



2022

Defending Gender: Transprejudice as Gender System Maintenance

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LOYOLA UNIVERSITY CHICAGO

DEFENDING GENDER: TRANSPREJUDICE AS GENDER SYSTEM MAINTENANCE

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN SOCIAL PSYCHOLOGY

BY

LINAS MITCHELL

CHICAGO, IL

AUGUST 2022

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ACKNOWLEDGEMENTS

I cannot possibly thank everyone who has helped me on this journey—to anyone whose names I have omitted, know that your support has been felt and treasured.

Thanks to my committee—Jeffrey Huntsinger, Yael Granot, and Savina Balasubramanian—for their insight into my research topics and patience with my haphazard progress. Thanks to my advisor, Robyn Mallett, for telling me that I was allowed to focus on what I wanted to research, and for believing I had something to contribute when I doubted. Thanks also to Kamryn Hinkle for her labor as a research assistant on this project.

Thanks to the friends and family who supported me on my journey towards graduate school, and to all the friends I have made throughout my time here who have turned Chicago into a home for me. Particular thanks to Chad, Crow, and Cypress for keeping me connected to the world through the worst of COVID.

All my love and thanks to Michael, for being the best husband and pet dad; for being a sounding board for my ideas and presentations; for reading transphobic comments so I did not have to; for doing the dishes and keeping me fed and stable when I could not possibly handle one more task.

Finally, I would like to acknowledge all the transgender people before me—particularly Black, brown, and transfeminine—who worked to create a world where I could do this research as an openly trans person. I hope this research can help continue the work.

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ABSTRACT

The high levels of interpersonal and policy-based discrimination that transgender people face can be understood as a way of responding to transgender threats to gender systems. By understanding gender as a system of meaning and power, I apply System Justification Theory to interpret transprejudice as a form of gender system maintenance that may be influenced by one's position in the gender system (gender) and general support for the status quo (conservatism). The present studies test whether transprejudice functions as a form of system affirmation/threat rejection. I found that exposure to system threat did not lead to greater transprejudice than a neutral control (Study 1). However, framing transgender people as posing little threat to the gender system led to more positive transgender attitudes and policy support than a neutral control through the effect of reduced threat (Study 2). Transprejudice was also associated with greater conservatism (Studies 1 & 2) and a male identity (Study 2), and the effects of threat increased as conservatism increased (Study 2). These findings could inform prejudice reduction interventions, policy advocacy, and personal choices around how to interact with gender systems.

CHAPTER ONE

THE PROBLEM

There are an estimated 1.4 million transgender adults in the United States (0.6% of the population; Flores et al., 2016), and 42% of U.S. adults report personally knowing a transgender person (Minkin & Brown, 2021). “Transgender” is commonly defined in such studies as a person whose gender identity differs from the sex assigned to them at birth (though, in reality, many people who meet this criteria do not identify with the term “transgender” for personal, cultural, or political reasons; for example, see Darwin, 2020; Valentine, 2007). Thus, transgender identity is commonly framed as a divergence from the societally expected relationship between the constructs of biological sex and gender. By subverting the relationship between these constructs (and, indeed, the constructs themselves), transgender identity has the potential to make these constructs visible in a way that cisgender identity (i.e., identifying with one’s assigned sex) rarely allows.

Discrimination is a ubiquitous experience for transgender people in the U.S. According to a national survey of nearly 28,000 transgender respondents, in the previous year alone nearly half experienced harassment due to being transgender, and 9% were physically attacked for being transgender (James et al., 2016). These results also show that discrimination can influence all aspects of transgender people’s lives, stretching from K-12 education (where 77% of people known or assumed to be transgender experienced mistreatment for it) to the workplace (where

30% of employed transgender people experienced mistreatment in the past year), and beyond into interpersonal relationships and interactions with law enforcement and government officials.

Of course, gender discrimination can be a common experience for all women (e.g., Lewis, 2018), and both cisgender men and women face stereotyping according to their gender (e.g., Eagly et al., 2020; Prentice & Carranza, 2002). However, transgender experiences differ from other forms of gender discrimination in that the focus of anti-transgender discrimination is often not merely about mistreating transgender people, but on rejecting or regulating the reality of transgender people's gender identities. Misgendering is the misclassification of an individual's gender, which can include the use of incorrect names/pronouns or being denied access to gendered spaces. For transgender people, this is a common form of discrimination that contributes to stress, depression, and negative body image (McLemore 2015, 2018; Mitchell, MacArthur, & Blomquist, 2021; Nadal et al., 2014). Transgender people report being forced to present in ways that do not match their identity by schools, workplaces, family, and homeless shelters; having therapists and religious advisors attempt to force them to stop being transgender; and being confronted when accessing public restrooms (James et al., 2016). For some, these confrontations escalate into being denied access, harassment, and physical or sexual assault. Furthermore, reports of violence against transgender people by the media and law enforcement often misgender transgender victims (Human Rights Campaign, 2020).

Transgender people also experience roadblocks from the systems they must navigate to express their gender as they wish. Laws in the U.S. around changing official gender markers vary by state, and may be entirely prohibited or practically prohibitive in terms of requiring certain

surgeries or expensive court proceedings (Lambda Legal, 2016). As a result, many people must use identification that does not match their chosen name and gender (with 68% possessing no IDs with their chosen identification and only 11% having all correct IDs), and presenting incongruent IDs can lead to legal difficulties or violence (James et al., 2016). Furthermore, more than half of transgender people seeking insurance coverage over the past year for transition-related surgeries were denied (James et al., 2016), presenting a barrier both to their desired physical embodiment and potential identification changes where surgery is a prerequisite. Thus, not only do transgender people often lack formal legal protections, but policies can formally institutionalize the oppression of transgender people.

The past five years have seen a growth of attempts to legislate against transgender people specifically. For instance, in 2016, state legislators proposed 44 bills aimed at restricting the rights of and enabling discrimination against transgender people, a jump from 21 of such proposals in 2015 (Human Rights Campaign Foundation, 2016). Most of these bills were aimed at regulating access to sex-segregated spaces (so-called “bathroom bills”), but many also sought to limit transgender people’s access to marriage, healthcare, and legal gender marker changes; to overturn nondiscrimination protections; and to explicitly allow the refusal of public services to transgender people on the basis of religious beliefs. Transgender protections can also be contested based on current political power, with the Trump administration revoking protections that were issued under the Obama administration and encouraging discrimination by federal agencies (National Center for Transgender Equality, 2020). Most recently, a variety of bills have been proposed to limit transgender people’s participation in sports, to prevent gender-affirming

healthcare for transgender youth, and to require professionals to out transgender youth to their guardians (e.g., H.B. No. 454).

Nonetheless, advocates continue to make progress on transgender rights. The summer of 2020 saw the Supreme Court rule that Title VII of the Civil Rights Act prohibits employment discrimination based on sexual orientation and gender identity, and at the time of writing, this protection is poised to be expanded and solidified with federal legislation (Human Rights Campaign Foundation, 2021). The Equality Act aims to update existing civil rights law to officially cover sexual orientation and gender identity, which would expand non-discrimination protections for transgender people across “employment, housing, credit, education, public spaces and services, federally funded programs, and jury service.” LGBT non-discrimination protections are supported by 69% of the public (Greenberg et al., 2019a), and the Equality Act has passed the House of Representatives and is awaiting voting in the Senate.

The oppression faced by transgender people is a powerful mixture of interpersonal and systemic, with interpersonal discrimination not prohibited and often encouraged by policies set up to expose transgender people to greater interpersonal risk (e.g., bathroom bills). These factors serve to reduce transgender people’s ability to function in society authentically. For instance, 20% of transgender/non-binary youth aged 13-24 had attempted suicide in the past year, making them twice as likely to do so as their cisgender LGBQ peers (The Trevor Project, 2021). Furthermore, though it is rare for transgender people to return to living as their assigned gender, those who do overwhelmingly do so due to external pressures such as discrimination, pressure from loved ones, and loss of opportunities (James et al., 2016).

Why do transgender people face such extreme resistance to their very existence? I argue that transgender people have the potential to threaten existing systems of gender—most specifically, the gender binary and patriarchy. Hyde and colleagues (2019) provide a succinct definition of the former: “In addition to the core belief that there are two discrete categories into which all individuals can be sorted, the gender binary system also typically assumes that one’s category membership is biologically determined, apparent at birth, stable over time, salient and meaningful to the self, and a powerful predictor of a host of psychological variables” (p.1). The gender binary system also supports patriarchal systems—in order for men to be superior to women, “men” and “women” must be coherent, stable, and meaningful categories (see also Morgenroth & Ryan, 2021; Wilton et al., 2019). The existence of transgender identity can undermine the coherence of binary gender categories, and can therefore threaten patriarchal power. Thus, those invested in maintaining gender binary and patriarchy must reject or manage transgender identity in a way that protects these gender systems.

Chapter 2 reviews frameworks for understanding gender systems and introduces System Justification Theory to explain the motivation and mechanisms for gender system maintenance. Chapter 3 summarizes empirical research on transprejudice, arguing that transprejudice represents a rejection of threats to the gender system. Chapter 4 examines how the above considerations apply to policy support, and Chapter 5 considers the moderating effects of perceiver gender and political orientation on responses to gender threat. In Chapter 6, I detail two studies that investigated the impact of system threat (both generally and from transgender people

specifically) on transprejudice and policy support, and I consider their implications and limitations in Chapter 7.

CHAPTER TWO

GENDER SYSTEMS & SYSTEM JUSTIFICATION

Gender is not only a personal identity, but also a complex system of information and power. In this chapter, I first review several frameworks for understanding how gender functions (and is disrupted) systemically. I then describe the basics of System Justification Theory and responses to system threat, and apply this theoretical grounding to the defense of gender systems.

Gender Systems

In proposing Gender Schema Theory, Bem (1981) observed that "... there appears to be no other dichotomy in human experience with as many entities assimilated to it as the distinction between male and female" (p.354). This observation underpins her theory of the gender schema, a process of organizing large amounts of information (including skills, roles, and objects) according to the cultural organization of individuals into masculine and feminine. Gender then becomes a categorical difference that individuals use to apply different standards of judgment, making gender a difference of kind rather than degree, which is situated as omni-relevant to judgments. Thus, information consistent with the gender schema is processed more quickly and easily than inconsistent information. This is particularly the case for those whom Bem terms "sex-typed individuals", whom we might now call gender-conforming (i.e., masculine men and feminine women). This approach emphasizes the way that binary gender fulfills epistemic motives by organizing vast amounts of information into two categories (e.g., Eagly et al., 2020; Ellemers, 2018; Prentice & Carranza, 2002).

Zerilli (1998) emphasized that gender is essential for how we construct knowledge about others, describing the gender system as a “grammar”—an arbitrary set of rules, but one that establishes how everything is communicated and understood. Rather than empirical facts amenable to reason, gender is a subjective conviction of how the world ought to operate. Thus, any inconsistencies in gendered logic (such as the existence of intersex, transgender, and gender non-conforming people) will not destroy the system so long as people are committed to upholding it.

Doing Gender Theory (West & Zimmerman, 1987) emphasizes the constant construction of gender through the process of assuming sex category (male or female) in interactions, and holding others accountable to act in accordance with these assumptions. This theory positions gender as omni-relevant to judgments, leading to the constant potential of censure for non-normative behavior. Ridgeway and Correll (2004) pull from Doing Gender Theory in their approach to hegemonic gender beliefs when claiming that gender influences the performance of all other roles, but that gender beliefs are flexible enough to accommodate changing societal norms while maintaining patriarchal power structures. Ridgeway (2009) expands upon this in describing the “gender frame” as the way that gender shapes all social relations. Gender beliefs allow interaction partners to assume they share knowledge of how interactions should be structured, motivating the maintenance of the gender system for epistemic knowledge of the self and other as well as for hierarchy maintenance.

Morgenroth and Ryan (2021) offer a framework for the perpetuation and disruption of the gender binary. Pulling on queer and feminist traditions, they define gender as being constructed

through its own performance. This gender performance is achieved through four interrelated parts: the character (i.e., categorization as man or woman), the costume (i.e., physical characteristics, including sex characteristics and gender presentation), the script (i.e., gendered behavior), and the stage (i.e., the context of the performance, including physical spaces, culture, language, and laws). The audience may be others who observe and react to the performance, as well as the individual performer themselves. This process establishes what genders exist, what they look like, and how they behave: women are always those who look and act like women, and men are always those who look and act like men. The observation of the performance then reinforces the gender system by giving credence to binary gender categories and the alignment of these parts of gender performance.

As gender requires its own performance to persist, any disruption to proper performance can threaten the gender system. Morgenroth and Ryan pull on Judith Butler's concept of "gender trouble", which they define as any disruption of the various facets of the gender performance. This disruption can occur in a variety of ways. A man presenting femininely or a woman behaving masculinely represent misalignment between the character and the costume or script, respectively. An identity, presentation, or behavior that is not fully masculine or feminine, such as a non-binary gender identity or an androgynous gender presentation, represent disruptions within the binary structure of the character, costume, or script. A change from one gender performance to another, such as a gender-conforming transgender man or woman, represents a disruption to the idea that the gender performance is constant and immutable. (Gender trouble may also occur at the level of the stage, which I discuss in Chapter 4.) Gender trouble can elicit

multiple kinds of threat in the audience: personal threats, which include safety and personal status threats; group/identity threats, which include distinctiveness and group status threats; and system threats. Morgenroth and Ryan outline what forms of gender trouble could elicit each kind of threat, but note that any gender trouble may elicit system threat, as a disruption to the self-reinforcing cycle can cast doubt on the foundational belief that gender consists of two distinct and meaningful categories. Furthermore, given that the personal, group, and identity roles of gender can only unfold within a coherent system of gender, I argue that any threats to gender systems also threaten other functions of gender. To understand further individual investment in systems and how people respond to these system threats, I next turn to System Justification Theory.

System Justification Theory

System Justification Theory posits that, in addition to self- and group-justifying tendencies identified in Social Identity Theory, people tend to justify the systemic social, political, and economic conditions of their lives (Jost, 2019). Though System Justification Theory has extended far beyond the psychology of prejudice and stereotyping, it is rooted in an attempt to explain parts of these processes overlooked by other theories. For example, Social Identity Theory states that an individual's self-esteem is tied to their group memberships (i.e., social identity), and that people are therefore motivated to view their group positively in comparison to other groups (Tajfel & Turner, 1979). However, this does not account for the outgroup favoritism sometimes displayed by oppressed groups (i.e., more positive views of the advantaged outgroup than of the oppressed ingroup). To address this, system justification theory

incorporated the concept of “false consciousness”, which names the tendency for people to believe in societal narratives that actually contribute to their marginalization (e.g., that men are more suited to leadership than women, or that gender differences are inborn and permanent). Furthermore, the theory posits that stereotypes can be more fruitfully understood as ways to legitimize existing hierarchies than as mere outgrowths of psychological heuristics (Jost & Banaji, 1994).

System justification is typically measured as the belief that the system in question is just and correct (see Kay & Jost, 2003, for measure development). Seeing existing systems as just and correct satisfies several basic motives, including “epistemic motives to reduce uncertainty and ambiguity; existential motives to assuage threat and insecurity; and relational motives to coordinate social relationships and achieve a sense of shared reality” (Jost, 2019, p.275). This is evidenced by increases in system justifying tendencies associated with reduced cognitive capacity, physical and relational threats, and individual levels of death anxiety and needs for cognitive closure and shared reality (see Jost, 2019 for review). For example, Hennes and colleagues (2012) found that system justification mediated the positive effects of need for cognition, shared reality, and death anxiety on political positions that supported (rather than opposed) the status quo, such as support for the Tea Party and opposition to Occupy Wall Street. Thus, system justification is a (usually implicitly) motivated process, and is tied to self-deception, motivated cognition, and selective information processing (Jost, 2019; Jost, Liviatan, Van Der Toorn, Ledgerwood, Mandisodza, & Nosek, 2011).

Threats to the correctness or certainty of a system motivate people to defend the system that is under threat (Jost, 2019). For example, Ullrich and Cohrs's (2007) participants exhibited higher system justification scores after reminders of international terrorism (compared to control conditions such as internet use or food). System justification may also take the form of stereotyping advantaged and oppressed groups to make such relations seem fair (e.g., Jost et al., 2005; Kay, Jost, & Young, 2005) or derogating the source of threat (e.g., Cutright et al., 2011). However, if people are first able to affirm the threatened system, this defensive responding lessens. For example, Liviatan and Jost (2014) presented participants with a paragraph threatening the U.S. economic and political systems (via a criticism of wealth inequality), or a control paragraph (criticizing the system of geology research). They then measured the accessibility of words in a lexical decision task, and found that participants exposed to the system threat manipulation were faster at identifying legitimacy-related words (e.g., fair, moral, secure). However, this effect disappeared when participants were first able to affirm the system (after threat) by writing about how an important American value makes America better. A matching self-affirmation did not have this effect, emphasizing the importance of the motivation to justify the system itself. System justification is also greater when the system in question is viewed as unavoidable and long-standing as opposed to a recent development (e.g., Blanchard & Eidelman, 2013), and when individuals believe they must depend on those systems and are powerless to change them (e.g., van der Toorn, Tyler, & Jost, 2011).

System justification may also vary by the system in question. The original measure addressed the status quo (within a nation) generally, but measures have also been adapted to

focus more specifically on justifying the economic or gender systems of a nation (e.g., Jost & Kay, 2005). For instance, Azevedo and colleagues (2017) found that in the 2016 presidential election, measures of economic and gender system justification related to support for Trump, whereas general system justification was unrelated to candidate preference. These different forms of system justification are important to specify when considering who is advantaged or oppressed by a given system. System Justification Theory asserts that systemic oppression is not merely due to advantaged groups (i.e., those who are empowered by a system) asserting dominance over oppressed groups (i.e., those who are disempowered by a system), but also “a collaborative process that turns virtually everyone into a victim and supporter of the system” (Jost, 2011, p. 231). Thus, the roles of groups both advantaged and oppressed by a given system in maintaining it are of theoretical interest. For advantaged group members, system justification often aligns with self-interest motives (such as self-esteem), whereas for oppressed group members, these motives conflict (see Jost, 2019). For gender systems, this suggests that men and women may show similar or differing levels of system support, depending on what motives are salient to them.

Gender System Justification

Several lines of research have investigated System Justification Theory’s specific implications for the gender system. Jost and Kay (2005) predicted that exposure to complementary gender stereotypes (i.e., men as agentic and women as communal) would lead to greater support of the status quo. This is because complementary stereotypes (as opposed to no stereotypes, or stereotypes emphasizing the superiority of men) serve to increase the perceived

fairness of the system by situating individuals as well-suited to their societal roles and uniquely valuable for their stereotypic qualities. This was found to be the case over three studies, with reminders of complementary stereotypes (particularly positive stereotypes of women, given that male superiority is likely chronically activated) leading to greater gender-specific and general system justification. This was particularly the case for women, as men tended to be already high on both forms of system justification.

System justification is tied not only the content of gender roles, but also their perceived potential to change. Essentialism refers to the belief that membership in a category is tied to an underlying “essence”, one that is typically seen as distinctive and unchanging (see Haslam, Rothschild, & Ernst, 2004, for review). When this belief is applied to gender (gender essentialism), it manifests in the belief that gender is an inherent aspect of a person that makes them fundamentally similar to people who share their gender and different from those who do not. For example, gender system justification is related to believing in gender essentialism and that gender roles are unchangeable (Kray et al., 2017). Brescoll, Uhlmann, and Newman (2013) found that when system justification motives were manipulated (through system threat or goal contagion), essentialist explanations of gender differences increased. This effect was mediated by perceived immutability of gender roles. However, the effect was attenuated when participants had the opportunity to reject the initial threat to the system by rating the threatening news article as biased and inaccurate. These results suggest that people are motivated to see gender roles as fair and inevitable in order to justify the existing gender system--people fulfill the roles they are

suiting for, and the abilities that make them suitable for different roles are unchangeable (Brescoll et al., 2013; Kray et al., 2017).

However, what happens when these beliefs are undermined—when individuals show gender-atypical skills and behaviors that could upset these assumptions? Backlash Theory (Rudman et al. 2012a) offers an interactional account of system maintenance that draws on System Justification Theory. This theory attempts to explain when and why individuals experience backlash (social and/or economic penalties for counter-stereotypic behavior). They argue that backlash is specifically motivated to maintain the status quo, and thus occurs in response to status-relevant transgressions—for gender roles, this means women displaying high-status agency, and men displaying a low-status lack of agency (Rudman et al., 2012b). Thus, when confronted with status-relevant transgressions, observers reinterpret the transgression into something normatively acceptable to denigrate (e.g., interpreting an agentic woman as “power-hungry”) and then impose social and (in the case of workplaces) economic sanctions (Rudman et al., 2012b). These sanctions serve to drive out these “vanguards” from their transgressive roles and cause others to avoid transgressing for fear of penalties, thus maintaining the status quo (e.g., Rudman & Fairchild, 2004).

The system-justifying motives for backlash are clear: women are just as likely as men to backlash against gender transgressors (despite this running contrary to women’s self-interest; Rudman & Phelan, 2008); individual differences in gender system justification predict rating agentic women as more dominant, less likeable, and less hireable; and exposure to system threat intensifies backlash (Rudman et al., 2012b). However, Backlash Theory was developed

specifically regarding status-relevant skills and behaviors. Though this is certainly relevant to reactions to transgender people and gender non-conformity, anti-transgender prejudice additionally functions at the level of regulating who can claim a given gender category at all. Given that disrupting the roles of certain genders is threatening to the system, disrupting who falls into these categories (or the existence of the categories themselves) is likely even more threatening. To explore this possibility, the next chapter reviews empirical work on transprejudice and frames current findings within system threat.

CHAPTER THREE

TRANSPREJUDICE AS SYSTEM MAINTENANCE

The previous chapter outlined frameworks for understanding gender as a system and how System Justification Theory explains gender system support in the form of responding to gender trouble and backlashing against gender vanguards. This section describes the existing literature on perceptions of transgender people and transprejudice, showing that this research provides evidence that responses to transgender identity follow system-supporting patterns, and that transgender identity is a form of “gender trouble” that must be resolved to maintain gender systems.

Empirical evidence supports that cisgender people see transgender people as threatening. Broussard and Warner (2019) had cisgender participants read vignettes describing a target as either transgender or cisgender, and either gender conforming or gender non-conforming (to their identified gender). Their results showed main effects of both transgender status and gender conformity on distinctiveness threat—that is, both transgender targets and gender non-conforming targets were seen as threatening the distinction between men and women. Broussard, Mitchell, Warner, and Mallett (2022) compared perceptions that transgender and cisgender targets pose various threats and showed that cisgender participants perceive more threats from transgender people (such as threats to group values and trust). Furthermore, perceiving threats from transgender people predicted feeling more negative emotions about transgender people, which in turn predicted supporting anti-transgender policy.

Given system justification motivations to uphold the gender system (Jost, 2019) and tendencies to backlash against transgressors (Rudman et al., 2012a), one would expect responses to transgender and gender non-conforming people to follow the same theoretical patterns. Below, I outline how existing research on transprejudice can be understood as such, with widespread cultural beliefs about transgender identity rendering transgender people less threatening to the gender system; individual differences in transprejudice relating to individual differences in system support; and the framing of transgender people's place within the gender system influencing how they are perceived in system-justifying ways.

Cultural Beliefs about Transgender Identity

As previously outlined, transgender people face widespread interpersonal and policy-based discrimination (e.g., James et al., 2016; Human Rights Campaign Foundation, 2016; Human Rights Campaign, 2020). Shifting the perspective from the experiences of transgender people to the perceptions of cisgender people, research has found high rates of prejudice against transgender people. In a nationally representative sample of heterosexual U.S. adults, Norton and Herek (2013) found average feeling thermometer ratings of 32.01 (on a 0-100 scale) for “transgender people”. In contrast, “men in general” scored 62.44, and “women in general” scored 67.56. Transgender ratings were also significantly lower than all sexual minority ratings (ranging from 34.94 for bisexual men to 42.10 for lesbian women). This high level of antipathy can be interpreted as rejecting the potential threat to gender systems that transgender people could otherwise pose.

Gazzola and Morrison (2014) qualitatively examined stereotypes about transgender men and women. Their sample of Canadian undergraduates showed patterns of belief that also enable threat rejection. The first major finding was that transgender people continued to be categorized according to their assigned sex—transgender men were considered women, and transgender women were considered men. The second major finding, that transgender people were pitied, seemed to follow from the underlying belief that one's assigned sex was "true" and transgender people's identified gender was "false". Transgender people were cast as mentally ill or confused about their identity, and assumed to experience social rejection as a result. Howansky and colleagues (2019) found similar results with a sample of Amazon Mechanical Turk workers. "Mentally ill" and "confused" were common stereotypes generated about transgender men and women, and stereotypes between transgender men and women had more in common with each other than with stereotypes of men or women generally. This link between mental illness perception and social rejection has also been upheld experimentally. Reed, Franks, and Scherr (2015) found that transgender applicants were less likely to be recommended for hiring, and more likely to be seen as mentally ill (compared to applicants where no transgender identity was highlighted). Furthermore, mental illness stigma mediated hiring recommendations, leading to those perceived as mentally ill to be less likely to be hired. Envisioning transgender people as mentally ill makes it easier to dismiss their identities as incorrect and therefore no real threat to gender systems.

Rejection of transgender targets' gender identities emerges not only in beliefs about their mental state, but also their physical appearance. Perceivers expected transgender targets to

appear less gender-typical (for their gender identity) than cisgender targets before seeing them; rated transgender targets as less gender-typical than cisgender targets, despite identical appearances; and remembered transgender faces as less gender-typical (specifically, more androgynous) than (identical) cisgender faces (Wittlin et al., 2018). Even when the original images of targets were present, perceivers represented transgender targets as less gender-typical than cisgender targets, both when creating virtual avatars and when matching morphed photographs to the original (Howansky et al., 2020). This insistence that transgender people are visually distinct from and less gender-typical than cisgender people of the same gender identity can serve to reinforce beliefs about the inherent nature of gender and the correctness of the systems built upon it.

By deciding that transgender people are not, in fact, the gender they claim to be—that they are simply mentally ill or confused, or that their appearance will always indicate their transgender status—the potential threat to the gender system is removed. If transgender people are simply wrong about their gender, then there is no flaw in the gender system which categorizes certain people as men and others as women—there are simply some men and women who are confused about this process. Thus, those people can be rejected, and the system remains intact.

Individual Differences in Transprejudice

Of course, not all people are equally likely to reject transgender people. Transprejudice is associated with prejudice against sexual minorities (Nagoshi, Adams, Terrell, Hill, Brzuzy, & Nagoshi, 2008; Tebbe & Moradi, 2012), and contact with sexual minorities and/or transgender

people is associated with more positive transgender attitudes (McCullough, Dispenza, Chang, & Zeligman, 2019; Norton & Herek, 2013). Hoffarth and Hodson (2018) did not find this for frequency of transgender contact, but did find that more positive transgender contact (rated as pleasant, cooperative, and sincere) related to less transprejudice. A second study also found lower transprejudice for those who frequently watched television shows with transgender characters (i.e., “media contact”).

Patterns in individual differences in transprejudice also support the link between transgender rejection and system support. Transprejudice is also associated with religiosity and religious fundamentalism (Nagoshi et al., 2008; Norton & Herek, 2013; Parent & Silva, 2018); need for closure (Makwana, Dhont, Keersmaecker, Akhlaghi-Ghaffarokh, Masure, & Roets, 2018; Tebbe & Moradi, 2012); and system-supporting ideologies such as anti-egalitarianism and political conservatism (Hoffarth & Hodson, 2018; Konopka, Prusik, & Szulawsk, 2019; Makwana et al., 2018; McCullough et al., 2019; Nagoshi et al., 2008; Norton & Herek, 2013; Parent & Silva, 2018). Social dominance orientation (SDO) has also been linked to transprejudice with critical consciousness as a mediator (Puckett, DuBois, McNeill, & Hanson, 2019). Critical consciousness involves awareness of and resistance to hierarchical systems of power, the antithesis of the “false consciousness” at the heart of System Justification Theory. Thus, people are more likely to exhibit transprejudice to the extent that they exhibit other system-supporting beliefs.

Of course, gender-specific system-supporting variables are also associated with transprejudice, such as support for traditional gender roles, a binary view of gender, and various

forms of sexism (Konopka, Prusik, & Szulawski, 2019; Makwana et al., 2018; Nagoshi et al., 2008; Norton & Herek, 2013; Tebbe & Moradi, 2012). Gender essentialism seems to play a particular role in transprejudice. Measured gender essentialism is associated with opposition to transgender rights (Wilton et al., 2019), and was shown to mediate the effect of SDO and authoritarianism on transprejudice (Ching, Xu, Chen, & Kong, 2020). Offering essentialist explanations of sex differences led to more negative transgender attitudes than interactionist or no explanations in one study (Ching & Xu, 2018), and reading an anti-essentialism gender article improved attitudes towards transgender people and rights compared to pro-essentialism gender or irrelevant control articles in another set of studies (Wilton et al., 2019). These findings suggest the system-justifying underpinning of transprejudice, as gender essentialism increases in response to system justification motives (Brescoll, Uhlmann, & Newman, 2013).

Overall, the pattern of results described here supports the link between system justification and transprejudice. Many of the cognitive and ideological variables associated with system justification are also implicated in transprejudice, and mediation analyses suggest that potential threats to the gender system are key in understanding transprejudice.

Context and Framing

Thus far, research on transprejudice has shown that prejudice against transgender people enables rejection of the potential threat they pose to the gender system, and that people who hold system justifying ideologies are also more likely to hold negative attitudes toward transgender people. However, as System Justification Theory and Backlash Theory explain, responses to system threat and vanguards are sensitive to nuance. Potential system threats are responded to

less defensively when individuals have the opportunity to affirm the system (Jost, 2019), and vanguards are backlashed against only when their behavior both threatens status hierarchies and the backlash can be construed to be justified rather than biased (Rudman, et al., 2012). These theoretical nuances have not been directly applied to transprejudice, but existing research does suggest that transprejudice is sensitive to context and framing. Specifically, the implications of transgender identity on the system seem to be key to understanding people's responses to it.

Ways in which transgender identity itself is understood have been shown to influence acceptance of transgender people. When heterosexual cisgender undergraduates provided definitions of "transgender", references to changing one's sex/gender were associated with greater prejudice, whereas references to an internal gender identity were associated with less prejudice (Buck, 2016). This suggests that transgender people are seen as more palatable when their identity is framed as unchanging and internally consistent. Furthermore, the associations between prejudice and definitions were mediated by support for traditional gender roles, emphasizing the role that an individual's approach to the gender system as a whole has on their approach to transgender people.

Bowers and Whitley (2020) find similar results in a survey of over 1,000 U.S. adults (sampled to approximate census data on gender, race/ethnicity, and region). Believing that transgender identity has a biological basis predicted support for transgender rights even when controlling for political affiliation and demographic variables; indeed, belief in a biological basis was the strongest predictor of these variables. Thus, even though framing gender differences in

essentialist terms leads to greater transprejudice (Ching & Xu, 2018), viewing transgender identity itself in essentialist terms seems to relate to less transprejudice.

In addition to beliefs about the nature of transgender identity, cisgender people react differently to transgender people based on how the transgender person performs their gender. Transgender men and women who tend to be visually identified as transgender face more discrimination than those who are more likely to “pass” as cisgender (Miller & Grollman, 2015). When a woman was stated to be transgender, heterosexual men’s ratings of her as gender-typical/feminine were related to more comfort with her identifying as a woman and engaging in feminine behaviors (Howansky et al. 2020; note, however, that participants were responding to the same image, so gender-typicality was not directly manipulated here). These results support the intuitive understanding that transgender people who are seen as performing their genders well are more likely to be accepted as their gender identity (see Morgenroth & Ryan, 2021).

These findings suggest that transgender system threats are not always managed with mere rejection. Indeed, work on transgender people within systems suggests there are other ways to mitigate these potential threats. In examining how transgender employees navigated gendered expectations in the workplace, Connell (2010) identified many ways that gender systems were maintained without blatant transphobic rejection. Though “stealth” transgender people (i.e., people whose transgender identity was not publicly known) experienced the same processes of “doing gender” as cisgender people, “out” transgender people (i.e., people who make their transgender identity publicly known) experienced more complex ways of being held accountable to gender.

Though these transgender participants often reported attempts to resist hegemonic gender by blending masculine and feminine gender cues and behaviors, they were nevertheless held accountable to binary gender expectations, or their gendered performance was reinterpreted to fit within hegemonic norms. In being held accountable, their cisgender coworkers showed an insistence on “teaching” the transgender participants appropriately gendered behavior or otherwise imposing the expectations of their gender identity onto transgender participants. For instance, one transgender male participant reported that a cisgender male coworker corrected him whenever he displayed behaviors the coworker perceived as feminine. Connell suggests that transgender people may be held to even stricter gender norms than their cisgender peers in order to compensate for their otherwise non-normative genders. In another instance, a transgender woman transitioning on the job reported that her boss worried that “becoming a woman” would harm her computer coding abilities. Thus, rather than change his understanding of gender expectations in the face of transgender experiences, her boss merely changed his expectations for her as an individual without adjusting his systemic gender views. Furthermore, discordant gender cues were often reinterpreted to meet expectations, such as a transgender woman participant with a deep voice who experienced clients over the phone constantly mishearing her name as a masculine one. In this way, even without blatant discrimination such as firing or workplace harassment, perceivers worked to keep transgender people’s gendered embodiment from disrupting the flow of gender norms.

Thus, though rejecting transgender identity (such as by considering it a mental illness) is one way to reduce the system threat created by transgender people, this “gender trouble” can be

ameliorated in other ways. By viewing transgender identity as an essential characteristic, and by ensuring that transgender people perform their genders in accepted ways, certain transgender people can be assimilated within the system without posing a great threat to it. However, given that system support is also associated with essentialist understandings of gender (Brescoll, Uhlmann, & Newman, 2013), this approach may then contribute to system-supporting gender ideologies overall. Within these parameters, only those who are “biologically transgender” will ever need to question their place in the gender system, and the categories and roles of each gender remain unchallenged. Aside from moving the biological determination of gender from genitals or sex chromosomes to some as-yet-undetermined gene or brain structure, the system of gender and its performance remains unchanged. This highlights the inherent flexibility of gender to maintain itself despite its own inconsistencies (Zerilli, 1998).

Based on these arguments, I hypothesize that rejection of transgender people can function as a form of system affirmation, as a way of reducing the inherent threat to gender systems posed by transgender “gender trouble” (Hypothesis 1a). However, framings of transgender people that situate them as non-threatening to the system will reduce levels of direct transprejudice, as such system-defending responses will be less necessary (Hypothesis 1b). Conversely, these framings then leave gender “untroubled”, situating the transgender people who are able to fit within these framings as part of the standing gender system.

CHAPTER FOUR

POLICY SUPPORT

As discussed in Chapter 1, many recent policy efforts have attempted to expand or curtail the rights and safety of transgender people (e.g., Human Rights Campaign Foundation, 2021; National Center for Transgender Equality, 2020). Laws and policies have the potential to shape how transgender people (and gender trouble generally) can exist in society. Historically, prohibitions on wearing cross-gender clothing were used to police and punish gender non-conformity, thus further entrenching normative gender. More recently, a variety of professional writing guides have updated from requiring binary gender language to allowing the use of gender-neutral pronouns and titles (e.g., singular they, ze, Mx), including the American Psychological Association (APA, 2020). Policies such as these function as part of the “stage” within Morgenroth and Ryan’s (2021) analysis of gender performance. The “stage” is the physical, social, and cultural context in which gender performance takes place, including gender-segregated spaces, gendered products, gender stereotypes and roles, gendered language, and laws and policies. The stage shapes the ability for different gender performances to take place and communicates expectations about how gender will be performed—for example, saying “he or she” rather than “they” when referring to an unknown person communicates that the person must be either male or female, reinforcing binary gender expectations. Cultural norms and stereotypes around gender (and transgender identity) influence transgender youths’ process of identity

formation and expression (Katz-Wise et al., 2017), thus shaping what transgender identities and experiences form.

Morgenroth and Ryan (2021) posit that disruptions to the stage are especially likely to elicit system threat, as these represent direct changes to the system itself. That is, a transgender person may pose a potential threat to the gender system by suggesting the possibility that gender is not binary, biologically determined, and unchanging. This threat can be addressed by rejecting the transgender person's gender identity (for example, by considering it a mental illness). Policies may also serve to make this dismissal easier by legally treating transgender people according to their assigned sex and considering discrimination based on transgender identity permissible. However, if policy changes are made to legally recognize transgender identities or prohibit anti-transgender discrimination, then mere transprejudice is not sufficient to combat this threat, and people attempting to justify the existing system will need to combat these inclusive policies or counter them with exclusionary policies. With this in mind, I review research on reactions to transgender policy, as well as how system justification and prejudice shape support for comparable policies. Given that they are both underpinned by efforts to justify the gender systems, transprejudice and transgender policy support are shaped by many of the same factors, but the different elements they represent in the gender performance (performer vs. stage) warrant a separate discussion for policy.

Westbrook and Schilt (2014) highlighted the implications policies have for gender determination (i.e., placing individuals within a gender category). Whereas gender determination within interactions is often implicit and not held up to scrutiny by those making the

determination, policies around gender inclusion must make explicit what criteria are being used to determine an individual's gender. This process can highlight instances of gender trouble, particularly where transgender people are concerned, and therefore their position in regards to the policy must be regulated to maintain the existing gender system. In this way, policies can address the threat posed by transgender people that the policies themselves exposed, thereby reinscribing gender categories.

In examining news coverage of transgender-relevant policies (employment non-discrimination laws, athletic participation, and requirements for birth certificate changes), Westbrook and Schilt (2014) identified a cultural conflict in what criteria to use for gender determination. Biological criteria (typically sex assigned at birth) were stable and unchanging, whereas identity-based criteria (i.e., gender identity) signaled cultural values of acceptance and self-determination. Furthermore, the application of these criteria differed by context in consistent ways that point to the importance of gender-segregated spaces in maintaining the gender system. Identity-based criteria for gender were often embraced in non-sexualized, gender-integrated settings like the workplace (for example, employment non-discrimination), reflecting a liberal valuing of autonomy and equality. However, biological criteria typically won out in discussion around gender-segregated spaces. Commentary around athletic policies focused on the presumed advantage that transgender women would have over cisgender women due to their "male" biology, resulting in specific biological criteria for inclusion. Similarly, attempts to amend laws around changes in birth certificates faced backlash focused on who was granted access to gender-segregated spaces, which resulted in requiring genital surgery for gender marker changes. Other

bills attempting to protect rights based on “gender identity” or “transgender expression” also faced backlash for not defining fully who could access gender-segregated spaces. Thus, reactions to different policies seem to hinge on the implications they have for gender system maintenance.

Westbrook and Schilt (2014) posited that this focus on gender-segregated spaces emerged because these spaces function to emphasize gender differences and cultivate gendered distinctions despite common inter-gender interactions in other spaces. Thus, in regulating who has access to gender-segregated spaces, key assumptions about gender were invoked: women are biologically weaker and less skilled than men, and therefore put at risk by their presence. Because of this logic, women’s spaces are more strictly policed, as cisgender women are presumed to be threatened by the potential presence of a “biologically male” transgender woman, whereas cisgender men are not threatened by the presence of a “biologically female” transgender man. (This is not to say that transgender men are necessarily more accepted than transgender women, but that they occupy a different place within the gender system.)

This focus on men’s power as rooted in biology upholds essentialist understandings of gender and supports a view of the current gender systems as unchanging and inevitable, which are system-justifying ideologies (Jost, 2019). Thus, this method of managing transgender inclusion serves to address transgender threats to the gender system while seeming to encompass values of self-determination. Much like Rudman and colleagues (2012) note within Backlash Theory, transgender people are rejected (e.g., not acknowledged as their gender identity) when they would threaten power structures and when this rejection can be framed as reasonable (e.g., protecting cis women) rather than biased. When there is little threat to the system and rejection

would be obviously biased (i.e., non-sexual, gender-integrated settings), transgender people may be included as their gender (and expected to perform accordingly). This elasticity of definitions allows the gender system to continue to function with little interruption even as individuals move through it or against it; and this elasticity is possible because, as Zerilli (1998) claimed, gender distinctions are based in belief rather than reason.

This idea that backlash must be justifiable is key in understanding support for various policies. Pratto, Stallworth, and Conway-Lanz (1998) found that SDO predicted policy support through legitimizing ideologies—that is, higher levels of SDO predisposed participants to support ideologies that justified certain policies, and this led to policy support rather than SDO directly. Furthermore, these ideology-policy links were specific—nationalism, for example, predicted support for military programs and the war in Iraq, but not support for social welfare programs. This suggests that one’s level of support for hierarchical systems (as measured by SDO) influence policy support through more specific ideological justifications. Thus, anti-transgender policy likely also requires justification in the form of a specific legitimizing ideology.

Mallett, Huntsinger, and Swim (2011) found that system justification led to less support for hate crime legislation. Specifically, when a low-status group was targeted by a hate crime, those high in system justification viewed the crime as less harmful, and were subsequently less supportive of legislation to address the crime than those low in system justification. This effect did not unfold when a high-status group was targeted. Thus, the perception of harm done seems to function as an ideological justification for opposing hate crime legislation. This effect was

particularly observed when hate crimes were framed as common (and thus part of the status quo) rather than rare, and when system threat was induced. Similarly, we might expect more anti-transgender policy attitudes to stem from the belief that anti-transgender policies do not cause harm, or that pro-transgender policies do cause harm.

Prejudice and stereotypes can function as justifications for harmful policy. For instance, believing that a group poses certain threats to one's ingroup is associated with one's level of support for policy that affects said group (Cottrell, Richards, & Nichols, 2010). This finding holds for transgender people, with participants who perceived transgender people as threatening the ingroup (particularly the ingroup's values) reporting more opposition to transgender rights (Broussard et al., 2021). Similarly, heterosexual women who perceived greater threat from transgender women to women or womanhood were less likely to support a fictitious bill that would allow transgender women to use public women's restrooms (Outten, Lee, & Lawrence, 2019). Parent and Silva (2018) also examined transprejudice as a mediator between SDO and religious fundamentalism on voting on a hypothetical "bathroom bill". This correlational study found evidence that higher levels of SDO and religious fundamentalism predicted increased transprejudice, which in turn predicted a greater likelihood to support a "bathroom bill". These findings suggest that people view anti-transgender policy as justified to the extent that they view transgender identity as wrong or dangerous.

Furthermore, we again see the importance of beliefs about the nature of gender and transgender identity, not only for prejudice but also for policy support. General essentialism was associated with support for bathroom bills, and gender essentialism was associated with support

for gender-segregated classrooms (Roberts et al., 2017). Wilton and colleagues (2019) also showed that gender essentialism was associated with lower support for transgender rights (beyond the effect of general essentialism). Experimentally, anti-essentialist messaging led to lower essentialism, and mediation analyses showed that this predicted lower transprejudice, which then predicted more support for transgender rights. Thus, transprejudice functioned as justification for opposing transgender rights. Notably, those exposed to pro-essentialist messaging did not differ from a control condition, suggesting that essentialism was the default approach for the sample of MTurk participants. Overall, these results show that a system-justifying ideology (essentialism) led to greater transprejudice, which then justified opposition to transgender rights.

Though essentializing gender leads to anti-transgender attitudes, this effect can be reversed when it is transgender identity itself being essentialized. In a U.S. quota-based sample approximating census data on race, ethnicity, gender, and region, believing that there is a biological basis to transgender identity (as opposed to not believing this or having no opinion) was associated with greater support for transgender rights (Bowers & Whitley, 2020). This effect also persisted beyond the effects of demographics, political ideology, and belief in Biblical literalism. This suggests that belief in a biological basis of transgender identity reduces the justifiability of anti-transgender policy, as it is seen as an immutable characteristic of individuals and not as a personal choice. This perceived immutability may also make transgender identity less threatening: if it is biologically based, it is not something that can spread ideologically, and only those with a particular biology will be affected. To use Morgenroth and Ryan's (2021)

elements of gender performance, a biological basis to transgender identity would mean that transgender people are not actually changing their “character” (i.e., essential identity as man or woman). Therefore, they should be allowed to bring their “costume” and “script” in line with their character by transitioning and acting socially as their gender.

In conclusion, system-supporting policy can be justified by prejudice against affected groups, with greater transprejudice justifying policies that affirm the gender system at the expense of transgender people. Transprejudice justifies anti-transgender policies by positioning transgender identities as not real or legitimate (and thus not experiencing real harm), or framing transgender people as harmful to one’s ingroup. Thus, I expect transprejudice to mediate the relationship between system threat and policy support (Hypothesis 5a). Furthermore, if transgender identity is framed as non-threatening, I expect that both transprejudice and anti-transgender policy support will be reduced (Hypothesis 5b).

CHAPTER FIVE

MODERATORS

In addition to the effects of system threat on transprejudice and policy support hypothesized above, individual differences may have important implications for how people respond to system threat—specifically, the extent to which they will respond to threat with transprejudice or see transgender people as inherently threatening. Potential moderators of this are near limitless—and indeed, many have been studied in relation to either system justification or transprejudice. Here, I focus on the gender and level of conservatism of participants, for two reasons. First, these variables are well established to predict both system support and transprejudice (as I will illustrate below). Second, these factors are easy to know about a person without administering lengthy questionnaires, which enhances the utility of tailoring messaging according to these characteristics. For instance, if liberals and conservatives respond differently to the threat-relevant framing of transgender people, then those wishing to increase support for transgender rights could use different framings (e.g., Andrews et al., 2017; Gainous & Rhodebeck, 2016; Walgrave et al., 2018) based on the political makeup of the area they wish to influence policy in. With these considerations, I next explain the established effects of gender and conservatism on system support and transprejudice, and explore how these variables may (or may not) influence the expression of transprejudice in the face of system threat.

Gender

A person's gender has important implications for their approach to the gender system. According to system justification theory, system justification motives play out for all members of systems, whether the system in question advantages or oppresses them (Jost, 2011). However, personal and group motives are also at play, which can either support or conflict with system justification motives (e.g., Jost & Thompson, 2000; Zimmerman & Reyna, 2013; see also Jost, 2017, 2019). Under gender binary, cisgender and gender-conforming people are advantaged over transgender and gender-nonconforming people. In this way, cisgender men and women both have a self-interest in justifying systems of gender binary. Under patriarchal systems, men are advantaged over other genders, so men's self-interest motives coincide with system justification motives, whereas women's conflict. For example, identification with one's gender was a stronger predictor of system justification for men than for women (Kray et al., 2017). Thus, both cisgender men and women have system justification and self-interest motives to uphold gender systems, but cisgender men's self-interest motives to support the system are greater. Studies uphold this theoretical reasoning: men tend to score higher than women on measures of gender system justification (Azevedo et al., 2017; Jost & Kay, 2005; Kray et al., 2017). Men also consistently score higher than women on various measures of transprejudice (Broussard et al., 2022; Makwana et al., 2018; Nagoshi et al., 2008, 2019; Tebbe & Moradi, 2012).

However, whether or not participant gender moderates the effect of other influences on transprejudice is less clear. Previous studies have found that the effects of anti-LGB prejudice, traditional gender role attitudes, need for closure, right-wing authoritarianism, and social

dominance orientation on transprejudice do not differ by participant gender (Makwana et al., 2018; Tebbe & Moradi, 2012). In the literature on Backlash Theory, men and women are equally likely to backlash against gender vanguards (e.g., Rudman & Fairchild, 2004; see also Rudman & Phelan, 2008; Rudman et al., 2012b). When exposed to a general system threat (or when primed with a goal to support the system), both men and women were more likely to support essentialist explanations for gender differences, and this increase did not vary by gender (Brescoll et al., 2013). Thus, men and women seem to respond to threats to the gender system in similar ways.

Other studies do find some nuances in predictors of transprejudice for men and women. Nagoshi and colleagues (2008, 2019) found that aggression proneness was an important predictor of transprejudice for men, whereas benevolent sexism was an important predictor for women. These measures seem to be particular embodiments of gender system justification employed by men and women, with each reflecting how the gender system benefits each group. For men, aggression proneness may reflect men's defensiveness of male domination, with physical domination viewed as a masculine domain. For women, benevolent sexism may reflect women's commitment to their circumscribed social power within traditional gender roles (Nagoshi et al., 2019). Thus, these findings do not necessarily suggest that gender system justifying responses (such as transprejudice) emerge from different sources for men and women, but rather that men and women's gender justifying beliefs may themselves take different forms.

Kray and colleagues (2017) examined the impact of fixed versus malleable theories of gender roles on system justification for men and women. In one study, a correlational survey

showed that men were higher in system justification than women, and that stronger gender identification related to greater system justification in men only. However, believing that gender roles are immutable correlated to more system justification for both men and women. Across three experiments, Kray and colleagues demonstrated that a fixed theory of gender roles (versus a malleable theory), as manipulated by faux research articles, led to greater gender self-stereotyping and gender system justification in men. Furthermore, these effects were mediated by an increase in gender identity strength, with increased male identity leading to increased self-stereotyping and gender system justification. Women did not show this increase in identity strength, self-stereotyping, or system justification from the fixed theory manipulation. Kray and colleagues suggest that this is because a framework of fixed gender roles motivates men to increase their gender identification (to protect their social standing), but women do not feel this motivation. This provides evidence that men's support for the gender system is enhanced by their self-interest motive to stay on the "winning" side of an unchangeable system, whereas women's gender system justification conflicts with their self-interest. These differences between men and women likely emerged because portraying gender roles as fixed versus malleable has direct implications on participants' own status within the system, thus activating self-interest motives.

Overall, the existing research does not suggest that gender moderates most precursors to transprejudice, nor that men and women respond differently to gender system threat. The differences that emerge in predictors of transprejudice (Nagoshi et al., 2008, 2019) seem to reflect different forms of gender system support for men and women, and Kray and colleagues' (2017) findings likely results from activating self-interest motives. Thus, differences reflect how

men and women approach their own place in the system, not how they respond to a threat to the gender system; and so long as self-interest motives relative to patriarchy are not activated, I would not expect to see gender differentially influence system justification's influence on transprejudice. Therefore, I hypothesize that men will report greater transprejudice and less support for transgender rights than women (Hypothesis 2), but I do not predict an interaction between gender and system threat.

Conservatism

Conservatism is an important predictor for system justification generally and transprejudice specifically. As a political ideology, conservatism is understood to encompass both a resistance to change and an acceptance of inequality; and meta-analysis reveals conservatism is tied to a variety of motives (e.g., uncertainty avoidance; needs for order, structure, and closure; general fear of threat; dogmatism; system instability) that support the conception of conservatism as a motivated social cognition to manage threat (Jost, Glaser, Kruglanski, & Sulloway, 2003). Thus understood, conservatism is fundamentally a system-justifying ideology, particularly within hierarchical systems. Studies consistently find that conservatism is associated with higher system justification, including economic (Jost et al., 2017) and gender system justification (Azevedo et al., 2017); this holds in nearly all countries studied, including the U.S., where this relationship shows medium to large effect sizes (see Jost 2019, Table 2).

As illustrated at the beginning of this paper, transgender identity is typically defined in terms of change from assigned sex, and believing that transgender people change their gender relates to greater transprejudice (Buck, 2016). Thus framed, transgender rights may be seen as

fundamentally anti-conservative. National U.S. polling (Greenberg et al., 2019b) shows that 62% of Americans have become more supportive of transgender rights than they were five years ago, compared to 25% becoming more opposed. However, conservative Republicans stand out as the only ideological group who report declining support overall, with 40% reporting greater support and 43% reporting greater opposition. Indeed, transgender rights are a highly politicized issue perceived to be divided along liberal/conservative lines. For example, Jones and Brewer (2019) found that a political candidate identified as transgender was rated as significantly more liberal than a candidate whose gender modality was not addressed. This effect was so pronounced that when the candidate was identified as a transgender woman and Republican, she was still rated as more liberal than a Democrat candidate who was presumed to be a cisgender woman.

Furthermore, indicating a transgender identity led to greater candidate support from strong liberals and lower candidate support from strong conservatives, and these effects persisted regardless of candidate party cues. These findings are consistent with research showing that conservative identity is associated with more negative attitudes towards transgender people and greater opposition to transgender rights (Bowers & Whitley, 2020; Knutson, Peter-Hagene, & Kler, 2022; Locantore & Wasarhaley, 2020; Norton & Herek, 2013; Rad, Shackelford, Lee, Jassin, & Ginges, 2019).

Knowing that conservatism relates to greater system justification and transprejudice, how can we expect conservatism to alter responses to system threat? System-justifying responding clearly occurs across the political spectrum. For example, both Democrats and Republicans reported more positive attitudes about Trump's election one week after his inauguration (when

the situation was inevitable) than they had two weeks prior (Laurin, 2018). In fact, exposure to system threat can cause people to become more conservative. After exposing adolescents to a system threat, a personal threat, or a no-threat control, van der Toorn, Jost, and Loffredo (2017) found that adolescents exposed to the system threat rated themselves as more conservative than adolescents in the other conditions (see also Jost et al., 2003 for review of threat increasing conservatism).

Nevertheless, an individual's support of the system does influence their response to system threat. When exposed to system threat, Cutright and colleagues (2011) found that those lower in dispositional system justification preferred to indirectly support the system (buying from national rather than foreign brands), whereas those higher in dispositional system justification did not show this pattern. Instead, high system-justifiers preferred direct system support, such as derogating the source of threat or displaying national symbols, which low system-justifiers did not engage in. Cutright and colleagues also note that system threat elicited system-justifying concerns in all participants (as evidenced by faster reaction time to justice-related words), indicating that dispositional system justification did not alter system justification motives, but rather how these motives were pursued. Thus, preexisting support for the system, which often overlaps with political ideology, can influence the way that people respond to system threat.

Van der Toorn and colleagues (2014) used a more direct measure of conservatism (political self-rating) to examine patriotism as a response to system threat. Though conservatism was typically associated with greater patriotism, this relationship disappeared under system

threat (as well as other manipulations of system support). Specifically, conservatives were highly patriotic regardless of condition, but liberals' patriotism increased under threat to match that of conservatives. However, this change did not extend to nationalism—conservatives showed greater nationalism than liberals, with no differences across conditions. This suggests that liberal reactions to system threat will not include responses that they find wholly unacceptable (for example, displaying nationalism). For transprejudice, this could suggest that those who are typically highly supportive of transgender people will not then resort to transprejudice in the face of system threat. In sum, system threat may lead people to become more conservative, or to respond in more conservative ways than they would in the absence of threat. However, liberals do tend to respond to threat differently than conservatives, and will not justify the system in ways they consider unacceptable.

Conservatism also influences reactions to transgender people in ways that seem to go beyond baseline levels of transprejudice. Stern and Rule (2018) specifically linked an individual's conservatism with reactions to gender category disruption. This experiment presented photographs of transgender men over the course of their first year on testosterone hormone replacement therapy and asked participants to categorize the target as male or female and indicate how positively they felt towards the target. The more androgynous the targets (as determined by independent raters), the longer participants took to categorize them. Furthermore, for conservative participants, target androgyny also led to lower positivity ratings, and this was mediated by categorization time. Liberal participants also took longer to categorize androgynous targets, but did not subsequently like them less.

Importantly, this study did not make any mention of targets' transgender identities to participants. Thus, reactions to targets were solely about participants' own difficulties in categorizing them, not targets' own claims to a given identity. (Less liking for androgynous targets among conservatives also emerged when participants were not asked to categorize their gender, suggesting that this process occurs whether or not categorization is intentionally activated.) This suggests that conservatism relates to more negative reactions towards targets that threaten simple, binary categorization of gender.

Bowers and Whitley (2020) offer a final potential nuance to the impact of conservatism on transprejudice. As described above, they found that believing in a biological basis for transgender identity related to increased support for transgender rights. They also found that conservatives were less likely to believe in a biological basis, which would be consistent with conservatives' generally lower levels of support for transgender rights. However, this belief also interacted with participant conservatism, with belief in a biological basis predicting support for transgender rights much more strongly for more conservative than for more liberal participants. It may be that framing transgender identity as biologically based reduces the threat to gender that transgender people are perceived to pose, as this would mean that transgender identity cannot be developed throughout a person's life, and is indeed not a "change" at all. Thus framed, gender could still be understood as biologically based, but located in a point besides genitals or sex chromosomes (for example, in particular brain regions). These results suggest that conservatives are sensitive to threat from transgender people, but reframing transgender people as non-threatening to the gender system may also be effective in reducing their transprejudice.

Given this literature, I hypothesize that as conservatism increases, transprejudice will increase and support for transgender rights will decrease (Hypothesis 3). Furthermore, I predict that conservatism will interact with system threat, such that high threat (compared to control) will increase transprejudice and decrease support for transgender rights to a greater extent as conservatism increases (Hypothesis 4a); and low threat (compared to control) will decrease transprejudice and increase support for transgender rights to a greater extent as conservatism increases (Hypotheses 4b).

On a final note, I do not expect to see an interaction between participant gender and conservatism, nor do I expect to see a three-way interaction between these moderators and manipulations of threat. Rad and colleagues (2019) suggested that gender and conservatism may interact, but their analyses did not reach conventional levels of significance. Instead, they found only that, in post-hoc analyses, gender differences in transgender attitudes disappeared at the highest levels of conservatism, which could have been due to floor effects. Beyond this, I am unaware of any empirical or theoretical reason to expect these further interactions.

CHAPTER SIX

STUDY DESIGN

Transgender people may be seen as inherently threatening to the present gender systems (Broussard & Warner, 2019; Morgenroth & Ryan, 2021). Given that System Justification Theory posits that people will respond defensively to system threats (Jost, 2019), attempts to reduce this threat may motivate anti-transgender prejudice and derogation (Rudman et al., 2012a). This would also account for why transprejudice also coincides with factors that determine one's outlook on and position in relation to gender systems, notably, one's own gender (e.g., Makwana et al., 2018; Nagoshi et al., 2019) and conservatism (e.g., Bowers & Whitley, 2020; Knutson et al., 2022). Transprejudice may then be used as justification for policies that reify existing gender systems (Cottrell et al., 2010; Pratto et al., 1998). The present studies test the impact of system threat on transprejudice, as well as the moderating effects of participant gender and conservatism, and the indirect effect of threat on policy through transprejudice.

Hypotheses

Effects of system threat. System threat will influence transgender attitudes, such that in the high threat condition, participants will show more negative transgender attitudes than in the control condition (H1a), and in the low threat condition, participants will show more positive transgender attitudes than in the control condition (H1b).

Effects of participant gender. Participant gender will predict transgender attitudes, such that men will show more negative transgender attitudes than will women (H2). I do not predict that participant gender will interact with any variables to predict transgender attitudes.

Effects of participant conservatism. Participant conservatism will predict transgender attitudes, such that transgender attitudes will become more negative as conservatism increases (H3). Furthermore, conservatism will interact with threat: high threat (compared to control) will result in more negative transgender attitudes and decreased support for transgender rights to a greater extent as conservatism increases (H4a); and low threat (compared to control) will result in more positive transgender attitudes and increased support for transgender rights to a greater extent as conservatism increases (H4b).

Indirect effects on policy support. Threat will show indirect effects on policy support through transgender attitudes, such that high threat (compared to control) will relate to more negative transgender attitudes, and negative transgender attitudes will relate to lower support for transgender rights (H5a). Conversely, low threat (compared to control) will relate to more positive transgender attitudes, and positive transgender attitudes will relate to greater support for transgender rights (H5b). I expect the effects of the threat conditions to increase as conservatism increases (as described in H4a and H4b).

Study 1

In Study 1, I manipulated general system threat with an established manipulation, and measured the impact of this threat on transprejudice (H1a). I also analyzed the relationship of participant gender (H2) and conservatism (H3) on transprejudice, and how these variables may

moderate the impact of threat on transprejudice (H4a). This study tests the potential for transprejudice to function as a way to affirm the system after a general system threat.

Study 1 Method

Design

This study used a 2 (system threat: high, control) x 2 (participant gender: cis men, cis women) x continuous conservatism (higher = greater conservatism), between-subjects design, with transprejudice as the dependent variable.

Prospective Power Analysis

The least sensitive test in Study 1 is for Hypothesis H4a, the interaction between threat and conservatism. Previous studies examining the interaction of system threat and system support (Wilkins & Kaiser, 2014; Yeung, Kay, & Peach, 2014) or gender threat and conservatism (Stern & Rule, 2018) on backlash or target derogation found small to medium effects. Therefore, I chose an effect between small and medium as the target value. A prospective power analysis using G*Power 3.1 (Faul et al., 2009) indicated that a sample of 263 would provide a power of .95 for an effect of $f^2 = .08$, with α error set to .01 to adjust for multiple tests. Due to expected participant attrition, I aimed to recruit 10% additional participants for a sample size of 290.

Participants

I recruited a sample of 291 adult U.S. residents from Amazon's Mechanical Turk (MTurk). MTurk samples are not representative of the general population on several demographic variables (specifically, MTurk samples are more liberal, lower income, younger,

have a higher level of education, and underrepresent Black and Latine populations; Levay, Freese, & Druckman, 2016). As conservatism is a variable of interest in this study, panels of participants who indicated a conservative identity on MTurk were interspersed throughout data collection to reach equal numbers of liberals and conservatives. All other noted variables (excluding income) are reported for these study samples.

I compensated participants \$0.75 for completing the study, with a bonus of \$0.50 for good data (see Data Screening below). Participants were required to have a 95% or higher approval ratings on MTurk and a U.S. residency to access the study, and non-cisgender participants and those outside the range of 18-75 years old were screened out before participating.

After excluding participants who failed attention and manipulation checks (see Data Screening below), 256 participants remained. The majority were women ($N = 148, 57.8\%$), straight/heterosexual ($N = 223, 87.1\%$). Most indicated a White racial identity ($N = 203, 79.3\%$), followed by Asian ($N = 23, 9.0\%$), Black ($N = 12, 4.7\%$), multiracial ($N = 12, 4.7\%$), Latin ($N = 5, 2.0\%$), and Middle Eastern/North African ($N = 1, 0.4\%$). They ranged in age from 19-75 years old ($M = 46.19, SD = 13.94$), and 123 (48%) reported personally knowing a transgender person. Most had attained a bachelor's degree ($N = 107, 41.8\%$), followed by some college but no degree ($N = 56, 21.9\%$), a graduate degree ($N = 36, 14.1\%$), an associate's degree ($N = 32, 12.5\%$), a high school diploma/equivalent ($N = 24, 9.4\%$), and less than a high school diploma ($N = 1, 0.4\%$).

Procedure

Participants accessed the study on Qualtrics. Before beginning, participants reported their gender and whether they identify as transgender (along with other items to disguise the purpose of the questions) so that non-cisgender participants were directed out of the study. As part of the cover story, participants read that the survey consists of two separate studies. In the first, participants would be asked to read a segment of a news article and answer questions about how they understood it to test how people interact with news articles. In the second, participants would share their attitudes towards what they believe will be a randomly selected topic to gather a variety of public opinions. In reality, all participants were asked about their attitudes towards transgender people.

After giving informed consent, participants were randomly assigned to read either the system threat or control paragraphs, presented as a segment of a news article. After this, participants completed manipulation and attention check items. Then participants selected a number from a drop-down menu of 1-10 to convince them that the following topic was randomly selected. They then moved on to the transgender attitudes measures. Finally, participants recorded their demographic information and received an electronic debriefing document. The study took approximately 20 minutes to complete. See Appendix A for full procedures and materials.

Materials

Screening items. In order to screen out non-cisgender participants, participants reported their gender information among several other items to disguise the purpose of the screening.

Participants reported their gender, age, and highest level of education; then selected all identities that apply to them from a list, including “transgender”, “religious”, and “home owner”.

System threat manipulation. To manipulate system threat, participants read the system threat manipulation established by Jost and colleagues (2005) and Kay, Jost, and Young (2005). Studies using this manipulation have compared it to system affirmations, personal threats, and neutral controls, and have shown that only the system threat manipulation influences system justification (e.g., Brescoll et al., 2013; van der Toorn et al., 2017). Due to concerns about the believability of the system affirmation given current events, I used a neutral control. In the system threat condition, participants read:

These days, many people in the United States feel disappointed with the nation’s condition. Many citizens feel that the country has reached a low point in terms of social, economic, and political factors.... It seems that many countries are enjoying better social, economic, and political conditions than the U.S. More and more Americans express a willingness to leave the United States and immigrate to other nations.

In the control condition, participants read information about the Golden Gate Bridge, based on information from the official website (Golden Gate Bridge, 2022). This paragraph was matched for length but does not specifically reference systemic conditions:

Every year, more than 10 million people visit the Golden Gate Bridge. Many citizens feel that the attraction is an engineering marvel with its tremendous towers, sweeping cables, and signature color and styling.... It seems that many people around the world hold it as an international icon and major travel destination. Year after year, the Golden Gate Bridge serves as a symbol of the United States’ ingenuity and resolve.

Participants were required to remain on the manipulation page for a minimum of 20 seconds to reduce the likelihood of inattention to the manipulation.

Manipulation and attention checks. Following Brescoll and colleagues (2013), participants in the experimental condition were asked the following manipulation checks framed as measuring their understanding of the article: “How did the article report that the United States is doing relative to other countries?” (better, worse, I don’t know) and “According to the article, how do most Americans feel about the condition of the United States?” (good, bad, I don’t know). In the control condition, participants were asked, “How did the article report that people around the world view the Golden Gate Bridge?” (positively, negatively, I don’t know) and “According to the article, how many people visit the Golden Gate Bridge each year?” (more than 10 million, less than 2 million, I don’t know). Following suggestions from Abbey and Meloy (2017), Chmielewski and Kucker (2019), and Shamon and Berning (2019), I screened for participant attention with a directed query item, a logical statement item, and two free response items.

Transgender attitudes.

Transgender Attitudes and Beliefs Scale (TABS). The TABS (Kanamori et al., 2017) consists of 29 items organized into three subscales: interpersonal comfort (e.g., “I would feel comfortable if my next-door neighbor was transgender,” 14 items); sex/gender beliefs (e.g., “Humanity is only male or female; there is nothing in between,” 10 items); and human value (e.g., “Transgender individuals should be treated with the same respect and dignity as any other person,” 5 items). TABS items and structure were validated across two studies using both principal components analysis and confirmatory factor analysis, and the subscales and overall scale showed high internal reliability in initial testing, $\alpha = .93-.98$. Furthermore, the TABS

highly correlates with previous measures of transprejudice and is not correlated with self-esteem or socially desirable responding.

Participants responded to each statement on a scale from 1 (strongly disagree) to 7 (strongly agree). Items are coded such that higher numbers indicate more positive attitudes towards transgender people, and items were averaged together to create one full scale and three subscales. Due to researcher error, one item from the interpersonal comfort scale (“I would feel uncomfortable finding out that I was alone with a transgender person”) was omitted from the survey. The TABS showed high reliability in the present sample for the full scale ($a = .98$) and subscales (interpersonal comfort, $a = .97$; sex/gender beliefs, $a = .95$; human value, $a = .93$).

Demographics. Participants reported their gender, race, and sexual orientation. Additionally, they reported their contact with transgender people with two questions: “Do you personally know a transgender person?” (yes, no, I don’t know); and “To what extent have you experienced close interpersonal contact with transgender people, for example, as friends, coworkers, family members, or romantic partners?” (1 = not at all, 7 = very much). A dichotomous transgender contact item is frequently used in transprejudice research (e.g., Broussard & Warner, 2019; Gazzola & Morrison, 2014; Wilton et al., 2019), whereas the second is an exploratory item.

To measure conservatism, participants responded to the question, “Where on the following scale of political orientation would you place yourself...?” (1 = extremely liberal, 6 = moderate, 11 = extremely conservative) for economic policy, social policy, and in general. This measure is commonly used and regularly correlates with system justification (e.g., Hennes et al.,

2012; see also Jost, 2019, Table 2). The items showed high reliability ($\alpha = .97$), so were averaged into a composite conservatism score.

Study 1 Results

Data Screening

I counted the logical statement, directed query, and two free-response items as attention checks. I excluded participants who failed more than one attention check. Failure of the logical statement consists of any answer from 1 (strongly disagree) to 4 (neither agree nor disagree); failure of the direct query consists of any answer besides the directed one; and failure of a free response consists of a response that is nonsensical, illegible, or less than three words. This removed 24 participants.

For the two manipulation checks, I excluded participants who answered either question with the incorrect option, or who respond to both with “I don’t know”. Therefore, remaining participants answered at least one manipulation check completely correct. This removed ten additional participants (four from the control condition, six from the threat condition). One final participant from the threat condition was removed from the threat condition for responding “I don’t know” to the transgender identity item, leaving the final sample of 256 ($N_{\text{control}} = 124$, $N_{\text{threat}} = 132$).

Preliminary Coding and Analyses

On average, participants considered it moderately likely that one could find articles like the manipulations written today. An independent-samples *t*-test on the believability of the

manipulation article revealed that the control condition ($M = 5.06$, $SD = 1.46$) and high threat condition ($M = 4.70$, $SD = 1.70$) were seen as equally believable, $t(254) = 1.81$, $p = .07$.

Participants reported little close transgender contact, conservatism averaged near the scale midpoint (as expected with the sampling procedure), and TABS scores were similar to previous findings with MTurk samples (Kanamori et al., 2017; see Table 1).

Table 1
Study 1 Variable Descriptive Statistics

	Mean (SD)	Observed Minimum - Maximum
Close Contact	2.83 (1.77)	1-7
Composite Conservatism	5.87 (3.18)	1 - 11
General Conservatism	5.87 (3.20)	1 - 11
Economic Conservatism	6.14 (3.37)	1 - 11
Social Conservatism	5.59 (3.30)	1 - 11
TABS Full Scale	4.89 (1.58)	1.11 - 7
TABS: Interpersonal Comfort	4.97 (1.82)	1 - 7
TABS: Sex/Gender Beliefs	4.18 (1.84)	1 - 7
TABS: Human Value	6.13 (1.24)	1 - 7

Bivariate correlations among close contact, conservatism, and TABS revealed significant correlations in the expected directions (see Table 2).

Table 2
Study 1 Variable Correlations

	Close Contact	Conservatism	TABS Full Scale
Close Contact	1	-.32*	.44*
Conservatism	-.32*	1	-.66*

* $p < .001$

To prepare for the planned regressions, I effects coded threat condition (0 = control, 1 = threat) and gender (0 = woman, 1 = man). Conservatism composite scores were mean-centered, so that scores more liberal than the average are negative and scores more conservative than the

average are positive. I then created interaction terms by multiplying threat condition by mean-centered conservatism.

To rule out an interaction between participant gender and threat condition, I conducted a 2 (threat: high, control) x 2 (gender: man, woman) MANOVA on the TABS¹. This did not reveal a significant interaction between threat and gender, $F(1,252) = 0.09, p = .77, \eta_p^2 = .0001$.

Therefore, I omit the interaction between threat condition and gender from hypothesis testing.

Hypothesis Testing

I conducted hypothesis testing with hierarchical linear regressions on the TABS to test Hypotheses 1a, 2, 3, and 4a. In the first step, I entered threat condition (control = 0, high threat = 1), gender, and conservatism. In the second step, I entered the interaction term between threat and conservatism.

The first step of the regression significantly predicted TABS, $R^2 = .43, F(3,252) = 65.08, p < .001$. However, conservatism was the only significant predictor, $\beta = -.66, p < .001$. This supports the hypothesis that conservatism would relate to less positive transgender attitudes (H3). Threat was not a significant predictor, $\beta = .01, p = .86$; contrary to Hypothesis 1a, participants in the high threat condition ($M = 4.88, SD = 1.64$) did not report lower transgender attitudes than participants in the control condition ($M = 4.91, SD = 1.51$). Participant gender was also not a significant predictor, $\beta = -.03, p = .58$; contrary to Hypothesis 2, men ($M = 4.74, SD = 1.59$) did not report lower transgender attitudes than women ($M = 5.01, SD = 1.57$).

¹ Results did not differ based on whether the full scale or any of the three subscales was used as the dependent variable, either for the MANOVA or the subsequent hypothesis-testing regressions, so only results for the full scale are reported here.

The second step of the regression did not add predictive power, $R^2\Delta = .002$, $p = .34$, and the interaction between threat and conservatism was not a significant predictor, $\beta = -.07$, $p = .34$. Thus, the threat condition and conservatism did not interact to predict transgender attitudes, failing to support Hypothesis 4a.

Study 1 Discussion

Of the four hypotheses tested in Study 1, only Hypothesis 3, that conservatism would relate to less positive transgender attitudes, was supported by the data. Transgender attitudes did not differ by condition, failing to support Hypothesis 1a; and did not differ by participant gender, failing to support Hypothesis 2. Furthermore, the threat condition did not have a differential effect on transgender attitudes for participants of differing levels of conservatism, failing to support Hypothesis 4a.

Regarding Hypothesis 1a, I expected that participants would report negative transgender attitudes as a way to affirm the status quo after being exposed to a general system threat (e.g., Rudman et al., 2012b). There are several possible explanations as to why this hypothesis was not supported. Most relevant to the theoretical background of this study, it may be that if transgender people are perceived as a threat to gender systems, then merely encountering items that require considering one's attitudes towards them may evoke this threat. If this is the case, the previous general threat manipulation (or the control) may not have had an effect because participants responded based on their current experience of threat—those who view transgender people as threatening the gender status quo reject them, and those who do not perceive this threat do not resort to rejection, regardless of previous exposure to general system threat.

Additionally, the general threat manipulation may have failed to generalize to transgender people due to preoccupations with issues more directly linked to overarching systems. Initial examination of participant free responses suggests that participants often agreed with the negative perspective of the system threat passage, referencing political division and economic decline (though whether these perspectives were wholly pessimistic or framed as opportunities for improvement varied across participants). This manipulation proved effective at eliciting system threat among adolescents as recently as 2017 (van der Toorn et al., 2017), but I have not been able to identify successful use of this manipulation since the beginning of the COVID-19 pandemic. If systemic concerns were already present for participants, this may reflect that current events have created a situation in which people already feel that the system is under threat, and the established manipulation may no longer be effective at increasing feelings of threat above baseline.

The lack of gender differences in transgender attitudes is surprising given past research (e.g., Makwana et al., 2018; Nagoshi et al., 2019). When developing the TABS, Kanamori and colleagues (2017) found gender differences of medium effect sizes in an MTurk sample. One possibility is that, while there is growing support for transgender rights (e.g., Greenberg et al., 2019b), anti-transgender rhetoric framed in feminist terms (i.e., gender-critical or trans-exclusionary radical feminism) has also risen (e.g., Hines, 2019; Williams, 2020). This shift in awareness and framing may have resulted in decreased gender differences in transgender attitudes. However, a single study is not sufficient to make claims that this established difference is disappearing. The negative relationship between conservatism and transgender attitudes does

match prior findings (e.g., Bowers & Whitley, 2020; Knutson et al., 2022), emphasizing the role that supporting the status quo plays in anti-transgender attitudes.

This study was not able to provide experimental evidence linking transgender attitudes to system justification motives. Specifically, this study failed to support the hypothesis that anti-transgender attitudes could serve as a system-justifying response to a general system threat. This lack of effect impedes comparison across the system justification literature, as this is a commonly employed manipulation. However, these results do not speak directly to the question of whether anti-transgender prejudice can be attributed to transgender people serving as threats to gender systems. Study 2 seeks to test this directly by manipulating the level of threat transgender people are perceived to pose to gender systems and examining the impact on transgender attitudes and policy support.

Study 2

In Study 2, I set out to manipulate the level of threat that transgender people specifically pose to the gender system with novel manipulations, presenting participants with information that transgender people either pose a great threat to current gender relations or pose little threat to current gender relations (or an irrelevant control). This study expanded upon Study 1 by examining the potential of specific framing of transgender people (as threatening or non-threatening) to increase or decrease the threat elicited by transgender people and subsequent backlash. I examined the impact of threat (and participant gender and conservatism) as in Study 1, as well as tested the indirect effects of these variables on support for transgender rights through transprejudice. Study 2 tested all listed hypotheses.

Study 2 Method

Design

This study used a 3 (transgender threat: high, low, control) x 2 (participant gender: cis men, cis women) x continuous conservatism (higher = greater conservatism), between-subjects design, with transgender attitudes and transgender policy support as the dependent variables.

Prospective Power Analysis

The least sensitive planned tests in Study 2 were Hypotheses H4a and H4b, the interaction between threat and conservatism. Using the same benchmarks of effect size at Study 1, a prospective power analysis using G*Power 3.1 (Faul et al., 2009) indicated that a sample of 311 would provide a power of .95 for an effect of $f^2 = .08$, with α error set to .01 to adjust for multiple tests. However, given the null findings of Study 1, additional participants were recruited to the extent permitted by funding to allow for the possibility of weaker effects or additional analyses.

Participants

I recruited a sample of 412 adult U.S. residents from Amazon's Mechanical Turk (MTurk). (Due to extended pilot testing time, the window for recruiting undergraduate psychology pool participants closed before Study 2 data collection could begin.) I compensated participants \$1.50 for completing the study, with a bonus of \$0.75 for good data (see Data Screening). Participant requirements were the same as Study 1, as well as the recruitment of panels of conservatives, and I excluded MTurkers who participated in Study 1 or the pilot studies from participating in Study 2.

After excluding participants who failed attention and manipulation checks (see Data Screening below), 400 participants remained. The majority were women ($N = 211$, 52.8%) and straight/heterosexual ($N = 357$, 89.3%). Most indicated a White racial identity ($N = 306$, 76.5%), followed by Black ($N = 30$, 7.5%), Asian ($N = 24$, 6.0%), multiracial ($N = 20$, 5.0%), Latin ($N = 17$, 4.3%), Native ($N = 2$, 0.5%), and other ($N = 1$, 0.3%). They ranged in age from 20-75 years old ($M = 42.94$, $SD = 13.99$), and 201 (50.3%) reported personally knowing a transgender person. Most had attained a bachelor's degree ($N = 158$, 39.5%), followed by some college but no degree ($N = 85$, 21.3%), a graduate degree ($N = 60$, 15%), an associate's degree ($N = 57$, 14.3%), and a high school diploma/equivalent ($N = 40$, 10%).

Procedure

This procedure largely matched Study 1. However, given that the connection between the manipulations and measures is more obvious in Study 2, participants did not read that the study consisted of two separate studies. Instead, the instructions explained that the researchers were interested in how the arguments of the article helped people think about the issue under discussion. Participants were randomly assigned to one of three transgender threat conditions and completed the manipulation checks. Participants were not led to believe that the questionnaire topic was random, but instead immediately read the provided definition of transgender and reported their attitudes, followed by the policy support scale and demographics. The study took approximately 30 minutes to complete. See Appendix B for full procedures and materials.

Materials

Screening items. Participants reported their gender, age, and highest level of education as in Study 1. As Study 2 relied on less deception regarding the relevance of transgender identity, participants were also directly asked “Are you transgender?” (yes, no, I don’t know). Participants who answered “yes” or “I don’t know” were directed out of the survey.

Transgender threat manipulation. To manipulate perceptions that transgender people pose threats to the existing social order, I originally created three mock articles inspired by Day and colleagues’ (2011) manipulations of threats to committed relationships. However, pilot testing suggested that these were ineffective at influencing transgender attitudes, and examination of their content raised concerns that these manipulations were not actually addressing transgender system threat (see Appendix C). Instead, these manipulations may have been influencing other variables that could have alternative effects under System Justification Theory, such as population size and growth, social power, and gender system changes aside from transgender people. I therefore revised the manipulations and included a direct measure of threat (see transgender attitude measures below). A second round of pilot testing provided preliminary support for the effectiveness of the manipulations (see Appendix D).

The revised manipulations remain presented as news articles, but instead pull on Morgenroth and Ryan’s (2021) categories of gender trouble and focus on the intentions of the transgender movement and the potential outcomes if it were to be successful, rather than the likelihood of transgender people causing change. For example, the low threat article emphasized consistency of gender (e.g., “We all—transgender or not—have an idea of our own gender that’s

wired into us from birth. No amount of different life experiences can change this for anyone”), whereas the high threat article emphasized change (e.g., “...our own gender that we learn from society. Anyone can find this idea changing over time with different life experiences”); the low threat article emphasized alignment of gender characteristics (e.g., “...transition gives transgender people the opportunity to bring their appearance in line with their constant sense of their own gender”), whereas the high threat article emphasized misalignment (e.g., “... transition gives transgender people the opportunity to alter their appearance according to their fluid experience of gender”); and the low threat article emphasized a binary approach to gender (e.g., “...the transgender movement strengthens the myth that men and women have different experiences and abilities”), whereas the high threat article emphasized the blurring of binaries (e.g., “...the transgender movement discounts the fact that men and women have different experiences and abilities”).

The manipulations also emphasized the individual vs. systemic nature of the transgender movement’s aims (e.g., low threat: “it’s really just about letting transgender people live according to their gender identity.... we’re not trying to change the fundamental basis of gender”; high threat: “it’s not just about letting transgender people live according to their gender identity.... we’re trying to change the fundamental basis of gender”). Thus, the high threat condition should create the perception that transgender people pose a high threat to gender systems, while the low threat condition should create the perception that transgender people pose little threat to gender systems. The threat articles also included quotes from those stated to be in support of or opposed to the transgender movement, in order to reduce potential reactions to

being persuaded; however, both pro- and anti-transgender statements supported the high or low threat manipulation, and only differed on whether this was considered good or bad.

In the control condition, participants again read information about the Golden Gate Bridge. This article is matched for length and form (including the dual perspectives) but does not reference gender or systemic conditions. See Appendix D for manipulations.

Manipulation and attention checks. As in Study 1, participants answered several manipulation and attention checks. In the threat manipulation conditions (high and low), participants answered two multiple choice questions (“Which of the following points would Davis and Miller [the transgender activists] be more likely to agree with?” and “What did Williams [the gender-critical scholar] say was unfair about the transgender movement?”; see Appendix B for response options) and two free-response items (“In one or two complete sentences, please explain one point from the article in support of the transgender movement” and “In one or two complete sentences, please explain one point from the article in opposition to the transgender movement”). Participants in the control condition responded to matched items tailored to the control manipulation content. The directed query, logical statement, and final free-response item will be the same as Study 1.

Transgender attitudes. To measure the effectiveness of the manipulations in altering perceptions of transgender threat, participants reported their perceptions of transgender people threatening the distinction between men and women (i.e., distinctiveness threat) with the item, “To what extent do transgender people threaten or reinforce the distinction between men and women?” (-3: completely reinforce, to 3: completely threaten). Counterbalancing in pilot testing

showed no effect of placing this item before or after the transgender attitudes and policy items for any variables (see Appendix D). As this item is conceptually a mediator between the manipulation and transgender attitudes, it was placed immediately after the definition in Study 2.

Otherwise, participants responded to the same measures of transgender attitudes as in Study 1. The omission of a TABS item was corrected in Study 2, so participants responded to the full 29-item measure. For this sample, full TABS $a = .98$; interpersonal comfort $a = .97$; sex/gender beliefs $a = .96$; and human value $a = .93$.

Policy attitudes. Miller and colleagues (2017) constructed a 14-item scale of attitudes towards transgender-relevant policy, based on previous national surveys of support for gay and transgender rights. Their study revealed a 2-factor structure, with 7 items loading on the “civil rights” subscale (e.g., “Legal protections that apply to gay and lesbian people should also apply to transgender people”, “Laws to prevent employment discrimination against transgender people”), and 7 items loading on the “body-centric” subscale (e.g., “Allowing students who have had a sex change to play college sports as a member of their current gender”, “Insurance companies should not be required to pay for medical treatment related to transgender health issues”).

In Study 2, participants responded to each statement on a scale from 1 (strongly disagree) to 7 (strongly agree). I reverse-coded items appropriately so that higher scores indicate more support for transgender rights. I then averaged responses into subscales (civil rights $a = .94$; body-centric $a = .94$) and a total scale ($a = .95$).

Demographics. Before completing demographic information, participants responded to the item, “In general, how much does society accept or reject transgender people?” (-3: society completely rejects transgender people, to 3: society completely accepts transgender people) in order to rule out perceived social acceptance as an explanation for the results of Study 2, as this was a concern for the first version of the manipulations. I omitted gender from the demographics section in Study 2, as I did not have to remove any participants for reported gender inconsistencies in Study 1. Otherwise, participants reported the same demographic items as in Study 1. For this sample, conservatism $a = .96$.

Study 2 Results

Exclusions, variable coding, and hypothesis testing were identical to Study 1 except where specified below.

Data Screening

Analysis of the logical statement, directed query, and free-response items are identical to Study 1. Failure at this stage resulted in removing six participants (two from each condition).

For the manipulation checks, I coded the correct response as 1 and the incorrect and “I don’t know” responses as 0, and summed the scores of the two items. Both items were answered correctly by 343 participants (126 in the control condition, 94 in the low threat condition, 123 in the high threat condition). Fifty-seven participants answered one check correctly (ten in the control condition, 35 in the low threat condition, 12 in the high threat condition), and six participants failed both checks (four in the low threat condition, two in the high threat condition). A one-way ANOVA indicated that correct responses differed across conditions, $F(2,405) = 14.93$,

$p < .001$, $\eta^2 = .07$. A Tukey post-hoc test showed that correct responses were less common in the low threat condition ($M = 1.68$, $SD = .53$) than the control condition ($M = 1.93$, $SD = .26$), $t(267) = 4.93$, $p < .001$, or high threat condition ($M = 1.88$, $SD = .37$), $t(268) = 3.60$, $p < .001$; but did not differ between high threat and control, $t(271) = 1.29$, $p = .93$. This suggests that the details of the low threat condition were more difficult for participants to recall, perhaps because it differed more from their pre-existing ideas about transgender issues.

Due to the relatively high number who failed one check and the overrepresentation in the low threat condition, I decided to maintain participants who answered at least one manipulation check correctly. Excluding the six who failed both checks left a final sample of 400 participants ($N_{\text{control}} = 136$, $N_{\text{low}} = 129$, $N_{\text{high}} = 135$).

Preliminary Coding and Analyses

On average, participants considered it moderately likely that one could find articles like the manipulations written today. A one-way ANOVA on the believability of the manipulation article revealed no differences across condition, $F(2,397) = 1.02$, $p = .36$, $\eta^2 = .005$, with the control ($M = 5.26$, $SD = 1.43$), low threat ($M = 5.50$, $SD = 1.46$), and high threat ($M = 5.35$, $SD = 1.36$) articles being rated as equally believable. Similarly, the manipulations did not lead to differences in the perceived social acceptance of transgender people, $F(2,397) = 1.56$, $p = .47$, $\eta^2 = .004$; transgender people were viewed as slightly rejected by society on average across the control ($M = -0.73$, $SD = 1.55$), low threat ($M = -0.78$, $SD = 1.38$), and high threat ($M = -0.93$, $SD = 1.37$) conditions.

Close contact, mean conservatism, and TABS scores were similar to Study 1, and policy support scores were similar to or slightly higher than those found by Miller and colleagues (2017; see Table 3).

Table 3
Study 2 Variable Descriptive Statistics

	Mean (SD)	Observed Minimum - Maximum
Close Contact	3.11 (2.02)	1-7
Composite Conservatism	5.83 (3.26)	1 - 11
General Conservatism	5.86 (3.33)	1 - 11
Economic Conservatism	6.16 (3.43)	1 - 11
Social Conservatism	5.46 (3.39)	1 - 11
TABS Full Scale	4.97 (1.59)	1 - 7
TABS: Interpersonal Comfort	5.09 (1.78)	1 - 7
TABS: Sex/Gender Beliefs	4.19 (1.91)	1 - 7
TABS: Human Value	6.18 (1.28)	1 - 7
Policy: Full Scale	4.68 (1.71)	1 - 7
Policy: Civil Rights	5.44 (1.66)	1 - 7
Policy: Body-Centric	3.92 (2.00)	1 - 7

A one-way ANOVA confirmed that distinctiveness threat varied across conditions, $F(2,399) = 7.82, p < .001, \eta^2 = .04$. A Tukey post-hoc test showed that threat was significantly lower in the low threat condition ($M = -.40, SD = 1.99$) than in the control condition ($M = .57, SD = 2.00$), $t(265) = 3.96, p = .001, d = .49$, or the high threat condition ($M = .36, SD = 2.21$), $t(262) = 2.93, p = .01, d = .36$; but that the high threat and control conditions did not differ, $t(269) = 0.82, p = .68$. Thus, the low threat manipulation was successful at reducing the perception of threat, but the high threat manipulation was not successful at increasing the perception of threat above control.

Bivariate correlations among close contact, conservatism, distinctiveness threat, TABS, and policy revealed significant correlations in the expected directions (see Table 4).

Table 4
Study 2 Variable Correlations

	Close Contact	Conservatism	Distinctiveness Threat	TABS Full Scale
Close Contact	1	-.25*	-.19*	.42*
Conservatism	-.25*	1	.44*	-.68*
Distinctiveness Threat	-.19*	.44*	1	-.45*
TABS Full Scale	.42*	-.68*	-.45*	1
Policy Full Scale	.39*	-.74*	-.46*	.91*

* $p < .001$

To prepare for the planned regressions, I dummy-coded the conditions, creating a “High Threat” variable (0 = control, low threat; 1 = high threat) and “Low Threat” variable (0 = control, high threat; 1 = low threat). Conservatism scores were mean-centered, so that scores more liberal than the average are negative and scores more conservative than the average are positive. I then created interaction terms by multiplying threat condition by mean-centered conservatism.

To rule out an interaction between participant gender and threat condition, I conducted a 3 (threat: high, low, control) x 2 (gender: man, woman) MANOVA on the TABS². This did not reveal a significant interaction between threat condition and gender, $F(2,394) = 1.88, p = .16, \eta_p^2 = .009$.

Hypothesis Testing

To test Hypotheses 1a, 1b, 2, 3, 4a, and 4b, I first conducted a linear regression on the TABS. Given the dummy-coded threat condition variables, step 1 consisted of “High Threat”,

² Once again, results did not differ whether the full TABS or subscales were analyzed, for either the MANOVA or regression below, so I report only the full scale results here.

“Low Threat”, gender, and conservatism. Step 2 consisted of the interaction terms between “High Threat” and conservatism and “Low Threat” and conservatism.

The first step of the regression significantly predicted TABS, $R^2 = .48$, $F(4,395) = 89.88$, $p < .001$. Participants gender ($\beta = -.14$, $p < .001$) and conservatism ($\beta = -.68$, $p < .001$) significantly predicted transgender attitudes, such that participants who were men ($M = 4.78$, $SE = .12$, vs. women, $M = 5.14$, $SE = .11$) and more conservative reported lower transgender attitudes, supporting Hypotheses 2 and 3. However, neither the low threat condition, $\beta = .01$, $p = .87$, nor the high threat condition, $\beta = -.02$, $p = .59$, were significant predictors. Contrary to Hypothesis 1a, participants in the high threat condition ($M = 4.92$, $SE = .14$) did not report lower transgender attitudes than participants in the control condition ($M = 4.93$, $SE = .14$); and contrary to Hypothesis 1b, participants in the low threat condition ($M = 5.03$, $SE = .14$) did not report higher transgender attitudes than participants in the control condition.

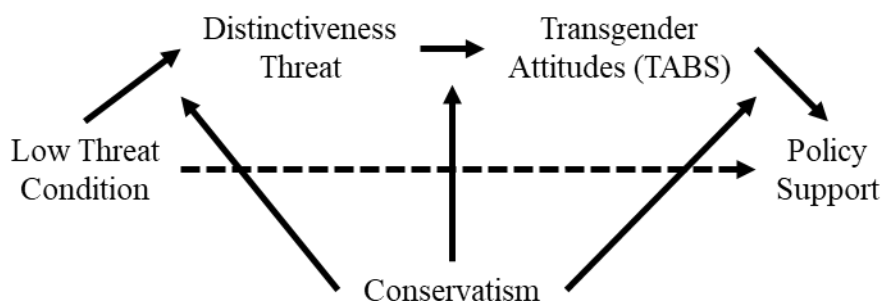
The second step of the regression did not add predictive power, $R^2\Delta < .001$, $p = .92$, and neither the interaction between high threat and conservatism, $\beta = -.01$, $p = .82$, nor the interaction between low threat and conservatism, $\beta = .01$, $p = .85$, were significant predictors. Thus, threat condition and conservatism did not interact to predict transgender attitudes, failing to support Hypotheses 4a and 4b.

Given the observed effect of the low threat condition reducing perceptions of distinctiveness threat, I decided to test if Hypotheses 1b and 5b would be supported for an indirect effect from the low threat condition to policy support through distinctiveness threat and TABS. Given Hypothesis 4b, I also included conservatism as a moderator. I tested this

moderated serial mediation using Hayes' (2013) Process Model 92, entering the dummy-coded low threat condition variable as the independent variable³, distinctiveness threat as the first mediator, transgender attitudes as the second mediator, and policy support as the dependent variable, with conservatism as a moderator (see Figure 1).

Figure 1

Diagram of the Moderated Serial Mediation of Low Threat Condition on Policy Support



Results of the direct model pathways are presented in Table 5. For distinctiveness threat, condition and conservatism were significant predictors, such that the low threat condition (compared to the control and high threat conditions) led to lower distinctiveness threat; and higher levels of conservatism related to greater perceptions of distinctiveness threat. Furthermore, the interaction between condition and conservatism was significant. Interaction effects were examined at the 16th, 50th, and 84th percentiles of conservatism (Table 6). This revealed that the low threat condition led to lower distinctiveness threat at moderate and high levels of conservatism, but had no effect at low levels of conservatism.

³ Model analyses including the high threat condition alongside the low threat condition as multicategorical IVs returned the same pattern of results, with no effects of the high threat condition. Therefore, only the analysis using the low threat condition compared to both high threat and control are presented here.

Table 5
Direct Effects of Model

Predictors	DV		
	Distinctiveness Threat	TABS	Policy
	<i>B (SE)</i>		
Low Threat Condition	-.82 (.20)**	-.09 (.13)	-.12 (.09)
Conservatism	.32 (.03)**	-.28 (.02)**	-.11 (.02)**
Condition X Conservatism	-.13 (.06)*	-.03 (.04)	-.01 (.02)
Distinctiveness Threat	---	-.14 (.03)**	-.03 (.02)
Threat X Conservatism	---	-.02 (.01)*	-.002 (.01)
TABS	---	---	.80 (.03)**
TABS X Conservatism	---	---	-.01 (.01)

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

Table 6
Conditional Effects of Model Pathways

Model Path	Conservatism Percentiles		
	16 th	50 th	84 th
	<i>B (SE)</i>		
Condition → Threat	-.27 (.32)	-.84 (.20)*	-1.33 (.31)*
Threat → TABS	-.05 (.05)	-.14 (.03)*	-.22 (.04)*
Indirect: Condition → Threat → Policy	.01 (.01)	.03 (.02)	.05 (.04)
Threat → Policy	[-.02, .04]	[-.01, .07]	[-.02, .15]
Indirect: Condition → Threat → TABS	.04 (.13)	-.07 (.10)	-.16 (.17)
TABS → Policy	[-.24, .30]	[-.28, .12]	[-.51, .16]
Indirect: Condition → Threat → TABS → Policy	.01 (.02)	.09 (.04)	.23 (.09)
Threat → TABS → Policy	[-.02, .07]	[.03, .18]	[.08, .44]

Note: Only significant direct effects are presented decomposed. Indirect effects reported with 95% Confidence Intervals, which are significant if they do not contain zero.

* $p < .001$

For TABS, threat and conservatism were significant predictors, such that high distinctiveness threat and higher conservatism both related to lower TABS. Furthermore, the interaction between distinctiveness threat and conservatism was significant: at moderate and high levels of conservatism, higher distinctiveness threat related to lower TABS, but threat had no effect on TABS at low levels of conservatism. Neither condition nor the interaction between condition and

conservatism showed direct effects on TABS. Taken together, the model results for distinctiveness threat and TABS support Hypotheses 1b and 4b

For policy support, only conservatism and TABS were significant predictors, such that higher conservatism related to lower policy support, and higher TABS related to higher policy support. Neither condition nor any conservatism interactions were significant predictors.

Finally, indirect effects of condition on policy emerged only for moderate and high conservatism through both threat and TABS, such that for moderate and high conservatism, the low threat condition led to lower distinctiveness threat, which in turn related to higher TABS, and then to higher policy support (Table 6). No indirect effects emerged for low conservatism, or through threat or TABS alone. These results support Hypothesis 5b.

Study 2 Discussion

Study 2 provided qualified support for several hypotheses. Hypothesis 2 (that men would express lower transgender attitudes than women) and Hypothesis 3 (that conservatism would related to lower transgender attitudes) were fully supported by my planned regression analyses. Though not supported by the originally planned analyses, Hypothesis 1b (that the low threat condition would increase transgender attitudes), Hypothesis 4b (that the effect of the low threat condition would be strengthened as conservatism increased), and Hypothesis 5b (that the effect of the low threat condition would affect policy indirectly through transgender attitudes) were supported once distinctiveness threat was included as a mediator between condition and transgender attitudes. The high threat condition did not increase distinctiveness threat above control, so Hypotheses 1a, 4a, and 5a were not supported.

The low threat condition reduced the perception that transgender people pose a threat to the distinction between men and women with a medium effect size. The high threat condition did not differ from the control on distinctiveness threat, suggesting that the content of the high threat manipulation is more consistent with participants' default ideas about the gender system threats of transgender people. Furthermore, as shown by both mean differences between conditions and the condition effects of the moderated serial mediation, condition only influenced transgender attitudes and policy to the extent that it influenced distinctiveness threat, suggesting that any condition effects are due to changes in perceptions of threat.

These effects differed from pilot testing, in which the high threat condition did show an increase in threat from the control (but low threat and control were equivalent). In addition to the generally lower quality of participant responses in the pilot, pilot participants also differed from Study 2 in that they were not selected for conservatism. This was reflected in pilot participants displaying general conservatism scores over two scale points below those in Study 2, with only 22% of pilot participants falling above the scale midpoint compared to 61% below. As the effects of low threat were moderated by conservatism in Study 2, this may explain the discrepancy between Study 2 and the pilot data.

Conservatism was a significant predictor of distinctiveness threat, transgender attitudes, and policy at every step in the model. Furthermore, conservatism also moderated the effect of the low threat condition on distinctiveness threat and the effect of distinctiveness threat on transgender attitudes. Specifically, the low threat condition reduced perceptions of distinctiveness threat from transgender people, and this effect increased as conservatism

increased, with no effect for the least conservative participants (who were already low on distinctiveness threat). Higher distinctiveness threat then related to lower transgender attitudes, and this effect also increased as conservatism increased, with no relationship for the least conservative participants. This suggests that, for the least conservative participants, perceiving distinctiveness threat from transgender people does not motivate engaging in backlash against transgender people, which would be a way to defend against this threat. This is consistent with the lower system justification motives of those lower on conservatism.

Higher transgender attitudes then related to higher policy support. This held regardless of level of conservatism, suggesting that the relationship between attitudes and policy is not dependent on conservatism (consistent with predictions). Conservatism did predict policy support beyond the effects of transgender attitudes, reflecting the politicized nature of transgender policy (e.g., Jones & Brewer, 2019). Together, these model effects resulted in an indirect effect of low threat condition on policy, such that the low threat condition led to more policy support through reduced threat and increased attitudes for participants with moderate and high conservatism, but not those lowest in conservatism, supporting initial predictions.

Unlike Study 1, Study 2 did find that men reported lower transgender attitudes than women. However, this effect was small, and notably smaller than the gender effects reported by Kanamori and colleagues (2017).

Of additional note, the conditions differed in the extent that participants were able to successfully understand and recall the perspectives presented in the articles, with participants failing more of these items in the low threat condition. This suggests that the low threat article

was more difficult for participants to process and remember. When considered with the lack of differences between the high threat and control conditions, this further supports that the high threat article was more aligned with participants' default ideas about transgender people. Given that I pulled on Morgenroth and Ryan's (2021) ideas of gender trouble for the high threat article, this suggests that, as predicted, people already perceive transgender people as posing these forms of gender trouble. Thus, maintaining participants who answered one article question incorrectly was necessary to maintain parity between conditions, but this may have weakened the effects of the article by including participants who did not fully understand and remember the manipulated point. This would most likely be the case for the low threat condition (where the majority of these cases arose), suggesting the possibility that the effects of low threat condition found here have the potential to be even stronger. This may have also contributed to the need to include distinctiveness threat as a mediator to find condition effects on transgender attitudes and policy.

CHAPTER SEVEN

GENERAL DISCUSSION

These studies provide initial support for the role of gender system threat in transprejudice. Study 2 showed that framing transgender people as being compatible with the existing gender system reduced the perception that transgender people threatened the distinction between men and women, and this in turn related to more positive transgender attitudes and policy support. However, both the general system threat manipulation (Study 1) and the high transgender threat manipulation (Study 2) failed to alter transgender attitudes compared to the control. In Study 1, it is unclear if the established manipulation was able to increase feelings of system threat above baseline—it is possible that this manipulation is no longer effective at increasing system threat in the current (post-COVID) climate. Alternatively, the failure of the high threat condition in Study 2 to elicit higher distinctiveness threat suggest that the issue may lie in the baseline response to transgender people. Perhaps, if an individual were going to believe that transgender people pose a meaningful threat, they would already believe this, given the inherent potential for transgender people to cause gender trouble (Morgenroth & Ryan, 2021).

Conservatism was a powerful predictor of transgender attitudes (Studies 1 & 2), distinctiveness threat, and policy support (Study 2). Conservatism also strengthened the relationships among these variables: the low threat condition lead to reduced threat; reduced threat related to more positive transgender attitudes; and these relationships were stronger as conservatism increased.

These relationships did not hold for participants low in conservatism—only the positive relationship between transgender attitudes and policy support persisted regardless of level of conservatism, and thus the indirect effect of condition on policy support did not unfold for low conservatism participants either. Thus, the most liberal of participants were not only less likely to see transgender people as threatening, but also did not respond to perceptions of threat with negative attitudes towards transgender people. Given the relationship between conservatism and system justification (e.g., Azevedo et al., 2017; Jost et al., 2003), very liberal participants may simply not view threats to the gender system as something that needs to be combatted.

Men did report less positive transgender attitudes than women in Study 2, though this effect was absent in Study 1. The difference in Study 2 consisted only of a small effect, whereas Kanamori and colleagues (2017) found medium effects of gender during TABS scale development. Future research will be needed to determine if gender differences in transgender attitudes are lessening, or if this was unique to the current sample.

These results offer important considerations for people interested in reducing transprejudice, passing trans-supportive policies, and blocking trans-antagonistic policies. By understanding how people's levels of transprejudice may be influenced by system threat and conservatism, those working in prejudice reduction and policy endeavors can tailor message framing to audiences for maximum effectiveness. For example, framing same-sex marriage as an equality issue led to increased support among Black Americans who relied on egalitarian values (Gainous & Rhodebeck, 2016), and framing a farming technique as good for the community led to more support for this technique among farmers with high community values (Andrews et al., 2017). Thus,

advocates may be able to enhance support for transgender people and transgender rights in conservative areas (where they face the most opposition) by tailoring messaging to frame these issues as non-threatening to gender systems.

These findings can also inform the choices of those who wish to disrupt gender systems. Alongside past research, my results highlight the double bind in which transgender people (and all gender disruptors) are placed. Those who disrupt the system face backlash (Rudman et al., 2012b), and this seems to be the default situation for transgender people. The threat they pose is then rejected by denying transgender identity, such as being considered mentally ill or confused (e.g., Howansky et al., 2019; Reed et al., 2015). Conversely, if they seek to avoid rejection by presenting themselves as no threat to the system, then they are assimilated into the existing system; and while they may win acceptance, the system as a whole goes unchallenged. Indeed, the creation of such a double bind is the only way the system is able to persist despite all the ways it fails to either further justice or account for reality. Rudman and colleagues (2012a) point out a similar double bind for their women vanguards: if women leaders display dominance, they fail as women, and if they do not, they fail as leaders. Pointing out the tautology of gendered logic will not dissuade those invested in the gender systems, as gender is built on subjective convictions rather than observable fact (Zerilli, 1998).

Despite this catch-22 for gender disruptors, greater awareness of how these systems function can empower people to make more informed choices about how they interact with gender systems. Morgenroth and Ryan (2021) suggest that, even in the face of situational adjustments to maintain the gender systems, repeated “gender trouble” over time will undermine the power of

the gender system to dictate reality by making its logic less compelling, opening the potential for expanded ideas about gender performance. The results of Study 2 suggest that espousing gender-threatening ideas and calling for gender system change does not immediately lead to lower transgender attitudes. This offers the possibility of sharing new approaches and expanding ideas on gender without exacerbating transprejudice in the short term (at least within a context in which transgender people are already seen as threatening).

Jost (2019) offers several specific ways that change may occur despite system justification motives. First, other motives, such as self-interest and personal values, may overcome system justification motives under the right conditions. This can be seen in the findings of Kray and colleagues (2017), with women less likely to engage in gender system justification under conditions that highlight their placement within it. Thus, emphasizing the way that the gender system is at odds with one's self-interest or values may reduce defense of the system. Similarly, considering an idealized version of the system in question (and how the current system falls short) may reduce system justification and inspire desire for social change. This option echoes Zerilli's (1998) call not to rely solely on rationalizing gender hierarchies away, but instead to simply commit to a new way of seeing the world in relation to gender. Next, defensiveness of the status quo may be reduced when proposed changes are viewed as congruent with the system overall. For example, Westbrook and Schilt (2014) found that transgender-supportive policies were motivated by values of equality and self-determination, which were seen as congruent with the overall cultural system despite transgender threat to the gender system. Finally, perceptions that a

new status-quo is inevitable may lead people to abandon the old system and direct system justification motives to the new (e.g., Laurin, 2018). Thus, even if individuals do not support transgender rights or other policy changes that weaken the gender system, the passage of the policies themselves may lead system supporters to bring their attitudes in line with these new policies.

Regarding policy in particular, Morgenroth and Ryan (2021) propose two possible ways that policy changes may create gender trouble, which they term degendering and multigendering. In degendering, gender is removed as a contextual cue, whereas in multigendering, options outside of the gender binary are highlighted. Both of these strategies may have different benefits and drawbacks. For example, a multigendering strategy of sex markers (such as including X in addition to M and F) may signal official recognition of non-binary identities, but this also entails maintaining government oversight of genders, and would still require at minimum lengthy paperwork to change one's sex marker. In contrast, a degendering strategy (removing sex markers) would reduce the position of the state as overseer of what genders exist, and remove the concept of a stable "legal" sex. However, Morgenroth and Ryan express concern that by not raising the issue of gender, degendering strategies may allow gender to proceed unquestioned. Even within this sex marker example, advocates disagree and work towards differing goals, and continued work is needed to determine the most effective ways to further transgender rights and gender system change through policy.

Limitations and Future Directions

Despite these promising implications, these studies also have a number of limitations. Though many of my hypotheses were supported, many effects were weaker than expected, or entirely indirect. The lack of directly observable effects on transgender attitudes for the low threat condition (and the lack of any effects for the high threat conditions in both Study 1 and Study 2) leaves doubt as to whether this is due to the actual relationships of these variables or flaws in the manipulations. In particular, the general system threat did not influence transgender attitudes, and the transgender threat manipulations had to be revised to incorporate several aspects of gender trouble. The mediating role of distinctiveness threat makes it clear that the effect of the low threat condition on attitudes was indeed due to reduced threat perceptions, but whether this is due specifically to system threat as opposed to other gender threats (e.g., personal, group, and identity threats, Morgenroth & Ryan, 2021) is less clear. Nevertheless, the moderation by conservatism unfolding according to hypotheses does lend support to a system threat interpretation of results.

A related limitation is that of the measure of distinctiveness threat. Being a last-minute addition to the methodology to address pilot testing concerns, the measure is not as robust as it could be, consisting only of a single item. Considering the key role this variable plays in the moderated serial mediation model that supports my hypotheses, its shortcomings require acknowledgement, and future research should develop more nuanced measures of the types of

gender threats participants may perceive transgender people to pose. Ultimately, these limitations suggest the need for future research to disentangle the multiple ways transgender people may elicit gender threats.

One alternative explanation for the results of Study 2 is that the exposure to transgender people (in the high and low threat manipulations) led to reduced perceptions of threat. If this were the case, the effects of the low threat condition could have been due to this exposure, and the null results of the high threat condition could be due to the exposure and the high threat content canceling one another out. Once again, the specific role of threat and the moderating effects of conservatism support a system threat interpretation of these results, but future research should investigate humanizing and empathic appeals alongside system threat to examine other potential influences. Humanizing approaches could also be an avenue to circumvent the pathway between threat and prejudice by, for example, overpowering system justifying motives with motives for compassion or pro-social behavior.

These findings are also limited in terms of not considering the intersectional nature of actual gendered lived experiences. These studies captured reactions to an abstraction of transgender people, which does not consider how factors such as race and SES can shape actual reactions to transgender people. This is especially important to consider given the ways that mainstream gender norms center White, middle-class ideals, and differ by different racial groups (Ghavami & Peplau, 2013). For example, Donovan (2011) found that Black women were stereotyped as strong and domineering, traits that differ from stereotypes of White women (which serve as the basis of more general stereotypes of women). These intersections doubtless shape both how

transgender people of color perform their gender, and how others perceive threat and backlash against them. Thus, even if perceiving transgender people as posing less gender threats leads to more positive attitudes, not all transgender people are equally able to assimilate and be “just like other men and women” to avoid threatening gender systems. These considerations are especially important when applying transprejudice research, given that Black and brown transgender people face much higher rates of discrimination and violence than do White transgender people (James et al., 2016).

My samples themselves were also predominantly White and college-educated. Therefore, my findings may not generalize to applications in communities of color or populations with less education/lower SES. Though system justification motives in transprejudice should also be at play for other populations, the specifics of what is and is not threatening, and what self-interest motives are at play that may support or conflict with system justification motives, could vary.

Conclusion

This research begins to clarify the role that system threat and system justification motives play in shaping transprejudice and policy support. By showing that a framing of transgender people as non-threatening to gender systems causally influences transgender attitudes and policy support through decreased threat perceptions, these findings will be able to inform prejudice interventions, policy advocacy, and personal choices in gender performance. This research also provides a key starting point to investigate further the impact of threat framings for transgender people across intersectional identities in both target and perceiver.

APPENDIX A
STUDY 1 SURVEY

SCREENING ITEMS

What is your gender? (man, woman, nonbinary/genderqueer, a gender not listed)

What is your age, in years?

What is your highest level of education? [less than high school, high school diploma or equivalent, some college but no degree, associate's degree, bachelor's degree, higher than bachelor's degree]

Please check any of the following identities you hold:

- Democrat
- Republican
- Religious
- Disabled/a person with a disability
- LGBTQ
- Transgender
- Pet owner
- Car owner
- Home owner

INFORMED CONSENT

COVER STORY

Thank you for participating in this research! Please read the following instruction.

This survey involves two brief, separate studies. You must complete all sections to receive payment. In Study 1, we are interested in how people interact with news articles. You will read a brief excerpt from a news article, then answer some questions about how you understood it.

In Study 2, we're interested in public opinion on a variety of social issues. You'll enter a number to be randomly assigned to share your opinion on one topic.

After both studies are complete, you'll be asked to report some of your demographic information. Please carefully follow all instructions and answer all questions to the best of your ability to receive the bonus.

Study 1 One Instructions:

On the following page is a passage taken from a news article. To make sure you are able to carefully read the passage, you will not be able to continue to the page after until 20 seconds have passed. Afterwards, you will be asked questions about how you understood the article, including some factual information about what the article says. You will not be able to return to the passage, so please take as much time as you need to understand the passage before moving on.

[I understand the instructions.]

MANIPULATION

MANIPULATION AND ATTENTION CHECKS

Please answer the following questions to the best of your abilities.

[*Manipulation only*] How did the article report that the United States is doing relative to other countries?

- Better
- Worse
- I don't know

[*Manipulation only*] According to the article, how do most Americans feel about the condition of the United States?

- Good
- Bad
- I don't know

[*Control only*] How did the article report that people around the world view the Golden Gate Bridge?

- Positively

- Negatively
- I don't know

[*Control only*] According to the article, how many people visit the Golden Gate Bridge each year?

- More than 10 million
- Less than 2 million
- I don't know

[*Logical Statement*] One is more likely to live in the United States than they are to live on the moon. (1 = strongly disagree, 7 = strongly agree)

[*Directed Query*] Where is the Golden Gate Bridge located? For this question, mark "Chicago" and move on.

- New York
- Los Angeles
- Chicago
- Philadelphia

[*Free Response*] Imagine that you are the writer of the previous article. Keeping to the same topic, please write one or two additional sentences that could be added to the article.

Study 1 is now complete; thank you for your work! In Study 2, we will ask you questions about your opinion on a randomly selected social topic. There are no right or wrong answers, so please share your honest opinion.

Please select a number to be randomly assigned a topic on which to share your opinion: [*number drop-down*]

You have been randomly assigned to share your opinion on: transgender issues

To make sure you understand this topic, please read the following definition: "Transgender" refers to people who identify with a gender different from the one they were assigned at birth, for example, on their original birth certificate.

TRANSGENDER ATTITUDES

Please rate your agreement with the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).

(1 = strongly disagree, 7 = strongly agree)

- I would feel comfortable having a transgender person into my home for a meal
- I would be comfortable being in a group of transgender individuals
- I would be uncomfortable if my boss was transgender (R)
- I would feel uncomfortable working closely with a transgender person in my workplace (R)
- If I knew someone was transgender, I would still be open to forming a friendship with that person
- I would feel comfortable if my next-door neighbor was transgender
- If my child brought home a transgender friend, I would be comfortable having that person into my home
- I would be upset if someone I'd known for a long time revealed that they used to be another gender (R)
- If I knew someone was transgender, I would tend to avoid that person (R)
- If a transgender person asked to be my housemate, I would want to decline (R)
- I would be comfortable working for a company that welcomes transgender individuals
- If someone I knew revealed to me that they were transgender, I would probably no longer be as close to that person (R)
- If I found out my doctor was transgender, I would want to seek another doctor (R)
- A person who is not sure about being male or female is mentally ill (R)
- Whether a person is male or female depends upon whether they feel male or female
- If you are born male, nothing you do will change that (R)
- Whether a person is male or female depends strictly on their external sex-parts (R)
- Humanity is only male or female; there is nothing in between (R)
- If a transgender person identifies as female, she should have the right to marry a man
- Although most of humanity is male or female, there are also identities in between
- All adults should identify as either male or female (R)
- A child born with ambiguous sex-parts should be assigned to be either male or female (R)
- A person does not have to be clearly male or female to be normal and healthy
- Transgender individuals are valuable human beings regardless of how I feel about transgenderism

- Transgender individuals should be treated with the same respect and dignity as any other person
- I would find it highly objectionable to see a transgender person being teased or mistreated
- Transgender individuals are human beings with their own struggles, just like the rest of us
- Transgender individuals should have the same access to housing as any other person

Using this scale from 0 to 100, please tell us your personal feelings toward each of the following groups. As you do this task, think of an imaginary thermometer. The warmer or more favorable you feel toward the group, the higher the number you should give it. The colder or less favorable you feel toward the group, the lower the number. If you feel neither warm nor cold toward the group, rate it 50.

- Men, generally
- Women, generally
- Transgender men. This refers to someone who was labeled female at birth and identifies as a man.
- Transgender women. This refers to someone who was labeled male at birth and identifies as a woman.
- Non-binary people. This refers to someone who does not identify as a man or a woman, regardless of what they were labeled at birth.

If you had to guess, what percent of the U.S. population is transgender? _____

DEMOGRAPHIC INFORMATION

Study 2 is now complete! To finish, please answer the next few questions about yourself and your experience with this research.

What is your gender? (man, woman, non-binary/genderqueer, a gender not listed)

Are you transgender? (yes/no/I don't know)

What is your race/ethnicity? Check all that apply. [Black/African American, White/Caucasian, Native American/Alaskan Native, Asian/Pacific Islander, Hispanic/Latin American, Middle Eastern]

Are you a sexual minority (e.g., gay, lesbian, bisexual, pansexual, asexual, queer, or otherwise non-straight/heterosexual)? [yes, I am a sexual minority; no, I am straight/heterosexual; I don't know]

Where on the following scale of political orientation would you place yourself, in general? (1-extremely liberal, 11-extremely conservative)

Where on the following scale of political orientation would you place yourself, in regards to economic issues? (1-extremely economically liberal, 11-extremely economically conservative)

Where on the following scale of political orientation would you place yourself, in regards to social issues? (1-extremely socially liberal, 11-extremely socially conservative)

In your own life, do you personally know a transgender or non-binary person? (yes, no, I don't know)

To what extent have you experienced close interpersonal contact with transgender or non-binary people, for example, as friends, coworkers, family members, or romantic partners? (1-not at all, 7-very much)

Please think about the passage you read in Study 1. How likely would it be to find an article like this written today? (1-not at all likely, 7-extremely likely)

Please write at least one complete sentence sharing your thoughts on this research.

DEBRIEFING

Please create a **SECRET KEY** that we will use to identify your HIT. Please, try to make your key **UNIQUE** and do not use keys like “12345” or “11111” – they are commonly used options and if more than one person provides the same key, we have trouble identifying your HIT and paying you.

Make sure to copy and/or remember this key as you will be asked to provide it when submitting this HIT. Providing the correct key will ensure that your HIT is approved.

Please remember to enter the KEY onto the Mechanical Turk page after submitting this survey. Otherwise, we won't be able to know that you completed the survey, and we won't be able to compensate you.

MY SECRET KEY IS:

APPENDIX B
STUDY 2 SURVEY

SCREENING ITEMS

First, please answer these four questions to check if you qualify for this study.

What is your gender? (man, woman, nonbinary/genderqueer, a gender not listed)

Are you transgender? (yes/no/I don't know)

What is your age, in years?

What is your highest level of education? [less than high school, high school diploma or equivalent, some college but no degree, associate's degree, bachelor's degree, higher than bachelor's degree]

INFORMED CONSENT

Thank you for participating in this research! Please read the following instruction.

This survey consists of two parts. In Part 1, you will read a news article, then answer some questions about how you understood it. In Part 2, you'll share your opinion on a social issue in several different ways.

After both parts are complete, you'll be asked to report some of your demographic information. Please carefully follow all instructions and answer all questions to the best of your ability to receive the bonus.

On the following page is a news article. To make sure you are able to carefully read the passage, you will not be able to continue to the page after until 2 minutes have passed. We are interested in how the different information and arguments presented in the article may help you think about the topic of the article. Afterwards, you will be asked questions about how you understood the article, including some factual information about what the article says. You will not be able to return to the passage, so please take as much time as you need to understand the passage before moving on.

[I understand the instructions.]

MANIPULATION (randomly assigned to one)

MANIPULATION AND ATTENTION CHECKS

Please answer the following questions to the best of your abilities.

[High/Low Threat Conditions]

Which of the following points would Davis and Miller (the transgender activists) be more likely to agree with?

- The transgender movement affects everyone because it seeks to change people's ideas about gender as a whole. [high]

- The transgender movement is only about transgender people’s self-expression and does not affect others. [low]
- I don’t remember.

What did Williams (the gender-critical scholar) say was unfair about the transgender movement?

- It acts as if men and women are basically the same and ignores their unique abilities and experiences. [high threat only]
- It acts as if men and women are meaningfully different and reinforces inequality between genders. [low threat only]
- Nothing—Williams did not say that anything was unfair about the transgender movement. [incorrect]
- I don’t remember.

In one or two complete sentences, please explain one point from the article in support of the transgender movement.

In one or two complete sentences, please explain one point from the article in opposition to the transgender movement.

[Control Condition]

Which of the following points would Davis and Miller (the Bridge District employees) be more likely to agree with?

- The Bridge has lost its status as an international icon.
- The Bridge is an essential part of San Francisco’s infrastructure and culture.
- I don’t remember.

What did Williams (the local historian) say was unfair about the management of the Bridge?

- Focusing on the Bridge as a tourist destination reduces its usefulness as a road and public space for residents. [correct]
- Nothing—Williams did not say that anything was unfair about the management of the Bridge. [incorrect]
- I don’t remember.

In one or two complete sentences, please explain one point from the article in support of tourism at the Golden Gate Bridge.

In one or two complete sentences, please explain one point from the article in opposition to tourism at the Golden Gate Bridge.

[All Conditions]

One is more likely to live in the United States than they are to live on the moon. (1 = strongly disagree, 7 = strongly agree)

Where is the Golden Gate Bridge located? For this question, mark “Chicago” and move on.

- New York
- Los Angeles
- Chicago
- Philadelphia

Part 1 is now complete; thank you for your work! In Part 2, we will ask you questions about your opinion on transgender issues.

To make sure you understand this topic, please read the following definition: “Transgender” refers to people who identify with a gender different from the one they were assigned at birth, for example, on their original birth certificate.

Please share your personal opinion for the following question.

How likely is it that the transgender movement, if successful, would change gender as we know it?

- -3—extremely unlikely
- -2—moderately unlikely
- -1—slightly unlikely
- 0—neither likely nor unlikely
- 1—slightly likely
- 2—moderately likely
- 3—extremely likely

To what extent do transgender people threaten or reinforce the distinction between men and women?

- -3—completely reinforce
- -2—moderately reinforce
- -1—slightly reinforce
- 0—neither threaten nor reinforce
- 1—slightly threaten
- 2—moderately threaten
- 3—completely threaten

TRANSGENDER ATTITUDES

Please rate your agreement with the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).

1. I would feel comfortable having a transgender person into my home for a meal
2. I would be comfortable being in a group of transgender individuals
3. I would be uncomfortable if my boss was transgender (R)
4. I would feel uncomfortable working closely with a transgender person in my workplace (R)
5. If I knew someone was transgender, I would still be open to forming a friendship with that person
6. I would feel comfortable if my next-door neighbor was transgender
7. If my child brought home a transgender friend, I would be comfortable having that person into my home
8. I would be upset if someone I'd known for a long time revealed that they used to be another gender (R)
9. If I knew someone was transgender, I would tend to avoid that person (R)
10. If a transgender person asked to be my housemate, I would want to decline (R)
11. I would feel uncomfortable finding out that I was alone with a transgender person (R)
12. I would be comfortable working for a company that welcomes transgender individuals
13. If someone I knew revealed to me that they were transgender, I would probably no longer be as close to that person (R)
14. If I found out my doctor was transgender, I would want to seek another doctor (R)
15. A person who is not sure about being male or female is mentally ill (R)
16. Whether a person is male or female depends upon whether they feel male or female
17. If you are born male, nothing you do will change that (R)
18. Whether a person is male or female depends strictly on their external sex-parts (R)
19. Humanity is only male or female; there is nothing in between (R)
20. If a transgender person identifies as female, she should have the right to marry a man
21. Although most of humanity is male or female, there are also identities in between
22. All adults should identify as either male or female (R)
23. A child born with ambiguous sex-parts should be assigned to be either male or female (R)
24. A person does not have to be clearly male or female to be normal and healthy
25. Transgender individuals are valuable human beings regardless of how I feel about transgenderism
26. Transgender individuals should be treated with the same respect and dignity as any other person
27. I would find it highly objectionable to see a transgender person being teased or mistreated
28. Transgender individuals are human beings with their own struggles, just like the rest of us
29. Transgender individuals should have the same access to housing as any other person

Using this scale from 0 to 100, please tell us your personal feelings toward each of the following groups. As you do this task, think of an imaginary thermometer. The warmer or more favorable you feel toward the group, the higher the number you should give it. The colder or less favorable you feel toward the group, the lower the number. If you feel neither warm nor cold toward the group, rate it 50.

- Men, generally

- Women, generally
- Transgender men. This refers to someone who was labeled female at birth and identifies as a man.
- Transgender women. This refers to someone who was labeled male at birth and identifies as a woman.
- Non-binary people. This refers to someone who does not identify as a man or a woman, regardless of what they were labeled at birth.

 Now thinking about policies, please rate your agreement with the following policy stances on a scale from 1 (strongly disagree) to 7 (strongly agree).

- Transgender people deserve the same rights and protections as other Americans
- Laws should protect transgender children from bullying in schools
- Legal protections that apply to gay and lesbian people should also apply to transgender people
- Laws to prevent employment discrimination against transgender people
- Congress should pass laws to protect transgender people from job discrimination
- Congress should pass laws to protect transgender people from discrimination in public accommodations like restaurants and movie theaters
- Allowing transgender people to serve openly in the military
- Allowing transgender people to change the sex listed on their driver's license or state ID card
- Allowing transgender people to adopt children
- Allowing transgender people to use public restrooms that are consistent with the way that they express their gender
- Allowing students who have had a sex change to play college sports as a member of their current gender
- Insurance companies should not be required to pay for medical treatment related to transgender health issues
- Allowing Medicare to pay for a transgender person's hormone therapy
- Allowing Medicare to pay for a transgender person's sex change surgery

 If you had to guess, what percent of the U.S. population is transgender? _____

In general, how much does society accept or reject transgender people?

- -3—society completely rejects transgender people
- -2—society moderately rejects transgender people
- -1—society slightly rejects transgender people
- 0—society neither accepts nor rejects transgender people
- 1—society slightly accepts transgender people
- 2—society moderately accepts transgender people

- 3—society completely accepts transgender people

DEMOGRAPHIC INFORMATION

Part 2 is now complete! To finish, please answer the next few questions about yourself and your experience with this research.

What is your race/ethnicity? Check all that apply. [Black/African American, White/Caucasian, Native American/Alaskan Native, Asian/Pacific Islander, Hispanic/Latin American, Middle Eastern]

Are you a sexual minority (e.g., gay, lesbian, bisexual, pansexual, asexual, queer, or otherwise non-straight/heterosexual)? [yes, I am a sexual minority; no, I am straight/heterosexual; I don't know or don't wish to disclose]

Where on the following scale of political orientation would you place yourself, in general? (1-extremely liberal, 11-extremely conservative)

Where on the following scale of political orientation would you place yourself, in regards to economic issues? (1-extremely economically liberal, 11-extremely economically conservative)

Where on the following scale of political orientation would you place yourself, in regards to social issues? (1-extremely socially liberal, 11-extremely socially conservative)

In your own life, do you personally know a transgender or non-binary person? (yes, no, I don't know)

To what extent have you experienced close interpersonal contact with transgender or non-binary people, for example, as friends, coworkers, family members, or romantic partners? (1-not at all, 7-very much)

Please think about the article you read in Part 1. How likely would it be to find an article like this written today? (1-not at all likely, 7-extremely likely)

Please write at least one complete sentence sharing your thoughts on this research.

DEBRIEFING

[I understand that the article I read was fake and does not represent any real individual's opinions.]

Please create a **SECRET KEY** that we will use to identify your HIT. Please, try to make your key **UNIQUE** and do not use keys like “12345” or “11111” – they are commonly used options and if more than one person provides the same key, we have trouble identifying your HIT and paying you.

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Please remember to enter the **KEY** onto the Mechanical Turk page after submitting this survey. Otherwise, we won't be able to know that you completed the survey, and we won't be able to compensate you.

MY SECRET KEY IS:

APPENDIX C
PRELIMINARY STUDY 2 MANIPULATIONS

High Threat Manipulation

U.S.

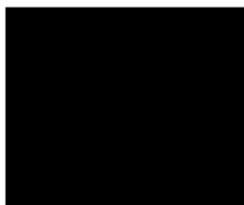
Gender Is Over: Trends in Transgender Population Point to Social Shifts

BY [LESLIE HAMIL](#) ON 1/3/22 AT 9:59 PM EST

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As frequent news coverage makes apparent, more and more people are identifying as transgender. [Recent survey data](#) from Pew Research Center reveals no sign that these numbers are declining, and instead the number of people identifying as transgender climbed to the highest level ever recorded in the past year. People appear to be discarding widely-accepted truths around sex and gender. It is therefore not surprising that a growing number of people are rejecting the gender they were born as altogether. What can explain this trend? Why is gender not the timeless truth that people thought it was?

In most Western cultures, gender roles have been fading for the last 70 years. Some scholars believe that once society relaxed expectations around how men and women should behave, the fundamental basis of gender itself was also weakened. Other scholars have pointed out that most transgender people themselves wish to not simply “switch” their gender category, but to radically change how people feel about gender. As stated by sociologist [Dr. Ben McAllister](#), “The changing norms around gender have opened the floodgates to question the very foundations of sex categories.”



These explanations match the trends in society—due to increased acceptance of transgender people, many people have begun questioning the basis of gender relations and their own place within them. More research will need to be done to follow these social patterns, but there is good reason to think that transgender people have the potential to substantially change the social landscape, and ideas about gender defined by biological sex may entirely become a thing of the past.

Low Threat Manipulation

U.S.

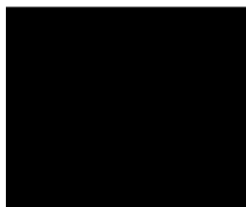
Gender Isn't Over: Trends in Transgender Population Point to Social Stability

BY [LESLIE HAMIL](#) ON 1/3/22 AT 9:59 PM EST

SHARE       

Frequent news coverage may make it seem that more and more people are identifying as transgender. However, [recent survey data](#) from Pew Research Center reveals no sign that these numbers are growing—instead, the small number of people identifying as transgender has leveled out in the past few years. People appear to be unwilling to discard widely-accepted truths around sex and gender. It is therefore not surprising that very few people will ever reject the gender they were born as altogether. What can explain this stability? Why does gender remain a timeless truth despite other social changes?

In most Western cultures, gender roles have remained relatively stable for the last 70 years. Some scholars believe that even when society relaxes expectations around how men and women should behave, the fundamental basis of gender itself remains strong. Other scholars have pointed out that most transgender people themselves simply wish to “switch” their gender category, not to radically change how people feel about gender. As stated by sociologist [Dr. Ben McAllister](#), “Any changing norms around gender are no match for the stable foundations of sex categories.”



These explanations match the trends in society—even with increased acceptance of transgender people, the vast majority of people remain satisfied with current gender relations and their own place within them. More research will need to be done to follow these social patterns, but there is no reason to think that transgender people have the potential to substantially change the social landscape, or that ideas about gender defined by biological sex will ever entirely become a thing of the past.

Control Manipulation

U.S.

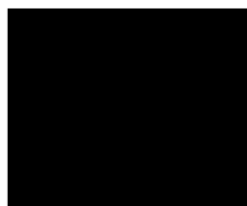
The Golden Gate Bridge: San Francisco Attraction Remains International Destination.

BY **LESLIE HAMIL** ON 1/3/22 AT 9:59 PM EST

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May 28th will mark 85 years that the Golden Gate Bridge has allowed vehicles to cross the entrance of the San Francisco Bay. Since then, according to the Bridge's [official website](#), over 2 trillion vehicles have driven over the Bridge's 4,200-foot long suspension span. Though now only the fifteenth longest bridge of its kind, it held the record from the time of its construction during the Great Depression until 1964. Now, 85 years after its opening, does the Bridge offer more than a necessary roadway? Does it still live up to its reputation as an engineering marvel?

Indeed, the Golden Gate Bridge remains an international icon for its tremendous size and iconic Art Deco styling. In addition to being a key part of San Francisco's infrastructure, the bridge itself is also a major travel destination with more than 10 million visitors yearly. Surprisingly, the originally proposed design was described as "ugly" by the local press. But when construction was completed, San Francisco Chronicle reporter [Will O'Brien](#) stated, "A necklace of surpassing beauty was placed about the lovely throat of San Francisco yesterday."



The Bridge was also revolutionary for more than aesthetic reasons: no state or federal funds were involved in building the Golden Gate Bridge, and its construction cost of \$35 million was paid entirely through bridge tolls. Despite tolls for vehicles, the Bridge is free to pedestrians and cyclists, giving everyone the opportunity to experience and learn about this timeless representation of American ingenuity and resolve. As the 85th anniversary approaches, we can be sure that these visits will not become things of the past.

Pilot Testing Results

In the first round of pilot testing, I recruited 77 cisgender MTurk participants (36 women; $M_{\text{conservatism}} = 4.43, SD = 3.08$), Transgender attitudes were measured using feeling thermometers for transgender women, transgender men, and non-binary people. These were averaged to get an overall transgender rating. A one-way ANOVA revealed that feeling thermometer means did not differ by condition, $F(2,74) = 0.43, p = .65$. Furthermore, the pattern of means ran contrary to expectations, with the high threat condition ($M = 65.09, SD = 27.27$) showing noticeably (though non-significantly) higher feeling thermometer ratings than the low threat ($M = 56.70, SD = 38.23$) or the control ($M = 58.30, SD = 39.15$). This raised concerns that the manipulations were having unintended effects, leading to revisions.

APPENDIX D
REVISED STUDY 2 MANIPULATIONS

High Threat Manipulation

U.S.

Gender Is Over: Aims of Transgender Movement Point to Social Shifts

BY LESLIE HAMIL ON 1/3/22 AT 9:59 PM EST

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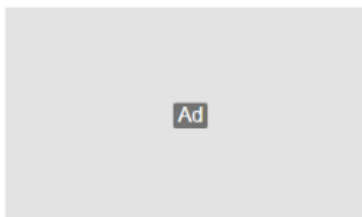
Maybe you've seen other reports about this group, or maybe your favorite show introduced a character from this community. Maybe you're even one of the 42% of U.S. adults who personally knows one of these people. Whatever the case, it's clear: the past few years has seen an increase in awareness of transgender people.

Despite this media coverage, many are still confused about what "transgender" means. Furthermore, people question what the transgender movement seeks to accomplish, as well as why others oppose this movement.

Generally, people use the term "transgender" to talk about people whose internal sense of their gender (their "gender identity") differs from their birth sex. Activists in the transgender movement often campaign for greater acceptance of transgender people and their gender identities, as well as policies that advance these goals. Such policies include legal protection on the basis of gender identity, ensuring access to medical transition, and categorizing people based on their gender identity rather than their birth sex.

Anthony Davis and Rose Miller have both been activists in the transgender movement for over five years. They agreed that despite the increasing awareness of transgender people, there is public uncertainty about the movement's goals.

"There's a lot of confusion around the transgender movement, but for me as a transgender activist, it's not just about letting transgender people live according to their gender identity," Davis said. He then continued with a laugh, "Just like those scary think pieces say, we're trying to change the fundamental basis of gender."



Miller expanded on what being transgender means to her and how that informs her activism.

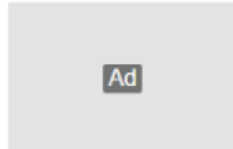
"We all—transgender or not—have an idea of our own gender that we learn from society. Anyone can find this idea changing over time with different life experiences. The transgender movement is about giving people the freedom to express those shifting feelings however they choose."

Miller emphasized that transition gives transgender people the opportunity to alter their appearance according to their fluid experience of gender, which is why access to transition and acceptance of people who transition is so important.

“There’s something radical about this. When we transition to live as a new gender, we don’t live like other men and women. We’re able to understand and imagine gender in new ways,” Miller concluded.

At the same time, activists that disagree with the transgender movement seek to preserve the gender status quo and prevent pro-transgender legislation. The gender-critical scholar [Marie Williams](#) explains the reasons she and many others oppose the transgender movement:

“Transgender people argue that their gender identities should be recognized simply because they feel them. This argument pretends that there is no real difference between men and women besides societal pressures for gender conformity. We simply cannot accept this rejection of the established truth of sex differences.”



Put another way, gender critics like Williams believe that the transgender movement discounts the fact that men and women have different experiences and abilities, and this threatens the just treatment of genders.

“It’s unfair to women,” Williams stressed. She argues that acceptance of transgender ideology will ultimately lead to societal decay by erasing men and women’s unique contributions to society.

Support for transgender identities remains a contentious issue for many, with people falling on all sides of the arguments. Meanwhile, policies continue to be proposed and passed that may either advance or halt the expansion of the transgender movement. Only time will tell what the outcomes of the transgender movement will be, and whether transgender activists or their opponents will succeed in achieving their vision for the future.

Davis offered the following perspective on the transgender movement in conclusion: “The transgender movement is not just about transgender people and our own lives. We’re trying to change other people’s ideas about gender as a whole—even their own genders. I can understand the fears of people who oppose our movement, but I think that those worries are ultimately their own to deal with.”

Low Threat Manipulation

U.S.

Gender Isn't Over: Aims of Transgender Movement Point to Social Stability

BY LESLIE HAMIL ON 1/3/22 AT 9:59 PM EST

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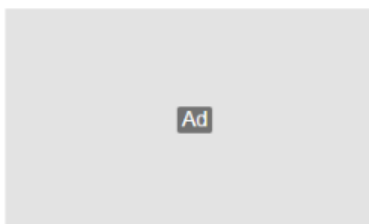
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Despite this media coverage, many are still confused about what "transgender" means. Furthermore, people question what the transgender movement seeks to accomplish, as well as why others oppose this movement.

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Anthony Davis and Rose Miller have both been activists in the transgender movement for over five years. They agreed that despite the increasing awareness of transgender people, there is public uncertainty about the movement's goals.

"There's a lot of confusion around the transgender movement, but for me as a transgender activist, it's really just about letting transgender people live according to their gender identity," Davis said. He then continued with a laugh, "Despite what those scary think pieces say, we're not trying to change the fundamental basis of gender."



Miller expanded on what being transgender means to her and how that informs her activism.

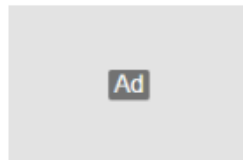
"We all—transgender or not—have an idea of our own gender that's wired into us from birth. No amount of different life experiences can change this for anyone. The transgender movement is about giving people the freedom to express that inherent part of themselves."

Miller emphasized that transition gives transgender people the opportunity to bring their appearance in line with their constant sense of their own gender, which is why access to transition and acceptance of people who transition is so important.

“There’s nothing radical about this. When we transition to live as the gender we’ve always felt, we live just like other men and women. We understand our gender in the same way as everyone else,” Miller concluded.

At the same time, activists that disagree with the transgender movement seek to advance their own ideas of gender and pass anti-transgender legislation. The gender-critical scholar Marie Williams explains the reasons she and many others oppose the transgender movement:

“Transgender people argue that their gender identities should be recognized simply because they feel them. This argument pretends that there is some real difference between men and women, besides societal pressures for gender conformity. We simply cannot accept this clinging to antiquated notions of sex differences.”



Put another way, gender critics like Williams believe that the transgender movement strengthens the myth that men and women have different experiences and abilities, and this reinforces the unjust treatment of genders.

“It’s unfair to women,” Williams stressed. She argues that acceptance of transgender ideology will ultimately lead to societal decay by preventing progress on issues of gender inequality in society.

Support for transgender identities remains a contentious issue for many, with people falling on all sides of the arguments. Meanwhile, policies continue to be proposed and passed that may either advance or halt the expansion of the transgender movement. Only time will tell what the outcomes of the transgender movement will be, and whether transgender activists or their opponents will succeed in achieving their vision for the future.

Davis offered the following perspective on the transgender movement in conclusion: “The transgender movement is about transgender people and our own lives. We’re not trying to change other people’s ideas about gender as a whole—certainly not their own genders. I can understand the fears of people who oppose our movement, but I think that those worries are ultimately their own to deal with.”

Control Manipulation

U.S.

The Golden Gate Bridge: San Francisco Attraction Remains International Destination

BY LESLIE HAMIL ON 1/3/22 AT 9:59 PM EST



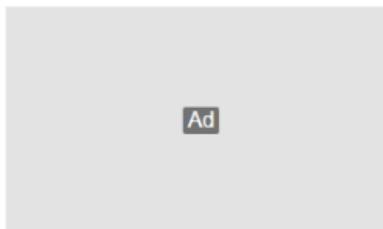
Maybe you've seen other reports about this famous construction, or maybe your favorite show features it as a scenic location. Maybe you're even one of the 10 million people each year who pay this place a visit. Whatever the case, it's clear: San Francisco's Golden Gate Bridge remains an international icon.

Despite this media coverage, many still know very little about the history of the Golden Gate Bridge. Furthermore, people question what purpose the Bridge serves, as well as whether the costs are worth the benefits.

One misconception is that the Bridge itself is "golden". Inspired by the original primer used during construction, the Bridge is painted International Orange to blend well with the nearby hills and contrast with the ocean and sky. The name instead originates from the Golden Gate Strait, the entrance to the San Francisco Bay from the Pacific Ocean that the Bridge crosses. Though now only the fifteenth longest bridge of its kind, it remained the longest from the time of its construction during the Great Depression until 1964.

Anthony Davis and Rose Miller have both been employees with the Golden Gate Bridge District for over five years. They agreed that despite the general familiarity with the Bridge, there is public uncertainty about the Bridge's history and utility.

"People have an image of the sweeping cables and Art Deco styling, but for me, it's really about the history and culture that it preserves for San Francisco," Davis said. He then continued with a smile, "Despite the attention the Bridge gets in popular culture, there's even more nuance and history under the surface."



Miller expanded on what makes the Bridge unique to her and how that informs her work.

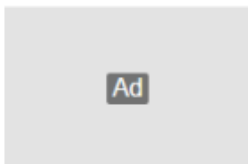
"The Bridge is an essential part of San Francisco's infrastructure. In the nearly 85 years it has been open to vehicles, over 2 trillion have driven across the Bridge's 4,200-foot long suspension span. These numbers really frame the important role the Bridge plays for everyone around."

Miller emphasized, however, that the Golden Gate Bridge offers more than a necessary roadway between San Francisco and Marin County, and it still lives up to the reputation as an engineering marvel it achieved when first built.

“There’s something incredible about the impact the Bridge has on visitors. Our work isn’t just about bringing tourism to the city, but about letting people from all over the world experience this wonder,” Miller concluded.

At the same time, some locals complain about the Bridge being managed as a tourist destination rather than as part of the local infrastructure. Local historian Marie Williams explains the reasons she and many others want to see changes from the Bridge District:

“There’s a history of overlooking the concerns of people who actually use the Bridge, from issues with traffic barriers and delays in safety net construction, to the current issue with design choices creating wind noise that affects nearby residential areas. Meanwhile, tolls are raised every year to cover the Bridge’s deficits.”



Put another way, locals like Williams believe that focusing on the aesthetic aspects of the Bridge to bolster it as a source of tourism may lead the Bridge District to disregard negative impacts on local residents.

“It’s unfair to San Franciscans,” Williams stressed. She argues that overemphasis on the Bridge as a tourist destination reduces its functionality as a roadway and public space for residents.

With a structure as renowned and essential as the Golden Gate Bridge, it is unavoidable that people will have differing ideas on the best approaches to manage it. Meanwhile, May 28th will mark 85 years that the Golden Gate Bridge has allowed vehicles to cross the entrance of the San Francisco Bay. Only time will tell what the future of the Bridge will hold, but its remaining importance seems clear.

Davis offered the following perspective on the Bridge in conclusion: “The Golden Gate Bridge is not just about San Francisco. The Bridge is an international icon and a timeless representation of American ingenuity and resolve. The Bridge District balances the concerns of our local community with preserving this landmark for the world, and there is always more work to be done to ensure the best for everyone who loves and relies on the Bridge.”

Pilot Testing Results

For the second round of pilot testing, I recruited 94 cisgender MTurk participants (55 women; $M_{\text{conservatism}} = 4.49$, $SD = 2.79$). Transgender attitudes were measured with five items from the TABS interpersonal comfort subscale. Means are displayed in the table below. A one-way MANOVA indicated that conditions differed on distinctiveness threat, $F(2,91) = 4.57$, $p = .01$, $\eta^2 = .09$. A Tukey post-hoc test showed that the high threat condition was significantly higher than the low threat ($p = .04$) and control ($p = .02$) conditions, but the low threat and control did not differ ($p = .99$). This test did not indicate a difference between conditions for TABS, $F(2,91) = 0.87$, $p = .42$, $\eta^2 = .02$, but means followed the predicted pattern.

To check for ordering effects of the distinctiveness threat measure, participants were counterbalanced to respond to the threat before or after the TABS. Independent samples t-tests indicated no difference in counterbalancing for distinctiveness threat, $t(92) = 0.62$, $p = .54$, or for TABS, $t(92) = 0.03$, $p = .98$.

Dependent Variable	Condition			Counterbalancing Effects	
	High Threat	Low Threat	Control	Threat First	TABS First
	<i>M (SD)</i>				
Distinctiveness Threat	0.97 (1.21)	0.17 (1.14)	0.13 (1.41)	0.52 (1.19)	0.35 (1.42)
TABS	5.09 (1.67)	5.61 (1.12)	5.23 (1.87)	5.30 (1.54)	5.30 (1.67)

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