

THE PSYCHOLOGICAL IMPACT OF PERCEIVING THE GENDER STATUS QUO AS  
LEGITIMATE

BY

JULIA SPIELMANN

THESIS

Submitted in partial fulfillment of the requirements  
for the degree of Master of Science in Psychology  
in the Graduate College of the  
University of Illinois at Urbana-Champaign, 2018

Urbana, Illinois

Master's Committee:

Assistant Professor Chadly Stern, Advisor  
Assistant Professor Joey Cheng

## ABSTRACT

Can people benefit psychologically from thinking that the status quo is legitimate?

Across three samples, we examined whether and why viewing current relations among men and women as legitimate provides people with a psychological boost. In all samples, we found that believing that current relations among men and women are fair and just (e.g., thinking that society is set up that men and women usually get what they deserve) was associated with greater life satisfaction and self-esteem. We found that perceiving oneself as less likely to be discriminated against in overt ways (e.g., being denied a job for unfair reasons) and subtle ways (e.g., being avoided in interactions) partially explained these relationships. Importantly, we found that these associations did not differ between men and women. Overall, these findings suggest that belief systems supporting the status quo can provide a palliative psychological effect through impacting people's beliefs about whether they are targets of discrimination, and that this can occur for members of both advantaged and disadvantaged groups. These findings further contribute to understanding why people might support the status quo and denounce diversity in different settings even if it disadvantages them.

*Keywords: gender system justification, discrimination, life satisfaction, self-esteem*

## **ACKNOWLEDGEMENTS**

Firstly, I would like to express my sincere gratitude to my advisor, Dr. Chadly Stern, for his continuous support and guidance throughout the completion of my master's thesis project. His dedication to the profession, his enthusiasm for the work, and the high standards he sets for himself and those around him have been a constant motivator for me. I look forward to continue working with him and to all that he has yet to teach me. I wish to thank my other thesis committee member, Dr. Joey Cheng, for her valuable feedback. I would also like to thank Alice for her enormous patience revising drafts of the manuscripts.

Finally, my deepest gratefulness to my parents and sister for their love and support. They have taught me the value of hard work, dedication, and independence. I would like to give special thanks to my boyfriend, Tony, for supporting all my decisions and for celebrating with me my every achievement. I could not have done it without you.

## TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION .....	1
CHAPTER 2: STUDY 1 – MECHANICAL TURK SAMPLE .....	11
CHAPTER 3: STUDY 2 – STUDENT SAMPLE .....	16
CHAPTER 4: STUDY 3 – QUALTRICS SAMPLE.....	20
CHAPTER 5: STUDY 1-3 – COMBINED DATA SETS .....	24
CHAPTER 6: GENERAL DISCUSSION .....	26
TABLES .....	32
FIGURES .....	36
REFERENCES .....	40
APPENDIX A: PRE-REGISTRATION REPORT.....	49
APPENDIX B: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER.....	50

## CHAPTER 1: INTRODUCTION

“I think [feminism] has made women unhappy... it's ...to make them believe that we live in a discriminatory and unjust society, and that they should look to [the] government to solve their problems,” explains Phylis Schlafly when asked how feminism has affected the American life in an NPR interview in 2014 (Martin, 2014). The conservative activist, who became known for successfully campaigning to stop the Equal Rights Amendment and ensuring it does not pass in the future, emphasized the possibility that challenging the current gender status quo makes people unhappy.

Previous research has examined factors and mechanisms linking people's support for the societal status quo to feelings of happiness (Jost & Hunyady, 2003, 2005; Jost & Thompson, 2000; Napier & Jost, 2008). However, researchers have yet to examine the factors as well as the underlying mechanism that link support for the *gender* system, in particular, to an individual's subjective well-being. Indeed, the ubiquitous use of gender as a simplifying organizing schema in society (Bem 1993; Eagly & Wood, 1999) further reinforces the current state of gender relations and sex role differences within society (Bem, 1981, 1993). Given the omnipresence of gender within society, we explore psychological consequences experienced by men and women who endorse beliefs in hierarchical gender relations. The justification of the system occurs even though current gender relations remain unbalanced (England, 2006, 2010), as wage disparities, workplace discrimination and sexual harassment cases continue to persist (Bobbitt-Zeher, 2011; Glick & Fiske, 2007; Gorman, 2005). Thus, understanding how perceptions of the gender status quo relate to subjective well-being in men and women can further shed light on how people improve or perpetuate society.

We examined three main questions in the present research. First, we examined whether support for the gender status quo predicts feelings of subjective well-being. Second, we investigated whether perceptions of discrimination help to explain the relationship between status quo support and subjective well-being. Third, we addressed whether the relationship between support for the gender status quo and subjective well-being occurs to a similar extent for men and women.

### **Status-Quo Support and Subjective Well-Being**

Why do people support the gender status quo? In particular, does the endorsement of the gender status quo serve a palliative function for men and women? According to system justification theory, people are motivated to endorse the belief that the current societal system is balanced, fair, and legitimate (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004). To justify the system people engage in different cognitive processes, such as stereotyping and rationalization (Jost & Banaji, 1994; Jost & Burgess, 2000; Kay & Jost, 2003). Moreover, people endorse different system-justifying ideologies, such as political conservatism, right-wing authoritarianism, or meritocracy (i.e., the idea that the status hierarchy is based on merit; Jost & Burgess, 2000; Jost & Hunyady, 2005; Jost, Pelham, Sheldon, & Ni Sullivan, 2003). Endorsement of the system as legitimate (e.g., rationalizing the system and prevailing inequalities) holds true even if it is seemingly at odds with people's personal or social group interests (Jost & Burgess, 2000; Jost et al., 2003; Jost & Thompson, 2000).

Moreover, the justification and perceived fairness of the system enable people to derive personal psychological benefits (Jost & Hunyady, 2005). Individual benefits from endorsing the current state of societal relations include increased coping and decreased stress reactivity (Dalbert, 2001; Lucas, Alexander, Firestone, & Lebreton, 2007; Tomaka & Blascovich, 1994),

maintaining of positive affect and reduction of negative affect (Jost & Hunyady, 2003; Jost et al., 2003; Napier & Jost, 2008), reduced moral outrage (Wakslak, Jost, Tyler, & Chen, 2007), and greater self-esteem and subjective well-being (Jost & Thompson, 2000). This research emphasizes the possibility that the belief in the system as “fair” and “legitimate” contributes to a person’s happiness, and more specifically their subjective well-being.

Although there is a growing body of research examining a link between support for the status quo and subjective well-being, the size and specificity of the relationship have been challenged due to inconsistent findings (Brandt, 2013; Onraet, Van Hiel, & Dhont, 2013). In support of the relationship, prior cross-sectional research highlights a unique link between system-justifying beliefs and its palliative functions for the individual (Rankin, Jost, & Wakslak, 2009). For example, people’s beliefs that the status quo is fair and just (i.e., system justification) were related to several psychological benefits, including heightened positive affect and greater life satisfaction. In a similar vein, Napier and Jost (2008) investigated the link between political ideology and subjective well-being. Rooted in the endorsement of a political ideology of rationalization of social institutions and inequality, conservatives reported greater levels of happiness compared to liberals. However, other studies concluded that the positive relation between rationalizations of social relations and subjective well-being is weak, non-existent, or in the opposite direction (Butler, 2000; Peterson & Duncan, 2007; Van Hiel, Mervielde, & De Fruyt, 2004; Van Hiel & Kossowska, 2006). In an attempt to reconcile these heterogeneous findings, a meta-analytic review examined the direction of the link between endorsement of the system and individual’s subjective well-being across 97 samples (Onraet et al., 2013). Studies included in the sample used different measures of system justification, such as right-wing authoritarianism, social dominance orientation (i.e., the tendency to view hierarchical structures

between social groups favorably), as well as different measures of subjective well-being (e.g., positive affect, negative affect, life satisfaction). A weak to non-significant average relation between right-wing attitudes and overall subjective well-being was obtained (Onraet et al., 2013). However, effect sizes were averaged across studies using different measurements of subjective well-being (e.g., life-satisfaction, self-esteem, positive and negative affect) and examining different domains of system justification (e.g., right-wing attitudes, social dominance orientation). Generalization across different assessed domains could obscure the possibility that the relation of system justification to subjective well-being is domain-specific. For instance, gender, due to its omnipresence in society, constitutes a domain to consider. Thus, we investigate the strength of the relation between gender system justification and subjective well-being among men and women.

Researchers have argued that gender is one of the most important organizing principles both historically, as well as in modern society, and that gender is ubiquitous in all cultures (Bem, 1981, 1993; Eagly & Wood, 1999; Haslam, Rothschild, & Ernst, 2000; Stern & Rule, 2017). For example, Gender Schema Theory states that gender-based schematic processing helps to uphold division of men and women into social roles based on gender for the sake of simplicity (Bem, 1981). Therefore, gender is central within societal structures, but also readily available in person perception as an organizing theme and social category (Banaji & Hardin, 1996; Macrae & Bodenhausen, 2000). Given the salience of gender within society, whether people support or oppose the gender status quo might be especially impactful on their subjective well-being. Thus, we hypothesized that support of the gender status quo is positively related to subjective well-being.

### **Mechanisms Linking Status Quo Support and Subjective Well-Being**



Underlying mechanisms linking system justification beliefs to subjective well-being have been investigated (Dalbert, 2001; Jost et al., 2003; Jost & Hunyady, 2003, 2005; Jost & Thompson, 2000; Lucas et al., 2007; Napier & Jost, 2008). According to system justification theory, existing inequality constitutes a possible threat to people's belief that the status quo is fair and legitimate (Jost & Banaji, 1994). In an effort to reduce the anxiety and uncertainty created by perceiving this threat, people are motivated to believe that the system is fair and just, which ultimately positively impacts the individuals' subjective well-being (Jost & Hunyady, 2003, 2005; Jost et al., 2003). One possible explanation for this relation are general ideological mechanisms, such as endorsing a meritocratic ideology (Jost et al., 2003; McCoy & Major, 2007; Napier & Jost, 2008). Findings suggest that reports of greater life satisfaction among conservatives depend on the individual's endorsement of the idea that the status hierarchy is based on merit (i.e., meritocratic ideology) and the rationalization of inequality (Napier & Jost, 2008). However, the link between political ideology and happiness might be driven by other societal structures, such as higher SES (i.e., socioeconomic status), according to Jetten and colleagues (2013). The authors argue that people's higher SES and better social network development function as a palliative mechanism linking system justification to subjective well-being. Results suggest that conservatives' higher SES allows them to have greater opportunities to develop social networks, which leads them to report greater life satisfaction. Taken together, these findings highlight that potentially different mechanisms underlie the link of system justification to subjective well-being. However, no research to the best of our knowledge has yet examined how people's perception of their discriminatory experiences function as an explanation of the system justification and subjective well-being link. Specifically, legitimization of the status quo results in people's biases in recognizing when the system is not fair and just (Jost et

al., 2003). In other words, system justification through rationalization and stereotyping might lead people to be biased in perceiving discriminatory experiences, which would also buffer their subjective well-being.

In line with the system justification perspective (Jost & Banaji, 1994; Jost et al., 2003), it is theorized that as people face societal uncertainty and inequality, they become motivated to believe that men and women are treated fairly and justly within society, which subsequently influences their perceptions of discrimination (Major, Quinton, & McCoy, 2002; McCoy & Major, 2007). Prior research has linked legitimizing ideologies to perception of discrimination (Major et al., 2002). Specifically, findings indicate that people endorsing system-justifying beliefs were less likely to perceive negative outcomes from outgroup members as discrimination. Thus, perceiving discrimination requires the recognition that the societal system is not fair and just (Major et al., 2002; Jost & Banaji, 1994; Jost & Hunyady, 2003). In other words, greater endorsement of the system as fair and legitimate is related to decreased perceptions of discrimination (McCoy & Major, 2007). Given this evidence, we propose that people who are strongly motivated to justify the gender system in turn report less experiences of discrimination.

Discriminatory behavior can be subtle (Dovidio, Gaertner, Kawakami, & Hodson, 2002; Gaertner & Dovidio, 1986; McConahay, 1986) or overt (Glick & Fiske, 1997; Hebl, Bigazzi Foster, Mannix, & Dovidio, 2002; Virtanen & Huddy, 1998). Perception of subtle differential treatment (e.g., nonverbal) is often characterized by attributional ambiguity (Crocker & Major, 1989; Major & Crocker, 1993; Sue et al., 2007; Tao, Owen, & Drinane, 2017). The target of discrimination is faced with the difficulty of attributing differential treatment and outcomes to either their own group membership or their own merit (Sue et al., 2007; Tao, Owen, & Drinane, 2017). Thus, perception of subtle discrimination is ambiguous and susceptible to people's own

interpretation. In contrast, overt discrimination, such as blatant dehumanization (Kteily & Bruneau, 2017; Kteily, Bruneau, Waytz, & Cotterill, 2015) and hostile sexism (Glick & Fiske, 2001), is less ambiguous. Forms of overt discrimination potentially have a bigger and more immediate impact on people's life (e.g., hostility; Kteily & Bruneau, 2017). Thus, motivation to deny experiences of overt discrimination might be high. Taken together, subtle discrimination and overt discrimination are susceptible to people's motivated interpretation. People high in system justification see the world as fair and just, which might result in a biased perception of discriminatory behavior. Therefore, we expected that system justifying beliefs would relate to both perceptions of subtle and overt discrimination.

Research consistently finds that experiences and perceptions of discrimination, stereotyping, or prejudice can have negative implications for the targeted individual (Major & Crocker, 1993; Major et al., 2002; Paradies, 2006; Pascoe & Richman, 2009). Specifically, perceptions of discrimination predict decreased self-esteem and psychological well-being (Crocker, Cornwell, & Major, 1993), as well as increased anxiety, depression, and decreased life satisfaction (Paradies, 2006; Williams & Mohammed, 2009). Importantly, meta-analytic reviews find quantitative support for the robust relation between greater perception of overt and subtle discrimination and negative effects on mental and physical health (Jones, Peddie, Gilrane, King, & Gray, 2013; Pascoe & Richman, 2009). Across studies, a negative correlation between perceived discrimination and psychological health was found (Pascoe & Richman, 2009). Thus, we hypothesized that people's perception of overt and subtle discrimination negatively relate to their psychological well-being. We suggest that perceptions of overt and subtle discrimination would in part account for the relationship between gender system justification and subjective well-being.

## **Does Status Moderate the Relationship Between Status Quo Support and Subjective Well-Being?**

Do high-status and low-status groups differentially benefit from perceiving society as fair and just? Prior research outlines three perspectives on how system justification among low-status and high-status groups will relate to subjective well-being (Brandt, 2013; Jost & Thompson, 2000; Vargas-Salfate, 2017). One perspective suggests that system justification will more strongly relate to subjective well-being among high-status groups compared to low-status groups (Jost & Thompson, 2000; Quinn & Crocker, 1999; Rankin et al., 2009). For example, Jost and Thompson (2000) found that for members of a disadvantaged group (i.e., African Americans), system justification beliefs were related to decreased self-esteem and increased neuroticism, but for members of the advantaged group (i.e., European Americans) the reverse pattern was found. Similarly, Rankin and colleagues (2009) examined the relationship between system justification and subjective well-being among low-income European and African Americans. The palliative effect of system-justifying beliefs was found for European Americans, but for African Americans system justification was only weakly negatively related to subjective well-being. These findings suggest that especially the high-status group may benefit from endorsing the current system.

The second perspective proposes that low-status group members (compared to high-status groups) more strongly benefit from supporting the status quo (Jost et al., 2003; Napier & Jost, 2008; Brandt, Henry, & Wetherell, 2015). For low-status individuals (i.e., stigmatized individuals), system justification provides unchanging societal values and norms (Brandt et al, 2015). This can satisfy needs for order, structure, and certainty (Jost & Hunyady, 2005), as well as buffer from threats towards the personal sense of social worth (Brandt et al, 2015; Brandt &

Henry, 2012). Brandt and colleagues (2015) investigated the link between system justification (i.e., authoritarianism) and life satisfaction among low-status and high-status individuals. Results revealed that authoritarianism and stigma interacted to predict individuals' life satisfaction, such that authoritarianism was positively related to life satisfaction for members of low-status groups, but unrelated for high-status groups. Related research indicated that system justification beliefs (i.e., hostile sexism) was positively related to life satisfaction, and that this relationship was stronger among individuals with low SES compared to high SES (Vargas-Salfate, 2017). Taken together, these results lend support to the idea that low-status groups can derive more benefits from system justification than high-status groups.

The third perspective is that members of both low and high-status groups could derive equal benefits from system justifying beliefs (Jost et al., 2003). For instance, research has found that the link between perceived discrimination and subjective well-being is robust among all included ethnicities, both genders, and across different types of psychological health (Pascoe & Richman, 2009). This suggests that also the mechanism linking system justification to subjective well-being is similar for men and women. Similarly, Jost and colleagues (2003) found that system justification was related to increased economic satisfaction for both European Americans and African Americans no matter their SES. However, this result might be specific to the examined domain, namely economy, which affects all members of society. Thus, the findings hint at the possibility that the system justification to subjective well-being link for both low-status and high-status groups might be domain specific. In the current research, we aim to investigate support for the status quo in a domain we examine (i.e., gender) that matches the groups (i.e., women and men) being examined. Because gender is a salient and all-encompassing organizing scheme within society (Bem, 1981, 1993; Eagly & Wood, 1999), most people,

regardless of gender, might be motivated to believe that the gender status quo is legitimate and subsequently benefit from those beliefs. In other words, the relationship between gender system justification and subjective well-being might not differ between men and women.

### **The Present Research**

Across three studies we examined: (a) whether support for the gender status quo predicts greater subjective well-being, (b) whether perceptions of discrimination in part account for this relationship, and (c) whether these relationships vary between men and women. In Study 1, we conduct an initial test of these relationships. In Studies 2 and 3, we replicate these relationships and rule out the alternative explanations of group identification and social dominance orientation. We use different samples across all studies. Lastly, we conduct an integrated data analysis to examine whether the size of relationships varies across samples.

## CHAPTER 2: STUDY 1 – MECHANICAL TURK SAMPLE

### Methods

#### Participants

533 participants (288 women, 245 men;  $M_{age} = 37.01$ ; range = 18-75) were recruited from the Mechanical Turk Web site. Sixty-five additional participants completed the study, but were excluded from analyses for either failing an attention check ( $n = 62$ ) or identifying their gender as “other” ( $n = 3$ ). A post-hoc power analysis revealed that we possessed at least 80% power to detect all observed effects in this study. All power analyses were conducted using G Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007).

#### Procedure

Participants were provided with an external link on the Mechanical Turk website that took them to the study, which was programmed using Qualtrics online-survey software. After providing consent, participants completed a demographics questionnaire in which they reported their gender and other demographic information. Then, participants read the study introduction and were informed that the study concerned people’s experiences and feelings in different domains (e.g., discrimination). Participants were reminded of the confidentiality and asked to provide honest responses. At the end, participants completed an attention check<sup>1</sup> and were debriefed.

#### Measures

---

<sup>1</sup> At the end of the study, participants completed an attention check, in which they read the following passage: “People vary in the amount they pay attention to these kinds of surveys. Some take them seriously and read each question, whereas others go very quickly and barely read the questions at all. If you have read this question carefully, please write the word yes in the blank box below labeled other. There is no need for you to respond to the scale below.” Below the information was a 7-point scale and response box. We excluded participants who did not correctly follow the instructions.

Unless otherwise noted, all items were measured on 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) scales.

**Overt discrimination.** Participants first responded to four items regarding personal experiences of overt discrimination. The items were generated by the researchers and combined into a composite score ( $\alpha = .79$ ). Sample items include “I feel that I have sometimes been actively discriminated against” and “I have not been hired for a job for unfair reasons”.

**Subtle discrimination.** Next, participants responded to four items regarding personal experiences of subtle discrimination. Similar to above, the items were generated by the researchers and combined into one composite score ( $\alpha = .89$ ). Sample items include “I have sometimes been treated with less respect than other people” and “People's nonverbal behavior (for example: eye contact or hand gestures) sometimes is less friendly toward me than to others.”

**Life satisfaction.** Participants’ global life satisfaction was measured via the 5-item “Satisfactions with Life Scale” ( $\alpha = .93$ ; Diener, Emmons, Larsen, Griffin, 1985). Items were combined into a composite score. A sample item includes “I am satisfied with my life.”

**Self-esteem.** Participants’ global self-worth was measured via the 10-item Rosenberg (1965) “Self-Esteem Scale” ( $\alpha = .93$ ). Items were combined into a composite score. A sample item includes “I feel that I am a person of worth.”

**Gender system justification.** Lastly, participants’ support for current relations between men and women was assessed with the eight-item gender system justification scale ( $\alpha = .85$ ; Jost & Kay, 2005). Items were combined into a composite score. A sample item includes “In general, relations between men and women are fair.”

## Results

### Does gender system justification predict life satisfaction and self-esteem?



We conducted multiple regression models that included gender system justification (grand mean centered), gender (effect coded as men = 1 and women = -1), and their interaction as predictors. We conducted separate models with life satisfaction and self-esteem as outcome variables. Results are presented in Tables 1 and 2. Gender system justification significantly predicted life satisfaction and self-esteem. People who more strongly embraced the idea that current relations between men and women are legitimate had higher satisfaction with life and greater self-esteem. The main effect of gender was not significant in predicting life satisfaction or self-esteem. The gender system justification  $\times$  gender interaction did not significantly predict life satisfaction or self-esteem. These findings indicate that gender system justification predicted greater subjective well-being, and did so to a similar extent for men and women.

#### **Does gender system justification predict perceptions of discrimination?**

We conducted multiple regression models that included gender system justification (grand mean centered), gender (effect coded as men = 1 and women = -1), and their interaction as predictors. We conducted separate models with subtle and overt discrimination as outcome variables. Findings are presented in Tables 3 and 4. Gender system justification significantly predicted perceptions of both subtle and overt discrimination. People who more strongly embraced the idea that current relations between men and women are legitimate reported experiencing less subtle and overt discrimination. The main effect of gender was a significant predictor for both subtle and overt discrimination. Men reported more experiences of overt and subtle discrimination than did women. The gender system justification  $\times$  gender interaction did not significantly predict subtle and overt discrimination. These findings indicate that gender system justification predicted fewer feelings of having been discriminated against, and did so to a similar extent for men and women.

## **Mediation Model**

We next examined whether perceptions of discrimination explain in part why gender system justification shapes subjective well-being. To test this question, we constructed a path model using Mplus Version 8 (Muthen & Muthen, 1998-2017) in which gender system justification predicted life satisfaction and self-esteem through overt and subtle perceptions of discrimination. We also included participant sex as a covariate. We tested for significant mediation through calculating bootstrapped indirect effects with 5,000 resamples. We consider an indirect effect to be significant if the 95% confidence interval does not contain zero (Hayes, 2013).

The indirect effect of gender system justification predicting life satisfaction through overt discrimination was significant, 95% CI [.002, .06], but the indirect effect through subtle discrimination was not, 95% CI [-.02, .04]. The effects are shown in Figure 1. The indirect effect of gender system justification predicting self-esteem through overt discrimination was significant, 95% CI [.002, .05], but the indirect effect through subtle discrimination was not, 95% CI [-.004, .06]. Thus, reduced feelings of overt discrimination in part explained why greater gender system justification was associated with higher life satisfaction and self-esteem. Perceptions of subtle discrimination did not play an explanatory role.

## **Summary**

The results of Study 1 provided initial evidence for a relation between gender system justification and people's life satisfaction and self-esteem. Specifically, participants who more strongly endorsed current relations between men and women as fair and just reported higher life satisfaction and greater self-esteem. These results did not differ between female and male participants. Participants, who more strongly believed that the current relations between men and

women were legitimate reported less experiences of overt and subtle discrimination. Yet, male participants reported more experiences of overt and subtle discrimination than did women. Perceptions of overt discrimination in part explained the relationship between gender system justification and life satisfaction and self-esteem. We replicated and extended these findings more in Study 2.

### CHAPTER 3: STUDY 2 – STUDENT SAMPLE

We had two main goals in Study 2. First, we sought to replicate results of Study 1 using a sufficiently powered sample from a different population. Second, we sought to provide greater support that gender system justification, rather than other theoretically related constructs, guides feelings of subjective well-being. Specifically, strongly identifying with one's social groups has the potential to buffer people's self-esteem and provide them with a broader sense of subjective well-being, especially among members of marginalized groups (Crocker & Major, 1989). As such, we sought to examine the extent to which supporting the gender status quo shapes subjective well-being above and beyond group identification.

#### Methods

##### Participants

340 student participants (195 women, 145 men;  $M_{age} = 19.84$ ; range = 18-28) completed the study for course credit. Fifty-three additional participants completed the study, but were excluded from analyses for either failing an attention check ( $n = 47$ ) or identifying their gender as "other" ( $n = 6$ ). We collected as many participants as possible in one semester and a post-hoc power analysis revealed that this sample size gave us 80% power to detect an effect size of  $r = .152$ .

##### Procedure

Participants were provided with the external link that directed them to the study, which was programmed using Qualtrics programming software.

**Measures.** Participants reported their gender system justification ( $\alpha = .83$ ), life-satisfaction ( $\alpha = .85$ ), self-esteem ( $\alpha = .91$ ), perceptions of overt discrimination ( $\alpha = .72$ ), and perceptions of subtle discrimination ( $\alpha = .85$ ) in the same manner as in Study 1.

**Group identification.** Participants' identification with their own group was assessed using a single item measure (Postmes, Haslam, & Jans, 2013). The item was presented as "I identify with being [...]", with the participant's self-reported group memberships reported at the end (e.g., White female). Participants provided their response on a 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) scale.

## Results

### **Does gender system justification predict life satisfaction and self-esteem?**

We conducted the same models as in Study 1. Findings are reported in Tables 1 and 2. The main effect of gender system justification was a significant predictor of life satisfaction and self-esteem. People who more strongly believe in the legitimacy of current relations between men and women reported higher satisfaction with life and greater self-esteem. Gender did not significantly predict life satisfaction or self-esteem. The gender system justification  $\times$  gender interaction did not significantly predict either outcome. These findings replicate Study 1.

### **Does gender system justification predict perceptions of discrimination?**

We conducted the same models as in Study 1. Results are reported in Tables 3 and 4. The main effect of gender system justification was significant in predicting perceptions of both subtle and overt discrimination. People who more strongly embraced the idea that current relations between men and women are legitimate reported experiencing less subtle and overt discrimination. Gender was a significant predictor for overt discrimination. Men reported more experiences of overt discrimination than did women. No main effect of gender was found for subtle discrimination. The gender system justification  $\times$  gender interaction did not significantly predict subtle or overt discrimination. These findings indicate that gender system justification

predicted fewer feelings of having been discriminated against and did so to a similar extent for men and women.

### **Ruling out social identification as an alternative explanation.**

We recomputed all models while including the main effect of group identification (grand mean centered), and the interaction between group identification and gender. Importantly, all significant main effects of gender system justification remained significant ( $p < .05$ ), except on subtle discrimination, which became marginally significant ( $B = -.15$ ,  $SE = .08$ ,  $t(335) = -1.90$ ,  $p = .072$ ). We found a significant main effect of group identification on life satisfaction ( $B = .12$ ,  $SE = .05$ ,  $t(335) = 2.44$ ,  $p = .02$ ). Participants strongly identifying with their group reported more life satisfaction. All other main effects of group identification were not significant ( $ps > .087$ ). We found a significant social identification  $\times$  gender interaction effect on overt discrimination ( $B = -.13$ ,  $SE = .05$ ,  $t(335) = -2.52$ ,  $p = .01$ ) and subtle discrimination ( $B = -.11$ ,  $SE = .06$ ,  $t(335) = -1.98$ ,  $p = .049$ ). Women who more strongly identified with their group reported more subtle and overt discrimination than men.

### **Mediation Model**

We conducted the same mediation analysis as in Study 1. The indirect effect of gender system justification predicting life satisfaction through overt discrimination was not significant, 95% CI  $[-.004, .09]$ , as well as the indirect effect through subtle discrimination was not, 95% CI  $[-.01, .04]$ . The effects are shown in Figure 2. The indirect effect of gender system justification predicting self-esteem through overt discrimination was significant, 95% CI  $[.02, .11]$ , but the indirect effect through subtle discrimination was not, 95% CI  $[-.02, .03]$ . Thus, reduced feelings of overt discrimination in part explained why greater gender system justification was associated

with higher self-esteem, but not life satisfaction. Perceptions of subtle discrimination did not play an explanatory role.

### **Summary**

The results of Study 2 partially replicated and extended findings of Study 1. Specifically, participants endorsing the current relations between men and women as legitimate reported greater life satisfaction and self-esteem. Again, these results did not differ between men and women. Participants who more strongly believed that current relations between men and women were fair reported less experiences of overt and subtle discrimination. Yet, men reported more experiences of overt discrimination than women. The reported relationships occurred above and beyond the participants' level of group identification. Perceptions of overt discrimination in part explained the relationship between gender system justification and self-esteem.

## CHAPTER 4: STUDY 3 – QUALTRICS SAMPLE

In Study 3, we sought to replicate the findings of the previous studies using a sample drawn from a third population, as well as rule out another potential alternative explanation for the relation between gender system justification and the outcome variables. We included a measure of people's inclination toward group structured society and inequality (i.e., social dominance orientation). Specifically, one's preference for dominance hierarchy could be a predictor of one's life satisfaction, self-esteem, and feelings of overt and subtle discrimination, attenuating the effect of gender system justification.

### Methods

#### Participants

637 participants (318 women, 319 men;  $M_{age} = 48.87$ ; range = 18–89) were recruited through the Qualtrics Online Survey Sample. The pre-registration plan for the methods and results can be found in Appendix A (p. ). We conducted an a priori power analysis. We recruited 600 participants to achieve at least 80% power based on the smallest predicted effect size from Study 2 ( $r = .12$ ).

#### Procedure

Participants in the Qualtrics Representative Sample Pool signed up for the study and were provided with the external link that redirected them to the programmed questionnaire.

**Measures.** Participants reported their gender system justification ( $\alpha = .79$ ), life-satisfaction ( $\alpha = .93$ ), self-esteem ( $\alpha = .91$ ), perceptions of overt discrimination ( $\alpha = .78$ ), and perceptions of subtle discrimination ( $\alpha = .89$ ) in the same manner as in the previous studies.

**Social Dominance Orientation.** Participants' preference for hierarchy and inequality was assessed using the 8-item "Short Social Dominance Orientation Scale" ( $\alpha = .81$ ; Ho et al.,



2015). Items were combined into a composite score. A sample item includes “Some groups of people are simply inferior to others”.

## Results

### **Does gender system justification predict life satisfaction and self-esteem?**

We conducted the same models as in the previous studies. Results are presented in Tables 1 and 2. Gender system justification was a significant predictor of life satisfaction and self-esteem. People believing that the current relations between men and women are legitimate had higher satisfaction with life and greater self-esteem. These findings replicate Studies 1 and 2. Gender significantly predicted life satisfaction, but not self-esteem. Women reported less satisfaction with life than did men. We found a significant gender system justification  $\times$  gender interaction predicting participants' self-esteem. Gender system justification predicted higher self-esteem, among men to a greater extent than among women. In other words, men who strongly endorse current relations between men and women report greater self-esteem, than do women. No significant interaction of gender system justification and participants' sex was found predicting life satisfaction.

### **Does gender system justification predict perceptions of discrimination?**

We conducted the same models as in the previous studies. Findings are reported in Tables 3 and 4. The main effect of gender system justification was significant in predicting perceptions of both subtle and overt discrimination. People strongly embracing the current gender system reported experiencing less subtle and overt discrimination. Gender was a significant predictor for overt and subtle discrimination. Men reported more feelings of overt and subtle discrimination than did women. The gender system justification  $\times$  gender interaction did not significantly predict subtle or overt discrimination.

## **Ruling out social identification and social dominance orientation as alternative explanations.**

To statistically rule out the possibility that social identification and social dominance orientation accounted for the effects observed above, we recomputed all models while including the main effect of group identification (grand mean centered), social dominance orientation (grand mean centered), the group identification  $\times$  gender interaction, and the social dominance orientation  $\times$  gender interaction. Importantly, all significant main effects of gender system justification remained significant ( $p < .001$ ). We found main effects of social dominance orientation on self-esteem ( $B = -.20$ ,  $SE = .05$ ,  $t(630) = -4.02$ ,  $p < .001$ ), overt discrimination ( $B = .21$ ,  $SE = .06$ ,  $t(630) = 3.47$ ,  $p < .001$ ), and subtle discrimination ( $B = .23$ ,  $SE = .07$ ,  $t(630) = 3.52$ ,  $p < .001$ ). People high on SDO reported less self-esteem, and more overt and subtle discrimination compared to people low on SDO. No interaction effects were significant ( $ps > .072$ ).

## **Mediation Model**

We conducted the models as in the previous studies. The indirect effect of gender system justification predicting life satisfaction through overt discrimination was not significant, 95% CI  $[-.02, .02]$ , as well as the indirect effect through subtle discrimination was not, 95% CI  $[-.01, .04]$ . The effects are shown in Figure 3. The indirect effect of gender system justification predicting self-esteem through overt discrimination was significant, 95% CI  $[.01, .05]$ , as well as the indirect effect through subtle discrimination was, 95% CI  $[.02, .08]$ . Thus, reduced feelings of overt and subtle discrimination in part explained why greater gender system justification was associated with higher self-esteem, but not life satisfaction.

## **Summary**

The results of Study 3 replicated and extended findings of Study 1 and 2. Specifically, participants endorsing the current relations between men and women as legitimate reported greater life satisfaction and self-esteem. Yet, women reported less life satisfaction, but not self-esteem, than did men. Women, but not men, who more strongly endorsed the current gender relations also reported greater self-esteem. In addition, participants who more strongly believed that current relations between men and women were fair reported less experiences of overt and subtle discrimination. Again, men reported more experiences of overt discrimination than women. The reported relationships were independent of the participants' level of group identification and social dominance orientation. Perceptions of overt discrimination in part explained the relationship between gender system justification and self-esteem. Thus, we replicated and extended findings of Study 1 and 2.

## CHAPTER 5: STUDY 1-3 – COMBINED DATA SETS

We next sought to examine whether the relationships significantly differed across the samples in Studies 1-3. To examine this question, we used an integrative data analysis. The integrative data analysis is a simultaneous analysis of different data sets and may be used to determine whether results vary across studies (Curran & Hussong, 2009). For this purpose, we combined all three data sets and used generalized linear modeling to examine whether relationships significantly differed across samples. We compared the strength of twelve relationships across samples. We did not possess a priori predictions about differences that would occur across samples. We therefore calculated an adjusted  $p$ -value by dividing the generally accepted cut off  $p$ -value ( $p = 0.05$ ) by twelve to account for the amount of analyses we ran. Thus, we used an adjusted  $p$ -value of 0.004 when testing for significance. We found a difference across samples for gender system justification predicting life satisfaction (Wald  $\chi^2 = 11.47$ ,  $df = 2$ ,  $p = .003$ ). Specifically, the Qualtrics sample differed from the Student sample ( $B = -.30$ ,  $SE = .09$ , Wald  $\chi^2 = 10.75$ ,  $p = .001$ , 95% CI  $[-.47; -.12]$ ), such that the relationship was stronger in the Qualtrics compared to the Student sample. The mTurk sample also differed from the Qualtrics sample, such that the relationship was stronger in the Qualtrics sample compared to the mTurk sample ( $B = .15$ ,  $SE = .08$ , Wald  $\chi^2 = 5.18$ ,  $p = .023$ , 95% CI  $[.02; .28]$ ). The Student and mTurk sample did not differ from each other ( $B = .14$ ,  $SE = .08$ , Wald  $\chi^2 = 2.90$ ,  $p = .09$ , 95% CI  $[-.02; .31]$ ). All other relationships did not significantly vary across samples ( $ps \geq .02$ ).

### Mediation Model

We also conducted the full mediation model with the combined data sets. The effects are shown in Figure 4. The indirect effect of gender system justification predicting life satisfaction through overt discrimination was marginally significant, 90% CI  $[.001, .03]$ , and the indirect

effect through subtle discrimination was marginally significant, 90% CI [.001, .02]. The indirect effect of gender system justification predicting self-esteem through overt discrimination was significant, 95% CI [.01, .04], and the indirect effect through subtle discrimination was significant, 95% CI [.01, .04]. Thus, reduced feelings of overt and subtle discrimination in part explained why greater gender system justification was associated with higher life satisfaction and self-esteem.

## CHAPTER 6: GENERAL DISCUSSION

Across three studies we investigated the link between system justification and subjective well-being in the domain of gender, and examined whether this relationship was explained by perceptions of discrimination among men and women. Specifically, we hypothesized that system justification would be positively related to life satisfaction and self-esteem, and that system justification would result in decreased perceptions of discrimination. We consistently found that people higher in gender system justification reported greater life satisfaction and self-esteem. Moreover, we observed that people higher in gender system justification reported less perceived overt and subtle discrimination. Perceptions of overt and subtle discrimination in part explained why greater gender system justification was associated with higher life satisfaction and self-esteem. These results did not differ for men and women. Further, we ruled out alternative explanations for our findings, such as social identification and social dominance orientation. Prior work has suggested that strongly identifying with one's group (i.e., social identification) and a strong preference for hierarchical structure (i.e., social dominance orientation) are factors predicting people's life satisfaction and self-esteem (MacInnis, Busseri, Choma, & Hodson, 2013; Outten, Schmitt, Garcia, & Branscombe, 2009; Verkuyten, 2008; Wakefield et al., 2017). However, statistically adjusting for social identification and social dominance orientation (measured in Study 2 and 3, respectively) did not affect our results. This suggests that gender system justification is a unique predictor for people's subjective well-being. Taken together, these findings extend literature on the palliative function of gender system justification through investigating underlying mechanisms.

The literature examining the link between system justification and subjective well-being is extensive, yet inconsistent results have not provided a cohesive picture (Onraet et al., 2013)

and little research has investigated the domain specificity of the palliative function of system justification. Extending past literature, we examined system justification in a domain that pertains to all members of society (i.e., gender). Gender is one of the most ubiquitous social categories and it is central to the social system (Bem, 1993; Eagly & Wood, 1999). Our finding that gender system justification serves a palliative function for men and women highlights the domain specificity of the observed effect. In other words, people who might be disadvantaged (e.g., women) by the societal system derive benefits from supporting the status quo. In this case, disparities between groups are rationalized through system justifying beliefs (Jost & Banaji, 1994). As such, people might become unaware of existing societal divides between groups and lack of diversity in certain settings. Despite the obvious disadvantage for low-status groups, members of such groups might continue to justify the status quo because of its palliative function. This is in line with previous research examining benefits of system justification beliefs across different countries (Glick et al., 2000; Napier, Thorisdottir, & Jost, 2009). Napier and colleagues (2009) found the link between system justification in general and life satisfaction to be moderated by a nation's magnitude of gender inequality, such that the link is stronger in nations with greater inequality. In other words, people rationalize persisting inequalities at a national level with the help of system-justifying beliefs. In contrast, the present research lends support for the idea that people rationalize inequalities even at a personal level through endorsing current gender relations. Reconciling our findings with Napier and colleagues' findings (2009), we would expect that our observed effects would be even stronger in countries with greater gender inequality, and would be attenuated in more progressive countries with greater gender equality.

### **Implications for Perceptions of Discrimination**

Our findings raise interesting questions regarding whether men's reports and women's reports of discrimination accurately represent reality. In our studies, men reported more experiences of overt discrimination than women. We find it unlikely that those reports should be taken at face value for the following reason. If people's reports of discrimination reflect accurate real-life experiences, then this would be contrary to findings consistently showing that women objectively face more discrimination than do men (Bobbit-Zeher, 2011; England, 2006, 2010; Glick & Fiske, 2007; Gorman, 2005). Thus, it is more likely that people are reporting their subjective *perceptions* of discrimination. In addition, multiple factors influence experiences of discrimination, such as motivated beliefs (Major, Quinton, & McCoy, 2002; McCoy & Major, 2007) and discrimination serving different purposes for high and low status groups (e.g., self-protection and need for approval; Kobrynowicz & Branscombe, 1997). System justification theory suggests that facing inequality and uncertainty motivates people to endorse system-justifying beliefs (Jost & Banaji, 1994). Thus, people's perceptions of discrimination are biased by their gender system justification beliefs. In other words, women, who face more discrimination than men, are motivated to endorse the gender status quo. System justification then could lead to a bias in perception of inequalities and lowered reports of perceived discrimination. This mechanism would explain why women in our studies are reporting less experiencing discrimination than are men.

### **Subtle and Overt Discrimination**

Perceived overt and subtle discrimination in part accounted for the relationship between gender system justification and subjective well-being. We hypothesized that endorsing the system as just and legitimate would be related to biased perceptions of discriminatory behavior. Our theory drew on literature about motivated reasoning, which suggests that due to the



impactful and threatening nature of discrimination, people might be motivated to explain away these types of experiences (Kteily et al., 2015; Major & Crocker, 1993; Sue et al., 2007). However, past research would suggest that people, due to various motivations (e.g., accuracy motivation), process information more deeply, which would lead them to engage in more deliberate reasoning (Kunda, 1990; Jost, Hennes, & Lavine, 2013). In other words, people experiencing attributional ambiguity when faced with discrimination would be motivated to assess and deliberate on the discriminatory behavior. Our findings suggest a different pattern. Thus, we argue that perceived overt and subtle discrimination may both have properties of ambiguity, creating uncertainty for the perceiver. Past research has shown that subtle discrimination is marked by attributional ambiguity (Crocker & Major, 1989; Major & Crocker, 1993; Sue et al., 2007; Tao et al., 2017), making perceptions of subtle discrimination susceptible to people's motivated interpretation. However, consider the following example of overt discrimination: a woman who does not get hired for a job is also presented with multiple ways to attribute the behavior (e.g., discriminatory behavior, better competition). In line with our findings, we would expect that women high on gender system justification are more likely to conclude gender did not play a role in the hiring process compared to women low on gender system justification. We argue that despite the overt nature of discrimination in this example, there remains a trace of uncertainty in interpretation for the perceiver. Past research has shown that experiencing a state of uncertainty is uncomfortable and aversive (Jost & Hunyady, 2003; Major, Quinton, & McCoy, 2002; Van den Bos & Lind, 2002). Further, experiences of overt and subtle discrimination are both impactful on people's mental, and physical health and overall quality of life (Jones et al., 2013; Kteily & Bruneau, 2017; Pascoe & Richman, 2009). For these reasons, people may be especially motivated to rationalize perceived overt and subtle

discriminatory treatment, thus eliminating feelings of uncertainty. In sum, people endorsing the status quo are motivated to perceive the system as fair, rationalize inequalities, and are biased in their perception of overt and subtle discrimination; which ultimately buffers their subjective well-being.

### **Implications for the Role of Status**

Our findings contribute to the existing literature examining the role status plays in the system justification to subjective well-being link. Three competing perspectives have outlined alternate influences of status: (1) that system justification would more strongly relate to subjective well-being among high-status groups compared to low-status groups (Jost & Thompson, 2000; Quinn & Crocker, 1999; Rankin et al., 2009); (2) that the relationship would be stronger for low-status groups compared to high-status groups (Napier & Jost, 2008; Brandt et al., 2015); or (3) that the relationship is equally strong among high and low-status groups (Brandt, 2013). Our findings align with the third possibility, as we found that the palliative function of endorsing the gender status quo did not differ between men and women. These results are consistent with previous research examining a specific domain that affects all members of society (i.e., economy; Jost et al., 2003). Jost and colleagues' findings indicate that people with high SES and low SES, who endorse the status quo report greater economic satisfaction. The domain (i.e., economic satisfaction) and groups (i.e., low SES and high SES) being examined were the same. In the present research, we similarly matched the group being examined (i.e., men and women) with the domain being examined (i.e., gender system justification). Finding no difference between high- and low-status in gender system justification suggests that the effect might indeed be contingent on the examined domain (i.e., gender). Across our studies, gender did not shape the palliative function of gender system justification,

indicating that for men and women system-justifying beliefs increased rationalization of inequalities and increased life satisfaction. We argue that these effects are not inherently bound to the domain of gender, but instead to the ubiquity and centrality gender has within our society. As such we used gender as an example for a general mechanism of a ubiquitous social category. We would expect to find similar results when examining the palliative function of system justifying ideologies among other social categories sharing the salience gender has in our society (e.g., age and race; Macrae & Bodenhausen, 2000).

### **Concluding Remarks**

In the present study, we have demonstrated that for men and women alike, perceptions of overt and subtle discrimination in part accounted for the link between *gender* system justification and subjective well-being. These findings extend existing literature on the palliative function of system-justifying ideologies by examining explanatory mechanisms and the domain specificity of the effect.

## TABLES

Table 1. Multiple regression models with life satisfaction as the outcome variable.

*Note.* GSJ = Gender system justification, LCI and UCI = Lower and Upper Bound of the 95% confidence interval around *B*, respectively.

Sample	<i>B</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>	<i>r</i> <sub>sp</sub>	LCI	UCI
Study 1: Mturk								
GSJ	.46	.06	529	8.04	<.001	.33	.35	.57
Gender	-.08	.07	529	-1.22	.22	-.05	-.22	.05
GSJ × Gender	-.09	.06	529	-1.53	.13	-.06	-.20	.03
Study 2: Student								
GSJ	.25	.07	336	3.76	<.001	.20	.12	.38
Gender	-.09	.07	336	-1.16	.25	-.06	-.23	.06
GSJ × Gender	-.01	.07	336	-0.17	.86	-.01	-.14	.12
Study 3: Qualtrics								
GSJ	.54	.06	633	9.66	<.001	.36	.43	.64
Gender	-.12	.06	633	-2.00	.05	-.07	-.24	-.00
GSJ × Gender	-.00	.06	633	-0.04	.97	-.00	-.11	.11

Table 2. Multiple regression models with self-esteem as the outcome variable.

*Note.* GSJ = Gender system justification, LCI and UCI = Lower and Upper Bound of the 95% confidence interval around *B*, respectively.

Sample	<i>B</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>	<i>r</i> <sub>sp</sub>	LCI	UCI
Study 1: Mturk								
GSJ	.30	.05	529	6.12	<.001	.26	.20	.40
Gender	-.08	.06	529	-1.39	.17	-.06	-.20	.03
GSJ × Gender	-.02	.05	529	-0.46	.65	-.02	-.12	.07
Study 2: Student								
GSJ	.20	.06	336	3.07	.002	.17	.07	.32
Gender	-.07	.07	336	-0.92	.36	-.05	-.20	.07
GSJ × Gender	.05	.06	336	0.71	.48	.04	-.08	.17
Study 3: Qualtrics								
GSJ	.29	.05	633	6.13	<.001	.24	.20	.38
Gender	-.04	.05	633	-0.75	.45	-.03	-.14	.06
GSJ × Gender	.11	.05	633	2.36	.02	.09	.02	.20

Table 3. Multiple regression models with overt discrimination as the outcome variable.

*Note.* GSJ = Gender system justification, LCI and UCI = Lower and Upper Bound of the 95% confidence interval around *B*, respectively.

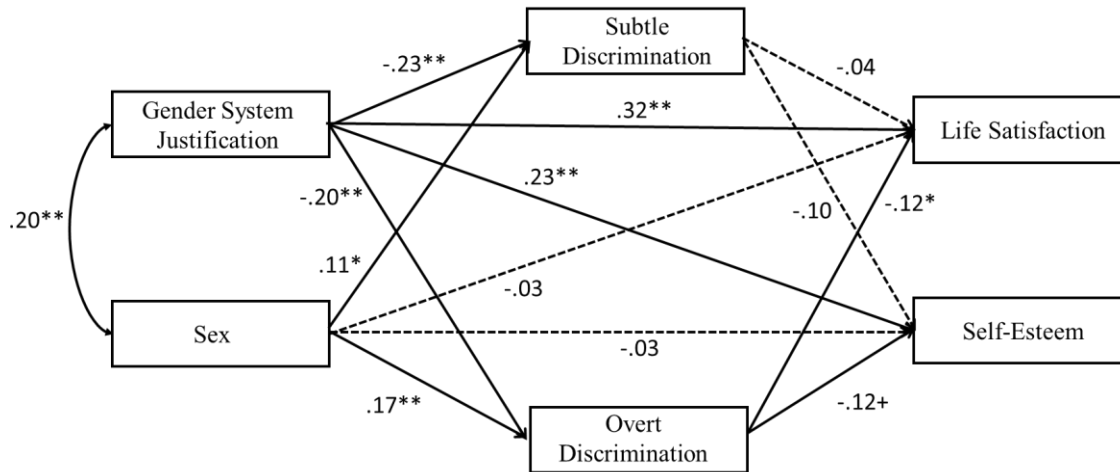
Sample	<i>B</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>	<i>r</i> <sub>sp</sub>	LCI	UCI
Study 1: Mturk								
GSJ	-.24	.06	529	-4.27	<.001	-.18	-.35	-.13
Gender	.27	.07	529	3.92	<.001	.17	.13	.40
GSJ × Gender	.02	.06	529	0.41	.68	.02	-.09	.14
Study 2: Student								
GSJ	-.35	.07	336	-4.98	<.001	-.26	-.48	-.21
Gender	.27	.08	336	3.52	<.001	.18	.12	.42
GSJ × Gender	.01	.07	336	0.07	.94	.00	-.13	.14
Study 3: Qualtrics								
GSJ	-.20	.06	633	-3.52	<.001	-.14	-.32	-.09
Gender	.22	.06	633	2.49	<.001	.14	.10	.35
GSJ × Gender	.08	.06	633	1.35	.18	.05	-.04	.19

Table 4. Multiple regression models with subtle discrimination as the outcome variable.

*Note.* GSJ = Gender system justification, LCI and UCI = Lower and Upper Bound of the 95% confidence interval around *B*, respectively.

Sample	<i>B</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>	<i>r</i> <sub>sp</sub>	LCI	UCI
Study 1: Mturk								
GSJ	-.30	.06	529	-4.91	<.001	-.21	-.41	-.18
Gender	.18	.07	529	2.45	.02	.10	.04	.32
GSJ × Gender	.03	.06	529	0.51	.61	.02	-.09	.15
Study 2: Student								
GSJ	-.18	.08	336	-2.23	.03	-.12	-.34	-.02
Gender	.16	.09	336	1.78	.076	.10	-.02	.33
GSJ × Gender	-.03	.08	336	-0.42	.68	-.02	-.19	.12
Study 3: Qualtrics								
GSJ	-.26	.06	633	-4.23	<.001	-.17	-.38	-.14
Gender	.15	.07	633	2.19	.03	.09	.02	.28
GSJ × Gender	.11	.06	633	1.76	.079	.07	-.01	.23

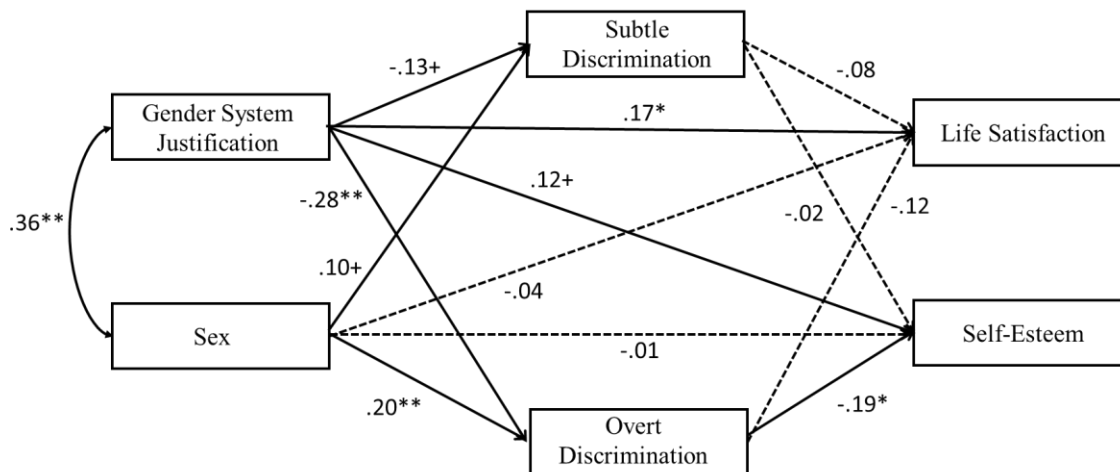
## FIGURES



*Figure 1.* Mediation model in which gender system justification predicts perceived life satisfaction and self-esteem through subtle and overt discrimination (Study 1). Solid lines indicate significant relationships; dashed lines indicate non-significant relationships.

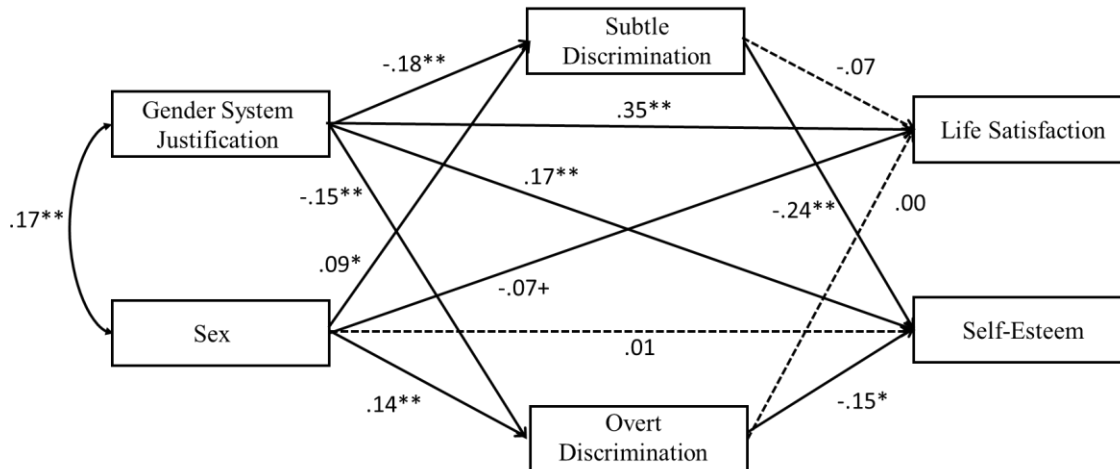
Note:  $^{**}p < .001$ ;  $^{*}p < .05$ ;  $^{+}p < .10$





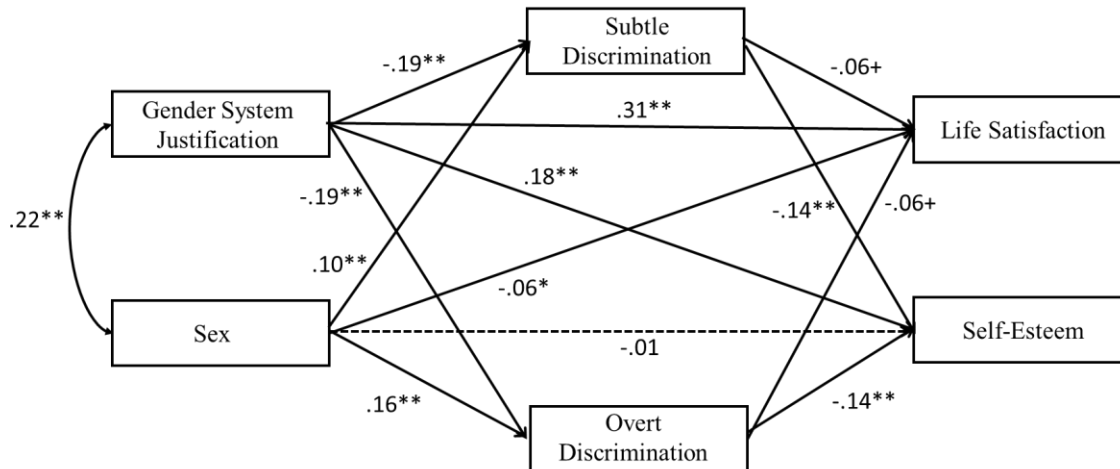
*Figure 2.* Mediation model in which gender system justification predicts perceived life satisfaction and self-esteem through subtle and overt discrimination (Study 2). Solid lines indicate significant relationships; dashed lines indicate non-significant relationships.

Note:  $^{**}p < .001$ ;  $^*p < .05$ ;  $^+p < .10$



*Figure 3.* Mediation model in which gender system justification predicts perceived life satisfaction and self-esteem through subtle and overt discrimination (Study 3). Solid lines indicate significant relationships; dashed lines indicate non-significant relationships.

Note:  $**p < .001$ ;  $*p < .05$ ;  $^{+}p < .10$



*Figure 4.* Mediation model in which gender system justification predicts perceived life satisfaction and self-esteem through subtle and overt discrimination (Combined Data Sets – all studies). Solid lines indicate significant relationships; dashed lines indicate non-significant relationships.

Note:  $^{**}p < .001$ ;  $^{*}p < .05$ ;  $^{+}p < .10$

## REFERENCES

- Banaji, M. R., & Hardin, C. D. (1996). Automatic stereotyping. *Psychological science*, 7(3), 136-141.
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological review*, 88(4), 354.
- Bem, S. L. (1993). *The lenses of gender: Transforming the debate on sexual inequality*. Yale University Press.
- Bobbit-Zeher, D. (2011). Institutional policies, and gender composition of workplace gender discrimination at work: Connecting gender stereotypes. *Gender & Society*, 25, 764-786.
- Brandt, M. J. (2013). Do the disadvantaged legitimize the social system? A large-scale test of the status-legitimacy hypothesis. *Journal of personality and social psychology*, 104(5), 765.
- Brandt, M. J., & Henry, P. J. (2012). Gender inequality and gender differences in authoritarianism. *Personality and Social Psychology Bulletin*, 38(10), 1301-1315.
- Brandt, M. J., Henry, P. J., & Wetherell, G. (2015). The relationship between authoritarianism and life satisfaction changes depending on stigmatized status. *Social Psychological and Personality Science*, 6(2), 219-228.
- Butler, J. C. (2000). Personality and emotional correlates of right-wing authoritarianism. *Social Behavior and Personality: an international journal*, 28(1), 1-14.
- Crocker, J., Cornwell, B., & Major, B. (1993). The stigma of overweight: Affective consequences of attributional ambiguity. *Journal of personality and social psychology*, 64(1), 60.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological review*, 96(4), 608.

- Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: the simultaneous analysis of multiple data sets. *Psychological methods, 14*(2), 81.
- Dalbert, C. (2001). *The justice motive as a personal resource: Dealing with challenges and critical life events*. Springer Science & Business Media.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment, 49*(1), 71-75.
- Dovidio, J. F., Gaertner, S. E., Kawakami, K., & Hodson, G. (2002). Why can't we just get along? Interpersonal biases and interracial distrust. *Cultural Diversity and Ethnic Minority Psychology, 8*(2), 88.
- Eagly, A. H., & Wood, W. (1999). The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American psychologist, 54*(6), 408.
- England, P. (2006). Toward gender equality: Progress and bottlenecks. *The declining significance of gender, 245-264*.
- England, P. (2010). The gender revolution: Uneven and stalled. *Gender & society, 24*(2), 149-166.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods, 39*(2), 175-191.
- Gaertner, S. L., & Dovidio, J. F. (1986). *The aversive form of racism*. San Diego, CA, US: Academic Press.
- Glick, P., & Fiske, S. T. (1997). Hostile and benevolent sexism: Measuring ambivalent sexist attitudes toward women. *Psychology of women quarterly, 21*(1), 119-135.

- Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, 56(2), 109.
- Glick, P., & Fiske, S. T. (2007). Sex discrimination: The psychological approach.
- Glick, P., Fiske, S. T., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., ... & Annetje, B. (2000). Beyond prejudice as simple antipathy: hostile and benevolent sexism across cultures. *Journal of personality and social psychology*, 79(5), 763.
- Gorman, E. H. (2005). Gender stereotypes, same-gender preferences, and organizational variation in the hiring of women: Evidence from law firms. *American Sociological Review*, 70(4), 702-728.
- Haslam, N., Rothschild, L., & Ernst, D. (2000). Essentialist beliefs about social categories. *British Journal of Social Psychology*, 39(1), 113-127.
- Hayes, J. R. (2013). *The complete problem solver*. Routledge.
- Hebl, M. R., Foster, J. B., Mannix, L. M., & Dovidio, J. F. (2002). Formal and interpersonal discrimination: A field study of bias toward homosexual applicants. *Personality and social psychology bulletin*, 28(6), 815-825.
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., ... & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO<sub>7</sub> scale. *Journal of Personality and Social Psychology*, 109(6), 1003.
- Jetten, J., Haslam, S. A., & Barlow, F. K. (2013). Bringing back the system: One reason why conservatives are happier than liberals is that higher socioeconomic status gives them access to more group memberships. *Social Psychological and Personality Science*, 4(1), 6-13.

- Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management*, 42(6), 1588-1613.
- Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British journal of social psychology*, 33(1), 1-27.
- Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political psychology*, 25(6), 881-919.
- Jost, J. T., & Burgess, D. (2000). Attitudinal ambivalence and the conflict between group and system justification motives in low status groups. *Personality and Social Psychology Bulletin*, 26(3), 293-305.
- Jost, J. T., Hennes, E. P., & Lavine, H. (2013). Hot” political cognition: Its self-, group-, and systemserving purposes. *Oxford handbook of social cognition*, 851-875.
- Jost, J., & Hunyady, O. (2003). The psychology of system justification and the palliative function of ideology. *European review of social psychology*, 13(1), 111-153.
- Jost, J. T., & Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Current directions in psychological science*, 14(5), 260-265.
- Jost, J. T., & Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: consequences for specific and diffuse forms of system justification. *Journal of personality and social psychology*, 88(3), 498.
- Jost, J. T., Pelham, B. W., Sheldon, O., & Ni Sullivan, B. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced

- system justification among the disadvantaged. *European journal of social psychology*, 33(1), 13-36.
- Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology*, 36(3), 209-232.
- Kay, A. C., & Jost, J. T. (2003). Complementary justice: effects of "poor but happy" and "poor but honest" stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of personality and social psychology*, 85(5), 823.
- Kobrynowicz, D., & Branscombe, N. R. (1997). Who considers themselves victims of discrimination?. *Psychology of women quarterly*, 21(3), 347-363.
- Kteily, N. S., & Bruneau, E. (2017). Darker demons of our nature: The need to (re) focus attention on blatant forms of dehumanization. *Current Directions in Psychological Science*, 26(6), 487-494.
- Kteily, N., Bruneau, E., Waytz, A., & Cotterill, S. (2015). The ascent of man: Theoretical and empirical evidence for blatant dehumanization. *Journal of personality and social psychology*, 109(5), 901.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological bulletin*, 108(3), 480.
- Lucas, T., Alexander, S., Firestone, I., & LeBreton, J. M. (2007). Development and initial validation of a procedural and distributive just world measure. *Personality and Individual Differences*, 43(1), 71-82.



- MacInnis, C. C., Busseri, M. A., Choma, B. L., & Hodson, G. (2013). The happy cyclist: Examining the association between generalized authoritarianism and subjective well-being. *Personality and Individual Differences*, 55(7), 789-793.
- Macrae, C. N., & Bodenhausen, G. V. (2000). Social cognition: Thinking categorically about others. *Annual review of psychology*, 51(1), 93-120.
- Martin, M. (Host). (2014, July 21). Phyllis Schlafly Explains Why Feminism Has Made Women Unhappy [Radio broadcast episode]. <https://www.npr.org/2014/07/21/333582322/phyllis-schlafly-explains-why-feminism-has-made-women-unhappy>
- Major, B., & Crocker, J. (1993). Social stigma: The consequences of attributional ambiguity. In *Affect, cognition and stereotyping* (pp. 345-370).
- Major, B., Quinton, W. J., & McCoy, S. K. (2002). Antecedents and consequences of attributions to discrimination: Theoretical and empirical advances. In *Advances in experimental social psychology* (Vol. 34, pp. 251-330). Academic Press.
- McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale.
- McCoy, S. K., & Major, B. (2007). Priming meritocracy and the psychological justification of inequality. *Journal of Experimental Social Psychology*, 43(3), 341-351.
- Muthén, L.K. and Muthén, B.O. (1998-2017). Mplus User's Guide. Eight Edition. Los Angeles, CA: Muthén & Muthén.
- Napier, J. L., & Jost, J. T. (2008). Why are conservatives happier than liberals?. *Psychological Science*, 19(6), 565-572.
- Napier, J. L., Thorisdottir, H., & Jost, J. T. (2010). The joy of sexism? A multinational investigation of hostile and benevolent justifications for gender inequality and their relations to subjective well-being. *Sex roles*, 62(7-8), 405-419.

- Onraet, E., Van Hiel, A., & Dhont, K. (2013). The relationship between right-wing ideological attitudes and psychological well-being. *Personality and Social Psychology Bulletin*, 39(4), 509-522.
- Outten, H. R., Schmitt, M. T., Garcia, D. M., & Branscombe, N. R. (2009). Coping Options: Missing Links between Minority Group Identification and Psychological Well-Being. *Applied Psychology*, 58(1), 146-170.
- Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International journal of epidemiology*, 35(4), 888-901.
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: a meta-analytic review. *Psychological bulletin*, 135(4), 531.
- Peterson, B. E., & Duncan, L. E. (2007). Midlife women's generativity and authoritarianism: Marriage, motherhood, and 10 years of aging. *Psychology and Aging*, 22(3), 411.
- Postmes, T., Haslam, S. A., & Jans, L. (2013). A single-item measure of social identification: Reliability, validity, and utility. *British journal of social psychology*, 52(4), 597-617.
- Quinn, D. M., & Crocker, J. (1999). When ideology hurts: effects of belief in the protestant ethic and feeling overweight on the psychological well-being of women. *Journal of personality and social psychology*, 77(2), 402.
- Rankin, L. E., Jost, J. T., & Wakslak, C. J. (2009). System justification and the meaning of life: Are the existential benefits of ideology distributed unequally across racial groups?. *Social Justice Research*, 22(2-3), 312-333.
- Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy. Measures package*, 61, 52.

- Stern, C., & Rule, N. O. (2017). Physical androgyny and categorization difficulty shape political conservatives' attitudes toward transgender people. *Social Psychological and Personality Science*, 1948550617703172.
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: implications for clinical practice. *American psychologist*, 62(4), 271.
- Tao, K. W., Owen, J., & Drinane, J. M. (2017). Was that Racist? An Experimental Study of Microaggression Ambiguity and Emotional Reactions for Racial–Ethnic Minority and White Individuals. *Race and Social Problems*, 9(4), 262-271.
- Tomaka, J., & Blascovich, J. (1994). Effects of justice beliefs on cognitive appraisal of and subjective physiological, and behavioral responses to potential stress. *Journal of Personality and Social Psychology*, 67(4), 732.
- Van den Bos, K., & Lind, E. A. (2002). Uncertainty management by means of fairness judgments. In *Advances in experimental social psychology* (Vol. 34, pp. 1-60). Academic Press.
- Van Hiel, A., & Kossowska, M. (2006). Having few positive emotions, or too many negative feelings? Emotions as moderating variables of authoritarianism effects on racism. *Personality and Individual Differences*, 40(5), 919-930.
- Van Hiel, A., Mervielde, I., & De Fruyt, F. (2004). The relationship between maladaptive personality and right-wing ideology. *Personality and Individual Differences*, 36(2), 405-417.
- Vargas-Salfate, S. (2017). The palliative function of hostile sexism among high and low-status Chilean students. *Frontiers in psychology*, 8, 1733.

- Verkuyten, M. (2008). Life satisfaction among ethnic minorities: The role of discrimination and group identification. *Social indicators research*, 89(3), 391-404.
- Virtanen, S. V., & Huddy, L. (1998). Old-fashioned racism and new forms of racial prejudice. *The journal of politics*, 60(2), 311-332.
- Wakefield, J. R. H., Sani, F., Madhok, V., Norbury, M., Dugard, P., Gabbanelli, C., ... & Paoli, P. (2017). The relationship between group identification and satisfaction with life in a cross-cultural community sample. *Journal of Happiness Studies*, 18(3), 785-807.
- Wakslak, C. J., Jost, J. T., Tyler, T. R., & Chen, E. S. (2007). Moral outrage mediates the dampening effect of system justification on support for redistributive social policies. *Psychological Science*, 18(3), 267-274.
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: evidence and needed research. *Journal of behavioral medicine*, 32(1), 20-47.

# APPENDIX A: PRE-REGISTRATION REPORT



## CONFIDENTIAL - FOR PEER-REVIEW ONLY

### Spring 2017 - GendSJ by Sex Qualtrics Panel (#4043)

Created: 05/11/2017 05:39 AM (PT)

Shared: 04/18/2018 05:16 AM (PT)

This pre-registration is not yet public. This anonymized copy (without author names) was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) will become publicly available only if an author makes it public. Until that happens the contents of this pre-registration are confidential.

#### 1) Have any data been collected for this study already?

No, no data have been collected for this study yet

#### 2) What's the main question being asked or hypothesis being tested in this study?

Gender System Justification (GSJ) will positively relate to life satisfaction and self-esteem, and will negatively relate to perceptions of subtle and overt discrimination. We will also examine whether these relationships differ for men and women. Based on the results of previous studies, we anticipate that they will not. Perceptions of subtle and overt discrimination will negatively relate to life satisfaction and self-esteem. Based on the results of previous studies, we predict that the relationship between GSJ and life satisfaction and self-esteem will be mediated by overt discrimination, but not subtle discrimination.

#### 3) Describe the key dependent variable(s) specifying how they will be measured.

Life Satisfaction measured via the "Satisfactions with Life Scale" (Diener, Emmons, Larsen, Griffin, 1985)

Self-Esteem measured via "Self-Esteem Scale" (Rosenberg, 1965)

Overt Discrimination (4 items, generated by the researchers) ("I feel that I have sometimes been actively discriminated against.", "I have not been hired for a job for unfair reasons.", "I have sometimes been unfairly stopped, searched, questioned, physically threatened or abused by the police or other authority figures.", "I have sometimes been called names or insulted by other people.")

Subtle Discrimination (4 items, generated by the researchers) ("I have sometimes been treated with less respect than other people.", "I have sometimes received worse service than other people at restaurants or stores.", "People have sometimes avoided interactions with me.", "People's nonverbal behavior (for example: eye contact or hand gestures) sometimes is less friendly toward me than to others.")

Single Item measure of Social Identification (Postmes, Haslam, & Jans 2012)

Social Dominance Orientation measured via the "Short Social Dominance Orientation Scale" (consisting of 8 items) (Ho, et al., 2015)

#### 4) How many and which conditions will participants be assigned to?

There are no conditions in this study. However, the conceptual independent variable will be gender system justification (Jost & Kay, 2005).

#### 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Reliability analysis of the subtle discrimination, overt discrimination, gender system justification, life satisfaction, self-esteem, and social dominance orientation items will be conducted. Item Reliability of  $\alpha > .70$  will be combined into one scale.

We will examine correlations among all of the constructs, we will also conduct a series of multiple regression analyses in which gender system justification (grand-mean centered), participant sex, and their interaction predict overt discrimination, subtle discrimination, life satisfaction, and self-esteem. We will also conduct a mediation analysis examining whether overt and subtle discrimination mediate the relationship between gender system justification and the two measures of well-being (life satisfaction and self-esteem).

#### 6) Any secondary analyses?

#### 7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

We will collect 600 participants through a qualtrics panel. This sample size was determined based on the desire to possess at least 80% power to detect the smallest effect size in the previous study we conducted ( $r=.12$ ).

#### 8) Anything else you would like to pre-register? (e.g., data exclusions, variables collected for exploratory purposes, unusual analyses planned?)

We will exclude participants who fail the attention check.

Verify authenticity:<http://aspredicted.org/blind.php?x=ep5ze7>

Version of AsPredicted Questions: 1.05

## APPENDIX B: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Office of the Vice Chancellor for Research

Office for the Protection of Research Subjects  
805 W Pennsylvania Ave  
Urbana, IL 61801



September 14, 2017

Chadly Stern, Ph.D.  
Psychology  
433 Psychology Building  
603 East Daniel Street  
Champaign, IL 61820

RE: *Experiences of Intersectionality among People with Multiple Subordinate-Group Identities*  
IRB Protocol Number: 17237

Dear Dr. Stern:

This letter authorizes the use of human subjects in your continuing project entitled *Experiences of Intersectionality among People with Multiple Subordinate-Group Identities*. The University of Illinois at Urbana-Champaign Institutional Review Board (IRB) approved the protocol as described in your IRB-1 application, by expedited continuing review. The expiration date for this protocol, IRB number 17237, is September 13, 2020. The risk designation applied to your project is *no more than minimal risk*.

The IRB has also reviewed the request for minor modifications. I will officially note for the record that these minor modifications to the original project, as noted in your correspondence received August 31, 2017, **increasing the anticipated number of participants from 3000 to 6000 total**, have been approved.

Copies of the attached date-stamped consent form(s) must be used in obtaining informed consent. If there is a need to revise or alter the consent form(s), please submit the revised form(s) for IRB review, approval, and date-stamping prior to use.

Please note that additional modifications to your project need to be submitted to the IRB for review and approval before the modifications are initiated. To submit modifications to your protocol, please complete the IRB Research Amendment Form (see <https://www.oprs.research.illinois.edu/forms-templates/forms/protocol-amendment-form>). Unless modifications are made to this project, no further submittals are required to the IRB.

We appreciate your conscientious adherence to the requirements of human subjects research. If you have any questions about the IRB process, or if you need assistance at any time, please feel free to contact me at the OPRS office, or visit our website at <https://www.oprs.research.illinois.edu>.

Sincerely,

Jennifer Ford  
Human Subjects Research Specialist, Office for the Protection of Research Subjects

Attachment(s): 4 consent forms

c: Julia Spielmann