting to socially exclude them.

**Additional analyses.** Because the primary goal of this study is to identify the processes behind prejudice toward gender non-conforming peers, the previous set of analyses was conducted only on ratings for non-conforming targets. However, the theoretical framework employed in this study dictates that the process would look much the same for stereotypes, threat perceptions, emotions, and behaviors toward gender conforming peers as for non-conforming peers. Thus, I conducted additional analyses to explore the extent to which the model appeared similar for ratings of both types of targets.

I specified a structural equation model identical to what was reported above, including ratings of gender conforming targets rather than of non-conforming targets. The model did not fit the data well (RMSEA = .27, CFI = .70, SRMR = .30). The belief

that the target was weird was associated with a moral threat and social coordination threat, but the belief that the target was gay was not associated with either threat. A perceived threat to morals was related to anger and discomfort, and a perceived threat to social coordination was negatively related to discomfort. Neither threat related to dislike or disgust. Dislike was associated with bullying, and discomfort was negatively associated with bullying. Anger, disgust, and dislike were associated with exclusion.

### **Discussion**

The purpose of this study was to identify the social threats children perceive to be posed by gender non-conforming peers and to assess the relation of children's stereotypes, threat perceptions, emotional responses, and behavioral responses toward these peers. I found that children reported that gender non-conforming peers were more weird and more likely to be gay, posed greater threats to social coordination, and elicited greater feelings of discomfort than gender conforming peers. In addition, children's beliefs that gender non-conforming peers were weird or gay related to their perceptions of social coordination and moral threats, which related to feeling anger toward these peers, which related to their likelihood of excluding these peers. Thus, I identified morality and social coordination to be two perceived threats associated with gender non-conformity and established that these threats and an anger emotional response accounted for children's social exclusion of gender non-conforming peers.

### **Differences in Ratings of Gender Conforming and Non-Conforming Peers**

I expected participants to report that non-conforming targets were more weird and more likely to be gay and to pose greater threats to morals and to social coordination. In addition, I expected participants to report greater feelings of anger, disgust, dislike, and



discomfort and greater likelihood of excluding and bullying non-conforming targets. I also expected these differences to be larger based on perceiver gender and target gender. Specifically, I expected boys to have higher scores on these measures of stereotypes, threat perceptions, emotions, and behaviors, especially toward non-conforming boys.

Overall, children rated gender non-conforming targets as more weird and more likely to be gay than gender conforming targets. This was especially true for gender non-conforming boy targets. That these beliefs were more strongly associated with gender non-conforming male targets reflects that boys are less able to defy gender norms than girls without negative social consequences (Kosciw et al., 2008; Mata et al., 2010; Peplau et al., 1998; Poteat & Anderson, 2012). In addition, although the finding that children perceived gender non-conforming targets as more likely to be gay is in alignment with adolescents' and adults' social stereotypes (Ghavami & Peplau, 2018; Horn, 2003, 2007), it is somewhat surprising that children of this age were aware of this stereotypical relation. Because sexuality is not yet relevant to children's lives in a reproductive sense, it was thought possible that they would not yet be aware of stereotypes surrounding sexuality, including that of expected gender non-conformity. However, because of the stigma surrounding homosexuality and the associated potential messages from parents and peers (GLSEN, 2015; Mata et al., 2010), it is possible that sexuality – or at least homosexuality – is socially relevant to children, even at this age. This is supported by the association of this stereotype with a threat to morality. Thus, it seems that children at this age may know how to identify this moral threat in their peers, with gender non-conformity as a cue.

There were no differences in children's reports of moral threats from gender

conforming and non-conforming targets. However, their perceptions of social coordination threats varied by gender and conformity; boys rated gender non-conforming boys as greater threats to social coordination than gender conforming boys. This indicates that children of this age believe that gender conformity plays a role in how well a social group gets along, but it is not associated with faulty morals or a tendency to break rules. This makes sense developmentally, considering that children learn about characteristics for successful social interactions earlier than they learn about morality (Hay, Payne, & Chadwick, 2004; Turiel & Davidson, 1986); thus, they would be better practiced by this age at identifying characteristics in others that relate to them being optimal social interaction partners than characteristics indicating the likelihood of rule-breaking.

Although I did not find significant mean differences in moral threat perceptions for gender conforming and non-conforming youth, I did find that the extent to which they thought non-conforming peers were gay related to how strongly they perceived them as moral threats. Because children rated non-conforming targets as more likely to be gay, threats to morality are likely somewhat associated with children's attitudes toward these peers. It is possible that the pattern is not completely clear because of developmental differences in these children's understanding of the social stigmas surrounding being gay (Mallet et al., 1997). Older children may be more likely to connect gender non-conformity with moral threats because of the stereotypic association with homosexuality, whereas younger children may not have yet made this generalization. Future research should explore more developmental nuance in this association, to better understand when children begin to connect gender conformity to morality.

Overall, children reported no differences in their experiences of anger, disgust, or dislike toward gender conforming and non-conforming targets. It is possible that children did not report differences in these discrete emotions because children of this age are still limited in their emotion knowledge and ability to identify specific emotions within themselves (Eisenberg, 1986; Pons, Harris, & de Rosnay, 2004). It is also possible that, although these items were worded differently to feel more natural to children (e.g., “grossed out” rather than disgust, “mad at” or “annoyed at” rather than anger), these feelings may have been too extreme for children to endorse feeling toward a hypothetical target (Tourangeau & Yan, 2007). This could be supported by the differential findings for children’s expected discomfort for interacting with gender conforming and non-conforming targets; children may not experience anger or disgust toward a non-conforming peer (or not experience it strongly enough to report on a survey) but may be aware of feeling uncomfortable around them. It will be important to explore these emotional responses using different measures in future research.

Findings for discomfort indicated that boys reported feeling more discomfort toward girls than toward boys, and girls reported feeling more discomfort toward gender non-conforming boys than toward non-conforming girls and gender conforming boys. This result for boys is consistent with previous research (Poteat & Anderson, 2012) and somewhat supports my hypothesis. I would also expect boys to differentiate between gender conforming and non-conforming male targets, but that did not occur with this sample. Further research is needed to explore why this is the case. The findings for girls were also surprising. Generally, children feel more comfortable interacting with others with whom they share common interests (Zosuls et al., 2014). Thus, I would expect that

girls would be more comfortable interacting with gender non-conforming boys than with gender conforming boys and with gender non-conforming girls because they would like the same games or activities, which has been demonstrated in previous research (Cook, Andrews, & Martin, in prep). It is possible that variation in these children's gender-typed interests influenced their ratings of expected comfort interacting with gender conforming and non-conforming peers; future studies with larger samples should thus consider perceivers' gender conformity in conjunction with these other factors to fully understand this pattern.

There were no reported differences in children's desire to bully or exclude gender conforming and non-conforming targets, which was contrary to what was expected. It is possible that these mean differences did not appear because of the low endorsement of these behaviors; few children reported a desire to exclude these targets, and even fewer reported that they would bully them. These low responses could be because of social desirability concerns (Tourangeau & Yan, 2007) they may not want to admit to a researcher that they would like to bully or exclude someone. Children are often taught that bullying a peer would be wrong, so it may not be perceived as an available option by many children. Alternately, it is possible that mean differences might appear if children reported their likelihood of including these peers rather than excluding them. Previous research has shown that children do not necessarily dislike members of an out-group, they just prefer members of their in-group (Zosuls et al., 2011); similarly, children may not wish to explicitly exclude gender non-conforming peers, they just wish to include them less than gender conforming peers. More research is needed that examines both of these behavioral options separately.

## **Understanding the Process**

The belief that gender non-conforming targets were weird related to perceptions of social coordination threats and moral threats, and the belief that these targets were gay was related to moral threats. Perceived threats to both social coordination and morals were related to experiencing anger toward these targets, which was related to wanting to socially exclude them. Overall, these findings partially support the use of the threat management framework to understand this process. Children's stereotypic beliefs about gender non-conforming peers related to their perceived threats, emotional responses, and behavioral responses to them. In addition, there was specificity in these relations that match theoretical predictions; a perceived moral threat related to anger and disgust but not dislike or discomfort, and a perceived social coordination threat related to anger and dislike but not disgust or discomfort. These emotional responses to such threat perceptions are appropriate to motivate behaviors to alleviate the threat. In this study, the reportedly optimal behavioral choice was social exclusion. It will, however, be important for future studies to include more nuanced manipulations to isolate situations where the likelihood of certain methods of socially excluding gender non-conforming peers or other behavioral outcomes would be more common.

One surprising finding was that none of the emotional responses toward gender non-conforming targets, including anger, was related to wanting to bully these peers. Given the theoretical framework, anger should motivate an aggressive behavioral response, which in this context would be bullying the non-conforming peer. However, very few children reported wanting to bully these targets, and anger did not relate to a desire to bully. It is likely that, because children are taught so often not to bully others

(and would likely not admit it even if they would like to; Tourangeau & Yan, 2007), they see social exclusion as a more accessible and acceptable option. If they cannot remove the threat by physical force, they can attempt to remove it socially.

We know from previous research that children justify social exclusion based on social coordination concerns (Killen & Rutland, 2011; Rutland & Killen, 2015); this study establishes that this is the case for excluding gender non-conforming peers and that believing they are weird is part of that process. It will be important for future studies to identify other specific stereotypes or characteristics of gender non-conforming peers that relate to children's perceived threats to social coordination; why do children consider these youth to not fit into their social group? It could be that children do not believe these peers to have the same hobbies or interests as them, which contributes to a friend group's coordination. However, it could be that there are other, more harmful indicators of social coordination threats that they perceive.

To attempt to establish that the prejudice process is the same for perceptions of any peer, whether gender conforming or non-conforming, I also tested the proposed model for prejudice toward conforming peers. There were several differences between the two models, but many of these differences were still aligned with the theory. For example, dislike was associated with bullying, and anger, disgust, and dislike were associated with exclusion. A surprising finding was that, for gender conforming targets, the extent to which they believed the target to be gay was not related to a perceived threat to morals, whereas being thought to be gay was a moral threat for gender non-conforming targets. This is an interesting finding and one that is worthy of further exploration; however, it is also important to interpret these results cautiously, as the model was not a

strong fit for the data for gender conforming targets. It will be important to replicate these findings in other samples.

### **Limitations and Future Directions**

This study was not without limitation. One important contribution of the threat management framework is that prejudice can be best understood when considering characteristics of the target and the perceiver together; what is perceived as a threat by one child may not be perceived as a threat by another child because of some characteristic of that perceiver. One such characteristic could be their gender conformity; a gender non-conforming boy may be perceived as a threat to social coordination by a gender conforming boy but not by a gender non-conforming boy. I was unable to explore such variations in target ratings by perceiver characteristics because of the small sample size. Recruiting a larger sample will be important for future research to explore perceiver differences in threat perceptions.

A larger sample would also allow for analyzing differences by perceiver age. As older children develop new and more nuanced stereotypes about gender non-conforming targets, they may perceive new or different threats from these peers than would younger children; the emergence of the moral threat perception would be one illustration of this. Alternately, younger children may perceive threats from non-conforming peers that are no longer relevant for older children.

To further elucidate these developmental differences, it will be important to include measures of children's interpretations of peers' motivations behind their gender non-conformity. Are these peers simply doing the activities and wearing the clothes that they like, do they not know how to be a boy the "right" way, or are they choosing to be a

boy the “wrong” way? The answers to these questions likely differ for younger and older children, not only because of the differences in the perspective-taking required for such social cognitions (Eisenberg, Murphy, & Shepard, 1997), but also because their understanding of rules or social conventions and reasons for violating social norms change with age. These differences in presumed motivations would have strong implications for children’s threat assessment of – and thus, their emotions and behaviors toward – gender non-conforming peers.

### **Theoretical Contribution**

Although the findings in this study did not always match my predictions, there is still considerable support for using the affordance management framework for understanding children’s prejudice toward gender non-conforming peers. One of the benefits of this theory is that it allows for the distinction of general stereotypes (e.g., “this person is probably gay”) from affordance-specific stereotypes (e.g., “this person has different morals than me”). That there was differentiation in the relation of the weird and gay stereotypes and the social coordination and moral threat perceptions (i.e., the belief that the target was gay related to a moral threat but not a social coordination threat) illustrates this distinction. This can be demonstrated more clearly in future work by including perceiver characteristics that would relate to a stronger or weaker connection of sexuality with morality. This framework is also helpful for predicting specificity in children’s threat perceptions and emotional responses toward non-conformity. By distinguishing children’s negative attitudes or general dislike of these peers into discrete threats and prejudices, researchers can begin to pinpoint the motivations behind their treatment of non-conforming youth.



## **Conclusion**

This study was the first step in applying affordance management theory to children's prejudice toward gender non-conforming peers. This theory allowed for the prediction of specific perceived threats and emotional responses to non-conformity that motivate children's maltreatment of these youth. Further research is needed to clarify findings from this study and identify additional threats perceived to be posed by non-conforming peers. Future research questions derived from this theory will help scholars understand characteristics of the non-conforming youth and their peers that make negative treatment more or less likely, thus improving the social lives of gender non-conforming children.

## CHAPTER 4

### GENERAL DISCUSSION

In two studies, I explored the utility of affordance management theory in identifying reasons for adults' and children's prejudice toward gender non-conforming peers. In both studies, I found support for key contributions of the affordance management theory for understanding this type of prejudice. I identified threats to personal freedoms, social coordination, and values as specific threats perceived to be posed by gender non-conforming individuals. I found some support for the predictions made regarding the relations of general stereotypes to specific threats, which related to specific prejudices. I also demonstrated that more nuanced results can be found by accounting for perceiver and target characteristics together rather than just the gender non-conformity of the target. Thus, the use of this theory contributed new information to the field about prejudice toward non-conforming peers.

The findings were somewhat different for the adult and child studies. First, adults perceived gender conforming peers to pose greater threats to social coordination, whereas children (boys) perceived gender non-conforming peers (boys) to be social coordination threats. This could be because the majority of the adult sample was liberal, which could have influenced some of the overall mean differences in this study. It is also possible that adults have more detailed schemas about what characteristics are necessary for effective social coordination. Children focus largely on skills and interests for social coordination threats, but it is possible that adults also incorporate other stereotypes such as those relating to communication style, trustworthiness, or social connectedness to make their threat assessments.

In addition, perceived threats to values or morality differed for adults and children. Adults considered gender non-conformity to be related to values threats, but children did not. This was strongly associated with differences in political ideology for adults, something which has not yet developed in children of this age (Craig et al., 2001). Children did, however, associate the belief that a target was gay with a threat to morality. This was somewhat surprising, given that children do not yet have a detailed understanding of sexuality (Mallet et al., 1997); it is likely that this association is relatively superficial, in that they are taught that “gay = bad” without knowing fully what being gay means (GLSEN, 2015; Mata et al., 2010). It could also be that the older children, who would have more knowledge of characteristics associated with sexuality, are driving this finding.

Another difference in findings was that the prejudices included in these studies (i.e., anger and disgust) related to both bullying and exclusion behaviors for adults but only to exclusion for children. It could be that children underreported their likelihood of bullying non-conforming peers because of social desirability concerns or because they are frequently told that bullying is wrong and do not want to report wanting to do something wrong (Tourangeau & Yan, 2007). It is also possible that adults simply have more freedom to be physically aggressive toward targets than do children. They are no longer restricted by the same sets of rules that prohibit overt bullying for children (Garandeanu, Vartio, Poskiparta, & Salmivalli, 2016). They also have more advanced moral reasoning than children, in that they may determine that bullying is sometimes acceptable if it is being done for a good reason (Recchia, Brehl, & Wainryb, 2012).

In both studies, findings somewhat matched predictions in the specific threat

perceptions and emotional responses connecting stereotypes and behaviors toward non-conforming peers. In many cases, stereotypes related to perceived threats that were expected or appropriate for those stereotypes. There was limited distinction, however, in the associations of threat perceptions to prejudices. However, because of the interconnectedness of the threats included in this study, these secondary emotional responses were still appropriate for this context. In addition, bullying and exclusion were the two outcomes examined in both of these studies; however, there is much more nuance in the possible behaviors aimed at gender non-conforming peers. It will be important for future research to include other behavioral options and to explore more detailed experimental manipulations to identify situations in which each behavioral outcome is more or less likely to occur.

There was also evidence from both studies showing that it is important to consider the interaction of perceiver and target characteristics together. The clearest illustration of this in the adult study was the differences in findings by political ideology; liberal and conservative participants often reported quite different ratings. Although political group was not included in the child study as a relevant perceiver characteristic, perceiver gender was. Gender was associated with several differences in children's ratings of peers. There was often a gender in-group preference in their responses, which is an example of the perceiver-target interaction outlined by this theory.

Although these general patterns of similarities and differences appeared in these two studies, it will be important for future work to explicitly incorporate developmental comparisons into one study. This would allow for clearer arguments to be made regarding the differences in threat perceptions or behavioral choices for perceivers of

different ages. Another extension of this work will be to explore prejudice toward non-conformity in an adolescent sample. Adolescents have unique developmental concerns regarding peers, the importance of social conformity, the emergence of mate selection opportunities, all of which likely contribute to the development of different kinds of threat perceptions and prejudices toward gender non-conforming peers.

These studies are the first to employ a threat management framework to examine prejudice toward gender non-conformity. I identified specific threats perceived to be posed by non-conforming peers, demonstrated how these threat perceptions relate to emotional and behavioral responses, and illustrated how these threats vary developmentally. In addition, I have outlined many avenues for future research that will further elucidate this process. Together, this research can perhaps be used to delineate motivations behind negative treatment of non-conforming peers and create interventions to improve the social lives of gender non-conforming individuals.

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Table 1

*Social Threats and Adaptive Emotional and Behavioral Responses*

| <b>Threat</b>   | <b>Prejudice<br/>(Emotional Response)</b> | <b>Motivated Behavioral<br/>Response</b> |
|---|---|--|
| Obstacles to in-group                                   | Anger                                     | Remove obstacles                         |
| Threat to personal freedoms and rights of group members | Anger                                     | Protect/reclaim compromised liberties    |
| Threat to social coordination                           | Anger                                     | Restore effective group functioning      |
| Threat to trust relations                               | Anger                                     | Minimize damage caused by violation      |
| Contamination to in-group                               | Disgust                                   | Minimize contamination                   |
| Threat to group values                                  | Disgust                                   | Maintain and confirm value system        |

*Note.* This table originally appeared in Cottrell & Neuberg, 2005.

Table 2

*Hypothesized Threats and Emotional and Behavioral Responses Applied to Gender Non-Conformity*

| <b>Relevant Belief About Gender Non-Conforming Target</b>  | <b>Threat Perception</b>                                | <b>Emotional Response</b> | <b>Behavioral Response</b>   |
|--|---|---------------------------|--|
| Politically liberal<br>“Social Justice Warrior”  | Threat to freedoms (religious or personal)              | Anger                     | Reify rights to freedoms   |
| Blurs gender group boundaries<br>Will interfere with group trust, communication, or norm enforcement   | Threat to social coordination                           | Anger                     | Enforce group boundaries<br>Make sure group members stay in line<br>Avoid contact with out-group                 |
| Flouts societal norms<br>Unpredictable<br>Unlikely to reciprocate  | Threat to trust relations                               | Anger                     | Avoid working with them<br>Avoid relying on them   |
| Gay<br>Liberal<br>Atheist<br>Does things differently than they should be done<br>Goes against religious values<br>Goes against how things should work<br>Wants to influence others to think and behave like them | Threat to group values (political, religious, societal) | Disgust                   | Social exclusion<br>Keep them from having contact with group members<br>Keep them from having influence or power |

**Table 2***Means and Standard Deviations of Men's Ratings of Targets*

| Political Group     | Liberal ( <i>n</i> = 99) |            |                        |            | Conservative ( <i>n</i> = 40) |            |                        |            |
|---------------------|--------------------------|------------|------------------------|------------|-------------------------------|------------|------------------------|------------|
|                     | Man ( <i>n</i> = 44)     |            | Woman ( <i>n</i> = 55) |            | Man ( <i>n</i> = 15)          |            | Woman ( <i>n</i> = 25) |            |
|                     | GC                       | GNC        | GC                     | GNC        | GC                            | GNC        | GC                     | GNC        |
| Liberal Values      | 2.51(.55)                | 3.53(.59)  | 2.74(.61)              | 3.35(.55)  | 2.61(.46)                     | 3.91(.65)  | 2.82(.50)              | 3.43(.76)  |
| Social              | 2.65(.70)                | 3.77(.72)  | 2.38(.90)              | 3.77(.72)  | 2.70(.84)                     | 3.33(1.05) | 2.52(.88)              | 3.70(.58)  |
| Anti-Social         | 1.77(.68)                | 2.25(.75)  | 1.71(.77)              | 2.08(.99)  | 1.40(.69)                     | 2.56(1.41) | 1.91(.80)              | 2.35(1.05) |
| Freedoms            | 2.11(.73)                | 2.02(.86)  | 2.35(.87)              | 1.72(.80)  | 1.55(.68)                     | 2.20(1.17) | 2.38(.78)              | 2.00(.95)  |
| Social Coordination | 2.93(.67)                | 2.62(.71)  | 2.74(.68)              | 2.35(.69)  | 2.47(.57)                     | 2.60(.71)  | 2.71(.98)              | 2.64(.67)  |
| Values              | 3.29(.54)                | 3.08(.53)  | 3.14(.54)              | 2.94(.48)  | 2.87(.43)                     | 3.48(.57)  | 3.08(.65)              | 3.20(.49)  |
| Anger               | 1.33(.61)                | 1.31(.64)  | 1.44(.71)              | 1.25(.55)  | 1.40(.74)                     | 1.33(.90)  | 1.50(.86)              | 1.38(.70)  |
| Disgust             | 1.33(.64)                | 1.49(.86)  | 1.56(1.01)             | 1.35(.67)  | 1.33(.72)                     | 1.47(.92)  | 1.50(.95)              | 1.58(1.03) |
| Trust               | 2.36(.69)                | 2.61(1.15) | 2.52(1.02)             | 3.28(1.05) | 2.53(.83)                     | 2.40(1.06) | 2.46(.95)              | 2.58(.95)  |
| Bullying            | 1.38(.65)                | 1.39(.68)  | 1.51(.77)              | 1.42(.71)  | 1.30(.65)                     | 1.17(.35)  | 1.37(.57)              | 1.41(.72)  |
| Exclusion           | 1.67(.83)                | 1.52(.79)  | 1.66(.83)              | 1.51(.78)  | 1.63(.77)                     | 1.80(.80)  | 1.63(.94)              | 1.60(.93)  |

*Note.* Total men *n* = 139. Scores were on a 1-5 scale. GC = gender conforming, GNC = gender non-conforming. Social = social non-conformity, Freedoms = personal freedoms threats, Social Coordination = social coordination threat.

**Table 3***Means and Standard Deviations of Women's Ratings of Targets*

| Political Group      | Liberal ( <i>n</i> = 263) |           |                         |           | Conservative ( <i>n</i> = 42) |           |                        |           |
|----------------------|---------------------------|-----------|-------------------------|-----------|-------------------------------|-----------|------------------------|-----------|
| Target Gender        | Man ( <i>n</i> = 115)     |           | Woman ( <i>n</i> = 148) |           | Man ( <i>n</i> = 23)          |           | Woman ( <i>n</i> = 19) |           |
| Target<br>Conformity | GC                        | GNC       | GC                      | GNC       | GC                            | GNC       | GC                     | GNC       |
| Liberal Values       | 2.46(.55)                 | 3.66(.51) | 2.55(.61)               | 3.33(.52) | 2.52(.53)                     | 3.73(.53) | 2.69(.56)              | 3.28(.44) |
| Social               | 2.36(.87)                 | 3.89(.80) | 2.30(.82)               | 3.59(.82) | 2.48(.61)                     | 4.00(.74) | 2.32(.67)              | 3.42(.85) |
| Anti-Social          | 1.50(.70)                 | 2.42(.95) | 1.65(.83)               | 2.00(.84) | 1.70(1.07)                    | 2.29(.96) | 1.59(.90)              | 1.74(.87) |
| Freedoms             | 2.20(.93)                 | 1.63(.63) | 2.21(.89)               | 1.62(.75) | 1.89(.90)                     | 1.94(.79) | 1.93(.79)              | 1.53(.73) |
| Social Coordination  | 2.97(.78)                 | 2.31(.59) | 2.86(.71)               | 2.39(.69) | 2.85(.54)                     | 2.56(.62) | 2.72(.68)              | 2.31(.66) |
| Values               | 3.32(.51)                 | 2.85(.53) | 3.13(.58)               | 2.90(.56) | 2.88(.65)                     | 3.59(.59) | 2.89(.53)              | 3.07(.39) |
| Anger                | 1.45(.96)                 | 1.15(.51) | 1.34(.71)               | 1.26(.64) | 1.19(.51)                     | 1.29(.64) | 1.17(.51)              | 1.22(.55) |
| Disgust              | 1.51(.92)                 | 1.18(.60) | 1.31(.64)               | 1.22(.63) | 1.19(.51)                     | 1.19(.51) | 1.17(.38)              | 1.28(.57) |
| Trust                | 2.17(.88)                 | 3.12(.93) | 2.45(.89)               | 2.93(.85) | 2.36(1.00)                    | 2.82(.85) | 2.56(.51)              | 2.72(.67) |
| Bullying             | 1.26(.50)                 | 1.15(.46) | 1.23(.57)               | 1.22(.52) | 1.26(.48)                     | 1.06(.11) | 1.11(.21)              | 1.13(.47) |
| Exclusion            | 1.74(.99)                 | 1.18(.51) | 1.58(.86)               | 1.31(.63) | 1.48(.66)                     | 1.29(.44) | 1.58(.60)              | 1.22(.49) |

*Note.* Total women *n* = 305. Scores were on a 1-5 scale. GC = gender conforming, GNC = gender non-conforming. Social = social non-conformity, Freedoms = personal freedoms threats, Social Coordination = social coordination threat.

**Table 4***Means and Standard Deviations of Non-Binary Participants' Ratings of Targets*

| Target Gender<br>Target Conformity | Man ( <i>n</i> = 5) |            | Woman ( <i>n</i> = 6) |           |
|------------------------------------|---------------------|------------|-----------------------|-----------|
|                                    | GC                  | GNC        | GC                    | GNC       |
| Values S                           | 2.23(.61)           | 3.67(.79)  | 2.81(.49)             | 3.17(.52) |
| Social S                           | 1.80(.76)           | 3.70(.45)  | 2.83(.75)             | 3.33(.41) |
| Anti-social                        | 1.27(.43)           | 2.47(.51)  | 1.44(.72)             | 1.61(.53) |
| Personal Freedoms                  | 3.04(1.19)          | 1.80(.51)  | 1.77(.75)             | 1.80(.68) |
| Social Coordination                | 3.00(.71)           | 1.93(.72)  | 2.83(.35)             | 2.67(.52) |
| Values T                           | 4.00(.59)           | 2.57(.56)  | 3.25(.66)             | 2.94(.53) |
| Anger                              | 2.40(1.14)          | 1.00(0.00) | 1.33(.82)             | 1.17(.41) |
| Disgust                            | 2.00(1.22)          | 1.00(0.00) | 1.17(.41)             | 1.17(.41) |
| Trust                              | 1.60(.55)           | 3.00(1.00) | 2.83(1.17)            | 2.67(.52) |
| Bullying                           | 1.45(.41)           | 1.15(.22)  | 1.13(.31)             | 1.21(.33) |
| Exclusion                          | 3.10(1.52)          | 1.10(.22)  | 1.50(.77)             | 1.17(.26) |

*Note.* Total non-binary *n* = 12. These means are from liberal non-binary participants; only one non-binary participant was conservative, so no means are shown. Scores were on a 1-5 scale. GC = gender conforming, GNC = gender non-conforming. Social = social non-conformity, Freedoms = personal freedoms threats, Social Coor = social coordination threat.

**Table 5***Correlations Among Study Variables for Men and Women*

|                         | 1                 | 2                 | 3                 | 4                 | 5                 | 6                 | 7                | 8                 | 9                 | 10                | 11               | 12                | 13                | 14               | 15                | 16                | 17                | 18                | 19               | 20                | 21                | 22                |  |
|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|--|
| GC target               |                   |                   |                   |                   |                   |                   |                  |                   |                   |                   |                  |                   |                   |                  |                   |                   |                   |                   |                  |                   |                   |                   |  |
| 1. Values S             | --                | .28 <sup>b</sup>  | .17 <sup>a</sup>  | -.08              | -.03              | -.17 <sup>a</sup> | .02              | .06               | .17 <sup>a</sup>  | .10               | -.06             | -.20 <sup>a</sup> | -.02              | -.12             | -.02              | .02               | .06               | .00               | -.04             | .07               | .06               | .00               |  |
| 2. Social S             | .44 <sup>b</sup>  | --                | .16               | -.26 <sup>b</sup> | -.23 <sup>b</sup> | -.13              | .02              | -.07              | .17 <sup>a</sup>  | .04               | -.13             | -.19 <sup>a</sup> | .07               | -.07             | .03               | .11               | .10               | .04               | .06              | -.07              | .10               | -.06              |  |
| 3. Anti-social          | .20 <sup>b</sup>  | .03               | --                | -.53 <sup>b</sup> | .04               | -.09              | .51 <sup>b</sup> | .51 <sup>b</sup>  | .15               | .58 <sup>b</sup>  | .50 <sup>b</sup> | -.12              | -.22 <sup>b</sup> | .26 <sup>b</sup> | .30 <sup>b</sup>  | .05               | -.04              | .46 <sup>b</sup>  | .36 <sup>b</sup> | .09               | .46 <sup>b</sup>  | .31 <sup>b</sup>  |  |
| 4. Personal Freedoms    | -.23 <sup>b</sup> | -.40 <sup>b</sup> | .50 <sup>b</sup>  | --                | .26 <sup>b</sup>  | .02               | .47 <sup>b</sup> | .54 <sup>b</sup>  | -.10              | .44 <sup>b</sup>  | .56 <sup>b</sup> | -.10              | -.29 <sup>b</sup> | .10              | .14               | .04               | -.17 <sup>a</sup> | .32 <sup>b</sup>  | .22 <sup>b</sup> | .13               | .33 <sup>b</sup>  | .26 <sup>b</sup>  |  |
| 5. Social Coordination  | -.32 <sup>b</sup> | -.33 <sup>b</sup> | .05               | .42 <sup>b</sup>  | --                | .27 <sup>b</sup>  | .11              | .18 <sup>a</sup>  | -.57 <sup>b</sup> | .08               | .36 <sup>b</sup> | .05               | -.09              | -.04             | -.07              | .17 <sup>a</sup>  | -.01              | .08               | .03              | -.18 <sup>a</sup> | .07               | -.03              |  |
| 6. Values T             | -.24 <sup>b</sup> | -.21 <sup>b</sup> | -.16 <sup>b</sup> | .16 <sup>b</sup>  | .36 <sup>b</sup>  | --                | .02              | .09               | -.19 <sup>a</sup> | -.13              | .04              | -.08              | .03               | -.16             | -.24 <sup>b</sup> | -.14              | -.01              | -.04              | -.04             | -.02              | -.11              | -.23 <sup>b</sup> |  |
| 7. Anger                | -.09              | -.17 <sup>b</sup> | .27 <sup>b</sup>  | .48 <sup>b</sup>  | .23 <sup>b</sup>  | .14 <sup>a</sup>  | --               | .76 <sup>b</sup>  | .15               | .71 <sup>b</sup>  | .59 <sup>b</sup> | -.01              | -.33 <sup>b</sup> | .23 <sup>b</sup> | .32 <sup>b</sup>  | .20 <sup>a</sup>  | -.14              | .66 <sup>b</sup>  | .51 <sup>b</sup> | .06               | .59 <sup>b</sup>  | .45 <sup>b</sup>  |  |
| 8. Disgust              | -.13 <sup>a</sup> | -.19 <sup>b</sup> | .32 <sup>b</sup>  | .47 <sup>b</sup>  | .31 <sup>b</sup>  | .16 <sup>b</sup>  | .78 <sup>b</sup> | --                | -.02              | .73 <sup>b</sup>  | .66 <sup>b</sup> | -.01              | -.31 <sup>b</sup> | .21 <sup>a</sup> | .26 <sup>b</sup>  | .15               | -.14              | .52 <sup>b</sup>  | .38 <sup>b</sup> | -.04              | .53 <sup>b</sup>  | .41 <sup>b</sup>  |  |
| 9. Trust                | .20 <sup>b</sup>  | .29 <sup>b</sup>  | .18 <sup>b</sup>  | -.14 <sup>a</sup> | -.52 <sup>b</sup> | -.39 <sup>b</sup> | -.09             | -.12 <sup>a</sup> | --                | .19 <sup>a</sup>  | -.07             | -.09              | -.11              | .07              | .16               | -.16              | -.14              | .15               | .10              | .38 <sup>b</sup>  | .18 <sup>a</sup>  | .12               |  |
| 10. Bullying            | .06               | -.02              | .41 <sup>b</sup>  | .34 <sup>b</sup>  | .03               | -.11 <sup>a</sup> | .59 <sup>b</sup> | .66 <sup>b</sup>  | .14 <sup>a</sup>  | --                | .65 <sup>b</sup> | -.02              | -.32 <sup>b</sup> | .27 <sup>b</sup> | .45 <sup>b</sup>  | .17 <sup>a</sup>  | -.14              | .60 <sup>b</sup>  | .43 <sup>b</sup> | .02               | .74 <sup>b</sup>  | .54 <sup>b</sup>  |  |
| 11. Exclusion           | -.23 <sup>b</sup> | -.32 <sup>b</sup> | .29 <sup>b</sup>  | .55 <sup>b</sup>  | .44 <sup>b</sup>  | .21 <sup>b</sup>  | .59 <sup>b</sup> | .67 <sup>b</sup>  | -.20 <sup>b</sup> | .55 <sup>b</sup>  | --               | .14               | -.27 <sup>b</sup> | .35 <sup>b</sup> | .27 <sup>b</sup>  | .03               | -.11              | .50 <sup>b</sup>  | .36 <sup>b</sup> | -.02              | .49 <sup>b</sup>  | .39 <sup>b</sup>  |  |
| GNC target              |                   |                   |                   |                   |                   |                   |                  |                   |                   |                   |                  |                   |                   |                  |                   |                   |                   |                   |                  |                   |                   |                   |  |
| 12. Values S            | -.13 <sup>a</sup> | -.21 <sup>b</sup> | .01               | .12 <sup>a</sup>  | .03               | .09               | .08              | .12 <sup>a</sup>  | -.12 <sup>a</sup> | -.01              | .14 <sup>a</sup> | --                | .29 <sup>b</sup>  | .28 <sup>b</sup> | .12               | .10               | .17 <sup>a</sup>  | -.06              | .03              | -.14              | -.14              | .22 <sup>b</sup>  |  |
| 13. Social S            | -.04              | .02               | -.16 <sup>b</sup> | -.07              | .02               | -.07              | -.10             | -.12 <sup>a</sup> | -.17 <sup>b</sup> | -.20 <sup>b</sup> | -.07             | .29 <sup>b</sup>  | --                | -.03             | -.25 <sup>b</sup> | -.06              | -.04              | -.27 <sup>b</sup> | -.16             | -.01              | -.27 <sup>b</sup> | -.17 <sup>a</sup> |  |
| 14. Anti-social         | .00               | -.15 <sup>a</sup> | .18 <sup>b</sup>  | .28 <sup>b</sup>  | .05               | -.05              | .18 <sup>b</sup> | .21 <sup>b</sup>  | .01               | .25 <sup>b</sup>  | .21 <sup>b</sup> | .22 <sup>b</sup>  | .10               | --               | .62 <sup>b</sup>  | .19 <sup>a</sup>  | .24 <sup>b</sup>  | .34 <sup>b</sup>  | .34 <sup>b</sup> | -.10              | .32 <sup>b</sup>  | .45 <sup>b</sup>  |  |
| 15. Personal Freedoms   | .07               | -.09              | .39 <sup>b</sup>  | .34 <sup>b</sup>  | .10               | -.08              | .29 <sup>b</sup> | .35 <sup>b</sup>  | .07               | .47 <sup>b</sup>  | .30 <sup>b</sup> | -.02              | -.29 <sup>b</sup> | .54 <sup>b</sup> | --                | .34 <sup>b</sup>  | .17 <sup>a</sup>  | .43 <sup>b</sup>  | .43 <sup>b</sup> | -.05              | .52 <sup>b</sup>  | .61 <sup>b</sup>  |  |
| 16. Social Coordination | -.04              | .06               | .07               | .04               | .14 <sup>a</sup>  | -.04              | .11              | .07               | .00               | .11               | .00              | -.11 <sup>a</sup> | -.08              | .12 <sup>a</sup> | .30 <sup>b</sup>  | --                | .29 <sup>b</sup>  | .22 <sup>b</sup>  | .34 <sup>b</sup> | -.45 <sup>b</sup> | .26 <sup>b</sup>  | .40 <sup>b</sup>  |  |
| 17. Values T            | -.04              | .01               | .08               | -.11              | -.01              | .06               | -.09             | -.03              | .03               | .01               | .02              | -.01              | -.04              | -.05             | .13 <sup>a</sup>  | .33 <sup>b</sup>  | --                | .07               | .21 <sup>a</sup> | -.39 <sup>b</sup> | -.13              | .23 <sup>b</sup>  |  |
| 18. Anger               | .12 <sup>a</sup>  | -.04              | .38 <sup>b</sup>  | .26 <sup>b</sup>  | .01               | -.12 <sup>a</sup> | .37 <sup>b</sup> | .36 <sup>b</sup>  | .16 <sup>b</sup>  | .53 <sup>b</sup>  | .32 <sup>b</sup> | -.04              | -.27 <sup>b</sup> | .26 <sup>b</sup> | .48 <sup>b</sup>  | .26 <sup>b</sup>  | .01               | --                | .82 <sup>b</sup> | -.09              | .69 <sup>b</sup>  | .57 <sup>b</sup>  |  |
| 19. Disgust             | .09               | -.08              | .39 <sup>b</sup>  | .27 <sup>b</sup>  | .06               | -.15 <sup>a</sup> | .34 <sup>b</sup> | .37 <sup>b</sup>  | .15 <sup>a</sup>  | .48 <sup>b</sup>  | .32 <sup>b</sup> | -.08              | -.25 <sup>b</sup> | .31 <sup>b</sup> | .52 <sup>b</sup>  | .36 <sup>b</sup>  | .12 <sup>a</sup>  | .74 <sup>b</sup>  | --               | -.13              | .60 <sup>b</sup>  | .61 <sup>b</sup>  |  |
| 20. Trust               | .02               | -.03              | .04               | .14 <sup>a</sup>  | -.12 <sup>a</sup> | .04               | .12 <sup>a</sup> | .11               | .22 <sup>b</sup>  | .07               | .08              | .08               | .04               | .09              | -.03              | -.46 <sup>b</sup> | -.20 <sup>b</sup> | -.02              | -.08             | --                | .05               | -.20 <sup>a</sup> |  |
| 21. Bullying            | .12 <sup>a</sup>  | .01               | .33 <sup>b</sup>  | .28 <sup>b</sup>  | .05               | -.03              | .39 <sup>b</sup> | .34 <sup>b</sup>  | .10               | .55 <sup>b</sup>  | .34 <sup>b</sup> | -.13 <sup>a</sup> | -.23 <sup>b</sup> | .29 <sup>b</sup> | .49 <sup>b</sup>  | .22 <sup>b</sup>  | .01               | .74 <sup>b</sup>  | .74 <sup>b</sup> | -.04              | --                | .59 <sup>b</sup>  |  |
| 22. Exclusion           | .03               | -.06              | .30 <sup>b</sup>  | .28 <sup>b</sup>  | .11               | -.10              | .34 <sup>b</sup> | .30 <sup>b</sup>  | .08               | .49 <sup>b</sup>  | .36 <sup>b</sup> | -.10              | -.30 <sup>b</sup> | .25 <sup>b</sup> | .53 <sup>b</sup>  | .40 <sup>b</sup>  | .09               | .63 <sup>b</sup>  | .66 <sup>b</sup> | -.18 <sup>b</sup> | .72 <sup>b</sup>  | --                |  |



*Note.* Men's correlations are above the diagonal; women's correlations are below the diagonal. <sup>a</sup> $p < .05$ , <sup>b</sup> $p = .01$ .

**Table 6***Correlations Among Study Variables for Non-Binary Participants*

|                         | 1 | 2   | 3   | 4                 | 5                | 6                 | 7                 | 8                 | 9    | 10                | 11                | 12                | 13               | 14               | 15   | 16                | 17                | 18                | 19               | 20                | 21               | 22               |
|-------------------------|---|-----|-----|-------------------|------------------|-------------------|-------------------|-------------------|------|-------------------|-------------------|-------------------|------------------|------------------|------|-------------------|-------------------|-------------------|------------------|-------------------|------------------|------------------|
| GC target               |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   |                   |                  |                   |                  |                  |
| 1. Values S             |   | .39 | .52 | -.61 <sup>a</sup> | -.32             | -.76 <sup>b</sup> | -.63 <sup>a</sup> | -.63 <sup>a</sup> | .34  | -.13              | -.52              | -.40              | -.20             | -.49             | -.02 | .61 <sup>a</sup>  | .38               | .49               | .52              | -.41              | .16              | .37              |
| 2. Social S             |   |     | .19 | -.59 <sup>a</sup> | .12              | -.55              | -.57              | -.53              | .15  | -.67 <sup>a</sup> | -.64 <sup>a</sup> | -.80 <sup>b</sup> | .14              | -.51             | -.37 | .63               | .33               | .25               | -.12             | -.66 <sup>a</sup> | -.30             | .27              |
| 3. Anti-social          |   |     |     | -.07              | -.04             | -.61 <sup>a</sup> | -.14              | -.21              | .02  | -.04              | -.18              | -.21              | .22              | .09              | .03  | .52               | -.06              | .74 <sup>b</sup>  | .53              | -.40              | .64 <sup>a</sup> | .93 <sup>b</sup> |
| 4. Personal Freedoms    |   |     |     |                   | .60 <sup>a</sup> | .65 <sup>a</sup>  | .86 <sup>b</sup>  | .92 <sup>b</sup>  | -.37 | .61 <sup>a</sup>  | .90 <sup>b</sup>  | .52               | .41              | .83 <sup>b</sup> | .09  | -.30              | -.67 <sup>a</sup> | -.08              | -.20             | .33               | .35              | -.01             |
| 5. Social Coordination  |   |     |     |                   |                  | .31               | .47               | .60 <sup>a</sup>  | -.45 | .32               | .58 <sup>a</sup>  | -.04              | .69 <sup>a</sup> | .36              | -.42 | .34               | -.63 <sup>a</sup> | -.05              | -.54             | -.24              | .07              | .20              |
| 6. Values T             |   |     |     |                   |                  |                   | .45               | .59 <sup>a</sup>  | -.19 | .34               | .53               | .33               | .13              | .33              | .08  | -.53              | -.23              | -.58 <sup>a</sup> | -.46             | .37               | -.18             | -.52             |
| 7. Anger                |   |     |     |                   |                  |                   |                   | .91 <sup>b</sup>  | -.56 | .54               | .91 <sup>b</sup>  | .64 <sup>a</sup>  | .21              | .84 <sup>b</sup> | .15  | -.30              | -.77 <sup>b</sup> | -.22              | -.33             | .36               | .35              | -.05             |
| 8. Disgust              |   |     |     |                   |                  |                   |                   |                   | -.46 | .62 <sup>a</sup>  | .90 <sup>b</sup>  | .65 <sup>a</sup>  | .39              | .76 <sup>b</sup> | .22  | -.35              | -.77 <sup>b</sup> | -.17              | -.26             | .42               | .36              | -.11             |
| 9. Trust                |   |     |     |                   |                  |                   |                   |                   |      | -.07              | -.59 <sup>a</sup> | -.31              | -.54             | -.34             | .32  | -.15              | .82 <sup>b</sup>  | .12               | .53              | .36               | .06              | -.08             |
| 10. Bullying            |   |     |     |                   |                  |                   |                   |                   |      |                   | .65 <sup>a</sup>  | .55               | .09              | .53              | .24  | -.26              | -.35              | -.26              | .08              | .56               | .50              | .03              |
| 11. Exclusion           |   |     |     |                   |                  |                   |                   |                   |      |                   |                   | .67 <sup>a</sup>  | .40              | .78 <sup>b</sup> | -.01 | -.26              | -.83 <sup>b</sup> | -.14              | -.30             | .28               | .22              | -.13             |
| GNC target              |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   |                   |                  |                   |                  |                  |
| 12. Values S            |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   | .05              | .46              | .33  | -.64 <sup>a</sup> | -.57              | -.06              | .20              | .66 <sup>a</sup>  | .33              | -.31             |
| 13. Social S            |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  | .31              | -.41 | .17               | -.60 <sup>a</sup> | .36               | -.15             | -.37              | -.03             | .29              |
| 14. Anti-social         |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  | .25  | -.35              | -.56              | .01               | -.10             | .35               | .33              | .13              |
| 15. Personal Freedoms   |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      | -.45              | .11               | -.05              | .36              | .61 <sup>a</sup>  | .45              | -.03             |
| 16. Social Coordination |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   | -.05              | -.10              | .30              | .05               | -.28             | -.14             |
| 17. Values T            |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   | .32               | -.14             | -.83 <sup>b</sup> | .12              | .61 <sup>a</sup> |
| 18. Anger               |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   |                   | .67 <sup>a</sup> | -.33              | .33              | .52              |
| 19. Disgust             |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   |                   |                  | .25               | .49              | .26              |
| 20. Trust               |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   |                   |                  |                   | .26              | -.42             |
| 21. Bullying            |   |     |     |                   |                  |                   |                   |                   |      |                   |                   |                   |                  |                  |      |                   |                   |                   |                  |                   |                  | .63 <sup>a</sup> |

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22. Exclusion

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*Note.* <sup>a</sup> $p < .05$ , <sup>b</sup> $p = .01$ .

**Table 7***Means and Standard Deviations of Target Ratings*

| Gender            | Boy ( <i>n</i> = 55) |            |                       |            | Girl ( <i>n</i> = 58) |            |                       |            |
|-------------------|----------------------|------------|-----------------------|------------|-----------------------|------------|-----------------------|------------|
|                   | Target Gender        |            | Target Gender         |            | Target Gender         |            | Target Gender         |            |
|                   | Boy ( <i>n</i> = 28) |            | Girl ( <i>n</i> = 27) |            | Boy ( <i>n</i> = 28)  |            | Girl ( <i>n</i> = 30) |            |
| Target Conformity | GC                   | GNC        | GC                    | GNC        | GC                    | GNC        | GC                    | GNC        |
| Weird             | 1.75(1.38)           | 2.39(1.71) | 1.41(1.08)            | 2.30(1.84) | 1.43(.96)             | 1.68(1.19) | 1.50(.94)             | 1.40(.89)  |
| Gay               | 1.38(1.13)           | 2.17(1.69) | 1.50(1.18)            | 1.83(1.52) | 1.43(1.26)            | 2.39(1.66) | 1.82(1.56)            | 1.79(1.57) |
| Morals            | 1.70(1.09)           | 1.96(.98)  | 1.94(1.07)            | 1.86(1.14) | 1.68(.96)             | 1.51(.63)  | 1.72(1.07)            | 1.72(.92)  |
| Social            | 1.67(1.10)           | 2.33(1.41) | 2.29(1.30)            | 2.09(1.11) | 1.73(1.00)            | 1.63(.86)  | 1.79(1.18)            | 1.71(.75)  |
| Anger             | 1.45(1.06)           | 2.00(1.45) | 2.00(1.26)            | 2.00(1.32) | 1.44(.89)             | 1.37(.63)  | 1.59(1.15)            | 1.85(1.17) |
| Disgust           | 1.65(1.14)           | 2.10(1.48) | 1.88(1.48)            | 1.84(1.21) | 1.60(1.19)            | 1.36(.81)  | 1.29(.85)             | 1.18(.39)  |
| Discomfort        | 1.75(1.36)           | 1.83(1.34) | 2.21(1.63)            | 2.86(1.83) | 1.47(.80)             | 2.06(1.56) | 1.42(.96)             | 1.21(.42)  |
| Dislike           | 1.69(1.20)           | 1.75(.86)  | 1.67(1.28)            | 1.50(.99)  | 1.43(.75)             | 1.38(.59)  | 1.58(1.10)            | 1.50(.83)  |
| Exclude           | 1.77(1.05)           | 2.11(1.11) | 1.92(.97)             | 2.11(1.23) | 1.86(.94)             | 1.70(.79)  | 1.67(1.07)            | 1.63(.79)  |
| Bully             | 1.24(.97)            | 1.06(.24)  | 1.32(1.04)            | 1.05(.21)  | 1.04(.20)             | 1.00(0.00) | 1.25(.80)             | 1.14(.76)  |

*Note.* Scores were on a 1-5 scale. GC = gender conforming, GNC = gender non-conforming.

**Table 8***Correlations Among Study Variables*

|                | 1                | 2                 | 3                | 4                | 5                | 6                | 7                | 8                | 9                | 10               | 11               | 12               | 13               | 14               | 15               | 16               | 17               | 18               | 19               | 20               |
|----------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| GC target      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 1. Weird       | -                | .57 <sup>b</sup>  | .51 <sup>b</sup> | .26              | .24              | .26              | .31              | .15              | .17              | -.12             | .36 <sup>b</sup> | .08              | .37 <sup>b</sup> | .13              | .32 <sup>a</sup> | .40 <sup>b</sup> | .01              | .21              | .13              | -.12             |
| 2. Gay         | .12              | -                 | .19              | .13              | .19              | .08              | .37              | .22              | -.06             | -.10             | .19              | .14              | .12              | .02              | .10              | .13              | .26              | .32              | .06              | -.09             |
| 3. Morals      | .33 <sup>a</sup> | .07               | -                | .74 <sup>b</sup> | .76 <sup>b</sup> | .61 <sup>b</sup> | .51 <sup>b</sup> | .68 <sup>b</sup> | .63 <sup>b</sup> | .15              | .32 <sup>a</sup> | -.09             | .52 <sup>b</sup> | .33 <sup>a</sup> | .41 <sup>b</sup> | .35 <sup>a</sup> | .08              | .37 <sup>a</sup> | .38 <sup>b</sup> | -.17             |
| 4. Social      | .34 <sup>b</sup> | .05               | .92 <sup>b</sup> | -                | .70 <sup>b</sup> | .58 <sup>b</sup> | .27              | .70 <sup>b</sup> | .73 <sup>b</sup> | .36 <sup>a</sup> | .01              | -.04             | .39 <sup>b</sup> | .28 <sup>a</sup> | .20              | .18              | .03              | .17              | .28 <sup>a</sup> | -.10             |
| 5. Anger       | .30 <sup>a</sup> | .14               | .75 <sup>b</sup> | .75 <sup>b</sup> | -                | .71 <sup>b</sup> | .48 <sup>a</sup> | .80 <sup>b</sup> | .69 <sup>b</sup> | .59 <sup>b</sup> | -.04             | .07              | .29 <sup>a</sup> | .04              | .08              | -.01             | .02              | .20              | .16              | -.12             |
| 6. Disgust     | .35 <sup>b</sup> | .08               | .54 <sup>b</sup> | .56 <sup>b</sup> | .54 <sup>b</sup> | -                | .61 <sup>b</sup> | .71 <sup>b</sup> | .67 <sup>b</sup> | .58 <sup>b</sup> | .13              | -.06             | .30 <sup>a</sup> | .04              | .20              | .24              | .10              | .13              | .16              | -.11             |
| 7. Discomfort  | .21              | -.07              | .39 <sup>a</sup> | .35 <sup>a</sup> | .35 <sup>a</sup> | .39 <sup>a</sup> | -                | .64 <sup>b</sup> | .38              | <sup>c</sup>     | .43 <sup>a</sup> | .09              | .51 <sup>b</sup> | .32              | .40 <sup>a</sup> | .11              | .42 <sup>a</sup> | .44 <sup>a</sup> | .42 <sup>a</sup> | -.13             |
| 8. Dislike     | .23              | -.01              | .57 <sup>b</sup> | .61 <sup>b</sup> | .54 <sup>b</sup> | .38 <sup>b</sup> | .79 <sup>b</sup> | -                | .76 <sup>b</sup> | .69 <sup>b</sup> | .01              | -.05             | .30              | .11              | .07              | .05              | .21              | .40 <sup>a</sup> | .29              | -.11             |
| 9. Exclusion   | .32              | -.02              | .71 <sup>b</sup> | .71 <sup>b</sup> | .65 <sup>b</sup> | .55 <sup>b</sup> | .35 <sup>a</sup> | .67 <sup>b</sup> | -                | .54 <sup>b</sup> | -.08             | .11              | .26              | .14              | .11              | .03              | .12              | .05              | .18              | -.16             |
| 10. Bullying   | .07              | -.03              | .55 <sup>b</sup> | .58 <sup>b</sup> | .63 <sup>b</sup> | .17              | .41 <sup>b</sup> | .74 <sup>b</sup> | .60 <sup>b</sup> | -                | -.20             | .05              | .01              | -.17             | -.20             | -.19             | <sup>c</sup>     | -.18             | .04              | .29              |
| GNC target     |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 11. Weird      | .17              | -.19              | .10              | .08              | .07              | -.06             | .33 <sup>a</sup> | .46 <sup>b</sup> | .29 <sup>a</sup> | .40 <sup>b</sup> | -                | .03              | .37 <sup>b</sup> | .36 <sup>b</sup> | .53 <sup>b</sup> | .58 <sup>b</sup> | .14              | .30              | .43 <sup>b</sup> | .14              |
| 12. Gay        | -.18             | .17               | .04              | .04              | -.06             | -.18             | -.18             | .01              | .09              | .19              | .19              | -                | .52 <sup>b</sup> | .34 <sup>a</sup> | .40 <sup>b</sup> | .10              | .48 <sup>b</sup> | -.04             | .41 <sup>b</sup> | .18              |
| 13. Morals     | .15              | -.18              | .19              | .17              | .12              | -.11             | -.13             | .20              | .26              | .41 <sup>b</sup> | .30 <sup>a</sup> | .27 <sup>a</sup> | -                | .65 <sup>b</sup> | .76 <sup>b</sup> | .58 <sup>b</sup> | .50 <sup>b</sup> | .25              | .58 <sup>b</sup> | .21              |
| 14. Social     | .04              | -.26              | .06              | .11              | -.04             | .08              | -.14             | .12              | .20              | .25              | .29 <sup>a</sup> | .13              | .70 <sup>b</sup> | -                | .76 <sup>b</sup> | .50 <sup>b</sup> | .48 <sup>b</sup> | .41 <sup>a</sup> | .61 <sup>b</sup> | .36 <sup>a</sup> |
| 15. Anger      | .16              | -.22              | .06              | .06              | .19              | .00              | .05              | .29              | .15              | .43 <sup>b</sup> | .34 <sup>a</sup> | -.05             | .47 <sup>b</sup> | .52 <sup>b</sup> | -                | .66 <sup>b</sup> | .47 <sup>a</sup> | .44 <sup>b</sup> | .61 <sup>b</sup> | .27              |
| 16. Disgust    | -.16             | -.17              | -.09             | -.06             | -.08             | .15              | .13              | .14              | .01              | -.11             | .09              | .06              | .28 <sup>a</sup> | .40 <sup>b</sup> | .18              | -                | .11              | .23              | .54 <sup>b</sup> | .25              |
| 17. Discomfort | -.13             | -.22              | -.03             | -.04             | -.04             | .09              | .39 <sup>a</sup> | .30              | .16              | .06              | .44 <sup>b</sup> | .29              | .42 <sup>b</sup> | .49 <sup>b</sup> | .22              | .79 <sup>b</sup> | -                | .54 <sup>b</sup> | .54 <sup>b</sup> | .21              |
| 18. Dislike    | .04              | -.19              | .06              | .08              | .14              | -.02             | .18              | .46 <sup>b</sup> | .19              | .38 <sup>b</sup> | .32 <sup>a</sup> | .15              | .64 <sup>b</sup> | .69 <sup>b</sup> | .51 <sup>b</sup> | .57 <sup>b</sup> | .64 <sup>b</sup> | -                | .42 <sup>b</sup> | .05              |
| 19. Exclusion  | -.07             | -.33 <sup>a</sup> | .12              | .18              | .24              | .08              | .16              | .27              | .41 <sup>b</sup> | .41 <sup>b</sup> | .35 <sup>b</sup> | .06              | .46 <sup>b</sup> | .56 <sup>b</sup> | .46 <sup>b</sup> | .21              | .50 <sup>b</sup> | .51 <sup>b</sup> | -                | .11              |
| 20. Bullying   | -.07             | -.06              | -.10             | -.10             | -.07             | -.06             | <sup>c</sup>     | <sup>c</sup>     | -.10             | -.04             | -.07             | -.10             | -.11             | -.12             | .06              | .17              | <sup>c</sup>     | <sup>c</sup>     | -.06             | -                |

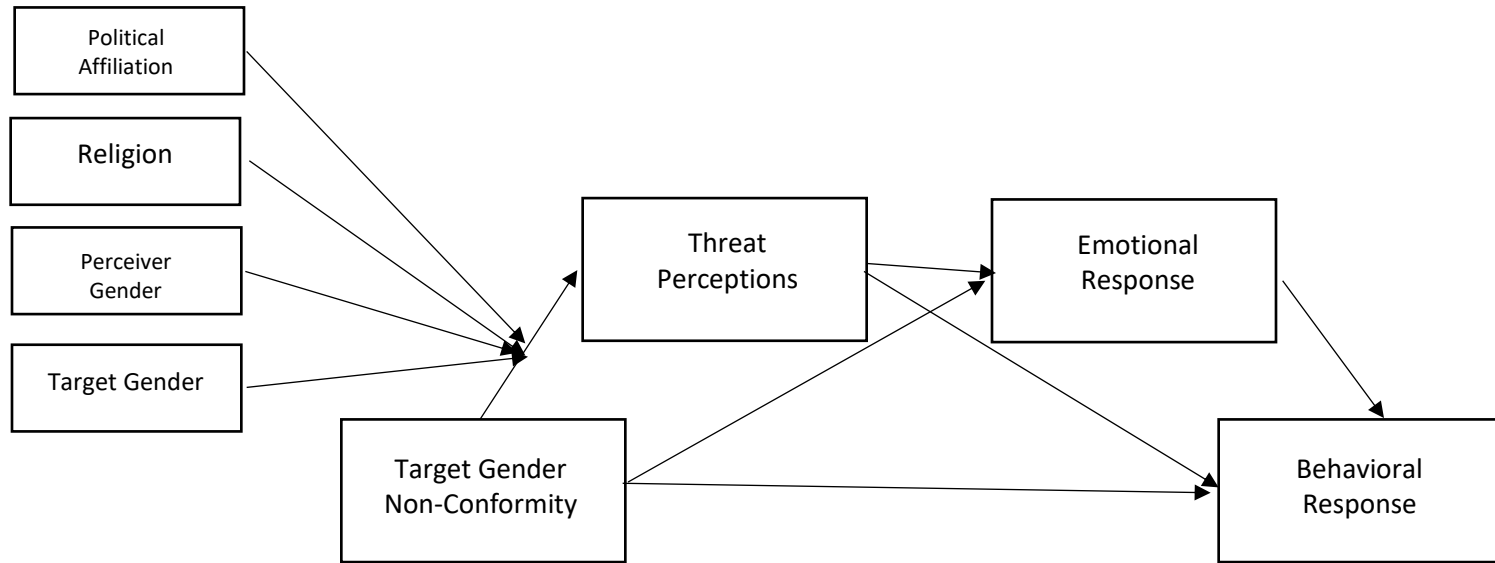
Note. Boys' correlations are above diagonal; girls' correlations are below diagonal.

<sup>c</sup> This value not calculated because scores for one scale were constant.

<sup>a</sup> $p < .05$ , <sup>b</sup> $p = .01$

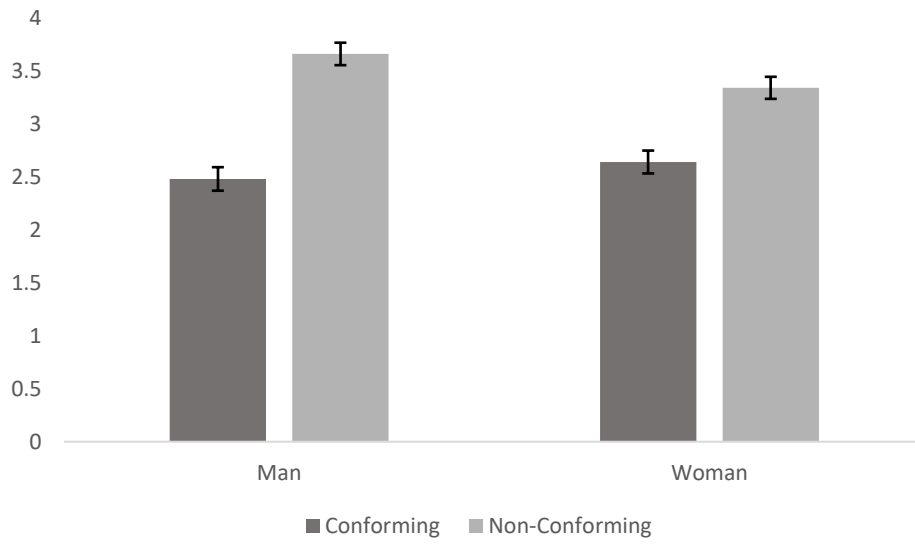
**Figure 1**

*Hypothesized Prediction of Behavioral Response to Gender Non-Conforming Peers*



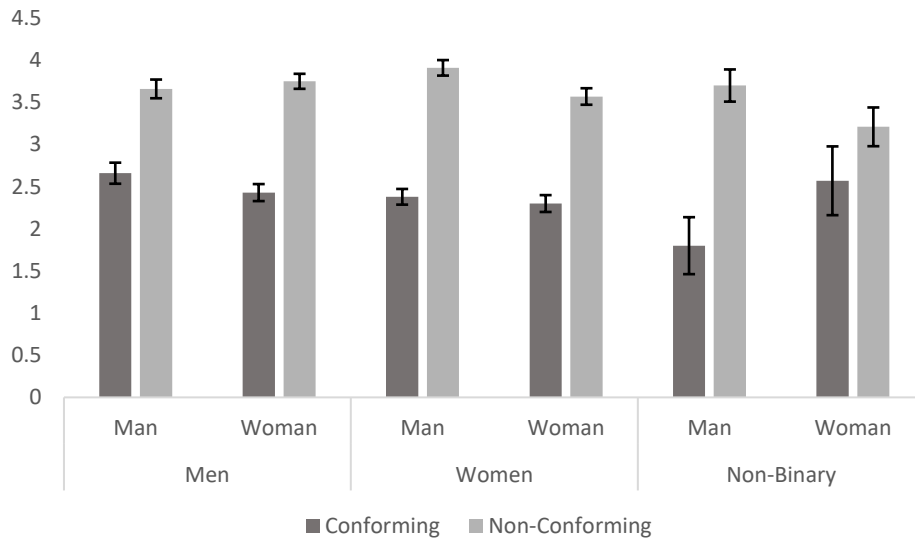
**Figure 2**

*Participants' Mean Ratings of Liberal Values Stereotype by Target Gender and Target Conformity*



**Figure 3**

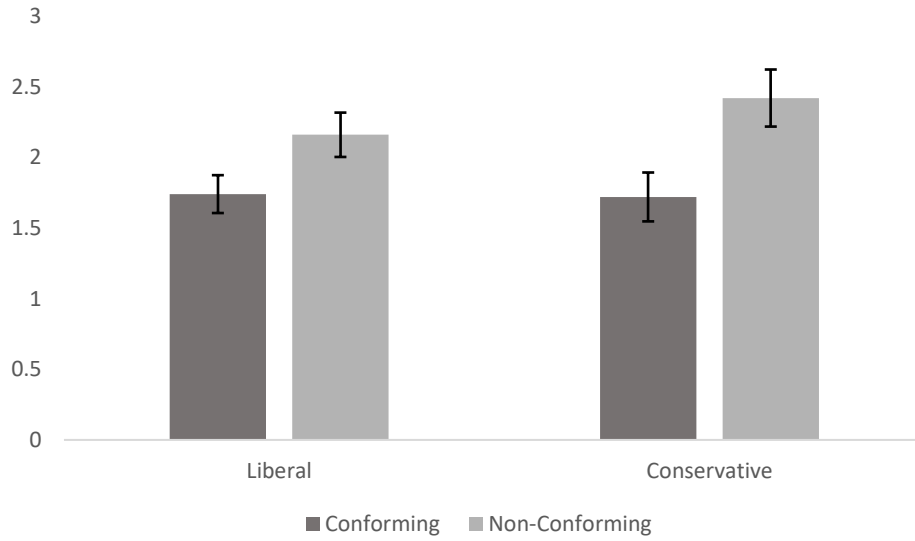
*Participants' Mean Ratings of Social Non-Conformity Stereotype by Perceiver Gender, Target Gender, and Target Conformity*





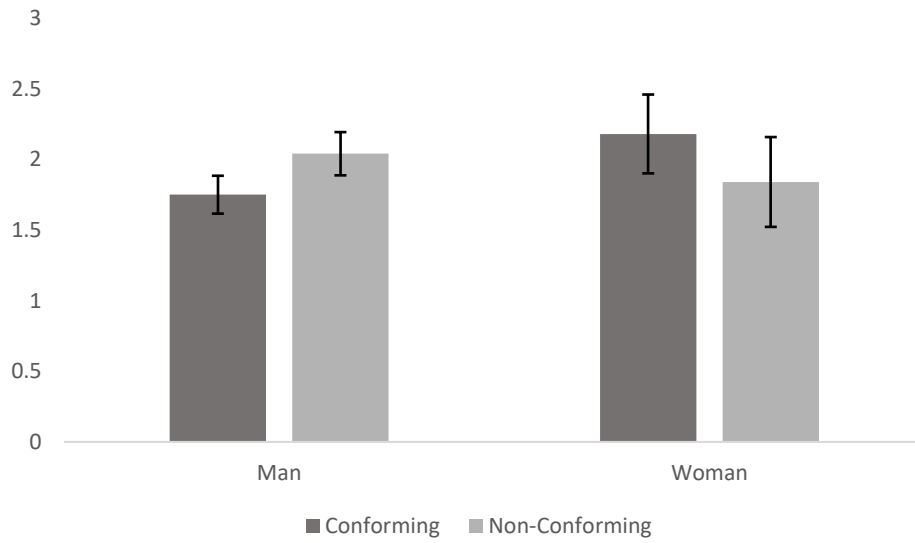
**Figure 4**

*Men's Mean Ratings of Anti-Sociality Stereotype by Political Group and Target Conformity*



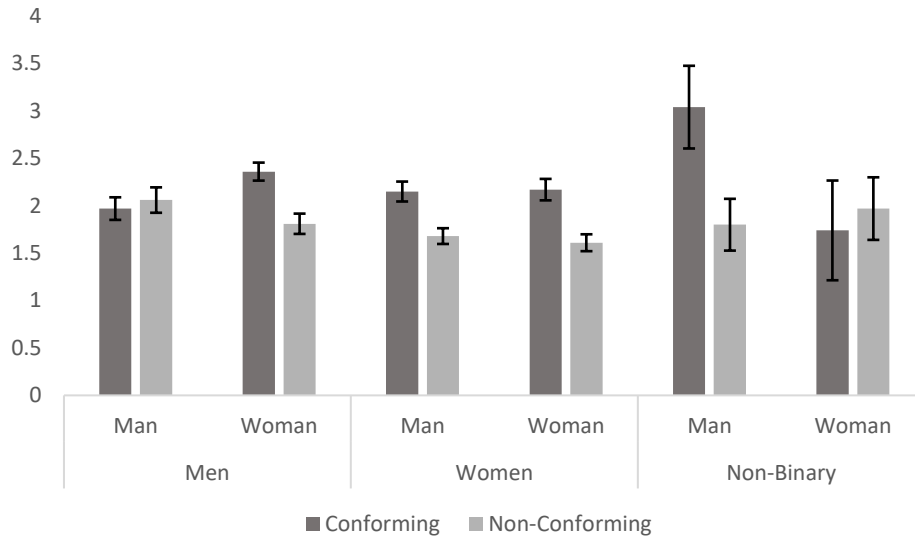
**Figure 5**

*Conservative Participants' Mean Ratings of Personal Freedoms Threat by Target Gender and Target Conformity*



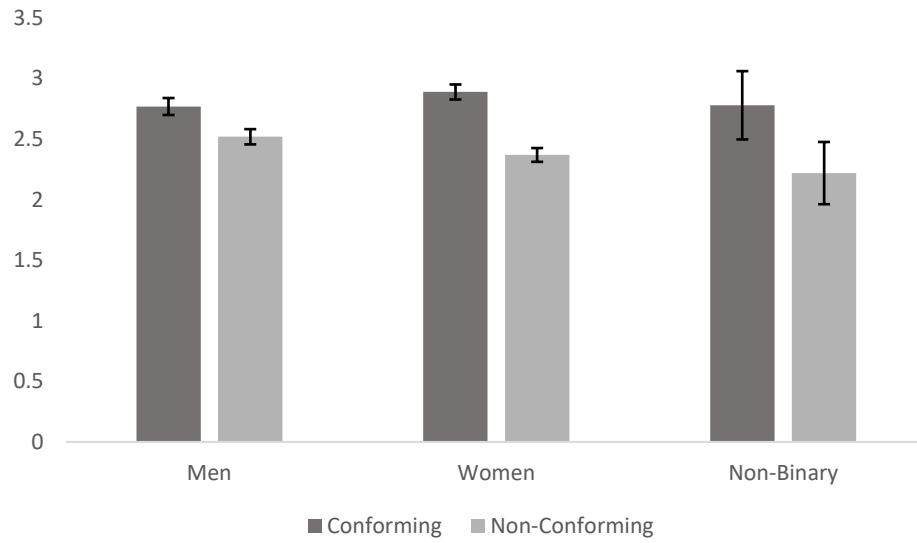
**Figure 6**

*Participants' Mean Ratings of Personal Freedoms Threat by Perceiver Gender, Target Gender, and Target Conformity*



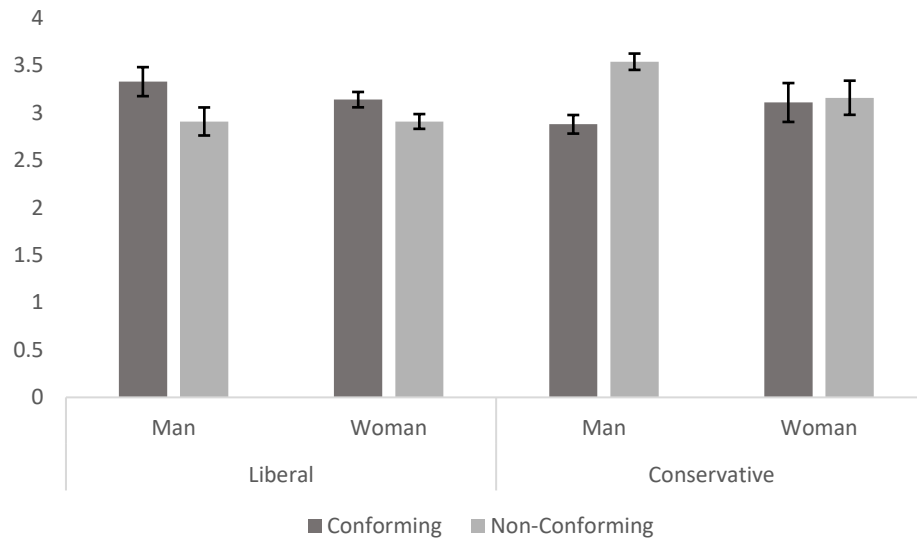
**Figure 7**

*Participants' Mean Ratings of Social Coordination Threat by Perceiver Gender and Target Conformity*



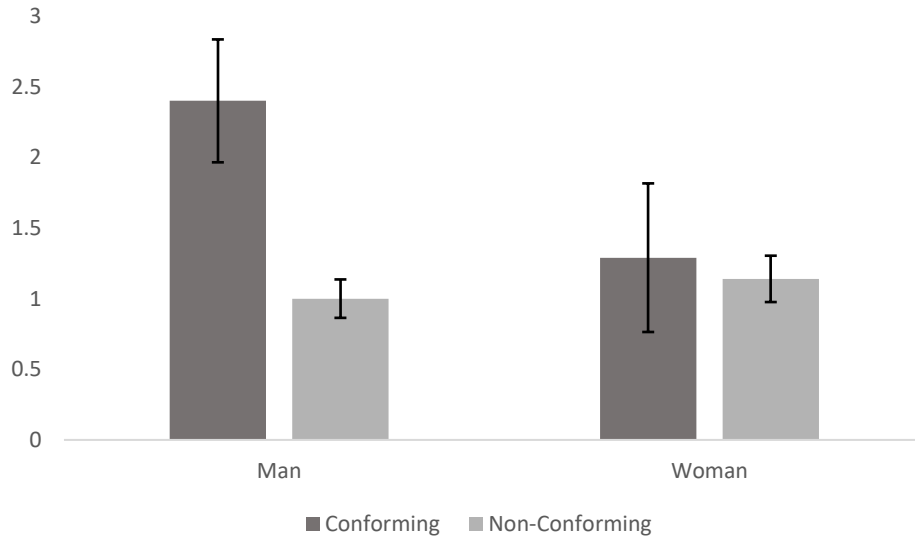
**Figure 8**

*Participants' Mean Ratings of Values Threat by Political Group, Target Gender, and Target Conformity*



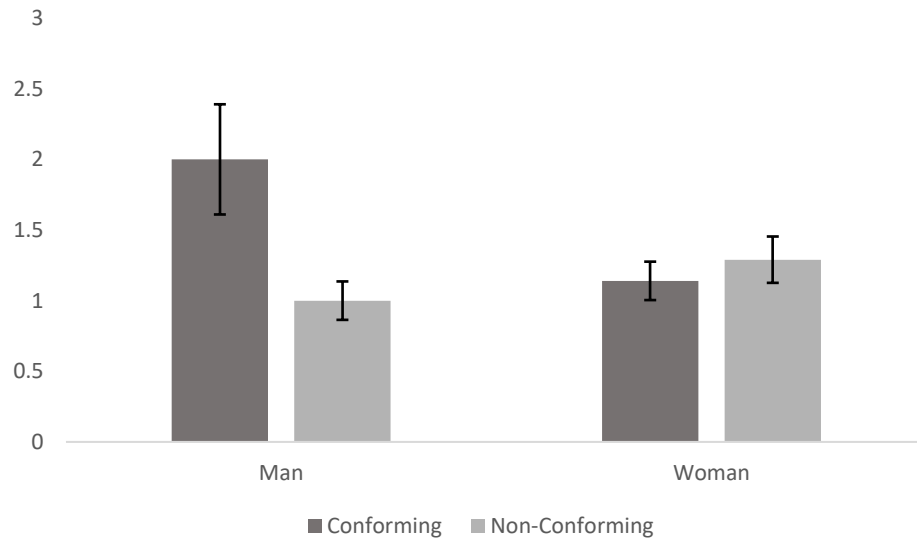
**Figure 9**

*Non-Binary Participants' Mean Ratings of Anger by Target Gender and Target Conformity*



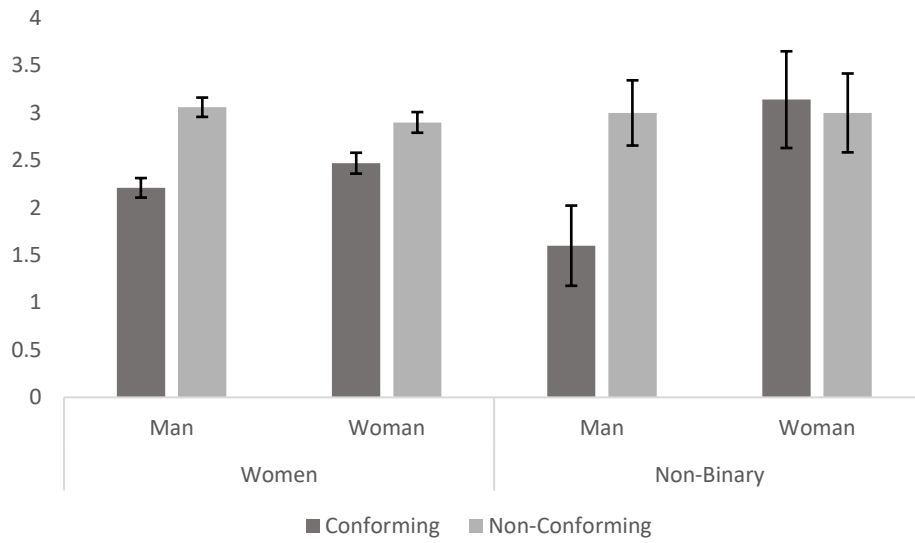
**Figure 10**

*Non-Binary Participants' Mean Ratings of Disgust by Target Gender and Target Conformity*



**Figure 11**

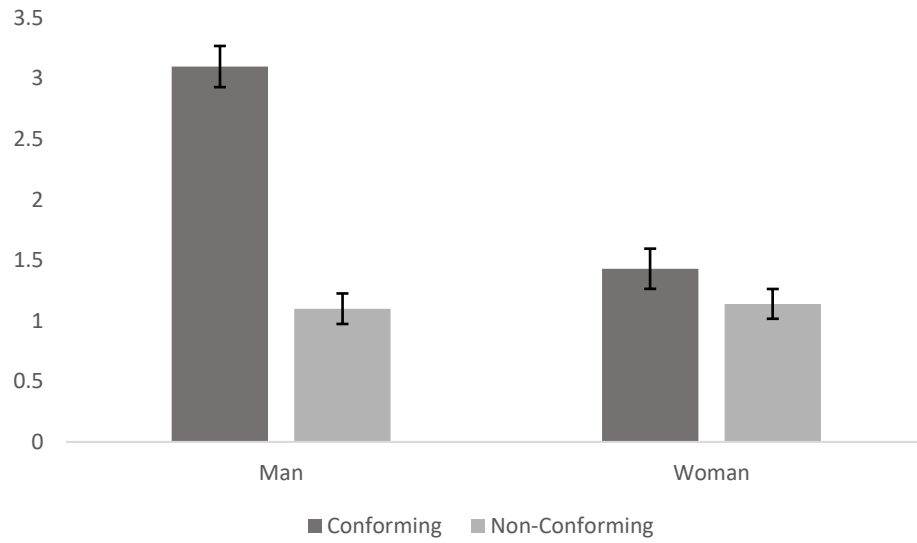
*Women's and Non-Binary Participants' Mean Ratings of Trust by Target Gender and Target Conformity*





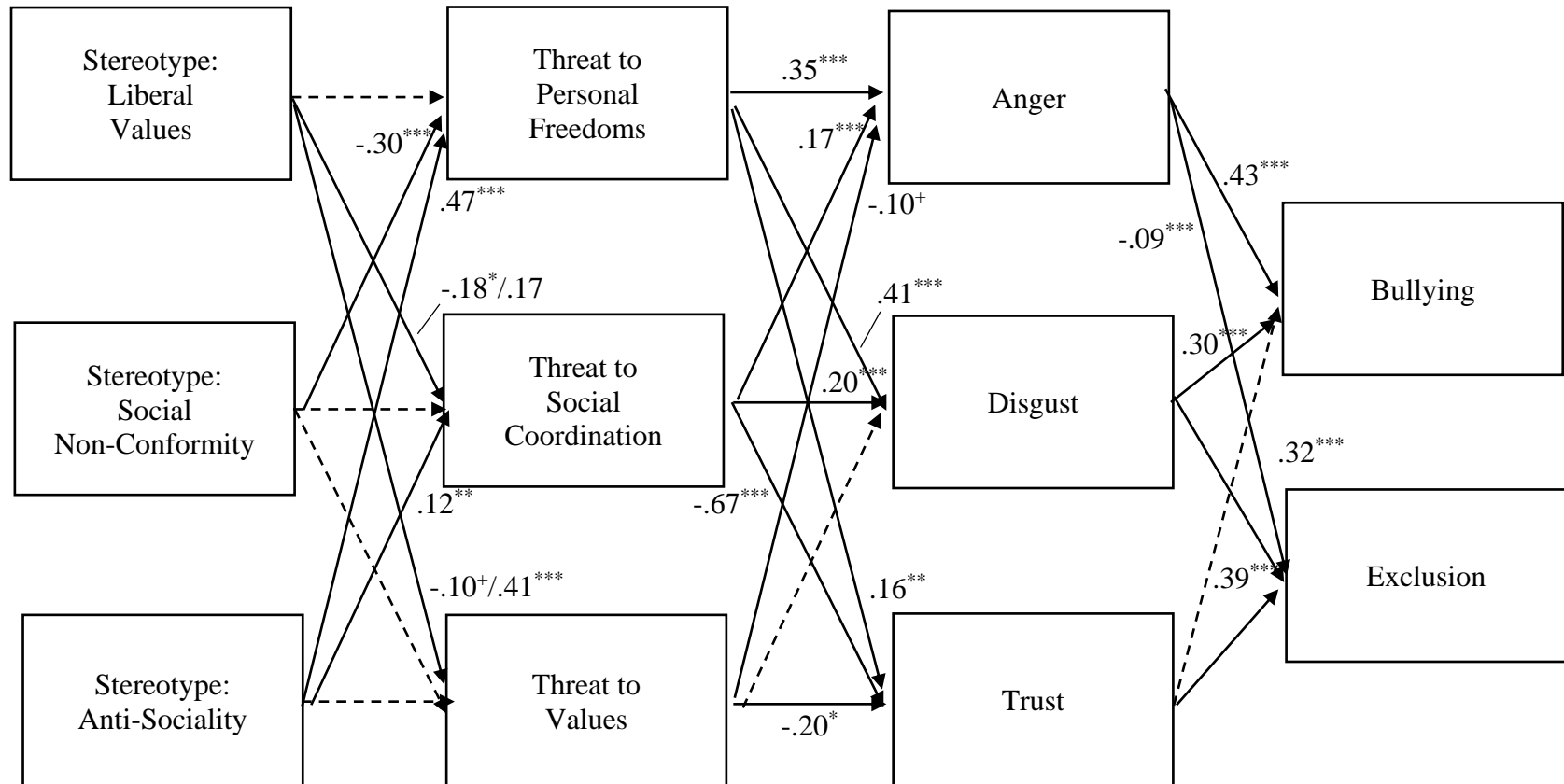
**Figure 12**

*Non-Binary Participants' Mean Ratings of Exclusion by Target Gender and Target Conformity*



**Figure 13**

*Estimated Model of Stereotypes, Threat Perceptions, Emotional Responses, and Behavioral Responses to Gender Non-Conforming Targets*

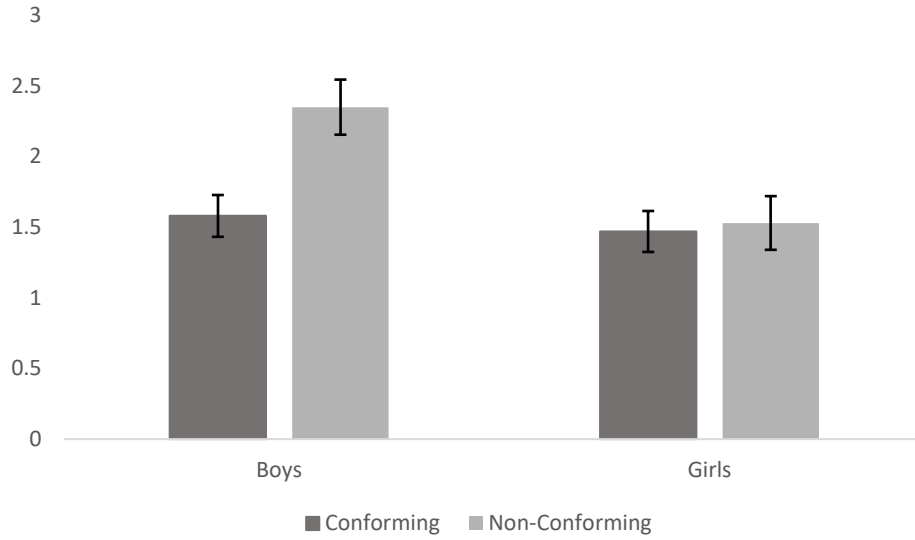


*Note.* All paths shown were estimated; non-significant paths are indicated by dotted lines. When two values are included on the same

line, the value to the left of the slash is the coefficient for liberal participants, and the value to the right is for conservative participants.  
+ $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

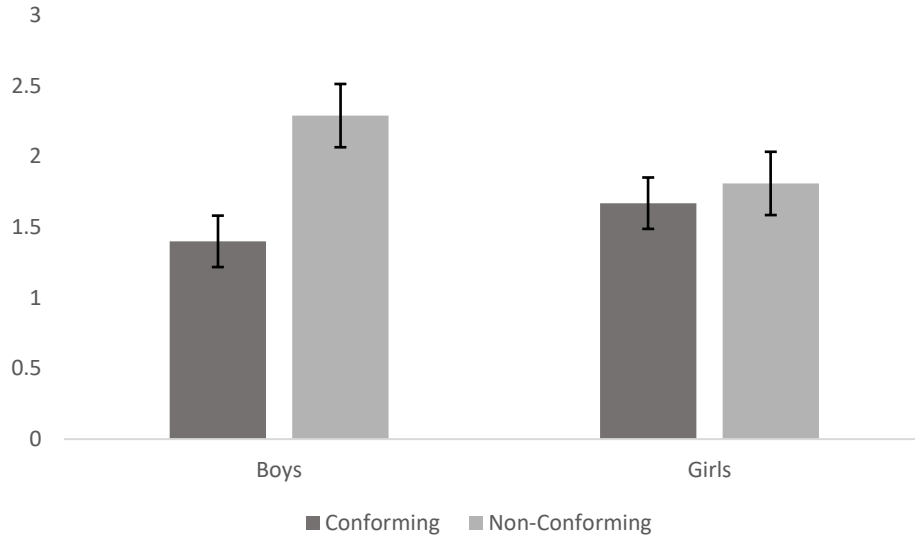
**Figure 14**

*Mean Ratings of Weird Stereotype by Perceiver Gender and Target Conformity*



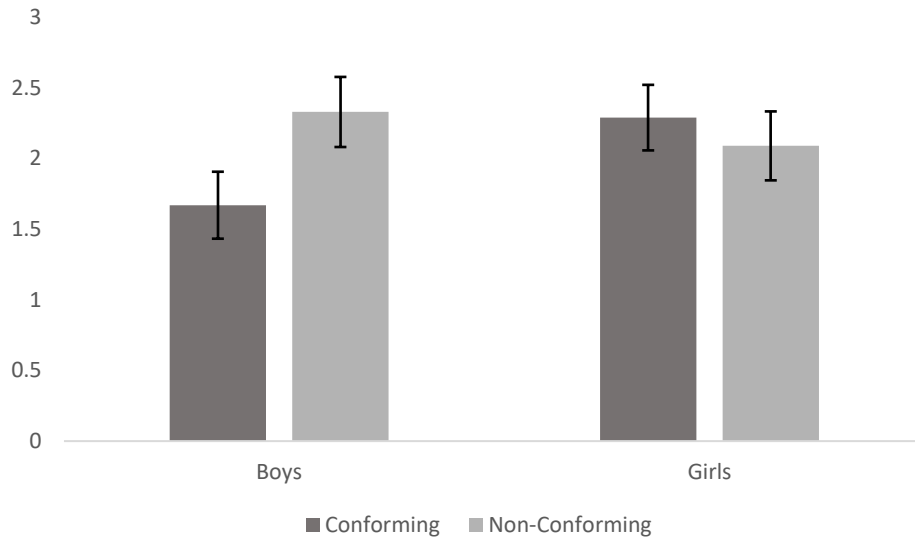
**Figure 15**

*Mean Ratings of Gay Stereotype by Target Gender and Target Conformity*



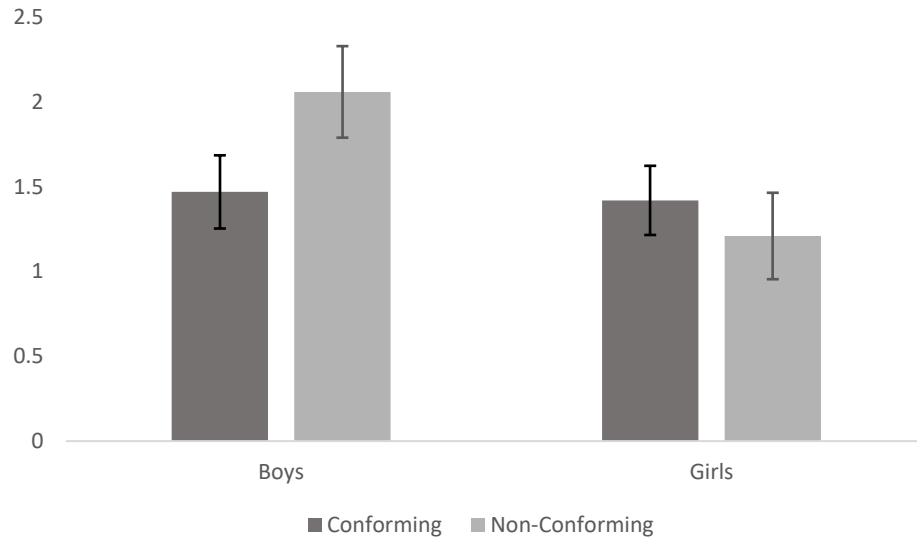
**Figure 16**

*Boys' Mean Ratings of Social Coordination Threat by Target Gender and Target Conformity*



**Figure 17**

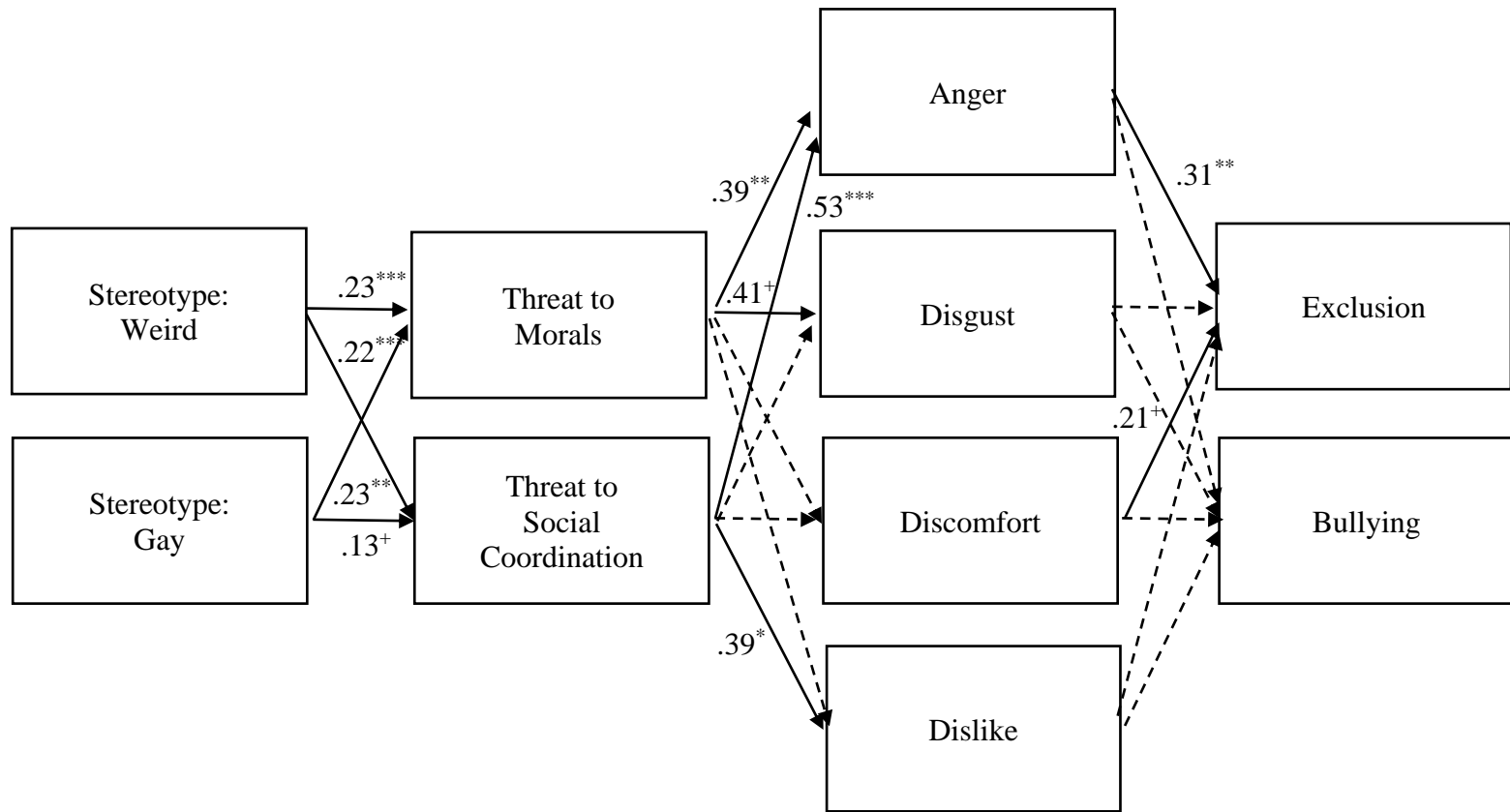
*Girls' Mean Ratings of Discomfort by Target Gender and Target Conformity*



**Figure 18**

*Estimated Model of Stereotypes, Threat Perceptions, Emotional Responses, and Behavioral Responses to Gender Non-Conforming Targets*

120



*Note.* All paths shown were estimated; non-significant paths are indicated by dotted lines.



<sup>+</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

APPENDIX A

MEASURES AND VIGNETTES PRESENTED TO ADULT PARTICIPANTS

Below is a description of a college student you are meeting for the first time. Please read this description carefully and answer questions about the person described.

Participants will be randomly assigned to read one of the four pairings below. They will first read one vignette and answer the following questions, then read the second vignette and answer the same questions.

#### Pairing 1

Vignette 1: Brittany is a junior nursing major and an ASU cheerleader. She usually wears sundresses and always does her makeup. She likes going shopping and spending time with her friends.

Vignette 2: Jen is a junior engineering major and member of an anime club on campus. She has short hair and usually wears what is comfortable. She is pretty independent and likes playing video games.

#### Pairing 2

Vignette 1: Brittany is a junior nursing major and treasurer of her sorority. She likes wearing the latest fashion and cares about her appearance. She likes going shopping and spending time with her friends.

Vignette 2: Jen is a junior chemistry major and member of an outdoor activities club on campus. She avoids wearing dresses if she can help it and doesn't usually bother with styling her hair. She is a big ASU football fan, and most of her friends are guys.

#### Pairing 3

Vignette 1: Kyle is a junior business major and member of the recreational golf club on campus. He usually wears polo shirts and khaki shorts but doesn't usually bother with styling his hair. He works out when he can and goes drinking with his guy friends on the weekends.

Vignette 2: Mark is a junior poetry major and singer for the men's a cappella group on campus. He usually wears button-ups and skinny jeans and sometimes wears silver nail polish. He's pretty social and likes doing yoga.

#### Pairing 4

Vignette 1: Kyle is a junior sports medicine major and active in his fraternity. He usually wears t-shirts and jeans, likes going to the gym, and is a pretty independent person.

Vignette 2: Mark is a junior poetry major and singer for the men's chorus on campus. He always styles his hair and cares about his appearance. He likes going

shopping, and most of his friends are girls.

Take a moment to picture this person. Think about what they look like, what activities they like to do, how they behave, who they interact with, and what things they are interested in.

Please write a few sentences describing this person (not using the information provided). You can include descriptions from your mental picture of this person, things you like or don't like about this person, what things you associate with this person, etc. There are no right or wrong answers; we are just interested in your thoughts.

This is an open-ended question with an open response option.

The following pages ask you questions about [target name]. Please use the description and your own thoughts about [target name] to answer these questions.

The vignette will be included at the top of each page for reference.

How likely is it that this person...

1. is politically liberal?
2. is politically conservative?
3. is a Christian?
4. is an Atheist?
5. is gay?
6. is a political activist?

Likert scale, 1 = not at all likely to 5 = very likely

How likely is it that this person...

1. has a lot of friends?
2. likes masculine activities?
3. likes feminine activities?
4. is physically attractive?
5. is good at math or science?
6. is good at language or writing?

Likert scale, 1 = not at all likely to 5 = very likely

How much do you think this person...

1. is weird?
2. conforms to social norms?
3. is masculine?
4. is feminine?
5. is kind?
6. is popular?

7. is trustworthy?
8. is predictable?
9. likes following the rules?
10. likes breaking the rules?

Likert scale, 1 = not at all to 5 = very much

How likely is it that this person...

1. has the same societal ideals as you?
2. has the same morals as you?
3. holds values inconsistent with your own?
4. has the same political beliefs as you?
5. has the same religious beliefs as you?
6. has similar sex-related values as you?

Likert scale, 1 = not at all likely to 5 = very likely

How likely is it that this person would...

1. fit into your friend group?
2. include you in social activities?
3. start rumors about you?
4. try to get other people not to like you?
5. try to beat you up?
6. want to steal your girlfriend/boyfriend?
7. flirt with you?
8. show you romantic attention even if you didn't want it?

Likert scale, 1 = not at all likely to 5 = very likely

How much do you think this person would...

1. be cooler than you?
2. help your social status if you were friends with them?
3. hurt your social status if you were friends with them?
4. be a good girlfriend/boyfriend to you?
5. be a good friend to you?
6. be loyal to you?
7. respect you?

Likert scale, 1 = not at all to 5 = very much

How much do you think this person would...

1. work well with you (on a school project or social activity)?
2. get along with you?
3. cooperate with you?
4. be difficult to work with?
5. be able to help you change your tire?
6. be able to help you resolve an argument with a friend?

Likert scale, 1 = not at all to 5 = very much

How much do you think this person would want to...

1. stop you from doing what you want?
2. make you do something you don't want to do?
3. limit your personal freedoms?
4. impose their values on you?
5. get other people to think like them?
6. disrupt social norms?
7. get other people to disrupt social norms?
8. destabilize society?

Likert scale, 1 = not at all to 5 = very much

How much would you...

1. like this person?
2. dislike this person?
3. trust this person?
4. respect this person?
5. resent this person?
6. pity this person?
7. admire this person?
8. envy this person?
9. love this person?
10. have positive feelings toward this person?
11. have negative feelings toward this person?

Likert scale, 1 = not at all to 5 = very much

How much would you feel ...

1. angry at this person?
2. disgusted by this person?
3. afraid of this person?
4. interested in this person?
5. proud of this person?
6. contempt toward this person?

Likert scale, 1 = not at all to 5 = very much

How much would you be...

1. comfortable interacting with this person?
2. anxious interacting with this person?
3. happy interacting with this person?
4. content interacting with this person?

Likert scale, 1 = not at all to 5 = very much

How much would you want to...

1. be friends with this person?
2. date this person?
3. tease this person?
4. beat up this person?
5. punch this person?
6. be rude to this person?
7. ask this person to hang out with your friends?
8. avoid interacting with this person?
9. keep your friends from interacting with this person?

Likert scale, 1 = not at all to 5 = very much

How likely is it that you would...

1. ask this person for help changing a tire?
2. ask this person for help resolving an argument with a friend?
3. vote for this person?
4. protect this person?
5. help this person?
6. want this person to be the leader of a group you are a part of?
7. want this person to be a teacher to your child?

Likert scale, 1 = not at all likely to 5 = very likely

APPENDIX B

MEASURES AND VIGNETTES PRESENTED TO CHILD PARTICIPANTS



First, we will read a description of a kid you are meeting for the first time. Please listen to this description carefully. Then I will ask you some questions about this person.

Participants will be assigned to read two of the four vignettes below. They will first read one vignette and answer the following questions, then read the second vignette and answer the same questions.

#### Pairing 1

Vignette 1: Brittany is a girl your age who does activities girls usually do. She usually wears girly clothes, and most of her friends are girls.

Vignette 2: Jen is a girl your age who does activities boys usually do. She doesn't usually wear girly clothes, and most of her friends are boys.

#### Pairing 2

Vignette 1: Kyle is a boy your age who does activities boys usually do. He wears boy clothes, and most of his friends are boys.

Vignette 2: Mark is a boy your age who does activities girls usually do. He wears different clothes than boys usually wear, and most of his friends are girls.

Take a minute to picture [target name] in your head. Think about what they look like, what they act like, who they play with, and what activities they like to do.

Now please tell me some ways that you would describe [target name]. You can say things like how you pictured them in your head, things you like or don't like about them, or other things you think they like to do. Remember that your answers are private, and there are no right or wrong answers. I just want to hear what you think.

This is an open-ended question with an open response option.

The next pages of questions ask you things about [target name]. Please use the description of [target name] we just read and your thoughts about them to answer these questions.

The vignette will be included at the top of each page for reference.

For the next several questions, I'm going to ask you to make guesses about [target name]. You might not know the answer for sure, but just make your best guess. Remember that your answers are private, and it doesn't matter if it's right or wrong. I just want to hear what you think.

## STEREOTYPES

Do you think this person likes girl toys?  
Do you think this person likes boy toys?  
Do you think this person is similar to boys?  
Do you think this person is similar to girls?

Do you think this person is good at math or science?  
Do you think this person is good at English or language arts?  
Do you think this person is good at playing soccer?  
Do you think this person is good at braiding hair?

Do you think this person is pretty?  
Do you think this person is kind?  
Do you think this person is popular?  
Do you think this person is honest?  
Do you think this person is brave?  
Do you think this person is gay?

Do you think this person likes Trump?  
Do you think this person likes Obama?  
Do you think this person is a Christian?  
Do you think this person doesn't go to church?  
Do you think this person does a lot of political things (like going with their parents to vote or go to rallies/marches or talks about politics a lot)?

Do you think this person is weird?  
Do you think this person fits in with other people?  
Do you think this person would be bullied?  
Do you think this person has a lot of friends?

## THREATS

Do you think this person likes following the rules?  
Do you think this person likes breaking the rules?  
Do you think this person knows right from wrong?  
Do you think this person knows how to be fair to people?  
Do you think this person makes up their own rules?  
Do you think this person doesn't listen to their parents?  
Do you think this person doesn't do what they're supposed to do?

This section of questions is about how you think this person would act around you. You

might not know the answer for sure, but just make your best guess. Remember that your answers are private, and it doesn't matter if it's right or wrong. I just want to hear what you think.

Do you think this person would be a good friend to you?  
Do you think this person would respect you?  
Do you think this person can be trusted?  
Do you think this person would keep your secrets?

Do you think this person would get along with your friends?  
Do you think this person would invite you to play with them?  
Do you think this person would say mean things about you to other people?  
Do you think this person would try to get other people not to like you?  
Do you think this person would be cooler than you?

Do you think you would be cooler if you were friends with this person?  
Do you think you would be less cool if you were friends with this person?  
Do you think other kids would like it if you were friends with this person?  
Do you think your parents would like it if you were friends with this person?  
Do you think you could guess how this person would act around you?  
Do you think you understand this person?

Do you think this person would work well with you (on a school project or a game)?  
Do you think this person would get along with you?  
Do you think this person would cooperate with you?  
Do you think this person would be hard to work with?  
Do you think this person would want to compete with you?  
Do you think this person would cheat if they were playing a game with you?

Do you think this person would try to beat you up?  
Do you think this person would want to steal your girlfriend/boyfriend?  
Do you think this person would be a good girlfriend/boyfriend?  
Do you think this person would flirt with you?  
Do you think this person would flirt with you even if you didn't want them to?

Do you think this person would be able to help you learn to play soccer?  
Do you think this person would be able to help you fix your hair?  
Do you think this person has the same religion as you?  
Do you think this person has the same politics as you?

Do you think this person would talk back to their parents or teachers?  
Do you think this person would cause problems in class?  
Do you think this person would get in trouble a lot?

For this section of questions, think about what [target name] likes and what they want. Now imagine, if they could make the world be any way they wanted, what would the world look like? You might not know the answer for sure, but just make your best guess. Remember that your answers are private, and it doesn't matter if it's right or wrong. I just want to hear what you think.

Would they make the world be the same as what you would want?  
Would they want the world to work the same way you do?  
Would they have the same rules about what is right and wrong as you do?  
Would they want the world to work differently from what you would want?

Do you think this person would treat other people the same way you would treat them?  
Do you think this person would want to keep you from doing the things you want to do?  
Do you think this person would try to make you do something you don't want to do?  
Do you think this person would want to make you think the same way they do?  
Do you think this person would want to make you act like them?  
Do you think this person would try to get other people to act like them?  
Do you think this person would want to change your mind about what is right or wrong?  
Do you think this person would want to change other people's minds about what is right and wrong?  
Do you think this person would try to get other kids to break the rules?

## PREJUDICES

For this set of questions, I'm going to ask you how you feel about [target name] and how you would feel if you were going to spend time with them. Remember that your answers are private, and there is no right or wrong answer. I just want to hear how you feel.

How much would you like this person?  
How much would you dislike this person?  
How much would you feel positive toward this person?  
How much would you feel negative toward this person?

How much would you be annoyed at this person?  
How much would you be mad at this person?  
How much would you be grossed out by this person?  
How much would you be afraid of this person?  
How much would you feel bad for this person?

How much would you respect this person?  
How much would you look up to this person?  
How much would you see this person as a role model?

How much would you want to be like this person?

How much would you be comfortable spending time with this person?  
How much would you be nervous about spending time with this person?  
How much would you be happy about spending time with this person?  
How much would you be excited about spending time with this person?  
How much would you be sad about spending time with this person?  
How much would you be upset about spending time with this person?  
How much would you feel good about spending time with this person?  
How much would you feel uncomfortable spending time with this person?

### BEHAVIORAL INCLINATIONS

This last set of questions is about how you think you would act around [target name]. Remember that your answers are private, and there is no right or wrong answer. I just want to hear how you feel.

How much would you want to be friends with this person?  
How much would you want to depend on this person?  
How much would you want to invite this person to hang out with your friends?  
How much would you want to have this person as your girlfriend/boyfriend?  
How much would you want to avoid spending time with this person?  
How much would you want to ignore this person?  
How much would you want to keep your friends from spending time with this person?

How much would you want to call this person names?  
How much would you want to tease this person?  
How much would you want to bully this person?  
How much would you want to be nice to this person?  
How much would you want to protect this person?  
How much would you want to step in if somebody was bullying this person?  
How much would you want to help this person?

How much would you want to ask this person for help learning to play soccer?  
How much would you want to ask this person for help fixing your hair?  
How much would you want to vote for this person?  
How much would you want to pick this person to be a leader?  
How much would you want to have this person be the leader of a group you're in?

APPENDIX C

ITEMS INCLUDED ON EACH SCALE IN FINAL ANALYSES

Adult Study

Values

Liberal

Conservative R

Christian R

Atheist

Gay

Political activist

Social Non-Conformity

Conforms to social norms R

Predictable R

Anti-Social

Disrupt social norms

Get others to disrupt social norms

Destabilize society

Personal freedoms

Stop you from doing what you want

Make you do something you don't want

Limit your personal freedoms

Impose their values on you

Get other people to think like them

Social coordination

Work well with you R

Get along with you R

Cooperate with you R

Be difficult to work with

Values

Same societal ideals R

Same morals R

Values inconsistent with yours R

Same political beliefs R

Same religious beliefs R  
Same sex-related values R

### Bullying

Tease  
Beat up  
Punch  
Be rude

### Exclusion

Avoid interacting  
Keep friends from interacting

### Children

### Morals

Follows rules R  
Breaks rules  
Knows right from wrong R  
Knows how to be fair R  
Makes up their own rules  
Cheats  
Talks back to parents or teachers  
Cause problems in class  
Get in trouble

### Social Coordination

Be a good friend to you R  
Get along with your friends R  
Invite you to hang out with them R  
Work well with you R  
Get along with you R  
Cooperate with you R  
Be hard to work with

### Exclusion

Invite them to hang out with your friends R  
Avoid spending time with them



Ignore them  
Keep your friends away from them

APPENDIX D  
STUDY 1 IRB APPROVAL



EXEMPTION GRANTED

Carol Martin  
Social and Family Dynamics, T. Denny Sanford School of (SSFD)  
480/965-5861  
cmartin@asu.edu

Dear Carol Martin:

On 3/12/2019 the ASU IRB reviewed the following protocol:

|                     |  |
|---------------------|--|
| Type of Review:     | Initial Study  |
| Title:              | Gender and Relationships for Emerging Adults   |
| Investigator:       | Carol Martin   |
| IRB ID:             | STUDY00009810  |
| Funding:            | None   |
| Grant Title:        | None   |
| Grant ID:           | None   |
| Documents Reviewed: | <ul style="list-style-type: none"><li>• Consent 3-10-19.pdf, Category: Consent Form;</li><li>• Recruitment Materials.pdf, Category: Recruitment Materials;</li><li>• Combined measures 3-4-19.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li><li>• Recruitment Flyer.pub, Category: Recruitment Materials;</li><li>• Protocol 3-10-19.docx, Category: IRB Protocol;</li></ul> |

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 3/12/2019.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator



APPENDIX E  
STUDY 2 IRB APPROVAL



APPROVAL: EXPEDITED REVIEW

Carol Martin  
 Social and Family Dynamics, T. Denny Sanford School of (SSFD)  
 480/965-5861  
 cmartin@asu.edu

Dear Carol Martin:

On 3/19/2019 the ASU IRB reviewed the following protocol:

|                     |  |
|---------------------|--|
| Type of Review:     | Initial Study  |
| Title:              | Gendered Aspects of Children’s Peer Relationships  |
| Investigator:       | Carol Martin   |
| IRB ID:             | STUDY00009828  |
| Category of review: | (7)(b) Social science methods, (7)(a) Behavioral research  |
| Funding:            | None   |
| Grant Title:        | None   |
| Grant ID:           | None   |
| Documents Reviewed: | <ul style="list-style-type: none"> <li>• Protocol 3-5-19.docx, Category: IRB Protocol;</li> <li>• Parent recruitment script.pdf, Category: Recruitment Materials;</li> <li>• Parental consent 3-4-19.pdf, Category: Consent Form;</li> <li>• Items draft 3-10-19.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li> <li>• Child assent.pdf, Category: Consent Form;</li> <li>• Letter to youth center coordinators 3-4-19.pdf, Category: Recruitment Materials;</li> </ul> |

The IRB approved the protocol from 3/19/2019 to 3/18/2024 inclusive. Three weeks before 3/18/2024 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 3/18/2024 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the “Documents” tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Rachel Cook  
Rachel Cook  
Carol Martin