The Masculine Overcompensation Theory: A Gender Perspective on Teacher Reactions to Transgender Bullying

by

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A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

Approved July 2020 by the Graduate Supervisory Committee:

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ARIZONA STATE UNIVERSITY

August 2020

ABSTRACT

Teachers represent important agents of gender socialization in schools and play a critical role in the lived experiences of transgender students. What remains less clear, however, is whether the gender of the teacher impacts their response to transgender bullying and specifically how threats to gender identity might influence men who teach to respond negatively. The current study used a 2 (gender) x 3 (gender identity threat, no gender identity threat, and control) experimental design to assess whether the masculine overcompensation theory helps explain how men who teach respond to transgender victimization experiences. It was hypothesized that men in the gender identity threat condition would endorse more anti-trans attitudes (e.g., higher transphobic attitudes, lower allophilia [feelings of liking] toward transgender individuals, more traditional gender roles, less supportive responses to a vignette about transgender bullying, less support for school practices that support transgender students, and less likelihood of signing a petition supporting transgender youth rights) compared to the other conditions. It was also expected that they would endorse more negative affect but higher feelings of self-assurance. Women in the study served as a comparison group as no overcompensation effect is expected for them. Participants (N = 301) were nationally recruited through word of mouth, social media, and personal networks. Results from the current study did not support the theory of masculine overcompensation as there was no effect of threatening feedback. There were a number of significant gender differences. Men reported lower transgender allophilia, higher transphobia, more traditional gender role beliefs, less likelihood of signing the petition supporting transgender youth rights, and more self-assurance than women. No gender effect was found for negative affect or

support for school practices supporting transgender students. There were also no observable differences in participant responses to the vignette by gender or condition. The implications and limitations of the current study were discussed.

ACKNOWLEDGEMENTS

There are a number of people I would like to thank for their support in helping me get to this point in my career. First, I would like to thank my advisor, Dr. Alisia Tran. Her unwavering support and dedication to my success as a graduate student is unmatched. I am incredibly grateful to be her advisee. I would also like to thank Dr. Bianca Bernstein and Dr. David Carlson. I am honored to have such distinguished scholars on my committee and appreciate their contributions immensely. A special thank you to the ASU Graduate and Professional Student Association and the ASU Graduate College for providing funding for this research. To my colleagues and friends at ASU, thank you for being amazing sources of support. The journey to earning a Ph.D. is filled with ups and downs, and I consider myself lucky that I can rely on such a fantastic set of friends to help get me to the end. I am especially grateful for the feedback and support from Gilbert and Roberto. I would also like to acknowledge my family. They have always been there for me and I am incredibly thankful for their love. Finally, and most importantly, I would like to thank my wonderful wife, Mallory. Thank you for believing in me, encouraging me, supporting me, challenging me, and being by my side throughout this process. I promise, no more school after this! And yes, I plan to finally get a "real job" when this is all said and done. Graduate school was filled with late nights, working on weekends, and sacrifices all around. I am so looking forward to spending more time with you, Reese, and Oliver in the near future!

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Introduction

Transgender students compose between 0.7% and 1% of all school aged youth or about 300,000 students in the United States (Herman, Flores, Brown, Wilson, & Conron, 2017; Shields et al., 2013). Transgender, for the purposes of this study, is defined as someone whose gender identity/expression differs from their sex assigned at birth (GLAAD, 2018). Gender identity refers to one's internal concept of being male, female, a blend of both, or neither, while *gender expression* refers to one's external appearance of gender identity and is typically expressed via behavior, clothing, haircut, and voice (Human Rights Campaign, 2018). Transgender students experience high levels of victimization (e.g., 78% are harassed and 35% physically abused) and often report feeling unsafe at school (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016). Transgender individuals who report victimization at school also report higher lifetime prevalence of suicide attempts (~50%; Haas, Rodgers, & Herman, 2014), which is much higher than the general public (1.6%; Grant et al., 2011). One reason that transgender students might be more likely to be harassed is perceived gender atypicality or nonconformity with traditional gender norms, which may threaten others' gender identities (e.g., masculine gender identity; D'Augelli, Grossman, & Starks, 2006; Harrison & Michelson, 2018).

Teachers may serve as a source of support for transgender students who are victimized by peers, but unfortunately when transgender students tell teachers about being bullied, they often do nothing (65% of cases; Kosciw et al., 2016) and sometimes engage in further harassment (31% of transgender students reported being harassed by K-12 teachers and staff; Grant et al., 2011; Sausa, 2005; Webb, Schirato, & Danaher, 2002).

Although researchers have explored teacher involvement in LGBTQ bullying, there is limited research that focuses explicitly on teachers in transgender bullying situations (Silveira & Goff, 2016). Bullying is defined as a specific type of aggression characterized by intended harm that is repeated over time, with an imbalance of power, and a more powerful person or group attacking a less powerful one (Olweus, 1996). Existing data show that men who teach (i.e., male teachers) express more transphobic attitudes than women who teach (i.e., female teachers), but previous research has largely ignored gender differences within the context of bullying involving transgender students (Bartholomaeus, Riggs, & Andrew, 2017). The masculine overcompensation theory, one of the mechanisms that might explain potential gender differences in teachers' behavioral responses to transgender bullying, posits that men who experience a perceived threat to their gender identity will engage in overcompensation behaviors in an attempt to regain their sense of masculinity (Willer et al., 2013). Previous research provides evidence that men who receive threatening feedback about their gender identity engage in overcompensation of masculine behaviors (e.g., increased homophobia), and there is evidence that threats to masculinity also increase opposition to transgender rights (Harrison & Michelson, 2018; Willer et al., 2013). This is significant because men represent an increasing percentage of teachers (20.7% K-8, 41.5% in secondary school; MenTeach, 2017) and students consistently report their willingness to talk with teachers about bullying (Greytak, Kosciw, & Diaz, 2009). Thus, it is useful to better understand the mechanisms that underlie the responses that transgender students receive from men who teach.

The current study utilized an experimental design to assess whether the masculine overcompensation theory helps explain how men who teach respond to transgender victimization experiences. Specifically, the study explored how threatening feedback about men's gender identity (i.e., that they are more feminine than masculine) impacted their transphobic attitudes, gender role beliefs, and a behavioral measure of their intent to sign a petition for transgender students. It also explored whether the gender identity feedback influenced their responses to a vignette about transgender bullying. Gaining understanding about the mechanisms that impact how men who teach respond to instances of transgender bullying and harassment can inform educator training, improve prevention and intervention efforts related to transgender youth being victimized, and provide guidance for counseling psychologists and other mental health professionals who engage in consultation with school staff.

Teachers' Role in Transgender Bullying

As previously mentioned, transgender students who are bullied do not always receive support from teachers, but a majority of transgender students (66%) reported speaking with a teacher about transgender related issues in general (Greytak et al., 2009). Transgender students were more likely to discuss transgender related issues with teachers as compared to mental health professionals (e.g., counselors, psychologists), even though they reported feeling more comfortable talking with mental health professionals (Greytak et al., 2009). This finding highlights that teachers have more consistent interactions with students as compared to mental health professionals in schools. Additionally, increased open interaction with teachers was related to increased feelings of belonging in school,

which suggests that teachers have the potential to positively impact the experiences of transgender students (Greytak et al., 2009).

Teachers are most likely to interact with transgender students within a school environment. Schools are powerful environments for the reinforcement and maintenance of gender identity in students (Stromquist, 2007). Gender is typically assigned at birth based on biological sex and, for many, represents one of the first identity factors that they recognize. Perceptions about gender become fairly permanent around age five (Ruble et al., 2007). However, gender expression and identity continue to develop throughout the lifespan (Steensma, Kreukels, de Vries, & Cohen-Kettenis, 2013). Teachers are often explicitly unaware of gender development and maintain the status quo of the gender binary (Webb, Schirato, & Danaher, 2002). That is, teachers often conceptualize gender as a stable identity with only two options (e.g., boy or girl) which can restrict students' gender expression and pressure students to conform to narrow gender norms. Indeed, one preservice teacher (college students who are education majors) noted that, "In elementary we are always dividing them as boys and girls. What if they are gender neutral? Or they don't know where they fit in, then what do you do?" (Kearns et al., 2017, p. 18). A recent international call to increase the number of men who teach stems from the belief that boys need men as role models who can enforce masculine norms, which further reflects how traditional gender norms impact education (Martino, 2015). Researchers have called on teachers to disrupt the status quo and encourage preservice training to include education on gender diversity in order to be better prepared to work with students with diverse gender identities (Kitchen & Bellini, 2012).

In addition to their influence on gender norms in schools, teachers represent critical agents who can shape the experiences of transgender students who are bullied (Kolbert et al., 2015; O'Donoghue & Guerin, 2017; Wernick, Kulick, & Inglehart, 2014). When teachers intervene in response to LGBTQ harassment, students report less harassment in the future and feel safer at school (O'Shaughnessy, Russell, Heck, Calhoun, & Laub, 2004; Russell et al., 2008). However, the problem remains that teachers often do not intervene and even ignore requests for help in response to bullying directed toward transgender students (Sausa, 2005). For example, teachers are more likely to respond to explicit sexist or racist forms of harassment as compared to anti-LGBTQ behaviors (e.g., negative remarks about gender expression; Kosciw, Greytak, Boesen, & Palmer, 2012). Indeed, many school trainings on how to deal with bullying or harassment fail to cover LGBTQ issues specifically (Birkett, Espelage, & Stein, 2008). Additionally, students report being met with ignorance about LGBTQ related harassment, a general unwillingness to intervene, and sometimes being blamed by teachers for the victimization (Kosciw et al., 2008; Sausa, 2005). This sentiment is captured by the following quote from a transgender student in a qualitative study, "[teachers] should actually speak up, because I've been in a lot of classrooms where stuff is said, and the teachers don't do [anything]. And if they did, it would stop right there if the teacher actually did something" (McGuire, Anderson, Toomey, & Russell, 2010, p. 1183). While previous researchers have assessed teachers' responses to transgender bullying through the perspectives of transgender students, they have not examined teachers' responses directly (McGuire et al., 2010).

Moreover, teachers sometimes are the perpetrators of harassment and victimization toward transgender students in schools. In fact, a national survey of transgender individuals found that 31% of respondents experienced harassment by teachers and school staff (Grant et al., 2011). In some cases, teachers physically assaulted transgender students and more than three quarters of those students later attempted suicide (Grant et al., 2011). These findings underline the consequences of teachers' attitudes and behaviors toward transgender students who experience victimization and provide insight into the severity of problems that transgender students face. Additionally, the findings raise further questions about what attitudes or circumstances might lead teachers to not intervene or engage in victimization themselves (e.g., how attitudes about gender are linked with specific behaviors in response to transgender bullying).

Unfortunately, little is known about what propels teachers to react positively, negatively, or passively to incidents of transgender bullying. Limited research suggests that teachers may choose not to react to gendered bullying (including harassment for gender non-conformity) out of fear of parental backlash or because of a lack of administrative support (Meyer, 2008). However, there is a dearth of research examining teachers' responses to transgender bullying specifically and what factors impact how teachers' respond. Previous research has focused on teachers as a homogenous group and has not considered how the gender identity of teachers might impact their responses to bullying involving transgender students (McGuire et al., 2010). There is a lack of research that examines teachers' explicit responses to an incident of transgender bullying and possible gender differences. One theory that could help clarify potential gender

differences among teachers and their responses to transgender bullying is the masculine overcompensation theory (Willer et al., 2013).

The Masculine Overcompensation Theory

The masculine overcompensation theory is rooted in the psychoanalytic concept of reaction formation and "masculine protest" in response to feeling inferior (Adler, 1956; Freud, 1962). It suggests that men who possess feelings of inferiority regarding their masculinity overcompensate for this by enacting "extreme masculine behaviors and attitudes designed to create the impression that they are quite masculine" (Willer et al., 2013, p. 982). The theory typically applies to the experiences of cisgender men (e.g., men whose gender identity matches their sex assigned at birth) who engage in overcompensation of masculine behaviors in response to threats to their masculinity. Willer and colleagues (2013) conducted an experiment to test the masculine overcompensation theory and included both men and women in their study. Participants (60 women and 51 men) were split into four groups (2 x 2 design). Half the men received feedback that their gender identity was masculine, half the men received feedback their gender identity was feminine, half the woman received feedback their gender identity was feminine, and half the women received feedback their gender identity was masculine. The researchers provided participants with falsified gender identity feedback on a gender role inventory that participants filled out in lab. After viewing their feedback, participants filled out two survey packets (one on political views and the other about cars). They found that men who were told they were feminine were more likely to report homophobic attitudes, support of war in the Middle East, and interest in purchasing a sport utility

vehicle (SUV) as compared to men whose gender identity feedback was masculine (Willer et al., 2013). No overcompensation effect was found in women. In fact, there were no significant differences between women in either condition (masculine or feminine feedback; Willer et al., 2013).

Research on social identities provides additional context and support for the masculine overcompensation theory. Identity theorists propose that individuals will put forth effort to maintain deeply held social identities, especially identities that are highly socially valued and part of the dominant social group (Cialdini et al., 1976; Stets & Burke, 2000). Identity theorists also suggest that individuals will enact extreme versions of behaviors related to identities that get threatened by social feedback that is misaligned with norms (Burke, 1991; Burke & Stets, 2009). This explains why overcompensation is expected as opposed to mere compensation. As masculinity is a highly socially valued identity, it is expected that men who have their masculinity threatened will respond in ways that overcompensate in an attempt to recover their sense of masculinity (Willer et al., 2013).

Further evidence supporting the overcompensation theory comes from understanding hegemonic masculinity; a theory that describes how and why men try to maintain dominant social roles (Connell, 2005). Hegemonic masculinity is a standard that men must measure up to and consists of seeking dominance over women and other men (Connell, 2005). Although theorists acknowledge that hegemonic masculinity can vary across cultural contexts and groups, there are certain characteristics that are common within the United States (Connell & Messerchmidt, 2005; Schrock & Schwalbe, 2009).

"Today's hegemonic masculinity in the United States of America ... includes a high degree of ruthless competition, an inability to express emotions other than anger, an unwillingness to admit weakness or dependency, devaluation of women and all feminine attributes in men, homophobia, and so forth." (Kupers, 2005, p. 716)

Kupers (2005) refers to these components of hegemonic masculinity as toxic masculinity.

Toxic masculinity is further reflected in gender differences between men and women's attitudes regarding gender roles and transgender issues. In the general public, men typically subscribe to more rigid gender role beliefs and indicate less support for transgender individuals (Kerr & Holden, 1996). Similarly, the limited research on teachers' attitudes toward transgender students finds that men who teach report more negative attitudes as compared to women who teach (Bartholomaeus et al., 2017), and researchers have suggested that these gender differences might lead to more transphobic behaviors among men (Riggs & Sion, 2016; Nagoshi et al., 2008; Norton & Herek, 2013). It is possible that the masculine overcompensation theory especially applies to men who teach, as they might be more prone to threats to their masculine gender identity in a female dominated field. Indeed, men who teach actively construct their masculinity in a traditionally female field and seek ways to emphasize their masculinity, which may lead to endorsement of more traditional gender norms (Francis & Skelton, 2001). It may also influence men who teach to engage in transphobic behaviors as a method to affirm their masculine gender identity to themselves (Norton & Herek, 2013). For example, men who experience a threat to their masculinity might engage in harassment toward a

transgender student or refuse to provide support for a transgender student who was bullied.

There is an emotional component to hegemonic masculinity. Theorists suggest that men are emotionally invested in beliefs and behaviors that reify their self-perceived adherence to masculine norms (Hall, 2002). Within a hegemonic masculinity framework, beliefs about sexuality elicit strong emotional reactions to expressions of sexuality that are viewed as unnatural or abnormal (e.g., men having sex with men; Donaldson, 1993). As sexual orientation and gender identity are often conflated, especially within the context of transgender issues, men may experience strong negative emotional reactions to individuals who are transgender (Mizock & Hopwood; Valdes, 1996). In fact, it is believed that transgender people represent an inherent threat to men's masculinity (Harrison & Michelson, 2018). Increased negative affect may stem from cognitive dissonance, as transgender individuals represent perceived threats to traditional beliefs about gender (e.g., that gender is a stable binary system; Burdge, 2007; Lusher & Robins, 2009). Masculinity researchers have proposed that men are sensitive and responsive to masculinity threats (Kimmel, 1994). Thus, men may try to recoup and affirm their sense of masculinity through overcompensation. Additional threats to masculinity experienced by men who teach would likely intensify transphobic attitudes and negative responses to bullying involving a transgender student. Gender identity threats are not expected to negatively impact women due to their increased flexibility with gender roles and gender expression (Harrison & Michelson, 2018).

Only one previous study has explored how the masculine overcompensation theory applies to transgender issues. In a sample of 182 undergraduate students (51.1%) women, ~50% White), researchers explored whether threatening feedback about gender identity impacted participants' support for transgender rights (Harrison & Michelson, 2018). The research design replicated the methodology from Willer and colleagues (2013). As expected, women expressed more support for transgender rights as compared to men (Harrison & Michelson, 2018). Men who were provided with threatening feedback about their gender identity (i.e., that they scored in the feminine range) were less supportive of transgender rights in their beliefs and behavioral intent than men who received nonthreatening feedback (Harrison & Michelson, 2018). For women, there was no significant difference based on condition for the attitude questions. Although research has consistently demonstrated no effect of gender identity threat on women's attitudes and behaviors, the current study will include women as a comparison group because previous research on teacher intervention often ignores gender differences (Greytak & Kosciw, 2014).

Current Study

Building on previous research on the masculine overcompensation theory, the current study assessed whether men who teach overcompensate (e.g., exhibit more transphobic attitudes) when they receive threatening information about their gender identity (Willer et al., 2013). The study utilized a 2 (gender) x 3 (gender identity threat, no gender identity threat, and control) design. Each participant completed a sex role inventory and received false feedback (excluding the control group). The gender identity

threat condition consisted of feedback that violated the individual's gender identity (e.g., being told that they scored in a feminine range if they are men). Participants in the no gender identity threat condition received feedback that aligned with their gender identity (e.g., women being told they scored in the feminine range). Lastly, the control group consisted of participants who were told that their scores were calculated and recorded, but no scores or additional feedback were provided.

It was hypothesized that men in the gender identity threat condition would endorse more anti-trans attitudes (e.g., higher transphobic attitudes, lower allophilia toward transgender individuals, less support for transgender school practices, and more traditional gender role beliefs) compared to the other conditions. It was also expected that men who receive threatening feedback will endorse more negative affect but higher feelings of self-assurance, as men have identified feeling self-assured as an important component of masculinity and may overcompensate by emphasizing that they are indeed self-assured (Harris, 2010; Willer et al., 2013).

The responses to the vignette were expected to reflect an approximation of how teachers would react in a hypothetical scenario involving bullying with a transgender target. The goal was to develop a greater understanding of what teachers would say to the student and what actions they might take. Previous research has largely ignored gender differences among teachers, and this was the first study to explore how gender identity feedback might shape teachers' responses to an incident of transgender bullying (McGuire et al., 2010). Although the qualitative approach in the current study was exploratory, it was hypothesized that men in the gender identity threat condition would

provide less supportive responses to the vignette about the transgender student as compared to other conditions. Less supportive responses were indicated by minimizing the transgender student's experience or rejecting their concerns, which would provide support of an overcompensation effect. It was also predicted that men in the gender identity threat condition would be more likely to misgender the student. This would reflect a rejection of the student's transgender identity and serve as additional support of an overcompensation effect.

Method

Participants

Participants were nationally recruited using targeted emails to teachers through personal networks, via word-of-mouth, and social media (e.g., Reddit). Preservice teachers with student teaching experience were also recruited from university settings via contacting faculty members. The inclusion criteria included being a teacher or preservice teacher (Kindergarten-12) and being over the age of 18. The survey was administered online via Qualtrics. The study was approved by Arizona State University's Institutional Review Board in October 2018. Data collection started in November 2018 and ended in June 2020. Potential participants provided consent using an online consent form and were informed that the online study explored "attitudes and behaviors related to bullying among youth." Participants were informed that upon completion of the study, they would vote on how they would like the research team to allocate \$300 of funds for donation to various charitable organizations and have the opportunity to provide their email to enter a raffle to win one of sixty \$25 Amazon gift cards. Funding for the Amazon gift cards was

provided by the Graduate Research Support Program administered by the Arizona State University Graduate and Professional Student Association. Participants were instructed to reach out to the research team if they would no longer like their survey responses to be included in the study. A total of 482 participants accessed the survey online, however 145 participants did not make it through the demographic items at the end of the survey. Of the remaining 337 participants, 36 (10.68%) were excluded for not answering all three of the validity check questions correctly. This resulted in the final sample (N = 301).

Participants in the final sample were 36.40 years old on average (SD = 10.23). The sample was 54.2% women (n = 163; 59 in the control condition, 55 in the no threat condition, and 49 in the threat condition) and 45.8% men (n = 138; 50) in the control condition, 41 in the no threat condition, and 47 in the threat condition). No participants identified as transgender. A large majority of participants were White/European American (84.4%) followed by Latinx (7%), Multiracial (3%), Black/African American (1.7%), Asian American/Pacific Islander (1.3%), Middle Eastern/Arab American (1.3%), and Native American (0.7%). The sample was predominantly straight/heterosexual (84.1%), however other sexual orientations were also represented (8% bisexual, 6.3% gay, 0.7% lesbian, and 0.3% pansexual). On a scale from 1 (conservative) to 7 (liberal), participants average score was 4.93 (SD = 1.47). Nearly half of the sample (49.9%) reported making between \$40,000 to \$60,000 per year. Only 12% reported making less than \$40,000 annually and 11.3% reported that they made over \$100,000 annually. Most of the participants had a master's degree (63.1%), while 32.6% had a bachelor's degree and 2% had a doctoral degree. Participants varied in their religious affiliations with

23.3% identifying as Catholic, 18.3% Protestant, 16.3% agnostic, 15.6% other (including Mormon, Baptist, and "none"), 9% atheist, 4.3% Christian Orthodox, 1.7% Jewish, 0.7% Hindu, 0.3% Muslim, 0.3% Buddhist, and 10.3% indicated that they preferred not to answer. When asked about importance of religion in their life on a scale from 1 (not important) to 7 (very important), the average was 3.61 (SD = 2.12). Many of the participants were married (59.1%) followed by single (20.3%), in a relationship (17.9%), and divorced (2.7%). Participants were also spread across grade level with 38.9% teaching Kindegarten-5th grade, 19.9% teaching 6th-8th grade, and 41.2% teaching high school. The majority of participants taught in public schools (82.1%) while 7.6% taught in a public charter school, 3.7% in a religious school, 2% in a parochial school, 2% in a boarding school, 2% in a private charter school, and 0.7% in a Montessori school. Participants were mostly located in the Western (39.9%) and Midwestern (34.6%) regions of the United States while others were from the South (15.3%) and Northeast (10.3%). Only five participants were preservice teachers. The sample also varied in their previous contact with transgender individuals as 42.9% reported no close relationships with transgender individuals; 37.5% reported relatively close contact with transgender individuals (e.g., an acquaintance); 13% reported that a close friend, family member, or coworker is transgender; and 6.6% reported that they had never met a transgender person (to the best of their knowledge).

Procedure

First, participants filled out brief demographic questions to determine their eligibility. Next, they completed the Bem Sex-Role Inventory (Bem, 1974). False

feedback from the 12-item Bem Sex Role Inventory was used as the manipulation in the current study (Bem, 1974; Fernández & Coello, 2010). Participants indicated how well a list of adjectives described them (e.g., "Dominant (masculine item); Tender (feminine item);" 1 = "never or almost never true" to 7 = "always or almost always true"). The scale contains six masculine items and six feminine items. For the purposes of this study, no real scores were calculated, but participants were provided with false feedback based on the condition they were randomly assigned to at the beginning of the survey (gender identity threat, no gender identity threat, or control).

Participants were told that Qualtrics automatically scored their results and were provided feedback about their gender identity (except for the control group). The feedback sheet (in the gender identity threat and no gender identity threat conditions) displayed a range from 0 to 50, with 0 to 25 representing the masculine half and 26 to 50 representing the feminine half. Brackets indicated an "average" range for men and women. The feedback and "average" ranges were false and created for the study (Willer et al., 2013). In the gender identity threat condition, participants were told that they scored just inside the range of the opposite gender identity (e.g., feminine range for men). For the no gender identity threat condition, participants were told that they scored within the average range matching their self-identified gender identity (e.g., masculine range for men). The control group was told that their gender identity was scored, but they were not provided with any results. After receiving feedback about their gender identity (i.e., the manipulation), participants completed the rest of the survey which consisted of a measure

of affect, a vignette, follow-up questions, measures of transgender attitudes, and a mock petition for transgender rights.

Measures

Demographic questionnaire. Participants reported their age, gender identity, sexual orientation, education level, religious preference, importance of religion in their life, race/ethnicity, political ideology, annual income, relationship status, and prior level of contact with transgender individuals. Additionally, participants indicated the number of years they have taught (or what year they are in school), the grade level they teach, whether they teach in a public or private school, and the geographic region where they work. Participants also indicated if they are substitute teachers. Lastly, they responded to a question asking about their career goals (e.g., if they would like to be an administrator).

Affect. Two subscales from the 60-item PANAS-X were used to measure emotions related to self-assurance and negative affect in order to determine the degree to which participants' affect varied across condition in response to the gender identity feedback (Watson & Clark, 1999). Self-assurance is defined as a positive emotion reflecting one's confidence in their character (Watson & Clark, 1999). Negative affect is a "general dimension of subjective distress and unpleasurable engagement" (Watson, Clark, & Tellegen, 1988, p. 1063). Participants indicated to what extent they felt each emotion in the present moment (e.g., "Proud [self-assurance]; Distressed [negative affect];" 1 = "very slightly or not at all" to 5 = "extremely"). Six items assessed self-assurance and ten items assessed negative affect. Higher scores on either subscale indicate more self-assurance/negative affect.

Each subscale demonstrated good internal consistency in a sample of undergraduate students (α = .83 for self-assurance; α = .84 for negative affect; Watson & Clark, 1999; Watson et al., 1988). Additionally, the PANAS-X subscales have good discriminant/convergent validity in expected directions with other measures of mood and depressive symptoms (Watson & Clark, 1999; Watson et al., 1988). Internal consistency in the current sample was good for both scales (α = .88 for self-assurance; α = .86 for negative affect).

Stimulus. Participants were shown the following vignette as a stimulus regarding a transgender bullying situation:

"Imagine that a student approached you with the following situation. The student was born a boy and identifies as a girl. The student is listed as "Samuel" on your official roster, but requests to be called "Samantha." The student reports being harassed by peers and receiving repeated threats of physical violence. For instance, the student's shorts were pulled down in the hallway last week by a group of older students. The student goes on to explain that while shopping at the mall with girls, a group of boys knocked shopping bags out of the student's hands. The student also shares about being pushed by peers in the hallway last week. The student says that this has been going on for some time and that this has resulted in the student receiving some failing grades."

Afterwards, participants reported the student's gender and name to assess whether they could correctly identify those details. Then they were asked about the first thing they would say to the student afterwards. See Appendix G for a full list of questions. Lastly,

participants responded to a single item that assessed how confident they were in their ability to respond to the vignette on a scale from 1-10, with higher scores indicating more confidence.

Attitudes Toward Supportive School Practices for Transgender Students. In order to measure participants' attitudes about supportive school practices for transgender students, the Music Teachers' Attitudes Toward Supportive School Practices (MT-ATSSP) Scale was used (Silveira & Goff, 2016). Participants indicated their level of agreement for 19 items (e.g., "Positive representations of transgender people should be included in the curriculum whenever possible"; 1 = "strongly disagree" to 5 = "strongly agree"). Instructions included a definition of the term transgender (see Appendix F). Higher scores indicate more positive attitudes toward school practices that support transgender students. Some items in the current study were edited to make them more applicable outside of a music education context (e.g., "It would be unfair for transgender students to be allowed to choose men's or women's attire for concert dress" was changed to "Transgender students should have a choice of wearing the school uniform they feel comfortable in").

Silveira and Goff (2016) developed the scale using a national sample of 612 K-12 music teachers (60.3% female, 93.4% White). The scale was created based on their review of the literature and an item analysis led them to retain all items as each item-total correlation was greater than .30. The scale had strong internal consistency (α = .93). They found that women and participants who identified as more liberal had more supportive attitudes. The Cronbach's alpha in the current study was high (α = .87).

AlloTrans Scale. The 17-item Allophilia Toward Transsexual Individuals Scale (Wang-Jones, Alhassoon, Hattrup, Ferdman, & Lowman, 2017) was used to assess participants' positive attitudes toward transgender individuals. It is adapted from the Allophilia Scale (Pittinsky, Rosenthal, & Montoya, 2011). The original Allophilia Scale was constructed as a measure meant to be easily adapted for assessing attitudes toward different groups by simply inserting the name of the group as the subject. Participants indicated their level of agreement for each item (e.g., "I feel positively towards transgender individuals"; 1 = "strongly disagree" to 7 = "strongly agree"). Higher scores indicate positive attitudes toward transgender people.

A sample of 138 adults (90 women) were used to assess psychometric properties of the AlloTrans Scale (Wang-Jones, 2017). It demonstrated good internal consistency (α = .99). Further, there was evidence for validity of the scale. The scale was negatively related to political conservatism and religiosity, and positively correlated with supporting transgender workplace policies (Wang-Jones, 2017). One-week test-retest reliability was .94. Cronbach's alpha in the current sample was high (α = .95).

Transphobic Attitudes. The 22-item Music Teachers' Attitudes Toward Transgender Individuals (MT-ATTI) Scale (Silveira & Goff, 2016) was used to assess levels of transphobic attitudes toward transgender individuals. They adapted items from the Attitudes Toward Transgender Individuals Scale (Walch, Ngamake, Francisco, Stitt, & Shingler, 2012) and included items from a scale used to measure attitudes among counselors (Eliason & Hughes, 2004). Participants indicated their level of agreement with each item (e.g., "Transgender individuals should not be allowed to work with children"; 1

= "strongly disagree" to 5 = "strongly agree"). Minor edits to wording were made for the current study (e.g., changing "transgenderism" to "transgender individuals"). Higher scores indicated more transphobic attitudes.

The scale was developed with the same sample as the Music Teachers' Attitudes Toward Supportive School Practices (MT-ATSSP) Scale (Silveira & Goff, 2016). They retained each item after an item analysis found all corrected item-total correlations were greater than .40 (Silveira & Goff, 2016). They conducted a pilot study with eight music teachers to improve content validity. Items that the focus group from the pilot study found confusing were updated to increase clarity without making substantial changes to the scale (Silveira & Goff, 2016). They also found that internal consistency was very good (α = .96; Silveira & Goff, 2016). In support of the scale's validity, the MT-ATTI was strongly positively associated with the Genderism and Transphobia scale (Hill & Willoughby, 2005; Silveira & Goff, 2016). The scale's internal consistency in the current study was high (α = .94).

Gender-Role Beliefs. Traditional gender role beliefs were assessed using a 10item version of the Gender Role Beliefs Scale (GRBS; Brown & Gladstone, 2012; Kerr & Holden, 1996). The scale contains 10 items (e.g., "Swearing and obscenity is more repulsive in the speech of a woman than a man") about traditional gender role expectations (1 = "strongly disagree" to 7 = "strongly agree"). Higher scores indicate more traditional (i.e., less feminist) attitudes about gender roles.

The GRBS showed good internal consistency in a previous study of 233 adults (52% female; $\alpha = .81$; $M_{age} = 29.3$ years; Brown & Gladstone, 2012). Six-week test-retest

reliability was .86 in a sample of 84 undergraduate students (58% female; $M_{age} = 19.7$ years; Brown & Gladstone, 2012). In regard to validity, the GRBS was positively correlated with more conservative political attitudes, religiosity, and homophobic attitudes (Brown & Gladstone, 2012). Unsurprisingly, women reported more feminist (i.e., less rigid) views than men, t(330) = -5.20, p < .001. Cronbach's alpha in the current sample was good ($\alpha = .82$).

Petition for transgender rights. Lastly, participants viewed a screenshot of an American Civil Liberties Union petition supporting legal protections for transgender youth. Participants indicated how likely they were to sign the petition ("not likely at all"; "somewhat likely"; and "very likely") and whether they wanted to be redirected to the petition ("yes, please redirect me so that I can sign"; "no, but please mail me about similar petition in the future"; and "no, thank you"). These questions assessed participants' behavioral intent to support transgender rights at various levels (full support, unsure at the time, and a firm "no"). Afterwards, participants were provided with a debriefing that stated, "The previous question was included to assess your intent to support a petition protecting transgender youth. As such, you will not be redirected or receive future emails about similar petitions." They were also provided with the URL if they were interested in signing the petition.

Analytic approach

Preliminary analyses included descriptive statistics and correlations on demographic and study variables. To assess for mean differences between the six experimental groups, a series of 2 x 3 factorial analysis of variances (ANOVA) were used

in addition to post hoc tests using the Bonferroni correction. The Bonferroni correction controls the familywise error rate and is considered a conservative post hoc test (Keppel & Wickens, 2004). An alpha level of .05 was used for all statistical tests. Statistical analyses were carried out using SPSS 26.0.

In addition to the quantitative analyses, teachers' responses to the questions "What is the first thing you would say to the student in response to their story?" and "Is there anything else you would do in response to the student's story?" were analyzed using a qualitative approach. The units of analysis in the current study were teachers' responses to the aforementioned questions. Thematic analysis was used to explore teachers' reactions to the vignette about transgender bullying (Braun & Clarke, 2006). A datadriven inductive approach was used to identify themes in the teachers' responses (Boyatzis, 1998). Themes emerged through exploration of the behaviors described in participants' responses and identifying commonalities (e.g., messages of apology, expressing gratitude to the student). Associated codes were developed based on these themes and included definitions and keywords. In vivo coding was utilized to prioritize the meaning of teachers' responses from their perspectives (Manning, 2017). As such, themes were identified at the semantic level and reflected explicit statements made by teachers (Braun & Clarke, 2006). One theme was identified at the latent level and reflected whether participant responses were considered supportive or not (e.g., expressed a desire to help, validated the student, or identified next steps). Responses were analyzed in Microsoft Excel and no qualitative software was used to assist in coding the data.

Thematic analysis also allows the qualitative information to be translated into quantitative data (Boyatzis, 1998). In the current study, percentage scores were calculated to determine what proportion of participants' responses contained certain themes. These percentages were calculated by gender and condition as well. This allowed for exploration of differences in frequencies of responses within each theme by gender and condition. A series of chi-square analyses were also utilized to determine whether there were statistically significant differences based on the percentage of responses by condition and gender for each theme that emerged. Responses to the questions "What was the student's name?" and "What was the gender identity of the student?" were also analyzed to assess whether teachers could accurately recall the student's name and gender, as both represent commonly invalidated identity factors for transgender students (Kosciw et al., 2016).

All responses were coded by the principal investigator (White, heterosexual, cisgender man, non-teacher). The principal investigator also identifies as a former victim of bullying and has also completed previous research exploring bullying behaviors and attitudes. These intersecting identities and experiences likely shaped the identification of themes, and the primary investigator reviewed bullying literature on teacher responses to bullying (and transgender bullying) throughout the coding process to increase awareness of potential biases. For example, previous research on best practices for responding to transgender bullying and studies that explored transgender students' experiences were utilized for purposes of comparison as themes emerged (e.g., McGuire et al., 2010; Sausa, 2005).

Results

Preliminary Analyses

A total of 69 (14.32%) individuals from the original 482 participants who started the survey discontinued before receiving feedback about their gender identity. The percentage of participants who dropped out before receiving feedback about their gender identity is similar to rates in previous research exploring drop out in online surveys (~10% drop out almost immediately; Hoerger, 2010). Of the 413 who continued, 18 dropped out after receiving the false gender identity feedback. Results of a binary logistic regression indicated condition (threat condition versus non-threat and control conditions) was not a significant predictor of dropping out following the gender feedback ($\chi_2 = 0.00$, df = 1, p = .99). Further, there was no significant difference in study completion percentage based on condition as determined by a one-way ANOVA, F(4, 407) = 0.85, p = .52.

A series of chi-square tests for independence and one-way ANOVAs were used to test whether there were significant differences between the experimental groups on the demographic variables (e.g., age, sexual orientation, political ideology, etc.). A one-way ANOVA indicated a significant effect of condition on political ideology for men, F(2, 135) = 6.38, p < .01, $\eta_p^2 = .086$. Post-hoc comparisons using the Bonferroni correction indicated that men in the no threat condition (M = 4.34, SD = 1.62) identified as more conservative than men in the threat (M = 5.15, SD = 1.20, p < .05) and control (M = 5.32, SD = 1.28, p < .01) conditions. There was no significant difference on political ideology between the control and threat conditions. Men were more likely to teach higher grade

levels than women ($\chi_2 = 32.51$, df = 2, p < .001). For example, 78.26% of men taught 6th-12th grade versus 46.62% of women. This difference reflects national data on proportions of teachers by gender across grade levels and was not included as a covariate as it was not correlated with any criterion variables (National Center for Education Statistics [NCES], 2020). No other significant differences existed between experimental groups on demographic variables. Means and standard deviations of the criterion variables by condition and gender are presented in Table 1. Intercorrelations among study variables are displayed in Table 2. Both political ideology and importance of religion were significantly associated with numerous criterion variables and as such were included as covariates in subsequent analyses (r = -.66 to .60). An outlier was identified on the transphobia scale with a *Z*-score on the of 4.02 and following guidelines from Tabachnick and Fidell (2007) was assigned a raw score one unit larger than the next highest score.

To assess normality of the data for the criterion variables, a Pearson 2 skewness coefficient was calculated for each criterion variable by determining the difference between the mean and median, multiplying by three, and dividing by the standard deviation (Doane & Seward, 2011). Coefficient values greater than 0.5 or less than –0.5 represent a skewed distribution (Lehman, 1991). Based on these guidelines, three of the study variables did not appear to approximate a normal distribution. Transphobic attitudes, traditional gender role beliefs, and negative affect were each positively skewed (Pearson 2 skewness coefficients from .50 to .84). To correct for the non-normality of the data, a log10 transformation was performed on the three positively skewed variables with new skew indices ranging from .09 to .45 (Osborne, 2002). As a way to obtain more

robust mean estimates and account for uneven sample sizes across experimental groups, bootstrap resampling with replacement (1000 samples) was utilized. The bias-corrected and accelerated (BC_a) method was used as it produces more accurate confidence intervals than the traditional percentile method (Efron & Tibshirani, 1993).

Table 1

Means and Standard Deviations of Criterion Variables by Gender and Condition

			Conc	lition		
	Control			er Identity reat	Gender Identity Threat	
	Men	Women	Men	Women	Men	Women
Variable						
Trans-Allophilia	78.48	78.39	70.39	76.64	76.77	78.84
	(13.07)	(13.89)	(14.78)	(15.30)	(15.35)	(13.89)
Transphobia	37.36	36.86	42.20	37.36	36.43	36.12
	(11.72)	(12.67)	(13.08)	(14.37)	(11.84)	(11.57)
Support for Transgender School Practices	70.56 (8.39)	69.42 (8.93)	68.02 (7.58)	70.80 (10.16)	70.55 (8.88)	70.55 (7.80)
Traditional Gender	23.58	20.71	26.02	21.42	23.45	19.80
Role Beliefs	(6.90)	(7.07)	(9.32)	(8.18)	(7.57)	(6.96)
Negative Affect	18.50	16.03	15.73	16.13	15.02	15.90
	(6.67)	(5.14)	(5.64)	(5.82)	(5.15)	(5.12)
Self-Assurance	17.58	16.29	16.83	15.47	16.94	15.63
	(4.54)	(4.73)	(4.67)	(5.12)	(4.46)	(5.35)
Likelihood of	2.22	2.27	1.73	2.15	2.30	2.24
Signing Petition	(0.74)	(0.72)	(0.74)	(0.78)	(0.69)	(0.69)

Note: Standard deviations appear in parentheses below means.

Table 2

Intercorrelations Among Study Variables by Gender

Variable	1	2	3	4	5	6	7
1. Trans- Allophilia	-	88***	.79***	58***	.23**	.18*	.62***
2. Transphobia	78***	_	88***	0.64***	19*	09	63***
3. Support for Transgender School Practices	.75***	79***	-	63***	.18*	09	.64***
4. Traditional Gender Role Beliefs	48***	.66***	58***	-	11	.09	52***
5. Negative Affect	.18*	08	.12	13	-	.06	.20*
6. Self- Assurance	08	.18*	22**	.23***	14	-	04
7. Likelihood of Signing Petition	.67***	64***	.62***	36***	.14	08	_

Note. r values for women are above the diagonal and r values for men are below the diagonal. *p < .05 **p < .01 .***p < .001.

Primary Analyses

Analysis of covariance (ANCOVA) was utilized instead of ANOVA due to the inclusion of political ideology and importance of religion as covariates. Specifically, analyses were bootstrapped 2 (gender: men and women) x 3 (condition: no threat, threat, and control) ANCOVA with Bonferroni corrected pairwise comparisons of estimated marginal means. See Table 3 for a summary of main effects and interaction terms. First, the hypothesis that men in the threatening feedback condition would have lower scores on allophilia toward transgender individuals as compared to other groups was tested. There was a significant main effect for gender on allophilia scores after controlling for political ideology and importance of religion, F(1, 293) = 5.89, p < .05, $\eta_p^2 = .02$. This

represents a small effect size (Cohen, 1973). Women reported higher levels of allophilia $(M = 78.29, BC_a 95\% CI [76.08, 80.38])$ than men $(M = 75.01, BC_a 95\% CI [72.64, 77.07], <math>d = 0.23)$. This is indicative of a small effect size (Cohen, 1973). There was no significant effect for condition, $F(2, 293) = 0.82, p = .44, \eta_p^2 = .01$, or the interaction, $F(2, 293) = 0.13, p = .88, \eta_p^2 = .00$.

The log10 transformed transphobia variable ANCOVA results and raw data transphobia ANCOVA results did not differ in significance or direction of effects. For ease of interpretation, output from the raw transphobia ANCOVA is reported throughout. There was a significant main effect for gender on transphobia scores after controlling for political ideology and importance of religion, F(1, 293) = 6.08, p < .05, $\eta_p^2 = .02$. This represents a small effect size (Cohen, 1973). Women reported lower levels of transphobia $(M = 36.35, BC_a 95\% CI [34.53, 38.20])$ than men $(M = 38.99, BC_a 95\% CI [37.24, 40.91]$, d = 0.21). This represents a small effect (Cohen, 1973). There was no significant effect for condition, F(2, 293) = 0.42, p = .66, $\eta_p^2 = .00$, or the interaction, F(2, 293) = 0.03, p = .97, $\eta_p^2 = .00$.

The ANCOVA with supportive school practices for transgender students as the dependent variable was not significant. Neither of the main effects for gender, F(1, 293) = 1.59, p = .21, $\eta_p^2 = .00$, or condition, F(2, 293) = .78, p = .46, $\eta_p^2 = .00$, were significantly associated with supportive attitudes for school practices after controlling for political ideology and importance of religion. Additionally, the interaction effect was not significant, F(2, 293) = 0.16, p = .85, $\eta_p^2 = .00$.

Similar to the log10 transformed transphobia analyses, the log10 transformed ANCOVA results and raw data ANCOVA results did not differ in significance or direction of effects for traditional gender role beliefs. For ease of interpretation, output from the raw data gender role beliefs ANCOVA is reported throughout. There was a significant main effect for gender on traditional gender role belief scores after controlling for political ideology and importance of religion, F(1, 293) = 42.61, p < .001, $\eta_p^2 = .13$. This represents a medium effect size (Cohen, 1973). Men reported more traditional (i.e., less feminist) gender role beliefs (M = 24.64, BCa 95% CI [23.54, 25.81]) than women (M = 20.32, BCa 95% CI [19.33, 21.34], d = 0.56). This is indicative of a medium effect. There was no significant effect for condition, F(2, 293) = 0.39, p = .68, $\eta_p^2 = .00$, or the interaction, F(2, 293) = 0.24, p = .79, $\eta_p^2 = .00$.

Two 2 x 3 ANCOVA were also used to assess whether there were differences in affect across experimental groups. The log10 transformed ANCOVA results and raw data ANCOVA results did not differ in significance or direction of effects for negative affect. As a result, the output from the raw data gender role beliefs ANCOVA is reported in the following ANCOVA. There were no significant main effects for gender, F(1, 293) = 0.20, p = .66, $\eta_P^2 = .00$, or condition, F(2, 293) = 2.67, p = .07, $\eta_P^2 = .02$, on negative affect after controlling for political ideology and importance of religion. The interaction was also not significant, F(2, 293) = 2.41, p = .09, $\eta_P^2 = .02$. For feelings of self-assurance, there was a significant main effect for gender, F(1, 293) = 6.70, p = .01, $\eta_P^2 = .02$, such that men reported more feelings of self-assurance (M = 17.18, BCa 95% CI [16.44, 17.91]) than women (M = 15.74, BCa 95% CI [14.90, 16.56], d = 0.3). This

represents a small effect size (Cohen, 1973). The main effect of condition was not significant, F(2, 293) = 1.07, p = .34, $\eta_p^2 = .01$, nor was the interaction term, $(F(2, 293) = 0.01, p = .99, \eta_p^2 = .00.$

To assess whether experimental group impacted reported likelihood of signing the petition for transgender youth rights, another 2 x 3 ANCOVA was performed. There was a significant main effect for gender on likelihood of signing the petition after controlling for political ideology and importance of religion, F(1, 293) = 5.43, p < .05, $\eta_p^2 = .02$. This is indicative of a small effect size (Cohen, 1973). Women reported greater likelihood of signing the petition (M = 2.24, BC_a 95% CI [2.13, 2.34]) than men (M = 2.07, BC_a 95% CI [1.95, 2.18], d = .23). This is representative of a small effect (Cohen, 1973). There was also a significant main effect for condition, F(2, 293) = 3.42, p < .05, $\eta_p^2 = .02$. The effect size was small (Cohen, 1973). Participants in the no gender identity threat condition (M =2.02, BC_a 95% CI [1.88, 2.15]) indicated lower likelihood of signing the petition than participants in the threatening gender identity condition (M = 2.24, BC_a 95% CI [2.12, 2.37], d = .24). This also represents a small effect (Cohen, 1973). Although both main effects were statistically significant, the interaction term was not, F(2, 293) = 1.27, p =.28, η_p^2 = .01. The options for being redirected to the petition were collapsed into a binary categorical variable with "Yes, please redirect me so that I can sign" coded as one level and both "No, but please email me about similar petitions in the future" and "No, thank you" collapsed into another level. Chi-square analyses revealed no significant differences in likelihood of requesting to be redirected by gender ($\chi_2 = 0.00$, df = 1, p = .95) or condition ($\chi_2 = 1.48$, df = 2, p = .48).

Table 3
Summary of Main Effects and Interaction Term for 2 x 3 ANCOVA

Criterion Variable	Gender Main Effect	Condition Main Effect	Interaction Effect
Allophilia	Women > Men	Not significant	Not significant
Transphobia	Men > Women	Not significant	Not significant
Support for transgender school practices	Not significant	Not significant	Not significant
Traditional gender role beliefs	Men > Women	Not significant	Not significant
Negative affect	Not significant	Not significant	Not significant
Self-assurance	Men > Women	Not significant	Not significant
Likelihood of signing the petition	Women > Men	Threat > No threat	Not significant

Responses to the Vignette

Quantitative Analyses

Participants reported an average score of 7.14 (SD=1.88) on a 10 point scale regarding their overall confidence responding to the transgender bullying vignette. The most common response was an eight (23.3% of responses). Only 22 participants (7.3%) rated their confidence at a four or lower. A 2x3 factorial ANOVA that assessed main effects of gender and condition as well as their interaction on level of confidence was not statistically significant, F(5, 295) = 1.51, p = .187, $\eta_p^2 = .03$. Previous contact with transgender individuals (r = .19, p < .05), transgender allophilia (r = .22, p < .01), transphobic attitudes (r = -.19, p < .05), support for school practices that support

transgender students (r = .25, p < .001), and traditional gender role beliefs (r = -.12, p < .05) were all significantly related to confidence in ability to respond.

The majority of participants across gender and conditions were able to correctly identify the student's name ("Samantha" as opposed to "Samuel"; 81.88% of men and 82.82% of women). A chi-square analysis revealed no significant differences by gender or condition ($\chi_2 = 7.59$, df = 6, p = .27). Similarly, the majority of participants correctly identified the student as a girl (75.36% of men and 79.14% of women) and there were no significant differences by condition or gender ($\chi_2 = 8.74$, df = 6, p = .19). A smaller percentage of participants used the term "transgender" or "trans" to describe the student's gender identity (5.80% of men and 7.98% of women). A chi-square test could not be carried out because the assumption that no more than 20% of the cells would contain an expected value of at least five cases was violated (McHugh, 2013). However, a Fisher's exact test found that there were no significant differences by gender or condition (p = .14). Although the term "bullying" was not used in the vignette, 22.59% of participants identified the scenario as involving bullying without prompting. A chi-square analysis revealed no significant differences by gender or condition ($\chi_2 = 4.69$, df = 6, p = .58).

Qualitative Analyses

Responses to the questions "What is the first thing you would say to the student in response to their story?" and "Is there anything else you would do in response to the student's story?" were analyzed using the qualitative approach described in the method section. The themes were not mutually exclusive and participant responses were placed into more than one theme if appropriate. Overall, 100% of participants' responses were

coded as supportive. Teachers' responses were considered supportive if they offered emotional validation, a message of apology, or identified next steps to help the student. None of the participants' responses were dismissive or invalidating. Each of the teachers in the current sample wrote that they would do something to try to help the student. For example, a 57-year-old, White, heterosexual, woman who teaches reading in an elementary school and was in the no threat condition wrote:

I would let the student know that what those students did to her was wrong, and I would do everything in my power to help her find the support she needs. In this case, I would likely start with a school social worker, but would also be sure that the school administration was aware and find out what action would be taken to support this child. I would also be sure to check in regularly with this student to offer continued support.

Two broader themes, *practical interventions* and *interpersonal messages*, became evident using an inductive approach. Each theme included associated subthemes (see Table 4). Chi-square analyses assessing for differences based on condition and gender are reported throughout.

Practical Interventions. Most participants (71.01% of men and 69.33% of women) offered *practical interventions* that involved taking action in response to the bullying. These included: (a) *school administration involvement*; (b) *mental health staff involvement*; and (c) *parental involvement*.

School Administration Involvement. Among the practical interventions, school administration involvement was the most common (39.20% of responses). Responses in

this theme referenced reaching out to school staff members like principals or deans for additional support. A number of teachers wrote that it was important to notify administration and some cited that it was school policy. For example, a 37-year-old, White, heterosexual man who teaches middle school social studies and was in the control condition wrote, "I would let the student know that I'd like to help them and talk to...admin about what is happening, but I need to confirm they are okay with this first." A chi-square analysis revealed that there were no significant differences by gender or condition ($\chi_2 = 4.28$, df = 6, p = .64).

Mental Health Staff Involvement. Another theme was some form of *mental health staff involvement* (26.24% of responses). Responses in this theme mentioned connecting the student with mental health support or notifying mental health professionals in the school about the bullying. Teachers varied in their recommendations and referenced school counselors, school psychologists, and social workers. For example, a 31-year-old, Latino, heterosexual man who teaches high school math and was in the threat condition wrote, "I would report this to the school counseling department so she can get some support." A chi-square analysis revealed that there were no significant differences by gender or condition ($\chi_2 = 7.98$, df = 6, p = .24).

Parental Involvement. The last theme in practical interventions was parental involvement (16.28% of responses). This theme included responses that indicated intent to contact the student's parents or that asked the student if their parents knew about the bullying. A response from a 42-year-old, White, heterosexual woman who teaches fourth grade and was in the control condition wrote, "I would have a conversation with...her

parents." A chi-square analysis revealed that there were no significant differences by gender or condition ($\chi_2 = 4.64$, df = 6, p = .59).

Interpersonal Messages. A majority of participants (63.77% of men and 64.42% of women) also shared *interpersonal messages* which were identified as those that spoke to the student's emotional experience. These included: (a) *offering an apology*; (b) *expressing gratitude to the student*; (c) *creating a safe space*; and (d) *listening to the student*.

Offering an Apology. Among the interpersonal messages, the most common theme was offering an apologetic remark to the student (38.20% of responses). Teachers' responses fit into this theme if they explicitly included a statement of apology about the bullying or stated that they were sorry the student was treated unfairly. For example, a 62-year-old, White, heterosexual man who teaches high school music and was in the control condition wrote, "I'm really sorry this is happening to you." A chi-square analysis revealed no significant differences by gender or condition ($\chi_2 = 6.47$, df = 6, p = .38).

Expressing Gratitude to the Student. The next theme, expressing gratitude to the student, was less prevalent (12.29%). Responses in this theme contained an explicit message thanking the student for telling them about their experiences. Some of responses in this theme additionally thanked the student for trusting them enough to share. One example of expressing gratitude to the student came from a 28-year-old, White, heterosexual man who teaches elementary school and was in the threat condition. He wrote, "Thank you for being vulnerable and sharing." A chi-square analysis revealed that there were no significant differences by gender or condition ($\chi_2 = 7.39$, df = 6, p = .29).

Creating a Safe Space. Some teachers explicitly mentioned creating a safe space in their responses (12.62% of responses). Teachers' responses in this theme focused on making sure the student was safe or ensuring their safety in some way. More specifically, some teachers wrote that they would tell the student their classroom is a "safe space." For example, a 30-year-old, White, heterosexual man who teaches high school music and was in the no threat condition wrote, "What can I do to ensure that you find this environment safe and comfortable?" A chi-square analysis revealed that there were no significant differences by gender or condition ($\chi_2 = 11.58$, df = 6, p = .07).

Listening to the Student. A smaller proportion of teachers explicitly wrote about the importance of listening to the student's experience (6.64% of responses). Responses fit this theme if they mentioned that a next step would be to listen. For example, a 42-year-old, White, heterosexual man who teaches high school math and was in the control condition wrote that, "... first and foremost, I would just listen." A chi-square test could not be carried out because the assumption that no more than 20% of the cells would contain an expected value of at least five cases was violated (McHugh, 2013). A Fisher's exact test found that there were no significant differences by gender or condition (p = .06).

Table 4

Vignette Themes and Subthemes with Examples

Coding Themes and Subthemes	Examples	
Supportive response (100%)	"I hear you, and I want you to know that my classroom is a safe space. If you feel comfortable, you can meet with the principal. If you don't want to go alone, I will accompany you. If you ever need to talk, know that my door is always open." (25-year-old, White, heterosexual woman, high school English, no threat condition)	
Practical interventions		
School administration involvement (39.20%)	"Investigate and discuss with my team prior to taking it to administration." (54-year-old, White, heterosexual man, middle school English, no threat condition)	
Mental health staff involvement (26.24%)	" talk to [the] school counselor or psychologist to see how they can help." (41-year-old, Latino, bisexual man, middle school, threat condition)	
Parental involvement (16.28%)	"I would ask the student what they needed from me/what I could do to help them most—speaking together [to] their parents I would want to take cues from the student first before I acted." (29-year-old, White, heterosexual woman, elementary school, no threat condition)	
Interpersonal messages		
Offering an apology (38.20%)	"I'm so sorry this is happening to you, it's awful. But I'm here for you." (34-year-old, White, bisexual man, elementary school music, threat condition)	
Creating a safe space (12.62%)	"The student would be offered my classroom as a safe space if they needed to get away from peers or decompress." (25-year- old, White, heterosexual woman, high school English, threat condition)	
Expressing gratitude to the student (12.29%)	"Thank you for opening up to me." (42-year-old, White, heterosexual man, high school math, control condition)	
Listening to the student (6.64%)	"Listen carefully and attentively." (55-year-old, White, heterosexual man, high school science, control condition)	

Discussion

The current study makes important contributions to the growing body of research on bullying involving transgender youth. Previous research has largely ignored teachers' reactions to bullying involving transgender individuals and often folds transgender issues into larger studies on LGBTQ bullying (Silveira & Goff, 2016). Although it is wellestablished that transgender youth experience disproportionately higher rates of victimization from both peers and teachers, the mechanisms that help explain why teachers perpetuate the bullying dynamic remain unclear (Bartholomaeus et al., 2017; Kosciw et al., 2016). It was hypothesized that the theory of masculine overcompensation would help explain negative reactions to bullying involving a transgender student. Specifically, the study explored whether men who teach overcompensated (e.g., exhibit more transphobic attitudes) when they received threatening information about their gender identity (Willer et al., 2013). The study utilized a 2 (gender) x 3 (gender identity threat, no gender identity threat, and control) experimental design and is the first study to apply the theory of masculine overcompensation to men who teach as it relates to their attitudes on transgender bullying. A qualitative approach provided additional context by exploring how teachers would react to a hypothetical bullying scenario involving a transgender target.

The primary hypothesis that men in the gender identity threat condition would engage in overcompensation was not supported. Although previous research found that threatened masculinity was a significant predictor of anti-transgender beliefs, there was only one significant difference based on experimental condition in the current study

(Harrison & Michelson, 2018). Unexpectedly and contrary to the study hypothesis, individuals in the gender identity threat condition, regardless of gender, were more likely to sign the petition for transgender youth rights as compared to individuals in the no threat condition. Perhaps feedback that affirmed participants' gender identity had an unexpected negative impact on their likelihood of engaging in behavior that was supportive of transgender youth. Participants in the threat condition may have attempted to mask a negative reaction to the threatening gender identity feedback by indicating support for transgender rights. They may have felt pressure to respond in a socially desirable way and masked a negative reaction through self-deception (Nederhof, 1985). Although there were not differences on attitudinal scores based on gender identity feedback, the feedback might have impacted behavioral intent. Perhaps participants in the threat conditions felt empathetic toward transgender youth after their masculinity or femininity was threatened. However, this does not fit with current theoretical frameworks which suggest that men who have their gender identity threatened are less likely to support transgender rights (Harrison & Michelson, 2018). Future research is needed to determine whether this finding was a spurious effect or if it reflects a unique impact of gender identity threat.

There are a number of potential reasons that an overcompensation effect was absent in the current study. It may be that men who teach represent a unique group among men, as previous studies that found a link between threatened masculinity and overcompensation used samples of undergraduate students (Harrison & Michelson, 2018; Willer et al., 2013). While previous researchers theorize that men who teach could be

more sensitive to threats of masculinity (Roulston & Mills, 2000; Simpson, 2004), this was not true for men who teach in the current study. One potential explanation for this is that men who work in settings that value masculine norms less and allow for more flexibility in how masculinity is expressed might be less sensitive to masculinity threats (Willer et al., 2013). Indeed, men who teach have identified that they are capable of engaging in traditionally feminine behaviors (e.g., nurturing and attending to the emotional needs of students), reflecting a flexibility in expression of gendered behaviors (Montecinos & Nielsen, 2004). Additionally, hegemonic masculinities can vary based on context and men who teach might differ in their susceptibility to masculinity threats based on their school's unique environment (Connell & Messerchmidt, 2005; Schrock & Schwalbe, 2009). If men who teach are less susceptible to threats to gender identity as compared to men in general, they may be more comfortable discussing issues surrounding gender identity and serve as important sources of support for transgender youth in schools.

Furthermore, the gender identity feedback may have not been powerful enough. There are some differences between the current study and previous research that found an overcompensation effect. Previous studies on masculine overcompensation utilized an experimenter who provided the written gender identity feedback to participants in a laboratory setting (Harrison & Michelson, 2019; Willer et al., 2013). Perhaps receiving the false feedback online was less potent. Participants appeared to understand the feedback as they were accurate in identifying its content (e.g., "My score fell within the average male range"). However, the manipulation check itself may have disrupted the

effect by forcing the participant to shift their attention unnecessarily and question the authenticity of the feedback (Hauser, Ellsworth, & Gonzalez, 2018). Hauser and colleagues (2018) go on to state that "responses to the dependent variable we care about can be changed by the experience of responding to a manipulation check" (p. 3). As a result, future studies examining overcompensation in men who teach might consider moving the manipulation check to the end and asking participants explicitly if they thought the gender identity feedback was real.

Although there were not additional effects based on gender identity feedback, there were a number of significant gender effects. Overall, women indicated more supportive attitudes toward transgender individuals as compared to men. One unique finding was that women in the current study reported more allophilia toward transgender individuals. Again, this is one of the first studies to explore transgender allophilia among teachers, and although previous research found no gender differences, it suggests that they exist in this population (Wang-Jones et al., 2017). Perhaps women reported more positive attitudes because of greater flexibility in their conceptualization of gender (Harrison & Michelson, 2018). Indeed, previous research found that women, compared to men, appear to be less affected by violations of the expectation that gender exists on a strict binary (Burdge, 2007).

Though the gender differences could theoretically be due to the manipulation (i.e., gender identity feedback), it is unlikely since it is well-established in the literature that women hold more positive beliefs regarding transgender issues and are more feminist in their perspectives than men (Brown & Gladstone, 2012; Harrison & Michelson, 2018;

Kerr & Holden, 1996; Silveira & Goff, 2016). In the current sample, there were significant gender differences for allophilia, transphobia, and traditional gender role beliefs, while both the effects of condition and the gender X condition interaction terms were not significant. This suggests that the gender differences in the current sample existed regardless of gender identity feedback and across the experimental groups (i.e., experimental manipulation).

Overall, the gender differences reflect previous findings that men have more negative views of transgender individuals (Harrison & Michelson, 2018). It is not clear based on the current study if men who teach differ in their attitudes toward transgender individuals as compared to men who are not teachers. Still, the gender differences found in the current sample can inform trainings or workshops on gender diversity. While both women and men could increase their awareness of biases through gender diversity trainings, men may especially benefit. This could lead to meaningful changes and decrease the likelihood of engaging in harmful behavior toward transgender students. Indeed, previous research has found that just building awareness can reduce bias (Pope, Price, & Wolfers, 2018).

There were differences in levels of transphobia when comparing teachers in the current sample to teachers in a previous study (Silveira & Goff, 2016). Men in the current study had lower mean transphobia scores (M = 1.75, SD = 0.56) than men in the previous study (M = 2.23, SD = 0.79), t(370) = 6.29, p < .001, d = .70 (Silveira & Goff, 2016). This represents a medium effect size (Cohen, 1973). Similarly, women in the current study had lower mean transphobia scores (M = 1.68, SD = 0.60) as compared to women

in the previous study (M = 2.02, SD = 0.73), t(521) = 5.21, p < .001, d = .51 (Silveira & Goff, 2016). This represents a medium effect (Cohen, 1973). It is possible that teachers in the current sample were less transphobic as compared to music teachers in the previous study. Alternatively, the gender identity feedback could have impacted participants' transphobia scores. The previous study did not test for an overcompensation effect; however, the comparison further suggests that the gender effects reflected pre-existing transphobic attitudes. Future research that utilizes a pretest and comparisons to non-teachers could provide further clarity on these findings.

Overall, the associations between criterion variables in the current study were in expected directions and aligned with previous research. For example, traditional gender role beliefs have been shown to be positively associated with transphobic attitudes (Hill & Willoughby, 2005; Makwana et al., 2018; Nagoshi et al., 2008). As expected, allophilia and transphobia were highly negatively correlated. Previous research exploring teachers' attitudes has exclusively focused on negative attitudes toward transgender individuals (Silveira & Goff, 2016). Although there were not differential outcomes between allophilia and transphobia with other criterion variables, it is possible that differences in how allophilia and transphobia relate to other outcomes were not captured in the current study. Still, transgender students benefit from having teachers who are affirming and not just tolerant of their gender identity (Greytak et al., 2009). Thus, measuring allophilia is critical as it cannot not be assumed that an absence of negative attitudes reflects positive feelings toward a group (Pittinsky et al., 2011).

The qualitative results provided additional context about how teachers respond to bullying involving a transgender target. Men and women did not differ in their responses to the vignette. There were no significant differences in the percentage of respondents who mentioned each theme by gender or condition. When prompted, a majority of the participants in the current study accurately identified the student as "Samantha" and reported that the student identified as a girl. However, because they were explicitly asked, it is unclear if this would translate into practice. Future studies could expand on this finding and assess whether teachers utilize the correct name and pronouns in a school setting. This is critical because there is evidence that proper name and pronoun usage avoids perpetuating discrimination experiences while affirming the gender identity of transgender youth (Kosciw, Greytak, Zongrone, Clark, & Truong, 2018; Wentling, 2015).

In addition to questions pertaining to details about the student in the vignette, teachers were asked how they would respond to the incident. Although previous research found that some teachers inaccurately believe intervening will make the bullying worse, each teacher in the current study indicated an intention to help the student (Horne, Orpinas, Newman-Carlson, & Bartolomucci, 2004). However, less than half of teachers in the study reported that they would reach out for additional support (e.g., a principal or other administrative staff). Researchers have recommended bullying prevention efforts that include involving school administration (Birkett, Espelage, & Koenig, 2009). About a quarter of the sample indicated that they would refer the student to mental health services (e.g., school counselor, social worker). Mental health professionals in schools represent important sources of support who can buffer the negative effects of bullying

and provide an affirming space for LGBTQ youth to build social-emotional skills (Earnshaw et al., 2014; Earnshaw et al., 2019). Even fewer participants (16%) reported that they would involve the student's parents. This is concerning given evidence that parental involvement in bullying prevention efforts can reduce both perpetration and victimization in K-12 students (Huang, Espelage, Polanin, & Hong, 2019).

Unexpectedly, no teachers reacted negatively to the vignette. This finding directly contradicts previous research which found that teachers often respond negatively to transgender students who are bullied (e.g., perpetuate the harassment, blame the student for being bullied, or ignore the student's concerns; McGuire et al., 2010; Sausa, 2005). Teachers in the current study may have guessed the study's intention and responded to demand characteristics (Orne, 1962). A demand characteristic refers to some aspect of an experiment that cues the participant to the study's intent or hypothesis, resulting in a change in their behavior (Orne, 1962). For example, teachers in the current study may have adopted the role of a "good participant" and wrote aspirational responses as opposed to how they would behave in a school setting (Weber & Cook, 1972, p. 274). Considering both previous research and responses in the current study, it appears there are gaps between how teachers intend to respond to an incident of transgender bullying and how teachers actually behave. To increase the likelihood that teachers will engage in the supportive behaviors they wrote about in the current study, they may benefit from opportunities to practice their responses (e.g., role plays).

In addition to exploring what teachers did report, it is worth examining what was missing from their responses. For example, only one teacher mentioned mentorship. In

previous research, transgender students who were mentored reported positive impacts (e.g., increased likelihood of attending college) and indicated a desire for teachers to serve in mentorship roles (Grossman et al., 2009; Rummell, 2016). Although transgender youth have reported a desire to have queer-oriented spaces (McGuire et al., 2010), only four teachers described connecting the student with a support group. Also, only two teachers who wrote about parental involvement indicated that they would first seek the student's permission. Indeed, the United States Department of Education recommends consulting with older transgender students before talking to their parents (Whalen & Esquith, 2016). Failing to ask for permission could represent a safety threat if they out the student. Unfortunately, many transgender children are rejected by their family or forced to leave home (Grossman, D'Augelli, Howell, & Hubbard, 2005; Robinson, 2018; Shelton, 2015). Finally, while many teachers offered an apology, previous research has found that it is important for teachers to take action in addition to providing verbal support (McGuire et al., 2010; Sausa, 2005). Taken together, the aforementioned points represent a need for additional training that covers the nuances and multicultural competency required to respond effectively to transgender bullying.

Teachers indicated their confidence in responding to the hypothetical bullying scenario. Teachers' level of confidence was related to their attitudes about transgender individuals, school practices that support transgender students, traditional gender role beliefs, and feelings of self-assurance, all in expected directions. It seems that, overall, teachers who were less supportive in their attitudes toward transgender individuals were less confident in their ability to respond to the vignette. For example, more transphobic

attitudes were associated with less confidence. Teachers' confidence about their ability to intervene is important given the link between confidence (i.e., self-efficacy) and intention to respond to a situation involving bullying (Yoon, 2004; Yoon, Sulkowski, & Baauman, 2016). To increase external validity, future research could explore the link between confidence, behavioral intent, and responses to bullying using an observational design.

Another factor associated with teachers' confidence was prior contact with transgender individuals. Unsurprisingly, teachers who indicated closer contact with transgender individuals reported more confidence. Increased contact with transgender individuals was correlated with higher allophilia and lower transphobia. This aligns with previous research on intergroup contact theory which found a negative correlation between contact with transgender individuals and transphobia (Walch et al., 2012). Still, many individuals in the current sample reported that they did not have close contact with transgender individuals (42.9%). This might reflect the low prevalence of transgender individuals in the United States (~0.6%; Flores, Brown, & Herman, 2016). Although a majority of the participants were from the Western United States, a region where numerous states have higher proportions of transgender individuals than the national average (e.g., Arizona, California, New Mexico; Flores et al., 2016), previous contact with transgender individuals was limited. Increased exposure to transgender individuals seems to decrease negative attitudes toward transgender people as a whole (Walch et al., 2012). As such, finding opportunities to increase teachers' exposure to people who are transgender through gender diversity workshops or panels could reduce biases (Walch et al., 2012).

As part of the demographic questionnaire, participants reported their level of political conservatism and importance of religion. Although these demographic variables were not related to the primary objectives of the current investigation, they were both strongly correlated with lower levels of transgender allophilia, increased transphobic attitudes, less support for school practices that support transgender students, more traditional gender role beliefs, less likelihood of signing the petition supporting transgender youth rights, less negative affect, and increased feelings of self-assurance. As such, both were included as covariates in the ANCOVA analyses. These findings match previous research on the impact of political ideology and religiosity on transgender attitudes, beliefs about gender roles, and affect (Acker, 2017; Greenberg & Gaia, 2019; Jost, Glaser, Kruglanski, & Sulloway, 2003; Norton & Herek, 2013; Silveira & Goff, 2016; Willoughby et al., 2010). These findings confirm that researchers should consider religiosity and political conservatism as covariates in future studies on teachers' transgender attitudes.

Limitations

There are a number of limitations to consider in the current study. The sample was mostly recruited through convenience sampling. The demographics of the current sample seem to largely reflect the demographics of teachers nationally (NCES, 2020); however, it is possible that the attitudes of the current sample did not represent teachers at the population level. Men in the current sample were disproportionally more likely to teach in middle school and high school as compared to women, though this reflects gender distributions at the national level (NCES, 2020). As men were specifically

targeted in recruitment efforts, they were overrepresented in the current study as compared to national data (MenTeach, 2017).

It is possible that the study suffered from selection effect bias. Although participants did not know the study had a transgender focus, the recruitment materials stated that the study explored attitudes and behaviors related to bullying. Teachers who were more sympathetic to bullying situations or who had prior experience responding to bullying may have been more likely to complete the survey. This could have biased the sample and help explain why all responses to the vignette about bullying were supportive.

The lack of pretest attitudinal measures prior to the manipulation make it challenging to fully assess how the gender identity feedback impacted participants' attitudes. Specifically, without a pretest it is difficult to conclude that the gender differences existed before the gender identity feedback. However, participants were randomly assigned to each experimental group to attempt to mitigate preexisting differences across conditions. There was one preexisting difference such that men in the no threat condition were more conservative than men in the other two conditions. Although political ideology was a covariate in each ANCOVA, ideally there would have been no demographic differences between the experimental groups.

Another limitation in the current study was attrition. This may have introduced bias in the sample. A total of 69 (14.32%) individuals from the original 482 participants who started the survey discontinued before receiving feedback about their gender identity. However, based on post hoc analyses, there were no significant demographic differences (e.g., age and gender) among those who dropped out and those who

completed the study. The percentage of participants who dropped out before receiving feedback about their gender identity was similar to rates in previous research exploring drop out in online surveys (~10% drop out almost immediately; Hoerger, 2010). Only 18 (4.36%) participants dropped out after receiving the false gender identity feedback. However, as a majority of demographic questions were at the end of the survey, there were a number of unknowns about the 145 participants who did not complete the study. For example, it could be that there were differences in completion based on geographic region, racial/ethnic background, or socioeconomic status.

Overall, many of the participants' responses to attitudinal measures reflected supportive views of transgender students and school practices that support transgender rights. It is possible that the study suffered from problems with restricted range which could lead to attenuation of effect sizes. However, additional analyses with log10 transformations did not differ from analyses using the raw data. This suggests that restricted range may not have negatively impacted the findings in the current study.

Finally, many of the participants' responses were recorded online during a global pandemic. This represents a unique sociocultural context that could affect the external validity of the study. Teachers may have been at home for a long period of time with less interaction with their students and perhaps this impacted responses in a unique way. As such, the sociocultural context during which the study was completed should be considered during any attempts to generalize the results.

Implications for Practice

The overcompensation theory does not appear to apply to men who teach in the current sample as a way to understand their responses to incidents of transgender bullying. Although there was no evidence supporting an overcompensation effect, men did report more transphobic attitudes overall as compared to women. While this might suggest that men who teach do not respond negatively to masculinity threats, they still seem to have less supportive attitudes toward transgender students. It is encouraging that they were unaffected by the manipulation, however training might be necessary to reduce bias and increase allophilia among men who teach.

In order to increase teachers' support of transgender students, it could be beneficial to target behavioral steps in addition to attitudes. There were potential gaps between interventions recommended in the current study and best practices for intervening. Specifically, many teachers indicated that they would handle the bullying situations themselves. Teachers might need additional training on how to effectively involve school administration and parents to help prevent further bullying (Horne et al., 2004).

The results from the current study also support future collaboration between mental health professionals and teacher educators. As counseling psychologists are leaders in intersectional research and multiculturalism (Grzanka, Santos, & Moradi, 2017; Vera & Speight, 2003), they could serve in consulting roles to school districts and teacher education programs to enhance training on prevention and interventions for transgender bullying. Teachers may be open to these collaboration opportunities as a number of teachers in the current study mentioned mental health professionals. Indeed, a

multidisciplinary approach has been shown to be most effective in bullying prevention and intervention efforts (Holt, Green, Tsay-Vogel, Davidson, & Brown, 2017; Pearce, Cross, Monks, Waters, & Falconer, 2011).

Implications for Future Research

Although there was not an overcompensation effect for men who teach in the current study, it is not possible to definitively conclude that men who teach are immune to threats to their gender identity. The current study replicated previous research designs, but future studies could expand on this methodology (Willer et al., 2013; Harrison & Michelson, 2018). For example, future research would benefit from looking at the salience or importance of gender identity to participants as a possible moderator of the overcompensation effect (Harrison & Michelson, 2018). To further explore if men who teach are less susceptible to masculinity threats, future studies could compare them to men in professions that are traditionally masculine (e.g., engineering or jobs involving manual labor) and assess for between group differences in overcompensation.

Additionally, in order to enhance validity, researchers might conduct an observational study that assesses teacher responses to bullying situations involving transgender youth in a school setting. However, observational studies have several significant drawbacks such as ethical questions about privacy and increased cost (Volk, Veenstra, & Espelage, 2017). Researchers might also consider measuring implicit biases, defined as pervasive, automatic cognitions about a social group that can lead to unintended discriminatory behavior (Holroyd, Scaife, & Stafford, 2016). Researchers could use an implicit association test to explore how implicit biases relate to teachers'

reactions to transgender bullying and attitudes toward transgender students. While explicit and implicit attitudes about transgender individuals are related, researchers have found that implicit attitudes predicted additional variance in support for transgender workplace policies beyond a measure of explicit attitudes (Wang-Jones et al., 2017).

Participants in the current study were split into experimental groups based on the gender binary such that gender (i.e., man/woman) and sex (i.e., male/female) may have been conflated (Valdes, 1996; Willer et al., 2013). Indeed, sex and gender are commonly conflated in survey research with sex as a proxy for gender (Bittner & Goodyear-Grant, 2017). Measuring gender as a binary variable fails to capture possible nuances related to gender identity across a spectrum (Bittner & Goodyear-Grant, 2017). However, in order to measure the impact of gender identity threat using the current experimental design, it was necessary to split teachers on the gender binary. Future studies exploring teachers' attitudes could measure gender identity on a spectrum (e.g., from feminine to masculine) to avoid conflating sex and gender and explore how these scores relate to attitudes toward transgender individuals (Bittner & Goodyear-Grant, 2017; Valdes, 1996).

There is a need for more intersectional research in counseling psychology (Shin et al., 2017). While it was beyond the scope of the current study, future researchers might consider assessing racial/ethnic background as an important intersecting identity.

Previous research shows that LGBTQ students of color report greater social isolation and experiences with racism as compared to cisgender, heterosexual peers (Earnshaw et al., 2019). It would be interesting to assess how teachers respond to a vignette that describes a bullying scenario involving both race-based and gender-based bullying.

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APPENDIX A CONSENT FORM

Purpose of the research: To better understand teachers' and preservice teachers' attitudes and behaviors related to bullying among youth.

Eligibility: You must be at least 18-years-old to participate and currently be a K-12 teacher or a preservice teacher with student teaching experience.

Your role in the current research: If you decide to volunteer you will be asked to answer a series of survey questions about your attitudes and behaviors regarding social issues and bullying. You will not be asked to provide your name or any personally identifying information outside of general demographic questions.

Time required: Completing the current study will take approximately 20-30 minutes.

Compensation: Upon successful completion, participants will vote on how they would like the research team to allocate \$300 of funds for donation AND have the opportunity to provide their email to enter a raffle to win one of sixty (60) \$25 Amazon gift cards. Raffle entry limited to once per person. Emails will be collected in a separate form and will not be connected to participants' survey responses. Raffle winners will be contacted via the email address they provide after data collection is complete. It is anticipated that raffle winners will be contacted in early 2019. Funding for the study will be provided by the research team.

Risks: There are no known risks to participating in this study.

Benefits: Each participant will receive one vote on how they would like the study to disperse \$300 of funds allocated for charitable donations. Upon successful completion of data collection, the research team will donate a fraction of the \$300 to each organization that is proportional to the number of votes each organization receives. Participants will be allowed to choose one of the following seven organizations: Human Rights Campaign, the Humane Society, Treasures 4 Teachers, the National Center for Transgender Equality, the American Cancer Society, the American Civil Liberties Union (ACLU), or the Wounded Warrior Project.

Confidentiality: The results of this study may be used in reports, presentations, or publications, but your responses will remain anonymous.

Participation and withdrawal: Your participation in this study is completely voluntary, and you may refuse to participate or withdraw from the study at any time. No penalties will be incurred as a result of withdrawing from the study.

To contact the researcher: If you have any questions or concerns about this research, please contact the primary investigator (Jeff Mintert, M.S., Jeffrey.mintert@asu.edu) or his dissertation chair (Alisia Tran Ph.D., alisia@asu.edu). To understand your rights in this research or for additional questions, concerns, suggestions, or complaints that are not being addressed by the research, or research-related harm, you may contact the Research Integrity and Assurance at Arizona State University (email: research.integrity@asu.edu; phone: 480-965-6788).

Best, Jeff Mintert Doctoral Candidate, Counseling Psychology Arizona State University

APPENDIX B SCREENING QUESTIONS

What is your age?
Are you currently a teacher (K-12)? Yes No
Are you currently a college student majoring in education with some student teaching experience? YesNo
If yes, approximately how much student teaching experience do you have? 1-2 months3-4 months5-6 months7-8 months9-10 months10 months to a year More than one year
Please indicate your gender identity: Man Woman Transgender Man Transgender Woman Gender non-conforming Not listed Prefer not to answer

APPENDIX C BEM SEX ROLE INVENTORY

Instructions:

Please answer the questions that follow as well as you can. Do not skip questions. If you are unsure of an answer, please give the answer that seems best to you.

For each of the following words, please pick a number from the following scale that best indicates how well you think the word describes yourself:

Not Applicable 1—2—3—4—5—6—7 Totally Applicable

1.	Warm
2.	Has leadership abilities
3.	Gentle
4.	Strong personality
5.	Affectionate
6.	Acts as leader
7.	Sympathetic
8.	Dominant
9.	Sensitive to other's needs
10.	Defends own beliefs
11.	Tender

12. Makes decisions easily _____

APPENDIX D GENDER IDENTITY SURVEY FEEDBACK

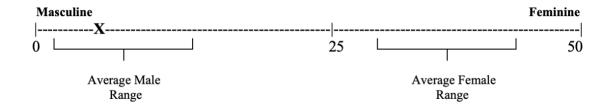
Gender Identity Survey Feedback (No Gender Identity Threat – Men)

The following is your score based on the previous questionnaire. It has been placed on a 0 to 50 index running from "Masculine" to "Feminine." Those lower on the scale have more masculine gender traits while those higher on the scale have more feminine gender traits.

Your Score: 11

Compared to average men, your score fell in the masculine range.

Below is a line graph of average scores for men and women. We have indicated your score with an "X" on the line.



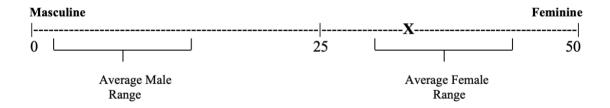
Gender Identity Survey Feedback (Gender Identity Threat – Men)

The following is your score based on the previous questionnaire. It has been placed on a 0 to 50 index running from "Masculine" to "Feminine." Those lower on the scale have more masculine gender traits while those higher on the scale have more feminine gender traits.

Your Score: 32

Compared to average men, your score fell in the feminine range.

Below is a line graph of average scores for men and women. We have indicated your score with an "X" on the line.



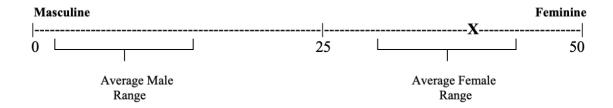
Gender Identity Survey Feedback (No Gender Identity Threat – Women)

The following is your score based on the previous questionnaire. It has been placed on a 0 to 50 index running from "Masculine" to "Feminine." Those lower on the scale have more masculine gender traits while those higher on the scale have more feminine gender traits.

Your Score: 39

Compared to average women, your score fell in the feminine range.

Below is a line graph of average scores for men and women. We have indicated your score with an "X" on the line.



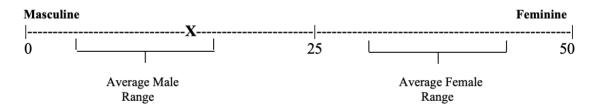
Gender Identity Survey Feedback (Gender Identity Threat – Women)

The following is your score based on the previous questionnaire. It has been placed on a 0 to 50 index running from "Masculine" to "Feminine." Those lower on the scale have more masculine gender traits while those higher on the scale have more feminine gender traits.

Your Score: 18

Compared to average women, your score fell in the masculine range.

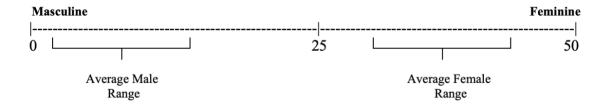
Below is a line graph of average scores for men and women. We have indicated your score with an "X" on the line.



Gender Identity Survey Feedback (Control Condition for Men and Women)

Thank you. Your responses were scored and recorded.

Manipulation Check (Gender identity threat/No gender identity threat conditions only)



You just viewed feedback on your earlier responses. Which of the following best describes that feedback?

- My score fell within the average male range.
- My score fell within the average female range.
- My score was in neither the average male or average female range.

What was your score (0-50) on the above scale? _____

APPENDIX E

PANAS-X

This scale consists of a number of words and phrases that describe different feelings and
emotions. Read each item and then mark the appropriate answer in the space next to that
word. Indicate how you feel right now (that is, at the present moment). Use the following
scale to record your answers:

1 Very slightly or not at all	2 A little	3 Moderately	4 Quite a bit	5 Extremely
or not at an				
Afraid				
Proud				
Scared				
Nervous				
Strong				
Jittery				
Irritable				
Confident				
Hostile				
Guilty				
Bold				
Daring				
Ashamed				
Upset				
Fearless				
Distressed				

APPENDIX F

VIGNETTE

Imagine that a student approached you with the following situation. The student was born a boy and identifies as a girl. The student is listed as "Samuel" on your official roster, but requests to be called "Samantha." The student reports being harassed by peers and receiving repeated threats of physical violence. For instance, the student's shorts were pulled down in the hallway last week by a group of older students. The student goes on to explain that while shopping at the mall with girls, a group of boys knocked shopping bags out of the student's hands. The student also shares about being pushed by peers in the hallway last week. The student says that this has been going on for some time and that this has resulted in the student receiving some failing grades.

APPENDIX G QUALITATIVE QUESTIONS

What was the student's name?

What was the gender identity of the student?

What is the first thing you would say to the student in response to their story?

Is there anything else you would do in response to the student's story?

How confident are you in your ability to respond to this situation? (slider scale 1-10)

APPENDIX H

MUSIC TEACHERS' ATTITUDES TOWARD SUPPORTIVE SCHOOL PRACTICES

For the purposes of this questionnaire, "transgender people" is defined as those whose gender identity (sense of oneself as a man or a woman) or gender expression (expression of oneself as male or female in behavior, manner, and/or dress) differs from conventional expectations for their physical sex. Transgender people include pre-operative, post-operative, and non-operative transsexuals who feel that they were born into the wrong physical sex as well as those who cross-dress to express an inner cross-gender identity. Please indicate your level of agreement with the following statements.

1	2	3	4	5
Strongly	Disagree	Neutral	Agree	Strongly
Disagree				Agree

- Legal names, which are no longer preferred by transgender students, should be public information at school*
- 2. Students should be allowed to decide what pronouns (he, she, etc.) are used to refer to them
- 3. It is the responsibility of school staff to stop others from making negative comments based on gender identity or expression
- 4. Students should have to use toilets according to their assigned sex, rather than their gender identity*
- 5. Positive representations of transgender people should be included in the curriculum whenever possible
- 6. It is unrealistic for teachers to practice using gender-neutral language in the classroom*
- 7. Transgender students should have a choice of wearing the school uniform they feel comfortable in
- 8. It is not important for school staff to become educated on issues of gender identity*
- 9. It is acceptable for teachers to comment to a student that s/he is not "masculine" or "feminine" enough*
- 10. School staff should receive training on how to intervene against gender-based student harassment

- 11. Schools should support the presence of Gay-Straight Alliances or similar groups for lesbian, gay, bisexual, and transgender students
- 12. It is inappropriate to teach students about gender variance at school*
- 13. It is unnecessary for school anti-harassment policies to specifically mention gender identity and expression*
- 14. School libraries should include books that feature transgender characters
- 15. School districts should allow transgender students to participate in sports on the basis of their gender identity, not assigned sex
- 16. "Male" and "female" should be the only gender options on schools' official forms*
- 17. Teachers should never use slurs referring to a student's gender identity or expression
- 18. Issues about gender identity do not arise until after primary school*
- 19. Counselors should be the ones to deal with issues around gender identity*

^{*}Reverse-coded item

APPENDIX I

ALLOPHILIA TOWARD TRANSSEXUAL INDIVIDUALS SCALE

Please indicate your level of agreement with the following statements:

1 2 3 4 5 6
Strongly Disagree Somewhat Somewhat Agree Strongly
Disagree Disagree Agree Agree

- 1. In general, I have positive attitudes about transgender individuals.
- 2. I respect transgender individuals.
- 3. I like transgender individuals.
- 4. I feel positively toward transgender individuals.
- 5. I am at ease around transgender individuals.
- 6. I am comfortable when I hang out with transgender individuals.
- 7. I feel like I can be myself around transgender individuals.
- 8. I feel a sense of belonging with transgender individuals.
- 9. I feel a kinship with transgender individuals.
- 10. I would like to be more like transgender individuals.
- 11. I am truly interested in understanding the points of view of transgender individuals.
- 12. I am motivated to get to know transgender individuals better.
- 13. To enrich my life, I would try and make more friends who are transgender.
- 14. I am interested in hearing about the experiences of transgender individuals.
- 15. I am impressed by transgender individuals.
- 16. I feel inspired by transgender individuals.
- 17. I am enthusiastic about transgender individuals.

APPENDIX J

MUSIC TEACHERS' ATTITUDES TOWARD TRANSGENDER INDIVIDUALS

For the purposes of this questionnaire, "transgender people" is defined as those whose gender identity (sense of oneself as a man or a woman) or gender expression (expression of oneself as male or female in behavior, manner, and/or dress) differs from conventional expectations for their physical sex. Transgender people include pre-operative, post-operative, and non-operative transsexuals who feel that they were born into the wrong physical sex as well as those who cross-dress to express an inner cross-gender identity. Please indicate your level of agreement with the following questions.

1	2	3	4	5
Strongly	Disagree	Neutral	Agree	Strongly
Disagree				Agree

- 1. It would be beneficial to schools to recognize transgender people as normal*
- 2. Transgender individuals should not be allowed to work with children
- 3. Being transgender is immoral
- 4. Transgender individuals are a valuable part of our schools*
- 5. Being transgender is a sin
- 6. Transgender individuals endanger the institution of the family
- 7. Transgender individuals should be accepted completely into our schools*
- 8. Transgender individuals should be barred from the teaching profession
- 9. There should be no restrictions on transgender individuals*
- 10. I avoid transgender individuals whenever possible
- 11. I would feel comfortable teaching a transgender student*
- 12. The presence of transgender individuals at a social function would not affect my enjoyment of the event*
- 13. I would feel comfortable if I learned that my neighbor was a transgender individual*
- 14. Transgender individuals should not be allowed to cross dress at school
- 15. I would like to have or I do like having friends who are transgender individuals*
- 16. I would feel comfortable if I learned that my best friend was a transgender individual*
- 17. Transgender individuals are really just closeted gays

- 18. Transgender people are sick
- 19. Anything other than boy and girl, or man and woman is abnormal
- 20. Having only two sexes is limiting*
- 21. Transgender people are an expression of the natural continuum of gender*
- 22. It is necessary to have clear distinctions between girls and boys

^{*}Reverse-coded item

APPENDIX K GENDER-ROLE BELIEFS SCALE

Please indicate your level of agreement with the following statements:

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

- 1. It is disrespectful to swear in the presence of a lady
- 2. The initiative in courtship should usually come from the man
- 3. Women should have as much sexual freedom as men*
- 4. Women with children should not work outside the home if they don't have to financially
- 5. The husband should be regarded as the legal representative of the family group in all matters of law
- 6. Except perhaps in very special circumstances, a man should never allow a woman to pay for a taxi, buy the tickets, or pay the check
- 7. Men should continue to show courtesies to women such as holding open the door or helping them put on their coats
- 8. It is ridiculous for a woman to run a train and a man to sew socks
- 9. Women should be concerned with their duties of child-rearing and house-tending, rather than with desires for professional and business careers
- 10. Swearing and obscenity is more repulsive in the speech of a woman than a man

^{*}Reverse-coded item

APPENDIX L PETITION



SHOW UP FOR TRANS YOUTH

After marriage equality was won in the Supreme Court, anti-LGBT forces came up with a new plan of attack: targeting transgender people — and singling out trans youth. Waves of proposed anti-trans state legislation swept the country. We've battled each bill, and we won't give up the fight.

We hoped that 17-year-old Gavin Grimm would secure a victory for the rights of trans students at the Supreme Court this year. But the Supreme Court remanded Gavin's case, sending it back to be reconsidered in the lower court.

Meanwhile, President Trump and his administration have made it crystal clear they are not willing to stand up for transgender young people. The Trump administration rescinded critical guidance - guidance that clarified Title IX's sex discrimination protections applied to transgender individuals.

Now it's up to us. We need to show our government, show the courts, and show the country that Title IX's prohibition on sex discrimination protects trans students – and that trans

SUPPORT THIS PETITION

34,370 Signed

50,000 Needed

I will fight for the rights of trans people, and I will show up for trans youth.

Sign me up for opportunities to take action to show those in power that transgender rights are not up for debate.

First name *	Last name *
E-mail address *	
Zip *	
AC	T NOW
By completing this form, I per the terms of the ACLU	agree to receive occasional emails J's privacy policy.

Already an ACLU Action supporter?

Enter your email address and click sign!

Email Address

SIGN

Recent Signers

How likely do you think you are to sign this petition?

Not likely at all
Somewhat likely
Very likely
Would you like to be redirected to sign the above survey?
Yes, please redirect me so that I can sign
No, but please email me about similar petitions in the future
No, thank you

APPENDIX M DEMOGRAPHIC QUESTIONS

Please select t White/Euro African Ar Asian Ame Latino/a Ar American I Middle Eas Other race	opean merica erican merica Indian stern/	Americ n/Black or Paci an /Native Arab Ar	can c fic Isla c Ameri	nder	ı you m	ost iden	tify:	
Biracial/m			1.1					
Please indicate	e your	politic	al ideo.	logy:				
Conservative	1	2	3	4	5	6	7	Liberal
Do you conside Straight/he Gay or Les Bisexual Pansexual Not listed (eterose sbian	xual						
Approximatel	y how	many	years h	ave you	lived in	the Ur	ited Sta	ates?
Please estimat _ < \$20,000 _ \$20,001 - \$ _ \$30,001 - \$ _ \$40,0001 - \$ _ \$60,001 - \$ _ \$70,001 - \$ _ \$80,001 - \$ _ \$90,001 - \$ _ \$100,001	\$30,00 \$40,00 \$50,0 \$60,00 \$70,00 \$80,00 \$100,0	00 00 00 00 00 00 00 00	l incom	ne:				
Enter a "3" in	this s	pace						
Please indicate Some high High school Some unive Associate's Bachelor's Master's de	schood of or G ersity s degre degre	ol EED ee	educati	on leve	l you ha	ve com	pleted:	

Doctoral degree								
Are you currently em Full-time Part-time Temporarily Unemployed	ployed?	?						
What is your currentCatholicProtestantChristian OrthodoxJewishMuslimSikhHinduBuddhistAtheistAgnosticOther (please spec	k ify)	, if any	?					
How important is reli	gion in	your lit	fe?					
Not important at all	1	2	3	4	5	6	7	Very important
What is your current Single In a relationship Married Divorced Separated	relation	ship sta	ntus?					
How many years hav	e you ta	ught? _						
How many years of t	raining	in the f	ield of	education	on have	you rec	ceived?	
What subject area do	you tea	ch?						
What grade level do : Kindergarten-5th g 6th-8th grade 9th-12th grade	*	ch or pla	an to te	each?				

What kind of school do you teach in?Public schoolPublic charter schoolPrivate charter schoolBoarding schoolMontessori schoolParochial school
Religious school
What geographic region do you work in?NortheastMidwestSouthWest
Are you currently a college student? _Yes _No
If yes, what year in school are you (if applicable)? First year Second year Third year Fourth year Fifth year Graduate student
Are you currently a substitute teacher?YesNo
Do you plan to enter into administration during your career (e.g., become a principal, vice principal, etc.)? YesNo
How would you describe your previous contact with transgender individuals? I am transgender I have close contact/relationships with family, friends, co-workers who are transgender
 Individuals I am acquainted with (i.e., relatively close contact) are transgender I do not have any close relationships or acquaintances with a transgender person
I have never met a transgender person that I know of

APPENDIX N DONATION, DEBRIEFING, AND RAFFLE

DONATION:
Please select the organization for which you would MOST like the current study to donate to:
 Human Rights Campaign The Humane Society Treasures 4 Teachers The National Center for Transgender Equality The American Cancer Society The American Civil Liberties Union (ACLU) The Wounded Warrior Project
DEBRIEFING:
Thank you for your participation in this study! The purpose of this form is to provide you with additional information about the study. During the survey, you were provided with feedback about how aspects of your gender identity compared to other men or women. This feedback was randomly distributed and was not an actual measure of your attitudes, feelings, or behaviors. Again, this feedback was created prior to participation and was not related to any of your responses. The deception was included to see how participants respond to differing types of feedback about their gender identity and how this might impact their attitudes and behaviors related to bullying involving transgender students. If you would no longer like your survey responses to be included in the study, please contact the primary investigator (Jeff Mintert, M.S., Jeffrey.Mintert@asu.edu) or his dissertation chair (Alisia Tran Ph.D., alisia@asu.edu). For additional questions, concerns, suggestions, or complaints that are not being addressed by the research, or research-related harm, you may contact the Research Integrity and Assurance at Arizona State University (email: research.integrity@asu.edu; phone: 480-965-6788).

If you would like to enter the raffle for one of sixty (60) \$25 Amazon gift cards, please click the >> icon below to enter your email. Your email will not be linked to your survey responses in any way. If you do NOT want to enter the raffle, you may close this window.

RAFFLE:
I would like to enter the raffle Yes
No

Are you affiliated with Arizona State University as a student, faculty, or staff?

Yes	
No	
Please enter your email address	
-	

NOT ELIGIBLE:

Thank you for your interest in this research. According to your responses, you do not meet the eligibility criteria necessary to participate which was outlined in the consent form at the start of this survey. For questions or concerns, please contact the primary investigator (Jeff Mintert, M.S., Jeffrey.mintert@asu.edu) or his dissertation chair (Alisia Tran Ph.D., alisia@asu.edu).

APPENDIX O VALIDITY CHECK ITEMS

Please select "Strongly Disagree" for this item

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Please sele	ect "Disagree 1	" for this iter	n 3	4	5
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Enter a "3" in this space ____

APPENDIX P ASU IRB APPROVAL



APPROVAL: EXPEDITED REVIEW

Giac-Thao Tran

CISA: Counseling and Counseling Psychology 480/727-4067

alisia@asu.edu

Dear Giac-Thao Tran:

On 10/9/2018 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study		
Title:	The Masculine Overcompensation Theory: A Gender Perspective on Teacher Reactions to Transgender Bullying		
Investigator:	Giac-Thao Tran		
IRB ID:	STUDY00008928		
Category of review:	(7)(b) Social science methods, (7)(a) Behavioral research		
Funding:	None		
Grant Title:	None		
Grant ID:	None		
Documents Reviewed:	 Mintert Citi Training, Category: Other (to reflect anything not captured above); Recruitment Materials .docx, Category: Recruitment Materials; Bishop CITI Training.pdf, Category: Non-ASU human subjects training (if taken within last 3 years to grandfather in); Study Protocol, Category: IRB Protocol; Gender Identity Survey Feedback.docx, Category: Other (to reflect anything not captured above); Survey Items, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); Consent Form, Category: Consent Form; 		

Page 1 of 2

The IRB approved the protocol from 10/9/2018 to 10/16/2019 inclusive. Three weeks before 10/16/2019 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 10/16/2019 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: Jeffrey Mintert Rebecca Bishop

Jeffrey Mintert Giac-Thao Tran