



eCOMMONS

Loyola University Chicago
Loyola eCommons

Dissertations

Theses and Dissertations

2015

Backlash Against Working Mothers

Kala Jean Melchiori
Loyola University Chicago

Recommended Citation

Melchiori, Kala Jean, "Backlash Against Working Mothers" (2015). *Dissertations*. Paper 1649.
http://ecommons.luc.edu/luc_diss/1649

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 3.0 License](#).
Copyright © 2015 Kala Jean Melchiori

LOYOLA UNIVERSITY CHICAGO

BACKLASH AGAINST WORKING MOTHERS

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

PROGRAM IN SOCIAL PSYCHOLOGY

BY

KALA J. MELCHIORI

CHICAGO, ILLINOIS

AUGUST 2015

Copyright by Kala J. Melchiori, 2015
All rights reserved.

ACKNOWLEDGMENTS

I would like to thank the people who provided me with support and guidance while I developed, defended, conducted, and wrote this dissertation. First and foremost, my mentor, Dr. Robyn K. Mallett's brilliance and kindness (competence AND warmth!) is unmatched. She supported me when I turned away from a skeleton of a dissertation proposal on another topic and followed my passion into new terrain. Her research on intergroup relations and approach to science is inspirational. Not a day goes by that I do not feel fortunate to work with her, and I also have the luck to call her my friend. Thank you, Robyn.

I would also like to thank the graduate students, faculty, and staff of the Psychology Department of Loyola University Chicago. My fellow graduate students in the Social Justice and Intergroup Relations lab - Dana, Patrick, Hilary, Rayne, Amanda, Mallory, Cara - have always offered a sympathetic ear and clever insights. Erika, Katie, and Valerie, my cohort friends, thank you for lunches, viewing parties, and commiseration. Special thanks to Dr. Jeff Huntsinger, Dr. Scott Tindale, Dr. Jim Larson, Dr. Pat Rupert, and Dr. Tracy DeHart, all of whom have offered me their critical expertise to help me become a better researcher.

I also thank the Loyola University Chicago Graduate School for providing funding through assistantships, research grants, the Research Mentoring Fellowship, and the Arthur J. Schmitt Fellowship, without which I would have not made timely progress

on my dissertation research. I would specifically like to thank Dr. Jessica Horowitz, the Associate Dean for Student Services, for her longstanding advocacy on behalf of graduate students at LUC.

Last, but certainly not least, thank you to my family. To my parents, grandparents, and parents-in-law, it means the world to me when you express your pride. Thank you. To Phil, my partner in love and life, thank you for being the rock of our little family. And to Cole, my son, thank you for inspiring my dissertation research. It is wondrous to watch you grow and learn each day. I love you, and I am so proud of you.

For Cole.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF TABLES	viii
LIST OF FIGURES	x
ABSTRACT	xi
CHAPTER ONE: THE PROBLEM	1
CHAPTER TWO: STEREOTYPES	4
Stereotypes of Traditional Women	5
Stereotypes of Working Women	6
Stereotypes of Working Mothers	7
CHAPTER THREE: DISCRIMINATION	9
Backlash	9
The BIAS Map	14
CHAPTER FOUR: PREJUDICE AS JUSTIFICATION FOR BACKLASH	21
Traditional versus Modern Sexism	22
Ambivalent Sexism	23
CHAPTER FIVE: THE PRESENT RESEARCH	30
Study 1 Method	34
Study 1 Results	41
Study 1 Discussion	61
Study 2 Method	66
Study 2 Results	75
Study 2 Discussion	91
CHAPTER SIX: GENERAL DISCUSSION	94
Future Research	98
Implications	99
APPENDIX A: MTURK PARTICIPANT RECRUITMENT TEXT	101
APPENDIX B: STUDY 1 INFORMED CONSENT FORM	103
APPENDIX C: MANIPULATION CHECKS: WARMTH AND COMPETENCE	105
APPENDIX D: SHORT-FORM AMBIVALENT SEXISM INVENTORY	107

APPENDIX E: PERCEIVER BIAS TREATMENT SCALE	109
APPENDIX F: DEMOGRAPHICS	111
APPENDIX G: DEBRIEFING ITEMS	114
APPENDIX H: DEBRIEFING FORM	116
APPENDIX I: STUDY 2 INFORMED CONSENT FORMS	118
APPENDIX J: SELF-DISCLOSURE TASK	121
APPENDIX K: STUDY 2 PICTURES	123
APPENDIX L: FALSE EMPLOYEE APTITUDE RESULTS	125
APPENDIX M: BACKLASH IN MANAGERIAL DECISIONS MEASURE	127
APPENDIX N: FUNNELED DEBRIEFING SCRIPT	130
REFERENCES	133
VITA	139

LIST OF TABLES

Table 1. Workplace examples of behavior taxonomy included in BIAS map	15
Table 2. Study 1: Varimax rotated component matrix of factors in the backlash managerial decisions measure	39
Table 3. Study 1 correlation table	42
Table 4. Study 1: Main effect of backlash	44
Table 5. Moderated mediation of the effects of parenthood and gender on active harm and passive facilitation through benevolent and hostile sexism	48
Table 6. Moderated mediation of the effects of parenthood and gender on active facilitation and passive harm through benevolent and hostile sexism	51
Table 7. Exploratory analysis: Moderated mediation of the effects of parenthood and gender on active harm and passive facilitation through perceived work ethic, family obligations, and inappropriateness	55
Table 8. Exploratory analysis: Moderated mediation of the effects of parenthood and gender on active facilitation and passive harm through perceived work ethic, family obligations, and inappropriateness	59
Table 9. Study 2: Varimax rotated component matrix of factors in the backlash managerial decisions measure	72
Table 10. Study 2 correlation table	75
Table 11. Main effect of backlash managerial decisions measure	77
Table 12. Main effect of perceiver BIAS scale of backlash	80
Table 13. Mediation of the effect of parenthood on active harm and passive facilitation (as measured with backlash managerial decision items) through benevolent and hostile sexism.	83

Table 14. Mediation of the effect of parenthood on active facilitation and passive harm (as measured with backlash managerial decision items) through benevolent and hostile sexism.	84
Table 15. Exploratory analysis: Mediation of the effects of parenthood on active harm and passive facilitation through perceived work ethic and inappropriateness	86
Table 16. Exploratory analysis: Mediation of the effects of parenthood on active facilitation and passive harm through perceived work ethic and inappropriateness	87
Table 17. Mediation of the effect of parenthood on active harm and passive facilitation (as measured with the perceiver BIAS treatment scale) through benevolent and hostile sexism	88
Table 18. Mediation of the effect of parenthood on active facilitation and passive harm (as measured with the perceiver BIAS treatment scale) through benevolent and hostile sexism	90

LIST OF FIGURES

Figure 1. The Backlash and Stereotype Maintenance Model.	11
Figure 2. The BIAS map predicted behaviors.	16
Figure 3. BIAS map for working men, working women, working mothers, and mothers on welfare.	17
Figure 4. Proposed model for perceiver backlash against working women without children and working mothers.	32
Figure 5. Simple moderation of the relationship between target parenthood status and backlash by target gender.	43
Figure 6. Simple moderation of the relationship between target parenthood status and ambivalent sexism by target gender.	45
Figure 7. Moderated mediation of indirect effects of hostile and benevolent sexism on the relationship between target parenthood status and backlash by target gender.	47
Figure 8. Effect of confederate parenthood status on backlash.	76
Figure 9. Supplementary analysis: Backlash managerial decision item endorsement for mother and nonparent conditions	79
Figure 10. Effect of confederate parenthood status on ambivalent sexism.	81
Figure 11. Mediation of the relationship between confederate parenthood status and backlash by hostile and benevolent sexism.	82

ABSTRACT

Research by Rudman and colleagues (2012) has detailed how people who defy social stereotypes (called vanguards) experience discriminatory backlash for acting counter-stereotypically. In the present research, I took Rudman's Backlash and Stereotype Maintenance Model (BSMM) and applied it to working women and working mothers. Due to the different content of the stereotypes of working women versus working mothers, I predicted that the process through which perceivers engage in backlash against the two groups is different. I used the theory of Ambivalent Sexism to shape my predictions for how working mothers are vulnerable to different forms of backlash than working women without children. Specifically, I proposed that working women are likely vulnerable to hostile sexist backlash such as hiring discrimination and resentment, whereas stereotypes of working mothers suggest that they may be more likely to experience benevolent sexist backlash such as patronizing help and unintended ostracism. Ultimately, I only found partial support for my predictions. When discrimination emerged, it was most likely targeted towards working mothers. Additionally, I found evidence that justifications such as perceived work ethic, family obligations, and inappropriateness of the action may be better predictors of backlash behavior than explicit hostile and benevolent sexism.

CHAPTER ONE

THE PROBLEM

[B]acklash has moved through the culture's secret chambers, traveling through passageways of flattery and fear. Along the way, it has adopted disguises: a mask of mild derision or the painted face of deep "concern". Its lips profess pity for any woman who won't fit the mold, while it tries to clamp the mold around her ears. It pursues a divide-and-conquer strategy: single versus married women, working women versus homemakers, middle- versus working-class. It manipulates a system of rewards and punishments, elevating women who follow its rules, isolating those who don't.

– Faludi, 1991, p. xxii

Eighty-one percent of American women will become mothers in their lifetime (US Census Bureau, 2013), and over 70% of mothers participate in the labor force (Bureau of Labor Statistics, 2013). There are currently over 60 million working mothers in the United States; therefore, of the approximately 155 million employed people in the country, mothers comprise 40% of the American labor force. Additionally, in 2013, mothers comprised 40% of all sole or primary breadwinners of households with children in the United States (Pew, 2013). Mothers comprise an essential position both in our economy and within families' bank accounts.

However, working mothers face a maternal wall – a barrier that can prevent mothers from achieving professional success because of their devalued state within the workplace (Crosby, Williams, & Biernat, 2004). The facts supporting the maternal wall

argument are bleak. While working women in general are seen as less competent than their male counterparts (Fiske, Cuddy, Glick, & Xu, 2002), working mothers are considered even less competent and less committed employees than female workers without children or working fathers (Cuddy, Fiske, & Glick, 2004; Heilman & Okimoto, 2008). Working mothers are also more likely to be passed over on hiring decisions, promotions, and training opportunities than their childless or male coworkers. Furthermore, motherhood presents a more extreme case of the gender wage gap. As of 2012, women earned 80 cents for every dollar earned by men in equivalent positions (Bureau of Labor Statistics, 2013). However, working mothers only earn 60 cents for every dollar working fathers earn (Crosby et al., 2004).

Working mothers face the task of overcoming two stereotypes; they are continually evaluated not only as workers, but also as parents. In general, people believe that American women's increasing departure from a traditional stay-at-home motherhood has made it harder for families to raise children; the majority of Americans think that children are better off if mothers stay at home (Pew, 2013). Specifically, successful working mothers, or mothers whose jobs are in masculine domains, are viewed as poor parents compared to working fathers of equal talent and positions (Okimoto & Heilman, 2012).

We need to do better for the ever-increasing number of mothers in the workplace. Given the fact that many working mothers are the primary or sole breadwinner in their households, the maternal wall is a serious issue for families and a society that values equality. The present research explores how perceptions of working mothers manifest in

discriminatory backlash “*elevating women who follow its rules, isolating those who don’t*” (Fauludi, 1991, pp. xxii).

CHAPTER TWO

STEREOTYPES

Stereotypes are the cognitive component of attitudes (Fiske, 1998). Whereas prejudice refers to the emotional, affective piece of an attitude toward an object, and discrimination refers to the behavioral manifestation of an attitude, stereotypes refer to the specific beliefs we have about people based on their social group membership. Fiske and colleagues' (2002) Stereotype Content Model (SCM) poses that, in general, stereotypes are composed of evaluations on two domains: competence and warmth. Competence refers to one's general capability and intelligence, while warmth refers to one's perceived likability and friendliness. Every group falls somewhere on the map of stereotypic competence and warmth. For example, White men are stereotypically seen as competent and warm, welfare recipients are seen as incompetent and cold, the elderly are seen as incompetent but warm, and Asians are seen as competent but cold.

Research finds that one's status within a culture is a determinate of that group's warmth and competence stereotypes (Fiske et al., 2002). High status dominant-group members (e.g., White men) do not threaten the status quo or inspire competition for resources; therefore we are likely to admire and take pride in these groups and rate them as highly competent and warm. However, high status disadvantaged-group members (e.g., White women) do inspire competition, especially from dominant-group members,

as they threaten the status quo. These groups inspire envious prejudice, and are stereotyped as highly competent but low on warmth. Low status disadvantaged-group members who are seen as competitive (e.g., Black men) inspire contemptuous prejudice and are evaluated as low in both warmth and competence, while low status disadvantaged-group members who are not competitive (e.g., housewives) are met with paternalistic prejudice and are viewed as warm but incompetent.

Stereotypes of Traditional Women

Traditionally, women are prescribed communal traits (Rudman & Glick, 2001). Women are biologically responsible for the gestation, birthing, and (usually) early feeding of children. Therefore, women have historically been regulated to the role of caretaker (Wood & Eagly, 2010). Over time people have come to presume that all women should exhibit the qualities associated with being a loving parent. Women are *supposed* to be warm, caring, sensitive to others, and have an interest in children (Rudman & Glick, 2001). Women are also proscribed agentic traits. Men generally are quicker and have more physical strength than women; therefore men have historically been regulated to the role of provider and aggressor (Wood & Eagly, 2010). Women were socialized to not take on the qualities assigned to men, as those qualities are unnecessary or even harmful for women to possess given their role. Women are *not* supposed to be aggressive, demanding, too intelligent, or controlling (Rudman & Glick, 2001).

Women have a large incentive to act according to the prescriptive and proscriptive stereotypes of traditional women (Wood & Eagly, 2010). Women who act warm and caring and avoid aggressive or highly competent behaviors are liked more and are more likely to be accepted by their peers. Women who defy social stereotypes, however, are

often disliked and likely to be met with resistance or even face discrimination from others.

Stereotypes of Working Women

Women who counter the prescriptions and proscriptions for traditional womanhood are termed vanguards – people who violate cultural stereotypes (Rudman & Fairchild, 2004). Working women, especially those in a leadership role or those who work in a traditionally masculine field, violate the proscription of agency simply by engaging in paid labor, and the prescription of warmth by deviating from their primary role as nurturer (Fiske et al., 2002). However, there is intense pressure both from perceivers of working women and working women themselves to reconcile these deviations from the cultural stereotype and conform to society's expectations (Rudman et al., 2012).

The stereotype of women in the workforce represents a negotiation between the stereotype of women in general and the stereotype of the ideal worker role. Working women fall into the category of "nontraditional women" (i.e., career women, feminists, lesbians, and athletes) according to stereotype content theorists (Fiske et al., 2002). Unlike the umbrella generalization of women as low on competence and high on warmth, nontraditional women are perceived to be highly competent – that is, they are rated as high on competence, confidence, independence, competitiveness, and intelligence. The ideal worker is also highly competent; ideal workers are expected to be committed to work above all other interests, put in long hours, and be highly accessible by employers and coworkers (Williams, 2005; Fuegen, Biernat, Haines, & Deaux, 2004). However, that competence comes at a cost for women. Nontraditional women are perceived to be lower

on warmth (i.e., tolerant, warm, good natured, sincere) compared to women in general. Thus, the more a working woman aligns with the ideal worker role, the less she is liked in comparison to more traditional women. In this way a woman who works outside the home violates both the prescriptive female trait of communality and the proscriptive female trait of agency.

Stereotypes of Working Mothers

Research indicates that working mothers experience a decrease in ratings of work-related competence that is beyond that experienced by female non-parents (Ridgeway & Correll, 2004). Working mothers violate both the ideal worker and ideal mother stereotype, which are in conflict with one another (Barnett, 2004; Ridgeway & Correll, 2004). The ideal worker is congruent with stereotypes of men; ideal workers are extremely competent and committed to the job, sacrifice other aspects of their lives for work, hold long hours at the office, and are constantly on-call for work related issues. Indeed, in order to also be a parent the ideal worker must have a stay-at-home partner, be wealthy enough to afford full-time childcare, or have a friend or family member willing to work full-time, free-of-charge.

Mothers who strive to live up to the ideal worker role are also evaluated against the ideal mother stereotype. The ideal mother is always available to her children (Ridgeway & Correll, 2004). She expends intense, skilled effort on caring for her children and responds to their needs 24 hours a day. Furthermore, mothers may be viewed as less skilled in non-nurturant domains because of their perceived nurturant skills. In other words, one can be either professional and agentic or “natural” and nurturing; the two abilities are seen as mutually exclusive. Therefore working mothers,

especially those in agentic fields, are defying the ideal mother stereotype by seeking paid employment and demonstrating professional skills.

In work domains other than highly nurturing occupations (e.g., daycare worker), working mothers are seen as lower on competence but higher on warmth compared to men with and without children or women without children (Cuddy, Fiske, & Glick, 2004). Even working pregnant women (who are not yet mothers) are seen as less competent than their childless, nonpregnant peers (Masser, Grass, & Nesic, 2007). Working mothers are therefore seen in a similar light as stay-at-home mothers and homemakers (Cuddy et al., 2004; Fiske et al., 2002). Working mothers align more with the prescriptive and proscriptive traits of women in general than nonparent female professionals, however evaluations of high warmth may not help working mothers professionally. Additionally, when working mothers are very successful in the workplace, or occupy positions that are considered highly masculine (e.g., STEM fields), working mothers are evaluated as low on nurturance and deemed as poor parents when compared to their stay-at-home counterparts (Okimoto & Heilman, 2012).

There are serious repercussions to women who do not abide by the traditional woman stereotype. Women who enter the workforce, either as nonparents or mothers, are, unfortunately, susceptible to discriminatory behavior from their supervisors, coworkers, and subordinates. I hypothesize that the specific details of their stereotype content plays a large role in determining the shape that discriminatory behavior may take.

CHAPTER THREE

DISCRIMINATION

Discrimination is mistreatment due to one's group membership (Fiske, 1998). While the cognitive (gender stereotypes) and affective (sexism) dimensions of attitudes towards women are largely intrapersonal, discrimination is the behavioral, interpersonal dimension of prejudicial attitudes. Discrimination against women in the workplace can take many forms, ranging from malicious gossip, to unfair hiring practices, to physical and sexual violence (Fitzgerald, 1993). Women who experience discrimination in the workplace suffer damages not only to their job opportunities and wages, but also to their physical and emotional health. In a longitudinal study, Pavalko, Mossakowski, and Hamilton (2003) found that when women experience even subtle, ambiguously discriminatory situations, they are likely to report more physical health concerns and report less job and life satisfaction than women who do not perceive workplace discrimination. The present research will examine a particular form of discrimination that occurs specifically when working women and mothers violate stereotypes of traditional women.

Backlash

Backlash is a specific type of discrimination. When a person discriminates against someone as punishment for stepping out of the bounds of her cultural stereotype,

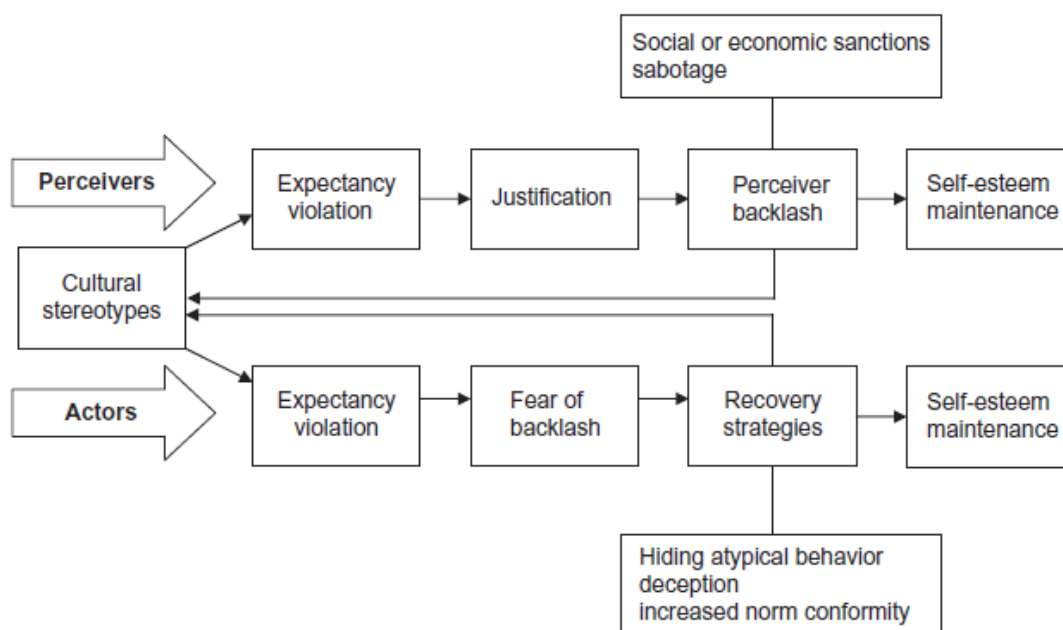
backlash has occurred (Rudman & Fairchild, 2004). For example, several classic studies have revealed that if people are given the same resume information except for the gender of the applicant, they will prefer the male candidate and perceive the female candidate to be less competent (Cohen & Bunker, 1975; Krefting, Berger, & Wallace, 1978; Martinko, & Gardner, 1983). Under these circumstances, discrimination has occurred, but not backlash; the participants in these studies do not view the female candidate as a competent vanguard, but rather evaluate her as they would a traditional woman: relatively incompetent in comparison to a man. However, if a competent working woman is given harder tasks by her supervisor in an attempt to make her fail, backlash has occurred because the reason for the discrimination is based on her deviance from traditional gender stereotypes.

Backlash against Working Women

Women who defy the general stereotype of women and succeed, lead, or hold power in the workplace are considered vanguards (i.e., people who do not conform to social stereotypes). According to the Backlash and Stereotype Maintenance Model (BSMM; Rudman, Moss-Racusin, Glick, & Phelan, 2012), perceivers, the people who evaluate vanguards, use backlash to reinforce their stereotypic worldview and actors (i.e., vanguards) who fear backlash may try to avoid discrimination by acting more stereotypically. In the case of working women, both men and women can be perceivers and are equally likely to engage in backlash against female vanguards in the workplace (Rudman & Phelan, 2008). Figure 1 shows the basic process of stereotype reinforcement via backlash for both perceivers and actors. Traditionally, women are supposed to be warm but incompetent when compared to men in the paid employment domain, as

women are expected to only demonstrate competence in the homemaking domain (Fiske et al., 2002; Glick & Fiske, 2001). When in the workplace, women who violate the warm but incompetent stereotype by acting agentially may become targets for backlash.

Figure 1. The Backlash and Stereotype Maintenance Model (BSMM; Rudman, Moss-Racusin, Glick, & Phelan, 2012).



Both perceivers and actors play a role in reinforcing cultural stereotypes (Rudman et al., 2012). For the purpose of the present work, I will focus on the perceiver path of the model. However, because it is important to understand working women's concerns within the workplace, I will briefly lay out the actor path of the model (see bottom half of Figure 1). Actors (i.e., members of stereotyped groups) are aware of the *cultural stereotypes* surrounding their group membership. They are also well aware of when they are *violating* how they are *expected* to behave based on the stereotypes; in other words, they know when they will be perceived as vanguards. This awareness leads vanguards to fear retaliatory *backlash* for violating stereotypes. In order to avoid backlash, vanguards may

choose to engage in *recovery strategies*, including hiding their stereotype-violating traits or behavior and/or making increased efforts to visibly conform to the social norm. While the recovery strategies may enable vanguards to *maintain their self-esteem* by avoiding social rejection doing so also serves to reinforce cultural stereotypes (Moss-Racusin & Rudman, 2010).

The perceiver portion of the model proposes the path that perceivers who engage in backlash also reinforce cultural stereotypes (see top half of Figure 1; Rudman et al., 2012). First, *cultural stereotypes* must be in use as a means of evaluating others according to group membership. According to their prescriptive stereotype, women are supposed to be warm and friendly, but according to their proscriptive stereotype, women should avoid being overly assertive or intelligent. Furthermore, it is only when women engage in counterstereotypic behavior that may upset the social hierarchy that the BSMM comes online (Rudman, Moss-Racusin, Phelan, & Nauts, 2012). For instance, women who are assertive and competent in charity work are less likely to receive backlash than women who are assertive and competent in the workplace. Women who display competence within the workforce are committing an *expectancy violation*. Instead of living up to the ideal of traditional womanhood, female leaders, executives, managers, or any successful career women become vanguards. Perceivers then use their prejudicial attitudes¹ to *justify* engaging in discriminatory *backlash* against the vanguard. Sabotage in particular can serve to reinforce cultural stereotypes; for example, requiring a female

¹ Perceivers rarely explicitly acknowledge that they are acting on their prejudices. Instead, they may look for other socially-acceptable justifications to obscure their prejudicial evaluations. However, the present research will get around this issue in several ways, such as asking for honest opinions in the directions, including filler items to make the true purpose of the measure less obvious, and claiming that the measure of prejudice is part of a separate, unrelated pilot study.

employee to complete a task quicker than other male employees sets her up to fail. Therefore, if the female employee does not finish her task in time, her coworkers who are unaware of the sabotage may simply view her failure as proof of incompetence, thus reifying the general stereotype of traditional women as incompetent. Finally, engaging in backlash serves to *protect the perceiver's self-esteem*, as the threat to their social status or worldview is lessened after attacking the vanguard's perceived competence. The present work will explore how working mothers are treated in accordance with the BSMM, but will not focus on the last steps of stereotype or self-esteem maintenance.

Women in the workplace face two daunting hurdles to success: overcoming stereotypes and avoiding backlash. It is almost impossible for women to clear both hurdles – they face a double bind. For example, women in the workplace who fail to clear the first hurdle and confirm the traditional woman stereotype are often denied workplace rewards (e.g., hiring, promotion) because they are perceived to be incompetent. On the other hand, women who overcome the first hurdle are often punished for doing so, possibly via hostile workplace discrimination (Rudman et al., 2012). It is only with “extreme diplomacy” (i.e., making great strides to preserve perceptions of warmth) that competent women can successfully operate within the workforce without receiving backlash.

Backlash against Working Mothers

Researchers have never examined how the BSMM plays out against working mothers, specifically. The goal of the current project is to map out the process for how perceivers engage in backlash against working mothers as compared to working women without children. As working mothers violate both the conflicting roles of the ideal

worker and ideal mother (Barnett, 2004; Ridgeway & Correll, 2004), we do not know which stereotype perceivers typically draw from when evaluating working mothers. Perceivers may have in mind the cultural stereotypes of both working women and mothers. According to Cuddy and colleagues (2004), this mixture of stereotypes results in a lower competence but elevated warmth stereotype in the workplace; working mothers trade warmth for competence. Compared to female professionals without children and male professionals both with and without children, female professionals with children were rated lowest on competence and highest on warmth. Therefore if a working mother is successful in her job role, or happens to work in a masculine-typed field, her presence in that role violates perceiver's expectancies for her. If working mothers try to overcome these stereotypes, they will likely face backlash. In order to avoid backlash in the workplace, mothers may choose to engage in behaviors that decrease their susceptibility. For example, a mother could conform to the stereotype by withdrawing from the workplace all together, or hide her parenthood status from her co-workers. Additionally, she could increase her norm conformity and try to "have it all" by displaying both traits of the ideal mother and ideal worker at all times.

The BIAS Map

Stereotypes are norms that are used by targets to guide behavior and by perceivers to evaluate behavior (Rudman, Moss-Racusin, Phelan, & Nauts, 2012). There are two types of stereotypes that dictate a group member's behavior: prescriptive traits that a good group member should possess, and proscriptive traits that a good group member should not possess. Targeted group members are well aware of their group stereotype and are sometimes able to choose to act in prescriptive ways and/or avoid proscriptive

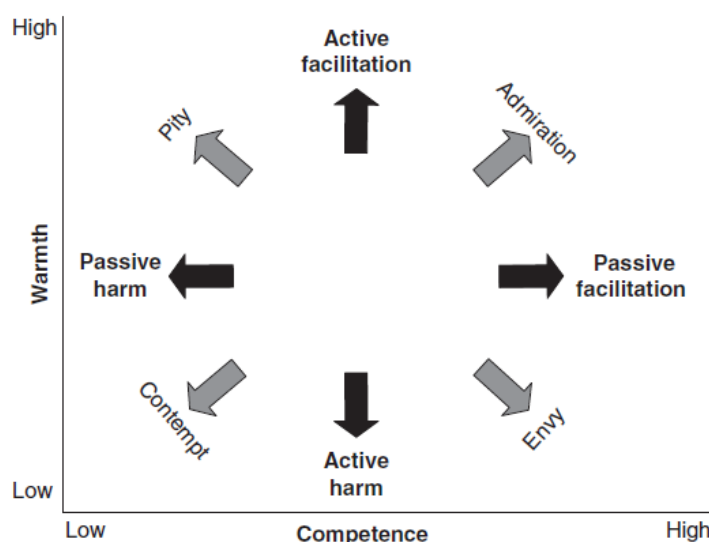
behaviors. On the other side of a cross-group interaction, perceivers draw from stereotypes to determine how to treat stereotyped group members. The Behavior from Intergroup Affect and Stereotypes (BIAS) map uses the warmth and competence quadrants of the stereotype content model to predict how people will emotionally react and behave towards stereotyped group members (Cuddy, Fiske, & Glick, 2007). Much of the research on stereotype content and the BIAS map has concerned women in and out of the workforce (Cuddy et al., 2007). For clarity, Table 1 contains the type of workplace behaviors that are indicative of active and passive harm and facilitation. The present research will draw on this literature to form a new synthesis between the type of behavior outlined in the BIAS map and backlash against nonparent women and mothers within the workplace domain.

Table 1. Workplace examples of behavior taxonomy included in BIAS map (Cuddy et al., 2007)

	Facilitation	Being friendly and helpful; listening to someone's opinions and ideas; treating someone with respect
Active	Harm	Intentionally bypassing someone for a promotion or training; sabotage; sexual harassment; deliberate avoidance or exclusion
	Facilitation	Working with another only for personal gain; resentfully hiring or promoting someone; associating with someone in formal work settings, but not casual or social settings
Passive	Harm	Unintentional avoidance or exclusion; failing to hire; failure to consider for promotion or training; unwanted help or advice

The nature of the target group's stereotype content sparks different emotional reactions, and those emotions drive perceivers to act accordingly. As shown in Figure 2, high warmth/high competence groups are admired and therefore receive active and passive facilitation (i.e., both genuine help and opportunistic help), while low competence/low warmth groups receive contempt and are likely to be subjected to active and passive harm (i.e., both purposeful and unintentional damage). People who have ambivalent stereotypes (i.e., are low on one dimension and high on another) receive a mix of active and passive facilitation and harm (Cuddy et al., 2007). High competent/low warmth groups, such as working women, elicit envy from others and receive active harm and passive facilitation. Low competent/high warmth groups, such as working mothers, elicit pity from others and receive active facilitation and passive harm.

Figure 2. The BIAS map predicted behaviors (Cuddy et al., 2007)



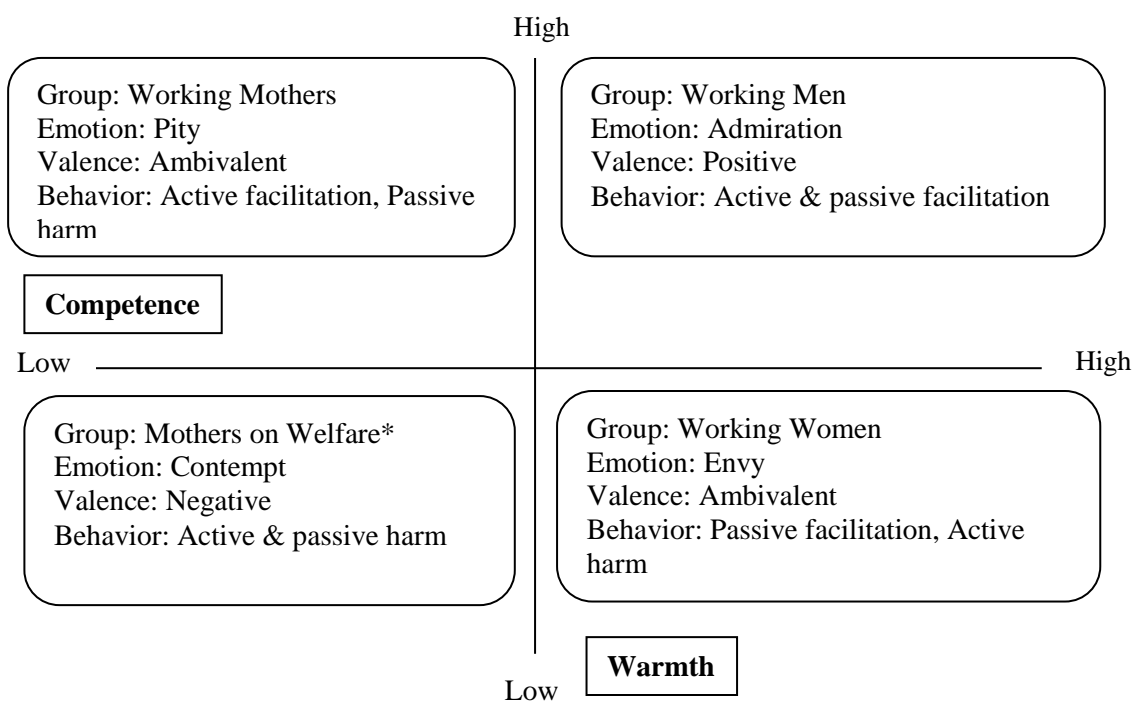
Using the BIAS Map to Predict Forms of Backlash

Backlash researchers generally look at two main forms of backlash: social or economic sanctions, and sabotage. Social or economic sanctions include denial of a

position, promotion, or training opportunities, while sabotage includes setting unrealistic goals or tasks designed to cause the target to fail (Rudman & Fairchild, 2004). Backlash researchers have basically conceptualized backlash as active harm behaviors. However, research on the BIAS map provides a more nuanced view of stereotype-based intergroup relations. It is important to look at how subtle and even seemingly benign treatment based on intergroup affect and stereotypes can be potentially detrimental for stereotyped group members.

Nontraditional women, including working women, are rated high on competence but low on warmth (Fiske et al., 2002). People who are perceived to be competent but cold elicit envy, and envious prejudice leads to active harm and passive facilitation from perceivers (see Figure 3). Active harm includes behaviors that result in discriminatory

Figure 3. BIAS map for working men, working women, working mothers, and mothers on welfare. **Note:* the group Mothers on Welfare is included to illustrate a group who is low on warmth and competence. The current research will not test this particular group.



hiring or promoting decisions, sabotage, and avoidance or exclusion of a high-status vanguard (see Table 1). For example, a man in the workplace may retaliate against a female coworker by leaving her out of important assignments as a way to sate his envy and correct for a perceived loss in status or imbalance of the social hierarchy due to her presence in the workplace. More extreme instances of active harm include systematic physical violence, including genocide. Gendered physical violence may manifest in the workplace via sexual harassment and sexual assault. In fact, female feminist activists who are very visible vanguards and key players in disrupting the social hierarchy are more likely to experience sexual harassment in the workplace than non-activists (Holland & Cortina, 2013). On the other hand, envious prejudice also leads to passive facilitation, such as behaviors that seem helpful but are actually done resentfully or for someone else's gain (see Table 1). For example, a supervisor may retaliate against a female employee by giving her some of the supervisor's responsibilities. While the added responsibility might help her in terms of skill building, the primary beneficiary in the short-term is the supervisor who now has a lighter workload.

Hypothesis 1a: Working women will receive more active harm compared to other target groups.

Hypothesis 1b: Working women will receive more passive facilitation compared to other target groups.

Group members who are evaluated as lower on competence and higher on warmth—such as working mothers—elicit pity and paternalistic prejudice from perceivers (Cuddy et al., 2007; Fiske et al., 2002). Paternalistic prejudice manifests in passive harm, such as subtle, paternalistic disrespect and condescension stemming from

the idea that low competent/high warmth stereotyped individuals are friendly, naïve, and submissive (Glick & Fiske, 2001b). On its surface, it may not be obvious how paternalistic prejudice is harmful. However, in its most extreme form, paternalistic prejudice results in slavery. While no one would equate motherhood with slavery, paternalistic prejudice may manifest itself in a much milder way if people expect mothers to be wholly fulfilled from unpaid child care labor, but unhappy with the demands of the paid workforce.

According to the BIAS map, group members who are evaluated as more warm than competent elicit pity which leads to active facilitation such as helping behavior, and passive harm such as neglect (see Figure 3; Cuddy et al., 2007). Active facilitation and passive harm behaviors may be used in an attempt to protect working mothers from spending too much time and energy on work-related tasks so that they can still be engaged parents. Although active facilitation and passive harm may be perceived as beneficial for working mothers, these benevolent sexist behaviors can be patronizing and paternalistic and may contribute to a workplace culture that reinforces the idea that working mothers are less capable compared to their counterparts (i.e., disparate impact). For example, unwanted help such as repeatedly asking a mother if she needs to leave work early is a form of passive harm, while increased interest in personal intimacy such as asking someone's personal opinions about a topic is a form of active facilitation. While on the surface these may seem like positive behaviors, pursuit of each leads to negative economic consequences for women. Supervisors may treat mothers with a "velvet glove" (Jackman, 1996) by being excessively friendly (active facilitation), but in turn may not even consider them for a promotion or training opportunity (passive harm). When active

facilitation exists at the same time as passive harm, fellow employees may adopt a workplace attitude that working mothers get underserved special treatment, because they are helped without being acknowledged for their competence.

Hypothesis 1c: Working mothers will receive more active facilitation compared to other target groups.

Hypothesis 1d: Working mothers will receive more passive harm compared to other target groups.

CHAPTER FOUR

PREJUDICE AS JUSTIFICATION FOR BACKLASH

In order for discriminatory backlash to occur, stereotypes must trigger prejudice within perceivers (Rudman & Glick, 2001). The nature of the prejudice that is triggered guides a perceiver to act in active or passive facilitatory or harmful ways (Cuddy et al, 2007). Prejudice refers to the (typically negative) affective response that one has to people based solely on their identity group membership (Fiske, 1998). Almost everyone lives with some facet of their identity that is devalued by mainstream society (Major & O'Brien, 2005). People can be unfairly judged due to their race, gender, mental health, disability, socioeconomic status, religion, sexual orientation, age, attractiveness, and a multitude of other dimensions. There has been abundant research on the forms that prejudice takes, as well as the processes that lead one to act on their prejudices and discriminate against stereotyped individuals. Prejudice, particularly implicit prejudice, is a strong predictor of discriminatory acts (Dovidio & Gartner, 2010). Prejudice against women is a consistent predictor of workplace discrimination against women (Rudman & Glick, 2001). It is therefore important to examine prejudice against women, sexism, in order to understand how women are evaluated in the workplace.

Traditional versus Modern Sexism

Sexism is defined as prejudice based on a person's biological sex or psychological gender (Glick & Fiske, 2001). Sexism is the affective component of attitudes towards people based on their maleness or femaleness, while gender-based discrimination is the behavioral component and gender stereotypes are the cognitive component (Dovidio & Gartner, 2010). While people can have sexist attitudes towards men, most psychological research on sexism focuses on sexism towards women. Therefore the term sexism usually implies prejudice specifically aimed at women.

Traditional or old-fashioned sexism refers to beliefs that women and men should inhabit traditional gender roles due to the differing "innate" abilities of men and women (Swim, Aikin, Hall, & Hunter, 1995). A traditional sexist believes that women should be homemakers and care for children and men should engage in the paid labor force because women are naturally more nurturing and less intelligent and capable than men. Traditional sexists explicitly profess to hold traditional stereotypes of women.

One popular psychological measure of traditional sexism is the Attitudes Toward Women Scale (AWS), which contains items such as "Women are generally not as smart as men" (Spence, Helmreich, & Stapp, 1973). The AWS remains a strong predictor of gender-based discrimination and is a popular measure for charting sexism across generations in longitudinal research (Glick & Fiske, 2011). However, since the development of the scale in 1972, variability on the scale has declined dramatically (Spence & Hahn, 1997; Twenge, 1997). Most people know it is not in line with the modern belief in equality to outright say that women are not as intelligent as men, and therefore refrain from doing so on self-report measures such as the AWS. Therefore, in

the 1990s, sexism researchers began to develop new, more subtle ways to measure sexism.

Modern sexism was conceptualized to address the “underground” nature of sexism (Swim et al., 1995). Researchers argue that the longitudinal decline in self-reported sexism is not due to actual reduction in sexist attitudes, but rather that people are hesitant about making their prejudicial beliefs known. It is often politically incorrect to express traditional sexist beliefs within modern society, as well as on self-report psychological measures. Therefore many expressions of sexism have taken on a superficially benign veneer. Swim and colleagues (1995) lay out three basic tenants of modern sexism: denial of continuing inequality or discrimination, antipathy towards women’s (especially feminists’) demands for equality, and the belief that women unjustly receive special advantages based on their gender.

Ambivalent Sexism

A third conceptualization of sexism is ambivalent sexism. Ambivalent sexism refers to the mix of both negative and positive components of attitudes towards women and represents a more nuanced way of looking at prejudice towards women (Glick & Fiske, 2001). Because men depend upon women for reproduction but rely on women’s low status in order to maintain their high status in society, they often hold both positive and negative attitudes towards women. In line with traditional sexism, *hostile sexism* refers to negative, antagonistic prejudice against women. Hostile sexists endorse such statements as "Women seek to gain power by getting control over men" (an item from the hostile subscale of the Ambivalent Sexism Inventory; Glick & Fiske, 2001). One of the

tenants of hostile sexism is the belief that women want to gain social power at the cost of men (Glick & Fiske, 2001).

The positive component of attitudes towards women is called *benevolent sexism*. Benevolent sexists believe that women, as the weaker sex, need to be cherished and protected by men and endorse such statements as "A good woman should be set on a pedestal by her man" (an item from the benevolent subscale of the Ambivalent Sexism Inventory; Glick & Fiske, 2001). One of the tenants of benevolent sexism is that men need women as their nurturing counterpart, thus these positive attitudes toward women may develop without upsetting traditional gender power relations (Glick and Fiske, 2001). Ambivalent sexism—the coexistence of both hostile and benevolent attitudes towards women—is a culturally ubiquitous phenomenon that often results in very real consequences for women.

Ambivalent sexism is a good predictor of discrimination against women in the workplace (Glick & Fiske, 2011; Hebl, King, Glick, Singletary, & Kazama, 2007; Masser & Abrams, 2004). However, the hostile sexism scale shows the same social desirability response bias as other explicit measures of traditional sexism. One way researchers attempt to circumvent desirability response bias is through implicit measures of prejudice. By tapping into unconscious, uncontrollable prejudicial responses, implicit measures of prejudice are strong predictors of discriminatory acts (Dovidio & Gartner, 2010), but to date researchers have not developed an implicit measure for ambivalent sexism. Instead, I will attempt to limit social desirability response bias in my study by creating a short-form of the Ambivalent Sexism Inventory (Glick & Fiske, 1996), adding distraction items, and presenting it as a "pilot test" for another study.

Working Women, Working Mothers, and Ambivalent Sexism

Vanguards that are seen as competent but cold (see the lower right quadrant of Figure 3) are susceptible to envious prejudice (Glick & Fiske, 2001b, 2011). Envious prejudice is associated with a feeling of danger from target group members. A woman's presence in the office may be viewed as a symbolic rejection of fair, merit-based systems in the workplace, thereby possibly posing as a dangerous threat to a man's livelihood. For example, women in the workplace may be viewed as unfairly taking a man's spot in the workplace. Therefore envious prejudice lends itself to hostile sexism (Glick & Fiske, 2001b, 2011; Masser & Abrams, 2004). People who score high on the hostile subscale of the Ambivalent Sexism Inventory hold a negative view of women, especially those who step out of the traditional feminine gender role. Therefore people who evaluate working women as cold are likely drawing from hostile sexist beliefs.

Hypothesis 2a: Exposure to a working woman will cause an increase in hostile sexism activation compared to other target groups.

Vanguards that are seen as relatively incompetent but warm (see upper left quadrant of Figure 3) are susceptible to paternalistic prejudice (Glick & Fiske, 2001b). Paternalistic prejudice is associated with a protective tendency towards stereotyped group members. A mother's presence in the office may be viewed as a symbolic threat to the nuclear family and traditional motherhood. Furthermore, people may fear that without women fulfilling their role as caregivers and romantic partners, men would not be complete, agentic individuals. Therefore working mothers are not generally seen as a threat to the socioeconomic system, but rather threaten the social system by not attending to their primary role as parents (Glick & Fiske, 2001b). Working mothers may be viewed

as unsatisfied with their position in the workplace because it is assumed they would rather be at home with their children. Paternalistic prejudice lends itself to benevolent sexism (Glick & Fiske, 2001; Masser & Abrams, 2004). People who score high on the benevolent subscale of the Ambivalent Sexism Inventory hold a positive view of women. Therefore people who see a working mother as warm are likely drawing from benevolent sexist beliefs.

Hypothesis 2b: Exposure to a working mother will cause an increase in benevolent sexism activation compared to other target groups.

Hostile and Benevolent Sexist Justifications for Backlash via Active and Passive Facilitation and Harm

System justification theory posits that people are motivated to preserve the status quo and develop legitimizing arguments for preserving the status quo, even when doing so violates self-interest (Jost, Banaji, & Nosek, 2004). For example, women should be in favor of policies such as affirmative action that advance their status and power within society. When women go against policies like affirmative action they draw from societal myths and justifications that legitimize the social system, such as the popular myth that affirmative action actually hurts women and racial minorities by not holding them to the same standards as White men. A woman who holds such a belief about affirmative action therefore legitimizes the status quo while also not appearing to work against her disadvantaged group.

Backlash is a manifestation of system justification (Rudman et al., 2012).

According to the Status Incongruity Hypothesis, backlash occurs when vanguards try to change their social status by aspiring to a higher social status or "sully" themselves by

inhabiting a lower social status (Moss-Racusin, Phelan, & Rudman, 2010). Working women are status incongruent when they succeed in the workplace because they aspire to the high-status role typically reserved for men. Working mothers are status incongruent when they succeed in the workplace not only because they seek high-status, but also because they are neglecting their "primary" low-status duty of caring for children. Therefore both working women and working mothers potentially inspire system justification threats in perceivers.

In many ways, ambivalent sexism creates conditions where the existing social hierarchy is easily justified because one can draw on the benevolent, positive stereotypes of women to legitimize the status quo (Glick & Fiske, 2001b). In general, both men and women are in favor of benevolent sexist beliefs and actions, such as men holding the door open for women (Glick & Fiske, 1997; Kilianski & Rudman, 1998). Therefore it is difficult for women to advocate against benevolent sexism due to social acceptance of benevolently sexist actions. Furthermore, when women act counter to benevolent sexist stereotypes by acting serious or avoiding nurturing tasks, they are likely to receive hostile sexist reprimands. These reprimands may be seen as valid due to the perceived error of the deviant female target. Hostile and benevolent sexism work in concert to preserve the systematic, prescriptive and proscriptive stereotypes of women (Glick & Fiske, 2001b). In support of this assertion, hostile and benevolent sexism differentially predict reactions to "deviant" and "proper" women. Hostile sexism predicts a negative evaluation of career women, whereas benevolent sexism predicts a positive evaluation of homemakers (Glick, Diebold, Bailey-Werner, & Zhu, 1997).

The present work extends the research on the BSMM to incorporate how the content of a stereotype differentially leads to either hostile or benevolent justifications, which in turn lead to disparate forms of backlash. To extend the research on the stereotype content model (Fiske et al., 2002) and ambivalent sexism (Glick & Fiske, 2001) to the BSMM, nontraditional women (or any member of a high-status, competitive group) in the eyes of hostile sexists, are seen as competent but cold (Fiske et al., 2002). Active harm and passive facilitation, as identified on the BIAS map taxonomy of behaviors, are complementary to the behaviors elicited by envious prejudice as discussed in Glick and Fiske (2001b, 2011), and hostile attitudes toward a group are associated with active harm and passive facilitation (Cuddy et al., 2007). Hostile sexists are likely to believe that their discriminatory behavior towards working women protects the status quo and the supremacy of men in society. Hostile sexist attitudes should therefore serve as a justification of workplace discrimination against working women. Envious hostile sexists are likely to justify blatant discriminatory behavior by rationalizing that they need to punish the vanguard for violating cultural stereotypes in order to protect themselves and the social order (Glick & Fiske, 2001b). With the justification in place, perceivers are free to engage in backlash against women for acting outside of the expectations of traditional women.

Hypothesis 3a: Hostile sexism will mediate the relationship between parenthood and active harm for female targets (but not male targets).

Hypothesis 3b: Hostile sexism will mediate the relationship between parenthood and passive facilitation for female target (but not male targets).

The BIAS map taxonomy of behaviors is complementary to the behaviors elicited by paternalistic prejudice as discussed in Glick and Fiske (2001b, 2011), and benevolent behaviors are associated with passive harm and active facilitation (Cuddy et al., 2007; Hebl, et al., 2007). Previous research has failed to find an effect of benevolent sexism on workplace outcomes (Masser & Abrams, 2004), however the researchers used measures designed only to tap active harm (i.e., employee ratings and hiring decisions). Further, benevolent sexists are likely to feel that their discriminatory behavior towards working mothers is for the woman's benefit and best interests. Benevolent sexist attitudes would therefore serve as a justification for workplace discrimination against working mothers. With the justification in place, perceivers are free to engage in backlash against mothers for acting outside of the expectations for traditional mothers and the ideal worker.

Hypothesis 3c: Benevolent sexism will mediate the relationship between parenthood and active facilitation for female targets (but not male targets).

Hypothesis 3d: Benevolent sexism will mediate the relationship between parenthood and passive harm for female target (but not male targets).

CHAPTER FIVE

THE PRESENT RESEARCH

The research on stereotype content, working women and working mothers, ambivalent sexism, and backlash suggests a divergent model for backlash against working women and working mothers. Figure 4 maps out my proposed model of perceiver backlash against working women without children and working mothers. In sum, working women and working mothers each represent a different form of stereotype violation when compared to traditional women. As such, I predict that perceivers who encounter working women are likely to have hostile sexist beliefs activated, which justify backlash in the forms of active harm and passive facilitation. Correspondingly, I predict that perceivers who encounter working mothers are likely to have benevolent sexist beliefs activated, which justify backlash in the forms of passive harm and active facilitation. Engagement in any form of backlash should then reaffirm social stereotypes, as well as serve as a source of self-esteem maintenance for the perceiver. The present research will test the parts of this model where working mothers and working women are predicted to diverge (i.e., the three middle panels of the model in Figure 4). Specifically, I will test how women who commit different *expectancy violations* (i.e., veering from the stereotype of traditional women by being working women or working mothers) activate divergent *justifications* (i.e., hostile and benevolent sexism) which lead to different forms

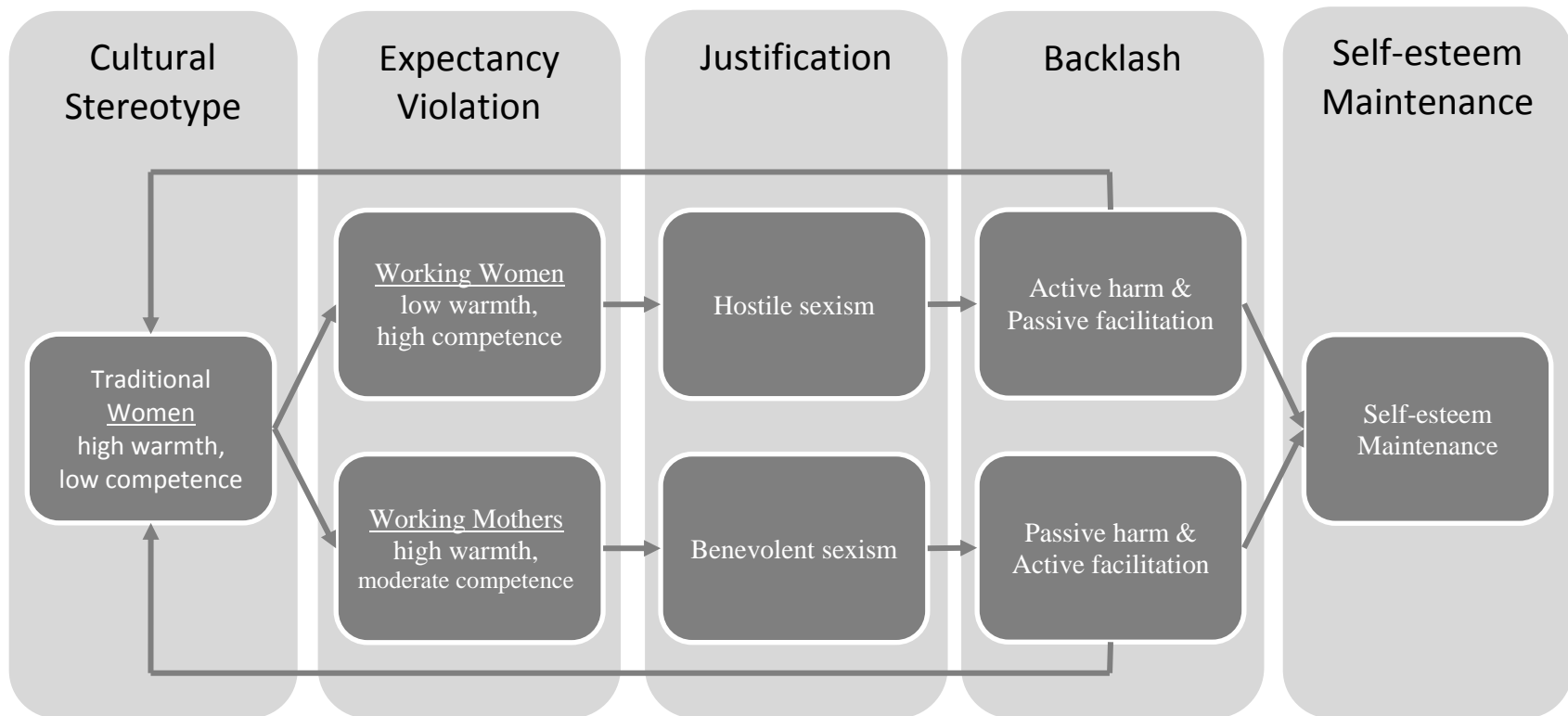
of *backlash* (i.e., active/passive facilitation and harm). My specific hypotheses, as stated in previous chapters, are:*Hypothesis 1a: Working women will receive more active harm compared to other target groups.*

- *Hypothesis 1b: Working women will receive more passive facilitation compared to other target groups.*
- *Hypothesis 1c: Working mothers will receive more active facilitation compared to other target groups.*
- *Hypothesis 1d: Working mothers will receive more passive harm compared to other target groups.*

- *Hypothesis 2a: Exposure to a working woman will cause an increase in hostile sexism activation compared to other target groups.*
- *Hypothesis 2b: Exposure to a working mother will cause an increase in benevolent sexism activation compared to other target groups.*

- *Hypothesis 3a: Hostile sexism will mediate the relationship between parenthood and active harm for female targets (but not male targets).*
- *Hypothesis 3b: Hostile sexism will mediate the relationship between parenthood and passive facilitation for female target (but not male targets).*
- *Hypothesis 3c: Benevolent sexism will mediate the relationship between parenthood and active facilitation for female targets (but not male targets).*
- *Hypothesis 3d: Benevolent sexism will mediate the relationship between parenthood and passive harm for female target (but not male targets).*

Figure 4. Proposed model for perceiver backlash against working women without children and working mothers.



I have also included a set of exploratory, qualitative measures in order to capture people's self-generated justifications for endorsement for different forms of backlash. Namely, I believe that people will cite features of the ideal worker stereotype (i.e., perceived work ethic and nonwork obligations) when explaining why employees should be treated in certain ways that align with active & passive facilitation & harm. Furthermore, based upon work on the shifting standards model (Biernat, 1995), people may use stereotypical group membership in order to determine the most appropriate roles for employees, even given identical credentials. Therefore I suspect the group membership of the target may impact people's judgments of whether a certain behavior is ethically appropriate for the workplace or not. I have developed four exploratory hypotheses that I wish to explore via open-ended responses within my experiments:

- *Hypothesis 4a: The relationship between working mothers and active harm will be mediated by perceptions of high work ethic, low family obligations, and low evaluations of inappropriateness.*
- *Hypothesis 4b: The relationship between working mothers and passive facilitation will be mediated by perceptions of high work ethic, low family obligations, and low evaluations of inappropriateness.*
- *Hypothesis 4c: The relationship between working mothers and active harm will be mediated by perceptions of low work ethic, high family obligations, and low evaluations of inappropriateness.*
- *Hypothesis 4d: The relationship between working mothers and passive facilitation will be mediated by perceptions of low work ethic, high family obligations, and low evaluations of inappropriateness.*

Study 1 Method

Design

Study 1 was a 2(target parenthood status: nonparent, parent) X 2(target gender: man, woman) X 4(backlash: active harm, passive harm, active facilitation, passive facilitation) mixed-methods design, with target gender and parenthood status as between-subjects factors and backlash as a within-subjects factor.

Participants

Prospective power analysis. I used G*Power 3.1 (Erdfelder, Faul, & Buchner, 1996; Faul, Erdfelder, Lang, & Buchner, 2007), a statistical prospective power software package, to estimate the appropriate sample size for my study. Research on the Stereotype Content Model for working women and working mothers (Fiske et al., 2002; Cuddy et al., 2004), BIAS Map (Cuddy et al., 2007), Ambivalent Sexism (Fisk & Glick, 2001), and Backlash (Rudman & Fairchild, 2004) report a medium to large effect size of stigmatized group status on indicators of discrimination. In order to avoid underpowering the experiment, I used a low-medium effect size when conducting the prospective power analysis. I set G*Power to estimate sample size with mixed-model within-between interaction effects at 80% power to find my effect with four groups (two levels of target gender X two levels of parenthood status) and four measures (four forms of backlash). G*Power indicated that I will need 46 participants per cell for a total of 184 participants in order to be adequately powered to find my hypothesized effects if they indeed exist. I planned to collect 20% more participants than the G*Power estimate (an additional 36 people for 220 participants total) in anticipation that some participants will

guess the purpose of the study, become distracted during the course of the study, or fail to fully complete the online survey materials.

Three hundred and thirty-one participants were recruited through Amazon's Mechanical Turk (www.mturk.com; see Appendix A), a website that employs a global, diverse, and motivated subject pool (Buhrmester, Kwang, & Gosling, 2011). Participants were eliminated from the data analyses if they failed a manipulation check ($n = 56$), were not a US citizen ($n = 36$), failed an attention check ($n = 9$), or reported they were a parent ($n = 2$), for a total of 228 remaining participants. Participants¹, on average, were 31.92 years old ($SD = 11.89$) and predominately female (134 female, 94 male) and White (192 White, 20 Black, 14 Hispanic/Latino, 6 East Asian, 8 multiracial, 1 South Asian). The majority of workers had been employed for over 10 years (40.5%) and had under 5 years supervisory experience (44.7%), but most did not have any hiring experience (54.2%)². Mirroring national figures, most participants also grew up with a mother who worked outside of the home (72.3%)³.

Fair pay for HITS on Amazon MTURK is based on a market “going rate” for tasks taking a similar amount of time and effort. For example, extremely brief questionnaires pay \$0.10 whereas time-intensive tasks such as audio transcription may pay upwards of \$10.00 per HIT task. I offered \$0.50 for compensation based on an

¹ Participants who were disqualified due to the manipulation check, citizenship, attention check, and parent items did not significantly differ from those retained in the sample with regards to age, gender, or race.

² There were no differences on any of the outcome measures by employment, supervisory, or hiring experience.

³ There were no differences on any of the outcome measures by employment status of the participants' mother.

estimated completion time of 15 minutes, and paid an additional \$0.25 (for a total of \$0.75) to workers who passed the manipulation and attention check items.

Procedure and Materials

All materials were presented to the participants via the online survey software Web Inquisit, by Millisecond Software. All procedures were approved prior to data collection by the Loyola University Chicago Institutional Review Board (IRB).

Target descriptions. After indicating informed consent (see Appendix B), participants read one of four employee descriptions: a man (with an undisclosed parenthood status), woman (with an undisclosed parenthood status), father, or mother. The target description was modified from materials used by Okimoto and Heilman (2012) and Cuddy et al. (2004); all pronouns were modified to reflect the gender of the target:

Jennifer [Jason] is a 32-year-old financial advisor who graduated with a master's degree in finance. She's [He's] been working in her [his] current field for six years. When working with a client, her [his] duties include conducting in-depth reviews of clients' financial circumstances, synthesizing and communicating current financial trends, designing financial strategies, and helping to implement change in her [his] clients' organizations. Her [His] hobbies include swimming and tennis. Jennifer [Jason] and her husband [his wife] recently had their first baby [have a dog and a cat]. She [He] lives in the suburbs of Chicago, commuting to work two days a week and telecommuting three days a week.

Manipulation checks. Participants read the description of the target before they indicated their answers to the following questions: "What was the name of the person in the scenario?" with the options "Daniel," "Jennifer," "Diana," and "Jason"; "What was the person's job title?" with the options "Counselor", "Financial Advisor," "History Professor," and "Talent Agent" ; and "Was the person described a parent?" with the options "yes" and "no."

Stereotype content. Participants were asked to rate the warmth (e.g., "Friendly"; seven items total) and competence (e.g., "Skillful"; seven items total) of the target person with a scale from 1 *not at all* to 9 *extremely* (adapted from Cuddy et al., 2004; Fiske et al., 2002; see Appendix C). Items were averaged to create Warmth ($\alpha = .92$) and Competence ($\alpha = .93$) scales.

Ambivalent sexism activation. Participants were told that it was important to have a brief break before continuing on with the study, and that during this break they were going to complete a "pilot test" of some items that were in development. The "pilot test" was actually a short-form of the Ambivalent Sexism Inventory (see Appendix E). To create the short form, I chose the five highest loading items (that did not reference the workplace) from both the hostile ($\alpha = .91$) and benevolent ($\alpha = .75$) subscales. I combined these items with five filler items from the Romantic Beliefs Scale (Sprecher & Metts, 1989) in order to decrease suspicion and hypothesis guessing, for a total 15 items in the "pilot study."

Backlash. To measure the likelihood of engaging in active and passive harm and active and passive facilitation, I adapted Sibley's (2011) BIAS-Treatment Scale for use with perceivers. Sibley's (2011) scale originally had 8 items per subscale, for a total of 32 items. In order to make the measure briefer for the participants, I modified the 4 highest-loading items from each subscale to form a 16-item Perceiver BIAS Treatment Scale (see Appendix E): active facilitation ($\alpha = .75$), passive facilitation ($\alpha = .65$), active harm ($\alpha = .82$), and passive harm ($\alpha = .70$). Participants were asked to rate how likely the target would be to elicit the following behaviors from coworkers with a scale from 1 *not at all likely* to 9 *extremely likely*. Research on self-projection indicates that people use their

own attitudes and beliefs as a baseline for how they estimate others would behave (Fisher, 1993). Following Cuddy et al. (2007), I framed the BIAS items to reflect overall behavioral tendencies instead of personal likelihood in order to reduce social desirability effects.

Exploratory backlash measures. Participants also completed the backlash in managerial decisions measure I originally created for Study 2. The backlash managerial decision measure consisted of 12 item designed to tap active facilitation, passive facilitation, active harm, and passive harm. Participants rated how good of a “fit” each task and behavior was for the employee on a 1 *not a good fit* to 9 *very good fit* scale (see Appendix M).

A principal components analysis with varimax rotation of all 12 items suggested that the backlash managerial decision measure was best split into four factor solution, each consisting of two items⁴. The measure has an active facilitation factor (Factor 1, with an eigenvalue of 2.23, accounting for 18.57% of the variance), passive harm factor (Factor 2, with an eigenvalue of 1.87, accounting for 15.57% of the variance), passive facilitation factor (Factor 3, with an eigenvalue of 1.20, accounting for 10.03% of the variance), and active harm factor (Factor 4, with an eigenvalue of 1.04, accounting for 8.66% of the variance). No other components had eigenvalues over 1; see Table 2 for factor loadings⁵.

⁴ The items that did not load and were subsequently dropped were: Begin training the employee for a supervisor position, Ask the employee to meet with you every week to discuss assignments, Invite the employee on optional social outings, such as a working lunch or happy hour, and Assign the employee a very difficult task to complete alone that usually requires two or more employees to complete.

⁵ The items that loaded onto the four components generally match predicted patterns for active facilitation, passive harm, passive facilitation, and active harm. Note, however, that the Study 1 and Study 2 factor

Table 2. Study 1: Varimax rotated component matrix of factors in the backlash managerial decisions measure.

		Item	<u>Component</u>			
			1	2	3	4
Factors	Active Facilitation	Invite the employee to give critical feedback on workplace policies.	.69	.01	.08	-.20
		Give the employee the opportunity to present ideas at a weekly staff meeting.	.63	-.03	.01	.12
	Passive Harm	Tell the employee how to best achieve work-life balance.	-.01	.74	-.08	.08
		Regularly pull the employee aside to offer what you consider to be helpful advice.	.05	.71	.25	.12
	Passive Facilitation	Require the employee to develop training materials that you would then use with employees from other companies.	-.01	.09	.67	.11
		Due to workplace politics, you agree to promote the employee although doing so would not have been your first choice.	.05	.08	.62	.18
	Active Harm	Ask the employee to be in charge of ordering office supplies, making coffee, and other general office maintenance tasks although these are not standard job duties.	-.11	.16	.02	.65
		Assign another financial advisor to collaborate with the employee on all of the employee's tasks.	-.08	.17	.17	.59

Exploratory qualitative justification measures. After each of the backlash in managerial decisions items, I asked participants to “Please give a brief reason why you chose this rating.” I had coders evaluate each of the 1,824 responses (8 open-ended

analysis revealed different factor structures. The items that comprise active facilitation are not the same in both studies; 5 out of the 8 items loaded the same in both Study 1 and Study 2. As the backlash in managerial decisions measure is one that I created and am still working to validate, I chose to compute the four subscales with the items that represent the four factors for each study sample, rather than use the theoretically derived subscales for both studies and risk working with invalid measures of the backlash constructs.

responses X 228 participants) on several dimensions. A random subset of the participant responses (responses from 98 participants = 784 responses; 42.98% of the open-ended data) were coded by two coders in order to calculate interrater reliability scores.

Based on the justifications I thought would emerge in hypotheses 4a-4d, I had coders rate the degree to which the participants indicated that the employee displayed a strong work ethic on a 5-point scale that ranged from 1 *very poor work ethic* to 5 *very strong work ethic* (interrater reliability: $r = .50$; across all 8 items: $M = 24.55$, $SD = 1.78$, range = 23 – 32). Next, participants rated the degree to which the behavior or task was generally inappropriate for the workplace on a 5-point scale that ranged from 1 *very appropriate* to 5 *very inappropriate* (interrater reliability: $r = .85$; across all 8 items: $M = 17.84$, $SD = 5.85$, range = 8 – 33). I combined coding items that measured mentions of a pet, parent, and spouse to create a “family” variable (across all 8 items: $M = 0.39$, $SD = 1.08$, range = 0 – 6). Coders indicated if the participant mentioned parenthood (interrater reliability: $r = .93$) or pets (interrater reliability: $r = .94$) in their answer on a 0 *no mention*, 1 *yes, mentioned once*, 2 *yes, mentioned more than once* scale. I also flagged each response for the mention of the target’s spouse or marriage. I combined the pet, parent, and spouse items to create a “family” variable (across all 8 items: $M = 0.40$, $SD = 1.05$, range = 0 – 8). I then calculated the work ethic, family, and inappropriate variables separately for each type of backlash behavior.

Demographics. Participants were asked to answer several questions about themselves, including their gender, race/ethnicity, parent status, and managerial experience (see Appendix F).

Debriefing. The last portion of the Inquisit survey asked participants three free-response items (see Appendix G). After the participants completed those items, the last page of the survey was a debriefing form that summarized the purpose of the study, offered information on prejudice and backlash research, and provided information on who to contact if they had further questions about the study (see Appendix H).

Study 1 Results

In order to test the ten hypotheses and proposed model, data analysis was conducted in three stages. The first two stages tested specific parts of the proposed model, while the final stage separately tested the complete model for each of the four types of backlash.

Correlations

I ran conducted correlation tests on the stereotype content variables, hostile and benevolent sexism, and the backlash items as measured by the BIAS treatment scale (see Table 3). In general, I found positive correlations between measures of stereotype content (warmth and competence) and between measures of sexism (hostile and benevolent). Active facilitation and passive harm were generally negatively correlated with passive facilitation and active harm.

Table 3. Study 1 correlation table.

	Warmth	Competence	HS	BS	AF	PF	AH
Warmth	-						
Competence	.61**	-					
Hostile Sexism (HS)	-.06	-.06	-				
Benevolent Sexism (BS)	.09	-.01	.42**	-			
BIAS							
Active Facilitation (AF)	.52**	-.39**	-.06	.09	-		
Passive Facilitation (PF)	-.35**	-.18**	.04	.01	-.46**	-	
Active Harm (AH)	-.37**	-.40**	.18**	.10	-.45**	.29**	-
Passive Harm (PH)	.31**	.13*	-.06	.14*	.32**	-.08	-.01

* $p < .05$, ** $p < .01$

Stereotype Content

I performed a 2(target parenthood status: nonparent, parent) X 2(target gender: man, woman) X 4(stereotype content: warmth, competence) repeated-measures ANOVA, with target parenthood status and gender as between-subjects factors and stereotype content as a within-subjects factor. There was a marginally significant main effect of parenthood condition such that parents ($M = 7.30$, $SE = 0.08$) were rated higher on stereotype content than nonparents ($M = 7.11$, $SE = 0.08$), $F(1, 260) = 2.76$, $p = .10$, $\eta^2 =$

0.01. There was a marginally significant main effect of gender condition such that women ($M = 7.31, SE = 0.08$) were rated higher on stereotype content than men ($M = 7.10, SE = 0.08$), $F(1, 260) = 3.13, p = .08, \eta^2 = 0.01$. There was a significant main effect of stereotype content such that all targets were rated higher on competence ($M = 7.66, SD = 0.98$) than warmth ($M = 6.76, SD = 1.14$), $F(1, 260) = 212.16, p < .001, \eta^2 = 0.45$.

There was a significant stereotype content X parenthood condition interaction, $F(1, 260) = 7.89, p = .01, \eta^2 = 0.03$. Parents ($M = 7.66, SD = 1.00$) and nonparents ($M = 7.65, SD = 0.97$) were rated equally competent, but parents ($M = 6.93, SD = 1.20$) were rated higher on warmth than nonparents ($M = 6.58, SD = 1.05$). None of the other two-way nor the three-way interactions were significant, $F(1, 260)s < 1.01, ps > .32$.

Phase 1: Gender as Moderator of Parenthood-Backlash Relation

First, to test hypotheses 1a – 1d, I analyzed the data for simple moderation (Hayes, 2012; see Figure 5). Testing a simple moderation model is appropriate for hypotheses 1a and 1b given my design because I am interested in whether the magnitude of one variable's (i.e., target parenthood status) effect on my outcome variables (i.e., four types of backlash) is dependent upon a third variable (i.e., target gender).

Figure 5. Simple moderation of the relationship between target parenthood status and backlash by target gender.



I performed a 2(target parenthood status: nonparent, parent) X 2(target gender: man, woman) X 4(backlash: active harm, passive harm, active facilitation, passive facilitation) repeated-measures ANOVA, with target parenthood status and gender as between-subjects factors and backlash as a within-subjects factor. There were no main effects of target parenthood status ($F(1, 260) = 0.95, p = .33$) nor target gender ($F(1, 260) = 1.74, p = .19$). There was a main effect of backlash, $F(3, 780) = 642.51, p < .001, \eta^2 = 0.71$. Simple contrasts that compared the four forms of backlash revealed that people endorsed active facilitation items the most, followed by passive harm items, passive facilitation items, and lastly the active harm items; each type of backlash significantly differed from the other (see Table 4).

Table 4. Study 1: Main effect of backlash.

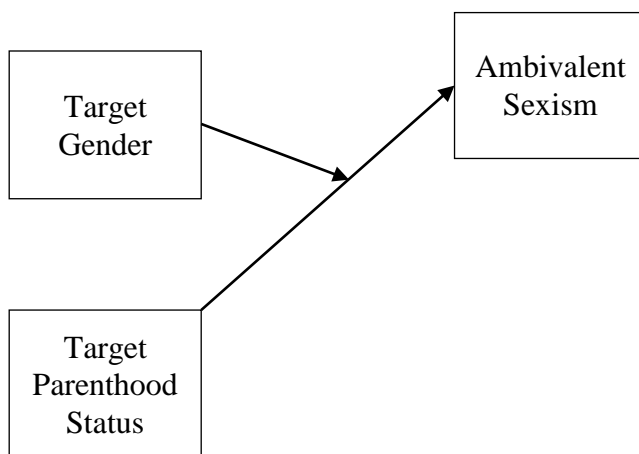
	<i>M (SD)</i>	<i>F(1, 260)</i>	<i>p</i>	η^2
Active harm vs.	1.93 (1.08)			
Active facilitation	6.65 (1.15)	1660.39	< .001	0.87
Passive facilitation	4.29 (1.33)	642.77	< .001	0.71
Passive harm	5.39 (1.34)	1050.15	< .001	0.80
Active facilitation vs.	6.65 (1.15)			
Passive facilitation	4.29 (1.33)	309.46	< .001	0.54
Passive harm	5.39 (1.34)	190.66	< .001	0.42
Passive facilitation vs.	4.29 (1.33)			
Passive harm	5.39 (1.34)	79.28	< .001	0.23

I did not find any 2-way interactions, $F(3, 780) < 1.45, ps > .23$. Contrary to hypotheses 1a – 1d, I did not find a 3-way interaction between target parenthood status, gender, and backlash, $F(3, 780) = 0.33, p = .81, \eta^2 = 0.001$.

Phase 2: Gender as Moderator of Parenthood-Sexism Relation

Second, to test hypotheses 2a and 2b, I tested for simple moderation (Hayes, 2012; see Figure 6). Testing a simple moderation model is appropriate for hypotheses 2a and 2b given my design because I am interested in whether the magnitude of one variable's (i.e., target parenthood status) effects on my outcome variables (i.e., hostile and benevolent sexism) is dependent upon a third variable (i.e., gender of the target).

Figure 6. Simple moderation of the relationship between target parenthood status and ambivalent sexism by target gender.



I performed a 2(target parenthood status: nonparent, parent) X 2(target gender: man, woman) X 2(ambivalent sexism: hostile, benevolent) repeated-measures ANOVA, with target parenthood status and gender as between-subjects factors and ambivalent sexism as the within-subjects factor. There were no main effects of target parenthood status ($F(1, 260) = 0.69, p = .41, \eta^2 = 0.003$) nor target gender ($F(1, 260) = 0.03, p = .85,$

$\eta^2 < 0.001$). There was a main effect of sexism; in line with past research, participants scored higher on benevolent sexism ($M = 4.23$, $SD = 1.59$) than hostile sexism ($M = 3.80$, $SD = 1.87$), $F(1, 260) = 13.24$, $p < .001$, $\eta^2 = 0.05$.

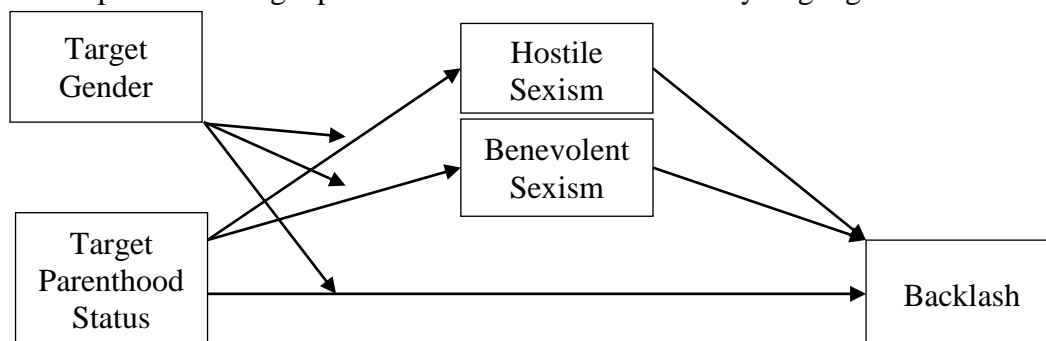
I did not find any 2-way interactions, $F(1, 260)s < 1.51$, $ps > .22$. Contrary to hypotheses 2a and 2b, I did not find a 3-way interaction between target parenthood status, gender, and sexism, $F(1, 260) = 0.03$, $p = .86$, $\eta^2 < 0.001$.

Phase 3: Moderated Mediation

Third, to test the complete model as described in hypotheses 3a – 3d, I analyzed my data for moderated mediation with two mediators operating in parallel separately for each of my four measures of backlash (Hayes, 2012; see Figure 7). Testing a moderated mediation model (also called a conditional process model) is appropriate for hypotheses 3a – 3d given my design because I am interested in whether the indirect effects of hostile and benevolent sexism through which target parenthood status impacts backlash are dependent upon the gender of the target. Further, this approach is advantageous because it allows me to test the mediating role of hostile and benevolent sexism concurrently and at different levels of target gender. Conventional means of testing mediation as outlined by Baron and Kenney (1986) do not allow for the simultaneous testing of mediation and moderation within one model. The PROCESS macro allows me to address both "how" (i.e., through hostile and benevolent sexism) and "when" (i.e., depending on target gender) target parenthood status has an effect on backlash within a single model (Preacher & Hayes, 2008). Additionally, the Preacher and Hayes (2006) method of mediation testing is a more conservative, robust test than conventional mediation testing.

To conduct my moderated mediation analysis, I used the SPSS PROCESS macro utilizing a bootstrapping approach. The bootstrapping approach, as opposed to traditional tests of mediation, draws samples from the existing data set, replacing those samples back into the "pool" before drawing additional samples. These samples are then used to estimate the path coefficients as specified in the model. I generated 5,000 samples with replacement to ensure a robust test for my hypotheses (Hayes, 2012). The resulting 5,000 tests for each path are then configured in a distribution of the results, and the test is considered "significant" if the 5% cut-off point of the lower tail of the bootstrap distribution of indirect effects is above 0. In other words, one can assume significance if 5% or less of the 5,000 samples reveal no indirect effects greater than chance. I predict that when the target is a woman, nonparent targets (i.e., working women) will elicit greater active harm and passive facilitation compared to other forms of backlash, and this relationship will be mediated by hostile sexism. In turn, female parent targets (i.e., working mothers) will elicit greater active facilitation and passive harm, and this relationship will be mediated by benevolent sexism. I predict no impact of parenthood status on backlash for men, and therefore I expect that neither hostile nor benevolent sexism will be significant mediators.

Figure 7. Moderated mediation of indirect effects of hostile and benevolent sexism on the relationship between target parenthood status and backlash by target gender.



Active harm. To test hypothesis 3a, I used Preacher & Hayes (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status on active harm through hostile and benevolent sexism. Table 4 groups active harm and passive facilitation in the same table because I predict the same pattern of effects of target gender and parenthood status for each variable. As shown in Table 4, there were no significant effects; I did not find support of my predicted model (see Figure 7).

Passive facilitation. To test hypothesis 3b, I used Preacher & Hayes (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status on passive facilitation through hostile and benevolent sexism. As shown in Table 5, there were no significant effects; I did not find support of my predicted model (see Figure 7).

Table 5. Moderated mediation of the effects of parenthood and gender on active harm and passive facilitation through benevolent and hostile sexism.

Description of Estimated Path	Active Harm		Passive Facilitation	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] X Gender^{^^} → Active Harm & Passive Facilitation</i>				
Direct effect of Parenthood	-.07 (.07)	-.21 / .05	.01 (.08)	-.21 / .05
Direct effect of Gender	.05 (.07)	-.08 / .18	-.01 (.08)	-.08 / .18
Parenthood X Gender Interaction Effect	-.04 (.07)	-.17 / .09	-.06 (.08)	-.17 / .09
<i>Parenthood[^] X Gender^{^^} → Benevolent & Hostile Sexism</i>				
Benevolent Sexism				
Direct effect of Parenthood	-.002 (.10)	-.20 / .19	-.002 (.10)	-.20 / .19
Direct effect of Gender	-.03 (.10)	-.23 / .16	-.03 (.10)	-.23 / .16
Parenthood X Gender Interaction Effect	.01 (.10)	-.19 / .21	.01 (.10)	-.19 / .21

Description of Estimated Path	<u>Active Harm</u>		<u>Passive Facilitation</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
Hostile Sexism				
Direct effect of Parenthood	-.15 (.12)	-.38 / .08	-.15 (.12)	-.38 / .08
Direct effect of Gender	.07 (.12)	-.16 / .29	.07 (.12)	-.16 / .29
Parenthood X Gender Interaction Effect	-.01 (.12)	-.24 / .22	-.01 (.12)	-.24 / .22
<i>Benevolent & Hostile Sexism → Active Harm & Passive Facilitation</i>				
Direct effect of Benevolent Sexism	-.04 (.05)	-.13 / .05	-.07 (.06)	-.13 / .05
Direct effect of Hostile Sexism	.03 (.04)	-.04 / .11	.01 (.05)	-.04 / .11
<i>Parenthood[^] X Gender^{^^} → Benevolent & Hostile Sexism → Active Harm & Passive Facilitation</i>				
Man Target				
Conditional direct effect of Parenthood	-.03 (.10)	-.22 / .16	.06 (.12)	-.22 / .16
Indirect effect of Parenthood through Benevolent Sexism	.001 (.01)	-.01 / .02	.001 (.01)	-.01 / .02
Indirect effect of Parenthood through Hostile Sexism	-.004 (.01)	-.04 / .01	.001 (.01)	-.04 / .01
Woman Target				
Conditional direct effect of Parenthood	-.12 (.09)	-.30 / .02	-.05 (.11)	-.30 / .02
Indirect effect of Parenthood through Benevolent Sexism	-.0003 (.01)	-.02 / .02	.001 (.01)	-.02 / .02
Indirect effect of Parenthood through Hostile Sexism	-.01 (.01)	-.04 / .01	-.002 (.01)	-.04 / .01

[^] Parenthood was coded so that -1 = nonparent, 1 = parent

^{^^} Gender was coded so that -1 = man, 1 = woman

* $p < .05$ (significant paths)

† Confidence Interval did not include zero

Active facilitation. To test hypothesis 3c, I used Preacher and Hayes (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status on active facilitation through hostile and benevolent sexism. In Table 6, I group active facilitation and passive harm in the same table because I predict the same pattern of effects of target gender and parenthood status for each variable. As shown in Table 5, the direct effects of both parenthood and gender on active facilitation were significant. As expected, parents ($M = 6.78$, $SD = 1.16$) were more likely to receive active facilitation than nonparents ($M = 6.52$, $SD = 1.14$), and women ($M = 6.77$, $SD = 1.06$) were more likely to receive active facilitation than men ($M = 6.52$, $SD = 1.24$). There was also a significant effect of benevolent sexism on active facilitation such that as benevolent sexism increased, active facilitation also increased (see Table 6). However, there were no other significant effects; I did not find full support of my predicted model (see Figure 7).

Passive harm. To test hypothesis 3d, I used Preacher & Hayes (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status on passive harm through hostile and benevolent sexism. As shown in Table 6, there was a significant effect of benevolent sexism on passive harm such that as benevolent sexism increased, passive harm also increased. However, there were no other significant effects (see Table 6); I did not find support of my predicted model (see Figure 7).

Table 6. Moderated mediation of the effects of parenthood and gender on active facilitation and passive harm through benevolent and hostile sexism.

Description of Estimated Path	<u>Active Facilitation</u>		<u>Passive Harm</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood ^ X Gender^^ → Active Facilitation & Passive Harm</i>				
Direct effect of Parenthood	.15 (.07)*	.01 / .29†	.05 (.08)	-.12 / .21
Direct effect of Gender	.15 (.07)*	.01 / .29†	-.003 (.08)	-.17 / .16
Parenthood X Gender Interaction Effect	.04 (.07)	-.10 / .18	-.05 (.08)	-.21 / .12
<i>Parenthood ^ X Gender^^ → Benevolent & Hostile Sexism</i>				
Benevolent Sexism				
Direct effect of Parenthood	-.002 (.10)	-.20 / .19	-.002 (.10)	-.20 / .19
Direct effect of Gender	-.03 (.10)	-.23 / .16	-.03 (.10)	-.23 / .16
Parenthood X Gender Interaction Effect	.01 (.10)	-.19 / .21	.01 (.10)	-.19 / .21
Hostile Sexism				
Direct effect of Parenthood	-.15 (.12)	-.38 / .08	-.15 (.12)	-.38 / .08
Direct effect of Gender	.07 (.12)	-.16 / .29	.07 (.12)	-.16 / .29
Parenthood X Gender Interaction Effect	-.01 (.12)	-.24 / .22	-.01 (.12)	-.24 / .22
<i>Benevolent & Hostile Sexism → Active Facilitation & Passive Harm</i>				
Direct effect of Benevolent Sexism	.10 (.05)*	.01 / .20†	.15 (.06)*	.04 / .26†
Direct effect of Hostile Sexism	-.03 (.04)	-.11 / .05	-.08 (.05)	-.17 / .01
<i>Parenthood ^ X Gender^^ → Benevolent & Hostile Sexism → Active Facilitation & Passive Harm</i>				
Man Target				
Conditional direct effect of	.11 (.10)	-.10 / .31	.09 (.12)	-.15 / .33

Description of Estimated Path	<u>Active Facilitation</u>		<u>Passive Harm</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
Parenthood				
Indirect effect of Parenthood through Benevolent Sexism	-.001 (.01)	-.03 / .03	-.002 (.02)	-.05 / .04
Indirect effect of Parenthood through Hostile Sexism	.004 (.01)	-.01 / .04	.001 (.02)	-.04 / .06
Woman Target				
Conditional direct effect of Parenthood	.18 (.10)	-.01 / .38	.001 (.11)	-.22 / .22
Indirect effect of Parenthood through Benevolent Sexism	.001 (.02)	-.03 / .04	-.0003 (.11)	-.02 / .02
Indirect effect of Parenthood through Hostile Sexism	.004 (.01)	-.01 / .05	.01 (.02)	-.01 / .07

^ Parenthood was coded so that -1 = nonparent, 1 = parent

^^ Gender was coded so that -1 = man, 1 = woman

* $p < .05$ (significant paths)

† Confidence Interval did not include zero

Exploratory Analysis

In exploratory hypotheses 4a-4d, I suspect that spontaneously-generated justifications for engaging in the different forms of backlash will align with facets of the ideal worker stereotype as well as the shifting standards model. I analyzed my data for conditional indirect effects with three mediators operating in parallel separately for the four types of backlash in managerial decisions (Hayes, 2012). Testing a conditional indirect effect (i.e., moderated mediation) model is appropriate given my design because

I am interested in whether there are indirect effects of perceived work ethic, family obligations, and inappropriateness through which target parenthood status and gender impacts backlash. To conduct my mediation analysis, I used the SPSS PROCESS macro utilizing a bootstrapping approach, generating 5,000 samples with replacement. I predicted that women nonparents will elicit greater active harm and passive facilitation compared to other forms of backlash, and this relationship will be mediated by justifications of perceived work ethic, family obligations, and inappropriateness. In turn, mothers will elicit greater active facilitation and passive harm, and this relationship will be mediated by justifications of perceived work ethic, family obligations, and inappropriateness.

Active harm. To test exploratory hypothesis 4a, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status and target gender on active harm through perceived work ethic, family obligations, and inappropriateness. As shown in Table 7, as predicted, there was a direct effect of parenthood on perceived family obligations such that parents had more perceived family obligations than nonparents. Family had a direct effect on active harm, such that as perceived family obligations increased, endorsement of active harm also increased. Finally, there was a significant indirect effect of family, indicating family mediated the relationship between parenthood status and active harm; parents were perceived to have greater family obligations, which in turn lead to more endorsement of active harm.

There was also a parenthood X gender interaction on ratings of inappropriateness such people were more likely to label the items as inappropriate in the mother condition

as compared to the nonparent women, nonparent man, or father conditions. Finally, there was a significant conditional indirect effect of inappropriate for female targets. When evaluating a female employee, perceived inappropriateness was a significant mediator of the relationship between parenthood status and active harm, In support of hypothesis 4a, the actions were deemed more inappropriate when evaluating mothers compared to nonparent women, which lead to less endorsement of the active harm items. No other paths in the model were significant (see Table 7).

Passive facilitation. To test exploratory hypothesis 4b, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status and target gender on passive harm through perceived work ethic and inappropriateness. I could not test for the effect of family obligations as none of the participants mentioned parenthood, pets, or spouses in the explanation of their ratings for the passive facilitation items. As shown in Table 7, there was an interaction effect of parenthood and gender on work ethic such that mothers were rated as having greater work ethic as compared to women, men, and fathers. There was also a direct effect of work ethic on passive facilitation such that as work ethic increased, so did endorsement of passive facilitation. There was also a direct effect of inappropriateness on passive facilitation such that as inappropriateness increased, endorsement of passive facilitation decreased. Finally, there was a significant conditional indirect effect. For female targets, work ethic mediated the relationship between parenthood status and passive facilitation: mothers were perceived to have greater work ethic, which lead to less endorsement of passive facilitation. There was no relationship between parenthood status, work ethic, and

passive facilitation for male targets. No other paths in the model were significant (see Table 7).

Table 7. Exploratory analysis: Moderated mediation of the effects of parenthood and gender on active harm and passive facilitation through perceived work ethic, family obligations, and inappropriateness.

Description of Estimated Path	Active Harm		Passive Facilitation	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood ^ X Gender ^^ → Active Harm & Passive Facilitation</i>				
Direct effect of Parenthood	.06 (.10)	-.10 / .22	.05 (.08)	-.06 / .18
Direct effect of Gender	-.04 (.09)	-.20 / .11	.02 (.08)	-.11 / .14
Parenthood X Gender Interaction Effect	.09 (.10)	-.07 / .25	.09 (.08)	-.35 / -.04
<i>Parenthood ^ X Gender ^^ → Work Ethic, Family, & Inappropriate</i>				
Work Ethic				
Direct effect of Parenthood	.002 (.02)	-.03 / .04	.06 (.04)	-.01 / .12
Direct effect of Gender	-.01 (.02)	-.05 / .02	-.03 (.04)	-.09 / .04
Parenthood X Gender Interaction Effect	-.02 (.02)	-.06 / .02	.07 (.04)*	.003 / .13 [†]
Family				
Direct effect of Parenthood	.10 (.02)*	.06 / .14 [†]	-	-
Direct effect of Gender	.01 (.02)	-.03 / .05	-	-
Parenthood X Gender Interaction Effect	-.02 (.02)	-.06 / .01	-	-
Inappropriate				
Direct effect of Parenthood	.10 (.08)	-.03 / .22	.03 (.06)	-.07 / .13
Direct effect of Gender	.01 (.08)	-.11 / .14	.06 (.06)	-.05 / .16
Parenthood X Gender Interaction Effect	.19 (.08)*	.07 / .32 [†]	.10 (.06)	-.004 / .20

Description of Estimated Path	<u>Active Harm</u>		<u>Passive Facilitation</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Work Ethic, Family, & Inappropriate</i> → <i>Active Harm & Passive Facilitation</i>				
Direct effect of Work Ethic	.24 (.27)	-.21 / .69	.44 (.12)*	.24 / .64 [†]
Direct effect of Family	1.21 (.25)*	.79 / 1.62 [†]	-	-
Direct effect of Inappropriate	-.35 (.08)*	-.48 / -.23 [†]	-.90 (.08)	-1.03 / -.78 [†]
<i>Parenthood</i> ^ <i>X Gender</i> ^^ → <i>Work Ethic, Family, & Inappropriate</i> → <i>Active Harm & Passive Facilitation</i>				
Man Target				
Conditional direct effect of Parenthood	-.03 (.14)	-.27 / .20	.14 (.11)	-.04 / .32
Indirect effect of Parenthood through Work Ethic	.006 (.01)	-.01 / .04	-.01 (.02)	-.05 / .03
Indirect effect of Parenthood through Family	.15 (.05)	.08 / .25 [†]	-	-
Indirect effect of Parenthood through Inappropriate	.03 (.04)	-.03 / .11	.06 (.09)	-.08 / .21
Woman Target				
Conditional direct effect of Parenthood	.15 (.13)	-.07 / .37	-.03 (.10)	-.21 / .14
Indirect effect of Parenthood through Work Ethic	-.004 (.01)	-.03 / .003	.05 (.03)	.02 / .12 [†]
Indirect effect of Parenthood through Family	.09 (.07)	.02 / .20 [†]	-	-
Indirect effect of Parenthood through Inappropriate	-.10 (.04)	-.19 / -.04	-.12 (.08)	-.25 / .004

^ Parenthood was coded so that -1 = nonparent, 1 = parent

^^ Gender was coded so that -1 = man, 1 = woman

* $p < .05$ (significant paths)

† Confidence Interval did not include zero

Active facilitation. To test exploratory hypothesis 4c, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target

parenthood status and target gender on active facilitation through perceived work ethic family obligations, and inappropriateness of the action. As shown in Table 8, there was a direct effect of parenthood on active facilitation such that participants were more likely to endorse active facilitation for parents versus nonparents. Parents were perceived to have greater work ethic than nonparents. There was also a direct effect of work ethic on active facilitation, such that the greater the perceived work ethic, the more endorsement of active facilitation. There was also a direct effect of perceived inappropriateness on active facilitation such that the more inappropriate for the workplace people viewed the action, the less likely they were to endorse the active facilitation items. There were no other unqualified direct effects on active facilitation (see Table 8).

There were no direct effects of parenthood, gender, or an interaction between the two on perceived work ethic (see Table 8).

There was a direct effect of gender on perceived family obligations such that women were perceived to have more family obligations than men. However, this effect was qualified by a parenthood X gender interaction; mothers were perceived to have more family obligations than women, but there was no difference in the mention of family obligations for men and fathers. There were no other effects on family obligations (see Table 8).

There was a direct effect of parent condition on perceived inappropriateness such that people viewed the active facilitation items as more inappropriate for parents compared to nonparents. There were no other effects on inappropriateness (see Table 8).

Finally, I found different a conditional direct effects for male and female targets. Parenthood only predicted active facilitation for female targets, such that mothers were

more likely to receive active facilitation than nonmothers. There was no effect of parenthood for male targets. Furthermore, there was a conditional indirect effect through inappropriateness. Participants in the mother (vs. female nonparent) condition were more likely to see the items as inappropriate for the workforce, and lower ratings of inappropriateness were related to more endorsement of active facilitation. There was no other significant mediators for female targets nor for male targets (see Table 8).

Passive harm. To test exploratory hypothesis 4d, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the conditional indirect effect of target parenthood status and target gender on passive harm through perceived work ethic, family obligations, and inappropriateness. As shown in Table 8, there was a direct effect of parenthood on perceived family obligations such that parents were perceived to have more family obligations than nonparents. Family also had a direct effect on passive harm such that as perceived family obligations increased, endorsement of passive harm also increased. Inappropriateness also had a direct effect on passive harm such that the more inappropriate the items were judged, the less likely participants were to endorse the passive harm items. Finally, family was a significant mediator of the relationship between parenthood status and passive harm; parents were perceived to have greater family obligations, which in turn lead to more endorsement of passive harm. No other paths in the model were significant (see Table 8).

Table 8. Exploratory analysis: Moderated mediation of the effects of parenthood and gender on active facilitation and passive harm through perceived work ethic, family obligations, and inappropriateness.

Description of Estimated Path	<u>Active Facilitation</u>		<u>Passive Harm</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood ^ X Gender ^^ → Active Facilitation & Passive Harm</i>				
Direct effect of Parenthood	.16 (.07)*	.05 / .27 [†]	.03 (.10)	-.15 / .21
Direct effect of Gender	.05 (.07)	-.06 / .17	-.12 (.10)	-.29 / .05
Parenthood X Gender Interaction Effect	.09 (.07)	-.03 / .20	.05 (.10)	-.12 / .22
<i>Parenthood ^ X Gender ^^ → Work Ethic, Family, & Inappropriate</i>				
Work Ethic				
Direct effect of Parenthood	.05 (.03)	.001 / .11	-.01 (.02)	-.05 / .03
Direct effect of Gender	-.004 (.03)	-.06 / .05	-.02 (.02)	-.06 / .02
Parenthood X Gender Interaction Effect	-.005 (.03)	-.06 / .05	-.005 (.02)	-.04 / .03
Family				
Direct effect of Parenthood	.05 (.03)	-.01 / .10	.10 (.02)*	.06 / .14 [†]
Direct effect of Gender	.06 (.03)*	.01 / .12 [†]	.01 (.02)	-.03 / .05
Parenthood X Gender Interaction Effect	.08 (.03)*	.03 / .13 [†]	-.02 (.02)	-.06 / .01
Inappropriate				
Direct effect of Parenthood	.08 (.04)*	.01 / .15 [†]	-.08 (.06)	-.18 / .02
Direct effect of Gender	.05 (.04)	-.03 / .12	.04 (.06)	-.06 / .14
Parenthood X Gender Interaction Effect	.02 (.04)	-.05 / .09	.14 (.06)*	.04 / .24 [†]

Description of Estimated Path	<u>Active Facilitation</u>		<u>Passive Harm</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Work Ethic, Family, & Inappropriate</i> → <i>Active Facilitation & Passive Harm</i>				
Direct effect of Work Ethic	.28 (.13)*	.07 / .50 [†]	-.25 (.27)	-.70 / .20
Direct effect of Family	-.09 (.14)	-.31 / .14	1.32 (.27)*	.87 / 1.77 [†]
Direct effect of Inappropriate	-.79 (.10)*	-.96 / -.63 [†]	-.59 (.10)*	-.77 / -.42 [†]
<i>Parenthood</i> [^] X <i>Gender</i> ^{^^} → <i>Work Ethic, Family, & Inappropriate</i> → <i>Active Facilitation & Passive Harm</i>				
Man Target				
Conditional direct effect of Parenthood	.08 (.10)	-.09 / .24	-.02 (.15)	-.27 / .24
Indirect effect of Parenthood through Work Ethic	.02 (.01)	.001 / .05	.002 (.01)	-.01 / .04
Indirect effect of Parenthood through Family	.003 (.01)	-.003 / .03	.16 (.05)	.10 / .25 [†]
Indirect effect of Parenthood through Inappropriate	-.05 (.05)	-.13 / .03	.10 (.07)	-.002 / .24
Woman Target				
Conditional direct effect of Parenthood	.25 (.10)*	.09 / .41 [†]	.08 (.14)	-.16 / .32
Indirect effect of Parenthood through Work Ethic	.01 (.02)	-.004 / .06	.004 (.01)	-.006 / .04
Indirect effect of Parenthood through Family	-.01 (.02)	-.06 / -.01	.10 (.06)	.02 / .20 [†]
Indirect effect of Parenthood through Inappropriate	-.08 (.05)	-.18 / -.01 [†]	-.04 (.05)	-.13 / .04

[^] Parenthood was coded so that -1 = nonparent, 1 = parent

^{^^} Gender was coded so that -1 = man, 1 = woman

* $p < .05$ (significant paths)

[†] Confidence Interval did not include zero

Study 1 Discussion

In support of hypothesis 1c and partial support of hypothesis 3c, parents and women were more likely to receive active facilitation than nonparents and men, respectively. Cuddy and colleagues (2007) asked participants to rate imaginary group members and demonstrated that high competence, high warmth groups were likely to receive active facilitation, compared to other groups and types of behavior. Given that working mothers were rated highly competent and warm in my study, this result supports past research on stereotype content-driven behavior. Unlike other types of behavior, active facilitation is comprised of positive behaviors that involve helpful and supportive work environments. Participants were likely to feel good about endorsing these items, thus minimizing social desirability response bias.

In partial support of hypotheses 3c and 3d, I found a positive association between benevolent sexism and active facilitation and passive harm, which is, to my knowledge, the first empirical evidence of such an association. Benevolent sexism, a pitying form of prejudice against women, predicted both genuine help (e.g., efforts to make the employee feel welcome) and paternalistic harm (e.g., give advice even when it is not asked for). It is important to explore the predictors of passive harm, specifically, as these types of behaviors are generally ambiguous, making them hard to identify and combat, yet detrimental to those whose competence they undermine in the workplace. Interventions designed to dissuade benevolent sexism may be one effective way of limiting passive harm in the workplace.

However, I did not find support for the other hypotheses in Study 1. My study was well-powered to find effects; thus there may have been unanticipated issues with my

sample or study materials. Another factor to consider is that, counter to previous research (e.g., Cuddy et al., 2004), I did not find the expected stereotype content for working women and working mothers. In my study, working women were rated more competent and warm in comparison to working men, when in past research they are rated as equally competent but less warm. Also counter to predictions, parents were seen as equally competent to nonparents as well as more warm, and gender of the target did not moderate this relationship. I suspect that the description of the target, highlighting a skilled, experienced worker with a master's degree in a demanding field, created a ceiling effect for competence such that responses were clustered to the extreme high end of the scale, resulting in little variation. Perhaps in the 10 years since Cuddy and colleagues' (2004) exploration of the stereotypes of working mothers, we have come into contact with more high-status working mothers in popular culture – for example, Sheryl Sandberg's *Lean In*, about women embracing their careers regardless of parenthood status, has entered the cultural consciousness. Therefore when presented with a high-power mother, people shift their stereotypes and assume she must be highly competent in order to succeed in both career and family. On the other hand, a low-status mother, like a fast-food worker, may be more likely to take a hit to perceived competence compared to a fellow low-status woman who is not a parent.

The presence of a demonstrably highly skilled working mother also works against the established stereotypes of mothers, thus diluting the likelihood of prejudicial responses. Research on aversive prejudice suggests that one needs a non-prejudicial point to anchor on in order to allow their prejudice to influence their behavior (Dovidio & Gaertner, 2004). In the limited target description, there was little else to "pin"

discriminatory responses on; it is possible that people would hone in on the worker's telecommuting as a justification for prejudice, as hypothesized by Cuddy and colleagues (2004), but follow-up coding of participant comments revealed that there were no differences between conditions on mentions of telecommuting⁶. Future research should modify the perceived skill-level and vary the presence of non-prejudicial reasons for discrimination in order to heighten the chance to find effects of prejudice.

A final possible explanation for why I did not find complete support for my hypotheses is that allowing people to complete psychology measures online in their own homes, as is the case with my Amazon Mechanical Turk sample, introduces more distraction for participants. I had multiple manipulation and instructional attention checks embedded within my survey, and only included work from participants who passed those checks in my sample. It is possible that MTurk participants are well aware of those tactics and know how to overcome them while still exerting minimal effort during the study, however new research suggests that MTurk participants are less likely to miss attention checks and show larger effects in response to minimal text manipulations than college student samples (Hauser & Schwarz, in press). It is also possible that because a large portion of MTurk workers have taken dozens or hundreds of psychological surveys, they are more likely to be suspicious, engage in hypothesis guessing, or conform to other response biases. Again, research with MTurk samples suggests that data generated through MTurk is at least equal in quality to college samples (Buhrmester, Kwant, & Gosling, 2011), and there is some evidence that highly experienced MTurk workers

⁶ A two-way ANOVA revealed no main effects nor an interaction for mentions of telecommuting, $F(1, 258) \leq 0.91, ps \geq .34$.

produce higher quality psychological data than college samples (Peer, Vosgerau, & Acquisti, 2014). Therefore I conclude that my MTurk sample is not the cause of the null effects I found in Study 1.

Exploratory analysis discussion. My exploratory analysis of qualitative justifications for backlash revealed partial support of exploratory hypotheses 4a-4d, notably that we do judge targets differently in light of gender and parenthood status. I found that our reasons for genuinely helping (i.e., giving active facilitation) are tied to perceived family obligations and how appropriate we deem the action. Although parents, for the most part, received more active facilitation than nonparents, participants were more likely to see the helpful actions as inappropriate for working mothers vs nonparent women. When inappropriate came online for those evaluating mothers, they were less likely to receive help than women without children. This may be because participants who evaluated mothers thought that helping them would show favoritism or be otherwise unfair in comparison to other workers, but the help was deemed appropriate for nonparent women. Additionally, mothers, compared to women without children, received more selfish help (i.e., passive facilitation), parents, in general, were susceptible to greater active and passive harm due to their perceived heightened family obligations compared to nonparents. In sum, my exploratory analysis revealed that when discrimination arises in both subtle and overt forms, parents, especially mothers, are most likely to be the targets. We also use different standards for assessing whether genuine help should be given to women without children vs. working mothers.

My exploratory analysis also suggests that people justify discrimination in different ways for different target group members. By coding the open-ended reasons that participants supplied for their behavior, I was able to get a more accurate picture of their justifications than with the self-report, closed ended measure of sexist attitudes. Additionally, people may be freer to express their prejudicial attitudes in an open-ended format. Open-ended responses allow people the opportunity to justify their feelings with nonprejudicial information. The social desirability bias may force people to hide their prejudicial feelings in static, closed-ended responses where they are not able to rationalize their responses as nonprejudicial.

Study 2 Method

The purpose of Study 2 is to test the hypotheses of Study 1 via a high-impact laboratory experiment. I will also build upon Study 1 by including an operationalization of backlash in the form of management decisions. Using such an operationalization should increase the mundane realism of the experiment because it mirrors the types of decisions that supervisors and managers actually make on a day-to-day basis. Finally, having multiple complimentary tests of my hypotheses maximizes both internal validity and external validity while providing evidence of replicability.

As in Study 1, I also included qualitative measures within the backlash in managerial decisions measure in order to conduct exploratory analyses on the spontaneously-generated justifications for backlash. I again coded the qualitative data to test for exploratory hypotheses 4a-4d to test an alternative model with perceived work ethic, family obligations, and inappropriateness as possible justifications for backlash.

Design

Study 2 was a 2(confederate parenthood status: nonparent, mother) X 4(backlash: active harm, passive harm, active facilitation, passive facilitation) mixed-methods design with target parenthood status as the between-subjects variable and backlash as the within-subjects variable.

Participants

Prospective power analysis. I used G*Power 3.1 (Erdfelder et al., 1996; Faul et al., 2007), a statistical prospective power software package, to estimate the appropriate sample size for my study. Research on the Stereotype Content Model for working women and working mothers (Fiske et al., 2002; Cuddy et al., 2004), BIAS Map (Cuddy et al.,

2007), Ambivalent Sexism (Fisk & Glick, 2001), and Backlash (Rudman & Fairchild, 2004) report a medium to large effect size of stigmatized group status on indicators of discrimination. In order to avoid under-powering the experiment, I used low-medium effect size when conducting the prospective power analysis. I used G*Power to estimate sample size with a mixed model design predicting within-between interaction effects at 80% power to find my effect with two groups (two levels of confederate parenthood status) and four measures (four forms of backlash). G*Power indicated that I would need 66 participants per cell for a total of 132 participants in order to be adequately powered to find my hypothesized effects if they indeed exist. I planned to collect 10% more participants than the G*Power estimate (an additional 14 people for 146 participants total) in anticipation that some people will be overly suspicious, guess the purpose of the study, or fail to fully complete the survey materials.

One hundred and ninety-six nonparent undergraduate student participants were recruited in exchange for either course credit ($n = 144$) or a \$10 gift card ($n = 52$). Participants were told that the study concerned the effects of self-disclosure on workplace morale and decisions. Participants, on average, were 19.51 years old ($SD = 2.33$) and predominately female (137 female, 59 male) and White (128 White, 39 Hispanic/Latino, 31 South Asian, 11 East Asian, 9 multiracial, 4 Native Hawaiian/Pacific Islander, 3 Black, 2 Middle Eastern). Most of participants had been employed under 5 years (52.1%) and had no supervisory (79.9%) nor hiring (90.9%) experience⁷. Mirroring national

⁷ There were no differences on any of the outcome measures by employment, supervisory, or hiring experience.

figures, most participants also grew up with a mother who worked outside of the home (71.9%)⁸.

Procedure and Materials

All procedures were approved prior to data collection by the Loyola University Chicago Institutional Review Board (IRB).

Only one participant was run through the study procedures at a time. After signing an informed consent form (see Appendix I), participants were brought into the lab by a research assistant and told that they would interact with another participant. This participant was actually a confederate. The research assistant then said the study was investigating workplace dynamics, and they would like one participant to take on the role of the supervisor and the other to take the role of the employee. The participant, via a rigged draw, always took the role of the supervisor, while the confederate always took the role of the employee. The research assistant asked the participants to imagine that they are a Financial Industry Regulatory Authority agent in charge of hiring, promoting, and monitoring an investment firm's financial advisors. Participants were told to pretend their interaction partner (the confederate) was a Financial Advisor who was under their supervision. I chose the financial industry as the job domain because it is a masculine domain, and women who participate in masculine domains are more likely to be considered vanguards (Rudman et al., 2012).

The research assistant then said that we were interested in the role of self-disclosure on workplace morale and decisions. In order to make the experience as real as

⁸ There were no differences on any of the outcome measures by employment status of the participants' mother.

possible, the participants should disclose actual personal information about themselves. The participant would then complete the self-disclosure exercise with the confederate, the short-form ambivalent sexism inventory, and finally a behavioral backlash measure and the modified Sibley (2011) backlash measure used in Study 1.

Parenthood status. Participants interacted with one of five White female confederates over the course of the study. The confederates were research assistants who had been trained on the study protocol. In order to avoid unintentionally bringing to mind negative stereotypes of single mothers, confederates in all conditions wore a ring on their left ring finger to indicate that they are married and mentioned their husband during the self-disclosure exercise. In order to increase perceptions that the confederate was competent and potentially successful, the confederate was dressed in business casual attire. The participant and confederate engaged in a self-disclosure exercise (see Appendix J). The first question asked participants to reveal their hometowns. The participant always answered first. Confederates answered that they were from Belmont, Ohio, or, if the participant was from Ohio, from Belmont, Iowa. The second question asked participants to reveal one aspect of how they spend their time at home. In the nonparent condition, a confederate said “My husband and I have a dog at home that I spend a lot of time caring for. Do you want to see a picture?” and the confederate showed the participant a picture of a dog on a smartphone. In the parent condition, a confederate said “My husband and I have a 1-year-old at home that I spend a lot of time caring for. Do you want to see a picture?” and the confederate showed the participant a picture of a 1-year-old male child on a Smartphone (see Appendix K for pictures). A few moments after the picture was shown, the research assistant interrupted the conversation.

Ambivalent sexism activation. The research assistant apologized and said that s/he forgot to administer the first part of the study before the self-disclosure task. The research assistant told the confederate that she needed to complete an employee aptitude assessment in another room. After the confederate left, the research assistant returned and told the participant that a graduate student needed help with a “pilot test” of some items that were in development for her thesis. The “pilot test” was actually the same short-form of the Ambivalent Sexism Inventory as Study 1 (see Appendix E; hostile subscale $\alpha = .83$, benevolent subscale $\alpha = .62$). Participants completed the measure on paper.

Aptitude test results. After the participant completed the “pilot test” short-form ASI, the research assistant reentered the room and told the participants that their partner (the confederate) has completed a financial advisor aptitude assessment and that they, in their adopted supervisory role, would review the results of the assessment. In fact, the assessment was created beforehand and all participants reviewed the same assessment results sheet (see Appendix L). Participants were told that the test consisted of general questions that are regularly used by Regulatory Authority agents to base their hiring, promoting, scheduling, assignment, and training decisions. The results sheet contained several dimensions (e.g., organization, interpersonal skills) of evaluation, with ratings from 1 *Low* to 12 *High*. The results sheet indicated that the person scored between 8 and 10 on each dimension. The assessment results were intentionally ambiguous. Research indicates that giving people ambiguous information about a target allows prejudicial responses to surface, as people can point to the ambiguous results to obscure their prejudicial evaluation (Dovidio & Gaertner, 2004). Furthermore, perceivers are more

likely to engage in backlash when they have a justification other than prejudice (Rudman et al., 2012).

Backlash. The backlash measures and all subsequent survey measures were completed via Inquisit Lab, by Millisecond Software, a computer-based survey program. After the participant had a few moments to review the results sheet, the research assistant took the results sheet back and asked the participants to use all of the information they now have about the employee to make some workplace-related decisions via the computer survey program.

Backlash in managerial decisions. The backlash managerial decision measure I created consisted of 12 items designed to tap active facilitation (e.g., “Give the employee the opportunity to present ideas at a weekly staff meeting”), passive facilitation (e.g., “Require the employee to develop training materials that you would then use with employees from other companies”), active harm (e.g., “Begin training the employee for promotion to a supervisory position” - reverse scored), and passive harm (e.g., “Assign another Financial Advisor to collaborate with the employee on all of the employee's tasks”) (see Appendix M). Participants were told: “You are now going to view a list of tasks and behaviors that could be a good fit or a bad fit for the employee. Using all of the information you have on the employee, rate how much you think the employee would be good fit for the following tasks or behaviors.” Participants then rated the items on a scale of 1 *not a good fit* to 9 *very good fit*.

A principal components analysis with varimax rotation of all 12 items suggested that the backlash managerial decision measure was best split into four factor solution,

each consisting of two items⁹. The measure has an active facilitation factor (Factor 1, with an eigenvalue of 2.54, accounting for 28.24% of the variance), passive harm factor (Factor 2, with an eigenvalue of 1.26, accounting for 13.94% of the variance), passive facilitation factor (Factor 3, with an eigenvalue of 1.04, accounting for 11.54% of the variance), and active harm factor (Factor 4, with an eigenvalue of 1.00, accounting for 11.14% of the variance). No other components had eigenvalues over 1; see Table 9 for factor loadings¹⁰.

Table 9. Study 2: Varimax rotated component matrix of factors in the backlash managerial decisions measure.

		Component				
		1	2	3	4	
Item						
Factors	Active Facilitation	Invite the employee on optional social outings, such as a working lunch or happy hour.	.78	.11	-.03	.12
		Give the employee the opportunity to present ideas at a weekly staff meeting	.68	.15	.39	-.18
	Passive Harm	Regularly pull the employee aside to offer what you consider to be helpful advice.	.24	.76	.07	-.11
		Tell the employee how best to achieve work-life balance.	-.02	.70	.11	.23

⁹ The items that did not load and were subsequently dropped were: Assign another Financial Advisor to collaborate with the employee on all of the employee's tasks, Invite the employee to give critical feedback on workplace policies, Ask the employee to meet with you every week to discuss assignments, and Begin training the employee for promotion to a supervisory position.

¹⁰ The items that loaded onto the four components generally match predicted patterns for active facilitation, passive harm, passive facilitation, and active harm. Note, however, that the Study 1 and Study 2 factor analysis revealed different factor structures. The items that comprise active facilitation are not the same in both studies; 6 out of the 8 items loaded the same in both Study 1 and Study 2. As the backlash in managerial decisions measure is one that I created and am still working to validate, I chose to compute the four subscales with the items that represent the four factors for each study sample, rather than use the theoretically derived subscales for both studies and risk working with invalid measures of the backlash constructs.

	Item	<u>Component</u>			
		1	2	3	4
Passive Facilitation	Require the employee to develop training materials that you would then use with employees from other companies.	.23	-.05	.82	-.02
	Assign the employee a very difficult task to complete alone that usually requires two or more employees to complete.	-.06	.24	.75	.20
Active Harm	Ask the employee to be in charge of ordering office supplies, making coffee, and other general office maintenance tasks although these are not standard job duties.	-.04	.29	.05	.79
	Due to workplace politics, you agree to promote the employee although doing so would not have been your first choice.	.35	-.32	.18	.59

Exploratory qualitative justification measures. After each of the backlash in managerial decisions items, I asked participants to “Please give a brief reason why you chose this rating.” I had coders evaluate each of the 1,568 responses (8 open-ended responses X 196 participants) on several dimensions. A random subset of the participant responses (responses from 67 participants = 536 responses; 34.18% of the open-ended data) were coded by two coders in order to calculate interrater reliability scores.

Based on the justifications I thought would emerge in hypotheses 4a-4d, I had coders rate the degree to which the participants indicated that the employee displayed a strong work ethic on a 5-point scale that ranged from 1 *very poor work ethic* to 5 *very strong work ethic* (interrater reliability: $r = .74$; across all 8 items: $M = 50.67$, $SD = 3.64$, range = 42 – 68). Next, coders rated the degree to which the behavior or task was generally inappropriate for the workplace on a 5-point scale that ranged from 1 *very appropriate* to 5 *very inappropriate* (interrater reliability: $r = .88$; across all 8 items: $M =$

28.18, $SD = 8.90$, range = 16 – 52). I combined coding items that measured mentions of a pet, parent, and spouse to create a “family” variable (across all 8 items: $M = 0.39$, $SD = 1.08$, range = 0 – 6). Coders indicated if the participant mentioned parenthood (interrater reliability: $r = .84$) or pets (interrater reliability: $r = .94$) in their answer on a *0 no mention, 1 yes, mentioned once, 2 yes, mentioned more than once* scale. I flagged each response for the mention of the target’s spouse or marriage. I then calculated the work ethic, family, and inappropriate variables separately for each type of backlash behavior.

Perceiver BIAS treatment scale. Participants also answered the same questions adapted from Sibley’s (2011) BIAS-Treatment Scale for use with perceivers from Study 1 that again measured active facilitation ($\alpha = .82$), passive facilitation ($\alpha = .59$), active harm ($\alpha = .78$), and passive harm ($\alpha = .51$) (see Appendix E).

Demographics. Participants answered the same demographic questions as Study 1 (see Appendix F).

Debriefing. The last portion of the Inquisit survey asked participants four free-response items (see Appendix G). After the participants completed the survey, they were instructed to tell the research assistant that they had finished. The research assistant used a funneled debriefing interview (see Appendix N) to probe the participants for suspicion and reveal the deception used in the study. Finally, participants were given a debriefing sheet to take home with them that summarized the purpose of the study, offered information on prejudice and backlash research, and provided information on who to contact if they had further questions about the study (see Appendix H).

Study 2 Results

In order to test the ten hypotheses and proposed model, data analysis was conducted in three stages. Similar to Study 1, the first two stages tested specific parts of the proposed model, while the final stage separately tested the complete model for each of the four types of backlash.

Correlations

I ran conducted correlation tests on the hostile and benevolent sexism, and the backlash items as measured by the BIAS scale, and backlash in managerial decisions measure (BMD; see Table 10). In general, I found positive correlations between measures of sexism (hostile and benevolent). Benevolent sexism also had significant positive relationship with the BMD active harm items. As measured by the BMD, active facilitation and passive harm were generally negatively correlated with passive facilitation and active harm. As measured by the BIAS treatment scale, measures of active and passive harm and facilitation were positively correlated.

Table 10. Study 2 correlation table.

	HS	BS	BMD AF	BMD PF	BMD AH	BMD PH	BIAS AF	BIAS PF	BIAS PH
Hostile Sexism (HS)	-								
Benevolent Sexism (BS)	.47**	-							
Backlash in Managerial Decisions (BMD)									
Active Facilitation (AF)	-.05	.03	-						
Passive Facilitation (PF)	.01	-.02	-.56**	-					

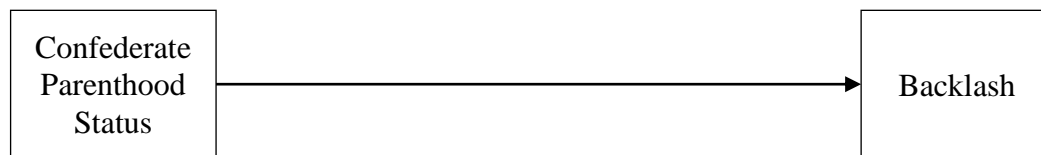
	HS	BS	BMD AF	BMD PF	BMD AH	BMD PH	BIAS AF	BIAS PF	BIAS PH
Active Harm (AH)	-.05	.15*	-.41**	.32**	-				
Passive Harm (PH)	.06	.12	.45**	-.25**	-.08	-			
BIAS									
Active Facilitation (AF)	-.07	.05	.47**	-.38**	-.06	.28**	-		
Passive Facilitation (PF)	-.05	.04	.36**	-.21**	-.22**	.22**	.29**	-	
Active Harm (AH)	.10	.06	.15*	-.09	-.09	.27**	.22**	.23**	-
Passive Harm (PH)	.11	.13	.22**	-.21	-.03	.28**	.26**	.22**	.18**

* $p < .05$, ** $p < .01$

Phase 1: Confederate Parenthood Status-Backlash Relation

First, to test hypotheses 1a – 1d, I will test for simple causality (see Figure 8); unlike Study 1, the confederate was always female, so there is no need to test for moderation. Testing for simple causality is appropriate for hypotheses 1a and 1b given my design because I am interested in whether one manipulated variable (i.e., confederate parenthood status) has a causal effect on a measured variable (i.e., backlash).

Figure 8. Effect of confederate parenthood status on backlash.



Backlash in managerial decisions. I performed a 2(confederate parenthood status: nonparent, mother) X 4(backlash: active harm, passive harm, active facilitation, passive facilitation) repeated-measures ANOVA with confederate parenthood status as

the between-subjects factor and backlash as a within-subjects factor. There was no main effect of confederate parenthood status, $F(1, 194) = 0.19, p = .66, \eta^2 = 0.001$. There was a main effect of backlash, $F(3, 582) = 107.10, p < .001, \eta^2 = 0.36$. Replicating the same pattern of results as Study 1, a simple linear contrast that compared the four forms of backlash revealed that people endorsed active facilitation items the most, followed by passive facilitation items, passive harm items, and lastly the active harm items; each type of backlash significantly differed from the other (see Table 11).

Table 11. Main effect of backlash managerial decisions measure.

	<i>M (SD)</i>	<i>F(1, 194)</i>	<i>p</i>	η^2
Active harm vs.	4.78 (1.82)			
Active facilitation	7.05 (1.23)	244.67	< .001	0.56
Passive facilitation	6.00 (1.22)	71.05	< .001	0.27
Passive harm	5.57 (1.67)	60.12	< .001	0.24
Active facilitation vs.	7.05 (1.23)			
Passive facilitation	6.00 (1.22)	92.79	< .001	0.32
Passive harm	5.57 (1.67)	126.82	< .001	0.40
Passive facilitation vs.	6.00 (1.22)			
Passive harm	5.57 (1.67)	9.74	.002	0.05

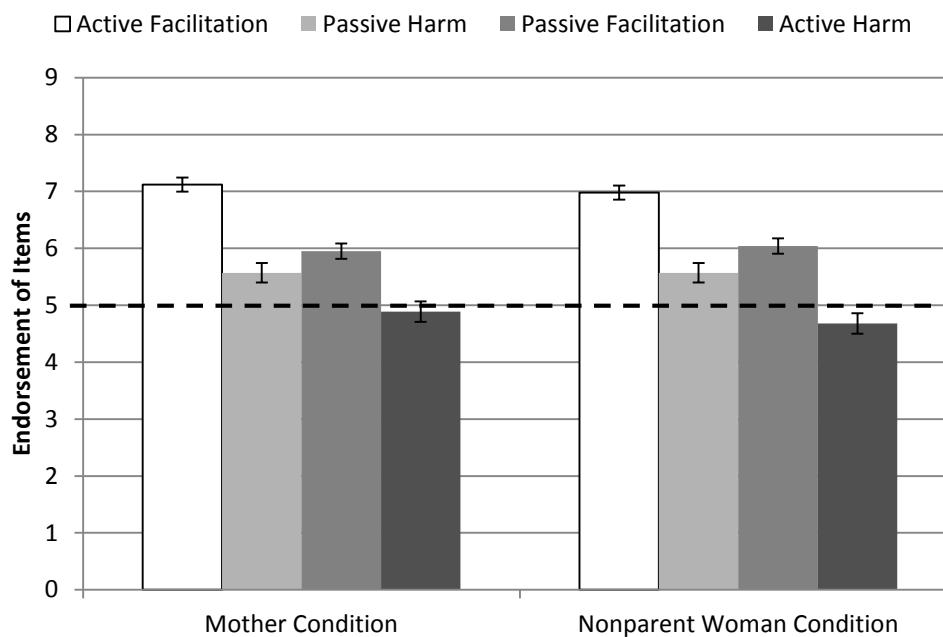
Counter to predictions, I did not find a 2-way interaction between confederate parenthood status and backlash, $F(3, 582) = 0.56, p = .64$.

Supplemental analysis. Even though the confederate parenthood status X backlash interaction was not significant, I ran one-sample t tests on the managerial decisions

backlash measure separately for participants in the mother and nonparent conditions to see if scores on each subscale were different from the midpoint rating on the 1-9 scale (i.e., 5). I conducted this analysis because I wanted to see if there was a difference, on average, in whether or not participants rated each set of behaviors as a good fit for employees, independent from whether or not the behavior ratings were different from one another. In partial support of Hypotheses 1a – 1d, I found that participants in the mother condition ($n = 96$) rated the confederate above the midpoint on the for receiving active facilitation ($M = 7.12$, $SD = 1.19$; $t(95) = 17.50$, $p < .001$) and passive harm ($M = 5.57$, $SD = 1.70$; $t(95) = 3.27$, $p = .002$). Also in line with predictions, participants in the mother condition did not differ from the scale midpoint on the active harm items, ($M = 4.89$, $SD = 1.94$; $t(95) = -0.55$, $p = .58$). Counter to predictions, participants in the mother condition rated the confederate above the midpoint on passive facilitation ($M = 5.95$, $SD = 1.43$; $t(95) = 6.53$, $p < .001$) items.; see Figure 9)

Also in partial support of Hypotheses 1a – 1d, I found that participants in the nonparent condition ($n = 100$) rated the confederate above the midpoint on passive facilitation ($M = 6.04$, $SD = 1.22$; $t(99) = 8.51$, $p < .001$) items. Counter to predictions, participants in the nonparent condition ($n = 100$) rated the confederate above the midpoint on the active facilitation ($M = 6.98$, $SD = 1.27$; $t(99) = 15.60$, $p < .001$) and passive harm ($M = 5.57$, $SD = 1.67$; $t(99) = 3.42$, $p = .001$). Also counter to predictions, participants in the nonparent woman condition rated the confederate marginally below the midpoint on active harm ($M = 4.68$, $SD = 1.69$; $t(99) = -1.92$, $p = .06$; see Figure 9).

Figure 9. Supplementary analysis: Backlash managerial decision item endorsement for mother and nonparent conditions.



Perceiver BIAS treatment scale. I performed a 2(confederate parenthood status: nonparent, mother) X 4(backlash: active harm, passive harm, active facilitation, passive facilitation) repeated-measures ANOVA with confederate parenthood status as the between-subjects factor and backlash as a within-subjects factor. There was no main effect of confederate parenthood status, $F(1, 194) = 0.48, p = .49, \eta^2 = 0.002$. Replicating Study 1, there was a main effect of perceiver BIAS scale of backlash, $F(3, 582) = 866.09, p < .001, \eta^2 = 0.82$. A simple linear contrast that compared the four forms of backlash revealed that people endorsed active facilitation items the most, followed by passive harm items, passive facilitation items, and lastly the active harm items; each type of backlash significantly differed from the other (see Table 12).

Table 12. Main effect of perceiver BIAS scale of backlash.

	<i>M (SD)</i>	<i>F(1, 194)</i>	<i>p</i>	η^2
Active harm vs.	1.78 (0.97)			
Active facilitation	7.11 (1.109)	1873.17	< .001	.91
Passive facilitation	3.86 (1.16)	550.14	< .001	.74
Passive harm	5.91 (1.07)	1522.39	< .001	.89
Active facilitation vs.	7.11 (1.109)			
Passive facilitation	3.86 (1.16)	527.27	< .001	.73
Passive harm	5.91 (1.07)	225.79	< .001	.54
Passive facilitation vs.	3.86 (1.16)			
Passive harm	5.91 (1.07)	270.65	< .001	.58

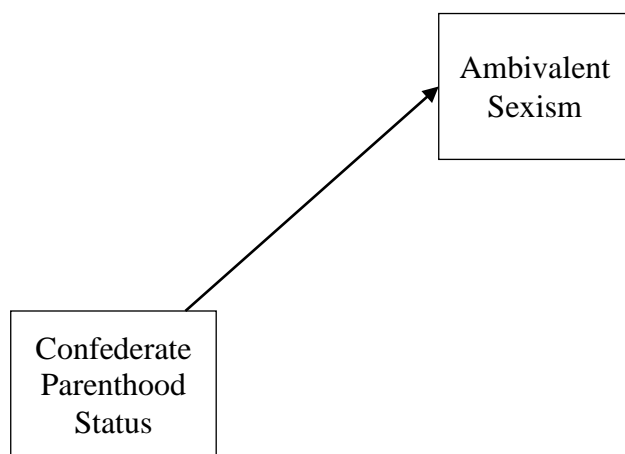
There was a marginally significant 2-way interaction between confederate parenthood status and backlash, $F(3, 582) = 2.56, p = .06, \eta^2 = 0.04$. I performed follow-up independent t-tests on each form of backlash. Counter to predictions, there were no differences between the mother and nonparent woman conditions on active facilitation, passive facilitation, or active harm, $t(194)s < .93, ps > .36$. There was a marginal effect of condition on passive harm, such that, as predicted, mothers ($M = 6.06, SD = 1.02$) were more likely to receive passive harm than nonparent women ($M = 5.79, SD = 1.08$), $t(94) = 1.80, p = .07$.

Phase 2: Confederate Parenthood Status-Ambivalent Sexism Relation

Second, to test hypotheses 2a and 2b, I analyzed my data for simple causality (see Figure 9). Testing for simple causality was appropriate for hypotheses 2a and 2b given

my design because I was interested in whether one manipulated variable (i.e., confederate parenthood status) has a causal effect on a measured variable (i.e., ambivalent sexism).

Figure 10. Effect of confederate parenthood status on ambivalent sexism.



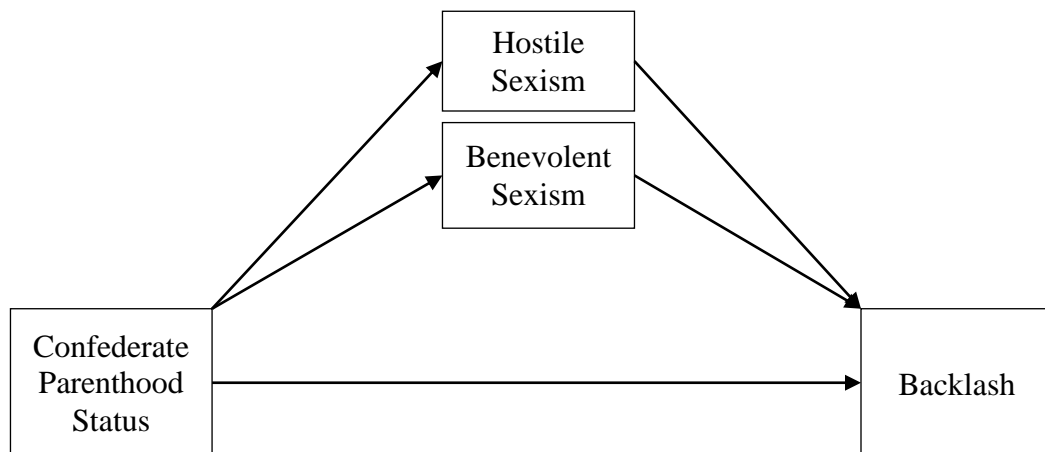
I performed a 2(confederate parenthood status: nonparent, mother) X 2(ambivalent sexism: hostile, benevolent) repeated-measures ANOVA with confederate parenthood status as the between-subjects factor and ambivalent sexism as the within-subjects factor. There was no main effect of confederate parenthood status, $F(1, 193) = 0.06, p = .81$. Replicating Study 1, there was a main effect of perceiver ambivalent sexism; participants scored higher on benevolent sexism ($M = 4.79, SD = 1.36$) than hostile sexism ($M = 3.82, SD = 1.59$), $F(1, 193) = 77.35, p < .001, \eta^2 = 0.29$. Contrary to predictions, there was no 2-way interaction between confederate parenthood status and ambivalent sexism, $F(1, 193) = 0.41, p = .52$.

Phase 3: Mediation Model

Third, to test the complete model as described in hypotheses 3a – 3d, I analyzed my data for simple mediation with two mediators operating in parallel separately for the four types of backlash (Hayes, 2012; see Figure 10). Testing a simple mediation model is

appropriate for hypotheses 3a and 3b given my design because I am interested in whether there are indirect effects of hostile and benevolent sexism through which parenthood status impacts backlash. To conduct my mediation analysis, I used the SPSS PROCESS macro utilizing a bootstrapping approach, generating 5,000 samples with replacement. I predicted that nonparents will elicit greater active harm and passive facilitation compared to other forms of backlash, and this relationship will be mediated by hostile sexism. In turn, mothers will elicit greater active facilitation and passive harm, and this relationship will be mediated by benevolent sexism.

Figure 11. Mediation of the relationship between confederate parenthood status and backlash by hostile and benevolent sexism.



Backlash in managerial decisions. I first ran the model for each of the four forms of backlash as measured by the backlash in managerial decisions measure. As shown in Table 13 and 14, there were no significant effects; I did not find support of my predicted model (see Figure 10).

Table 13. Mediation of the effect of parenthood on active harm and passive facilitation (as measured with backlash managerial decision items) through benevolent and hostile sexism.

Description of Estimated Path	<u>Active Harm</u>		<u>Passive Facilitation</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] → Active Harm & Passive Facilitation</i>				
Direct effect on outcome	-12. (.13)	-.37 / .14	.05 (.10)	-.37 / .14
<i>Parenthood[^] → Benevolent & Hostile Sexism</i>				
Direct effect on Benevolent Sexism mediator	-.01 (.10)	-.21 / .18	-.01 (.10)	-.21 / .18
Direct effect on Hostile Sexism mediator	.06 (.11)	-.17 / .28	.06 (.11)	-.17 / .28
<i>Benevolent & Hostile Sexism → Active Harm & Passive Facilitation</i>				
Benevolent Sexism direct effect on outcome	.09 (.11)	-.05 / .32	.08 (.10)	-.05 / .32
Hostile Sexism direct effect on outcome	.13 (.09)	-.37 / .14	-.07 (.10)	-.37 / .14
<i>Parenthood[^] → Benevolent & Hostile Sexism → Active Harm & Passive Facilitation</i>				
Indirect effect of Parenthood on outcome through Benevolent Sexism	-.001 (.01)	-.04 / .06	-.001 (.01)	-.04 / .06
Indirect effect of Parenthood on outcome through Hostile Sexism	.01 (.02)	-.02 / .07	-.004 (.01)	-.02 / .07

[^] Parenthood was coded so that -1 = nonparent woman, 1 = mother

Table 14. Mediation of the effect of parenthood on active facilitation and passive harm (as measured with backlash managerial decision items) through benevolent and hostile sexism.

Description of Estimated Path	<u>Active Facilitation</u>		<u>Passive Harm</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] → Active Facilitation & Passive Harm</i>				
Direct effect on outcome	-.07 (.09)	-.24 / .11	-.01 (.12)	-.25 / .23
<i>Parenthood[^] → Benevolent & Hostile Sexism</i>				
Direct effect on Benevolent Sexism mediator	-.01 (.10)	-.21 / .18	-.01 (.10)	-.21 / .18
Direct effect on Hostile Sexism mediator	.06 (.11)	-.17 / .28	.06 (.11)	-.17 / .28
<i>Benevolent & Hostile Sexism → Active Facilitation & Passive Harm</i>				
Benevolent Sexism direct effect on outcome	.09 (.07)	-.05 / .24	-.12 (.10)	-.07 / .32
Hostile Sexism direct effect on outcome	-.09 (.06)	-.21 / .03	.07 (.09)	-.10 / .24
<i>Parenthood[^] → Benevolent & Hostile Sexism → Active Facilitation & Passive Harm</i>				
Indirect effect of Parenthood on outcome through Benevolent Sexism	-.001 (.01)	-.04 / .01	-.001 (.02)	-.05 / .02
Indirect effect of Parenthood on outcome through Hostile Sexism	-.01 (.01)	-.04 / .01	.004 (.01)	-.01 / .06

[^] Parenthood was coded so that -1 = nonparent woman, 1 = mother

Exploratory analysis of qualitative justifications. I analyzed my data for indirect effects with three mediators operating in parallel separately for the four types of backlash in managerial decisions (Hayes, 2012). Testing an indirect effect (i.e., mediation) model is appropriate given my design because I am interested in whether there are indirect effects of perceived work ethic, family obligations, and inappropriateness through which

target parenthood status impacts backlash. To conduct my mediation analysis, I used the SPSS PROCESS macro utilizing a bootstrapping approach, generating 5,000 samples with replacement. For all analyses below, there was not enough variation in mentions of family (pets, parents, or spouse) in order to adequately test for mediation, therefore the analyses only test for mediation through perceived work ethic and inappropriateness.

I predicted that women (without children) will elicit greater active harm and passive facilitation compared to other forms of backlash, and this relationship will be mediated by perceived work ethic and inappropriateness. In turn, mothers will elicit greater active facilitation and passive harm, and this relationship will be mediated by perceived work ethic and inappropriateness.

Active harm. To test exploratory hypothesis 4a, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on active harm through perceived work ethic and inappropriateness. As shown in Table 15, I found a direct effect of work ethic on active harm such that as perceived work ethic increased, endorsement of active harm also increased. I also found a direct effect of inappropriate on active harm such that as perceived inappropriateness increased, endorsement of active harm decreased. No other paths in the model were significant (see Table 15).

Passive facilitation. To test exploratory hypothesis 4b, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on passive facilitation through perceived work ethic and inappropriateness. As shown in Table 15, I found a direct effect of work ethic on passive facilitation such that as perceived work ethic increased, endorsement of passive

facilitation also increased. I also found a direct effect of inappropriate on passive facilitation such that as perceived inappropriateness increased, endorsement of passive facilitation decreased. No other paths in the model were significant (see Table 15).

Table 15. Exploratory analysis: Mediation of the effects of parenthood on active harm and passive facilitation through perceived work ethic and inappropriateness.

Description of Estimated Path	Active Harm		Passive Facilitation	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] → Active Harm & Passive Facilitation</i>				
Direct effect on outcome	-.07 (.09)	-.25 / .11	.06 (.08)	-.10 / .22
<i>Parenthood[^] → Work Ethic & Inappropriate</i>				
Direct effect on Work Ethic	-.02 (.05)	-.12 / .08	.09 (.07)	-.04 / .23
Direct effect on Inappropriate	.15 (.16)	-.18 / .47	.08 (.10)	-.12 / .28
<i>Work Ethic & Inappropriate → Active Harm & Passive Facilitation</i>				
Direct effect of Work Ethic	.35 (.14)*	.08 / .62 [†]	.22 (.08)*	.06 / .38 [†]
Direct effect of Inappropriate	-.43 (.04)*	-.52 / -.35 [†]	-.47 (.06)*	-.58 / -.36 [†]
<i>Parenthood[^] → Work Ethic & Inappropriate → Active Harm & Passive Facilitation</i>				
Indirect effect through Work Ethic	-.01 (.02)	-.05 / .02	.02 (.02)	-.005 / .07
Indirect effect through Inappropriate	-.06 (.07)	-.20 / .08	-.04 (.05)	-.13 / .06

[^] Parenthood was coded so that -1 = nonparent, 1 = parent

* $p < .05$ (significant paths)

[†] Confidence Interval did not include zero

Active facilitation. To test exploratory hypothesis 4c, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on active facilitation through perceived work ethic and inappropriateness. As shown in Table 16, I found a direct effect of inappropriate on

active facilitation such that as perceived inappropriateness increased, endorsement of active facilitation decreased. No other paths in the model were significant (see Table 16).

Passive harm. To test exploratory hypothesis 4d, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on passive harm through perceived work ethic and inappropriateness. As shown in Table 16, I found a direct effect of inappropriate on passive harm such that as perceived inappropriateness increased, endorsement of passive harm decreased. No other paths in the model were significant (see Table 16).

Table 16. Exploratory analysis: Mediation of the effects of parenthood on active facilitation and passive harm through perceived work ethic and inappropriateness.

Description of Estimated Path	Active Facilitation		Passive Harm	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] → Active Facilitation & Passive Harm</i>				
Direct effect on outcome	.01 (.10)	-.14 / .16	.004 (.09)	-.18 / .19
<i>Parenthood[^] → Work Ethic & Inappropriate</i>				
Direct effect on Work Ethic	.02 (.04)	-.06 / .10	-.01 (.03)	-.08 / .06
Direct effect on Inappropriate	.11 (.06)	-.01 / .23	.01 (.15)	-.29 / .30
<i>Work Ethic & Inappropriate → Active Facilitation & Passive Harm</i>				
Direct effect of Work Ethic	.15 (.12)	-.11 / .40	-.05 (.20)	-.43 / .34
Direct effect of Inappropriate	-.75 (.09)*	-.92 / -.58 [†]	-.50 (.04)*	-.59 / -.41 [†]
<i>Parenthood[^] → Work Ethic & Inappropriate → Active Facilitation & Passive Harm</i>				
Indirect effect through Work Ethic	.003 (.01)	-.01 / .03	.001 (.01)	-.01 / .02
Indirect effect through Inappropriate	-.08 (.05)	-.18 / .01	-.003 (.07)	-.16 / .13

[^] Parenthood was coded so that -1 = nonparent, 1 = parent

* $p < .05$ (significant paths)

[†] Confidence Interval did not include zero

Perceiver BIAS treatment scale. I then ran the model for each of the four forms of backlash as measured by the Perceiver BIAS treatment scale.

Active harm. To test hypothesis 3a, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on passive harm through hostile and benevolent sexism. As shown in Table 17, there was a significant effect of benevolent sexism on active harm such that as benevolent sexism increased, so did endorsement of active harm. However, there were no other significant effects (see Table 15); I did not find support of my predicted model (see Figure 17).

Passive facilitation. To test hypothesis 3b, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on active facilitation through hostile and benevolent sexism. As shown in Table 15, there were no significant effects; I did not find support of my predicted model (see Figure 17).

Table 17. Mediation of the effect of parenthood on active harm and passive facilitation (as measured with the perceiver BIAS treatment scale) through benevolent and hostile sexism.

Description of Estimated Path	<u>Active Harm</u>		<u>Passive Facilitation</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] → Active Harm & Passive Facilitation</i>				
Direct effect on outcome	-.06 (.07)	-.20 / .08	.06 (.08)	-.10 / .23
<i>Parenthood[^] → Benevolent & Hostile Sexism</i>				
Direct effect on Benevolent Sexism mediator	-.01 (.10)	-.21 / .18	-.01 (.10)	-.21 / .18
Direct effect on Hostile Sexism mediator	.06 (.11)	-.17 / .28	.06 (.11)	-.17 / .28

Description of Estimated Path	<u>Active Harm</u>		<u>Passive Facilitation</u>	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Benevolent and Hostile Sexism → Active Harm & Passive Facilitation</i>				
Benevolent Sexism direct effect on outcome	.12 (.06)*	.001 / .23†	-.03 (.07)	-.16 / .11
Hostile Sexism direct effect on outcome	-.01 (.05)	-.11 / .09	.01 (.06)	-.11 / .13
<i>Parenthood[^] → Benevolent & Hostile Sexism → Active Harm & Passive Facilitation</i>				
Indirect effect of Parenthood on outcome through Benevolent Sexism	-.002 (.01)	-.03 / .02	.001 (.01)	-.01 / .02
Indirect effect of Parenthood on outcome through Hostile Sexism	-.001 (.01)	-.02 / .01	.001 (.01)	-.01 / .02

[^] Parenthood was coded so that -1 = nonparent woman, 1 = mother

* $p < .05$ (significant paths)

† Confidence Interval did not include zero

Active facilitation. To test hypothesis 3c, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on active facilitation through hostile and benevolent sexism. As shown in Table 18, there were no significant effects; I did not find support of my predicted model (see Figure 10).

Passive harm. To test hypothesis 3d, I used Preacher and Hayes' (2011) PROCESS macro for SPSS to test for the indirect effect of confederate parenthood status on passive harm through hostile and benevolent sexism. As shown in Table 18, there was a marginally significant effect of confederate parenthood status on passive harm such that mothers received more passive harm than nonparent women. However, there were no

other significant effects (see Table 18); I did not find support of my predicted model in

Figure 10.

Table 18. Mediation of the effect of parenthood on active facilitation and passive harm (as measured with the perceiver BIAS treatment scale) through benevolent and hostile sexism.

Description of Estimated Path	Active Facilitation		Passive Harm	
	Estimate (SE)	95% CIs Lower / Upper	Estimate (SE)	95% CIs Lower / Upper
<i>Parenthood[^] → Active Facilitation & Passive Harm</i>				
Direct effect on outcome	.05 (.09)	-.11 / .20	-.13 (.07)**	-.28 / .02
<i>Parenthood[^] → Benevolent & Hostile Sexism</i>				
Direct effect on Benevolent Sexism mediator	-.01 (.10)	-.21 / .18	-.01 (.10)	-.21 / .18
Direct effect on Hostile Sexism mediator	.06 (.11)	-.17 / .28	.06 (.11)	-.17 / .28
<i>Benevolent and Hostile Sexism → Active Facilitation & Passive Harm</i>				
Benevolent Sexism direct effect on outcome	.06 (.07)	-.07 / .19	.09 (.06)	-.03 / .22
Hostile Sexism direct effect on outcome	-.06 (.06)	-.17 / .05	.003 (.05)	-.10 / .11
<i>Parenthood[^] → Benevolent & Hostile Sexism → Active Facilitation & Passive Harm</i>				
Indirect effect of Parenthood on outcome through Benevolent Sexism	-.001 (.01)	-.03 / .01	-.001 (.01)	-.03 / .02
Indirect effect of Parenthood on outcome through Hostile Sexism	-.003 (.01)	-.03 / .01	.001 (.01)	-.01 / .02

[^] Parenthood was coded so that -1 = nonparent woman, 1 = mother

** $p < .10$ (marginally significant paths)

Study 2 Discussion

Participants were more likely to endorse passive harm items for mothers than nonparent women in Study 2. The specific passive harm items used in the study tapped the tendency to offer help and advice even when it was not asked for or needed by the target. No one in the workplace wants to think that a supervisor lacks confidence in his or her abilities, but micromanaging in the form of frequent, unrequested advice and direction can communicate just that. My finding suggests that working women may be more likely to find their competence in the workplace subtly undermined once they become mothers. Passive harm behaviors are important to examine because they can have serious downstream consequences. For example, mothers may perceive that they are not trusted with important assignments and therefore not push for challenging projects or promotions, or supervisors could pass over mothers for training opportunities from a misguided concern that they are, indeed, helping by taking a training "burden" from working mothers. Furthermore, in an exploratory analysis, I found that working women were rated as unlikely to receive active harm, but working mothers did not differ from the scale midpoint. Because the midpoint represents neutrality on active harm, or classic discrimination, this finding suggests that people may be more accepting of active harm directed at working mothers versus working women without children.

I also found that benevolent sexism predicted active harm, complementing the finding in Study 1 that benevolent sexism predicted active facilitation and passive harm. Taken together, my results indicate that benevolent sexism may be a more reliable predictor of workplace discrimination, compared to hostile sexism. Previous research has shown that warmth is a better predictor of target evaluations than competence (Cuddy,

Fiske, & Glick, 2008); benevolent sexism is more conceptually tied with warmth ratings, and may therefore also have greater predictive value. Additionally, there is typical less social desirability bias for benevolent sexism, as the items used to measure benevolent sexism paint women in a positive light. People may be more likely to honestly respond to the items that measure benevolent sexism, thus making the scale a more valid measure of people's attitudes than the negative-valence hostile sexism scale.

However, I did not find support for my other predicted patterns of responses. One strength of Study 2 is that it was a high-impact lab study which had more mundane realism than the online Study 1, but there are some shared conceptual and methodological issues that might account for the lack of effects in Study 2. It is possible that people did not view mothers as less competent and more warm than nonmothers. I did not have a measure of competence and warmth in Study 2, however, but the lack of difference by condition on several of the backlash variables (e.g., active & passive facilitation) suggests that participants viewed mothers and nonmothers as similarly capable and likable. Second, even though the bogus workplace aptitude results were meant to be ambiguous, it is possible that since the status bars were greater than the scale midpoint, participants interpreted the results as showing high competence, and were thus unable to pin possible discriminatory responses on the aptitude results. Thus without a nonprejudicial reason to hang their prejudicial feelings upon, they were unlikely to show bias for fear of being labeled sexist or discriminatory towards mothers. Third, I used a college student sample for study 2. It is possible that participants either did not believe that the confederate was actually a parent, or inferred high competency (because they had knowledge of the skills required to attend college) and warmth (because they too want to become parents or

admire her for staying in school after becoming a mother) when another population would not be as favorable in their judgments.

Exploratory analysis discussion. Unlike Study 1, I did not find support for my hypotheses 4a-4d in my exploratory analyses. I generally found connections between perceiving an action as inappropriate for the workplace and a decreased endorsement of the behavior, regardless of the confederate's parenthood status or the type of discriminatory behavior. Notably, I could not test for the mediating effect of perceived family obligations because the participants rarely mentioned parenthood, pets, or spouses in their justifications. However, the Study 2 exploratory analysis highlights how critical it is to identify inappropriate behaviors in the workplace in order to decrease even subtle forms of discrimination.

CHAPTER SIX

GENERAL DISCUSSION

My results support past research that suggests mothers face a "motherhood penalty" (Benard & Correll, 2010): a complicated, nuanced experience with discrimination that often leads mothers to disengage with or, at worst, drop out of the paid labor force. The majority of the research on backlash has conceptualized backlash as active harm behaviors. The present research expanded the definition of backlash to include both active and passive (i.e., unintentional) forms of harm and facilitation. Over two studies, I found that parents and women were rated as more likely to be genuinely helped in the workplace, but that mothers may also be more susceptible to passive harm and active harm compared to other groups. Furthermore, benevolent sexism emerged as a predictor for active facilitation, passive harm, and active harm. In comparison, hostile sexism did not predict any discrimination.

Cuddy and colleagues (2004) found that working mothers were rated as less competent but more warm than working women without children. I did not find support for this result in my conceptual replication in Study 1. It is possible that the stereotype content for working women and working mothers has changed in the past decade. People may now assume working mothers work just as hard and are equally competent as working women without children, and that working women without children are as likable as working mothers.

However, most of the previous research used a college student sample that likely had little experience in the workforce, to look at stereotypes of warmth and competence of working mothers. It is possible that older, experienced workers (like MTurk workers) have shifting standards of evaluation for working men, women, fathers, and mothers. People pay attention to counterstereotypic information, and that counterstereotypic information weighs heavier on our judgments of individuals than stereotypic information. For example, it takes relatively little information about possible incompetence to trigger suspicion of incompetence for stereotypically competent (e.g., men), compared to stereotypically incompetent (e.g., women) group members (Biernat, Fuegen, & Kobrynowicz, 2010). Likewise, our low expectations of stereotypically incompetent groups may cause us to readily boost our perceptions of their competency if we come across any slight indication of stereotype inconsistency (i.e., see a professionally accomplished woman as more impressive, or competent, as a similarly accomplished man). In the future, I plan to use target descriptions of only moderately-qualified employees in order to boost my likelihood of finding the predicted effects.

I also suspect that my short-form measure of Ambivalent Sexism was not a true measure of hostile and benevolent sexism activation. People had to engage in conscious reflection in order to indicate their agreement with the scale items. It is possible that participants would have answered the scale items similarly regardless of when the measure was administered, and that the presence of a working mother or working woman would not influence their responses. In other words, the short-form ASI may have

measured a trait instead of a psychological state. If this measure of the ASI did measure a trait then I would be unable to detect my predicted effects.

According to my prospective power analyses, I was well powered to find effects in both studies. However, it is possible that given my use of a new short-form ASI and new backlash scales, I was underpowered to find effects with my specific measures. It is possible that the measures I used and created for my projects were less sensitive than those measures used in the literature on which I based my power analyses. Furthermore, several of my measures of backlash were not very reliable (e.g., in Study 2, the Cronbach's alpha for passive harm as measured by the Perceiver BIAS Treatment Scale was only .51, well below the ideal level of .70 or above). Therefore in the future I plan to further validate the backlash in managerial decisions measure, and possibly include more items from Sibley's (2011) original BIAS Treatment Scale. I also plan to develop new, more precise measures of endorsement of subtly discriminatory behavior, possibly with qualitative or implicit measures.

I found several interesting patterns in my exploratory analysis with a qualitative justifications for endorsement of backlash behavior. First, I found that my Study 1 MTurk sample viewed the items differently from my Study 2 college student sample, and therefore the factor analysis produced similarly-themed but distinct measures of active and passive harm and facilitation from the original 12-item measure. I suspect that college students, who tend to be more liberal and egalitarian than the general population and have less work experience, viewed some items as potentially more unfair than the MTurk sample. For example, the item "Invite the employee to give critical feedback on

workplace policies” loaded on the Active Facilitation subscale for the MTurk sample, but had a split-loading between Active Facilitation and Passive Facilitation and was thus dropped from the scale for the college student sample. I suspect that some students felt that the word “critical” in the item potentially would set the woman up to provide negative criticism and thus harm her position in the workplace for criticizing her supervisors. The MTurk workers, who had more experience in the workplace, may have been more likely to view the item as a positive opportunity for an employee.

I found that parents, most often working mothers, received backlash because of their family obligations and participants did not perceive this behavior as inappropriate. Furthermore, labeling a behavior as inappropriate was crucial for decreased endorsement of the behavior, particularly for mothers. Thus my exploratory analyses suggest that perceived work ethic, family obligations, and inappropriateness of behavior are promising avenues for future research into the justifications of differential backlash against working women without children and working mothers.

The connection between attitudes and behavior is murky, and social scientists more reliably predict behavioral intentions than actual behavior. Using stereotypes to predict intentions to discriminate presents an even trickier problem. Much of the evidence on how specific stereotypes shape behavior comes from research that features minimal groups that the researchers lay stereotypes upon (Cuddy et al., 2007) or considers reports from targets of discrimination about how they have been treated (Sibley, 2011). It is difficult (though not impossible) to measure overt prejudice and discrimination in the lab. As with any null result, it is impossible to determine if an effect merely does not exist, or

if there were other (possibly several) procedural barriers to discovering a theoretically sound, real effect. I did not find support for most of my predictions. However, I still think my predicted effects are real. Based upon the decades of work on prejudice and discrimination (see Cuddy et al., 2008; Glick & Fiske, 2004; Rudman et al., 2012 for exhaustive reviews of stereotype content and the BIAS map, ambivalent sexism, and backlash, respectively), I, unfortunately, must assume that the specific way I approached my empirical questions was flawed. I aim to refine my methodology in order to tease apart the specific prejudice and discrimination that women and mothers face in the workplace.

Future Research

In general, future research should focus on both the traditionally harmful forms of discrimination, as well as more subtle, sometimes seemingly positive forms of backlash that serve to ultimately limit women's roles in the workplace. Not only are subtle backlash behaviors more likely to take place in the workplace than overt, clear discrimination, but study participants are less likely to feel a social desirability bias when answering subtle discriminatory items, thus making them more willing to endorse them than obviously negative behaviors.

In follow-up studies, I plan to use a greater variety of methods and measures in order to address how women are perceived in the workplace after they become mothers. First, I will include qualitative measures that I would then code to capture more nuanced responses, given that I suspect social desirability bias to be a driving factor for many of the null findings and I found some promising directions in my analysis of my exploratory

qualitative measures. Second, I also hope to get around the social desirability bias by developing an implicit measure of ambivalent sexism that will be a more pure measure of sexism activation. Third, I would like to develop a subtle behavioral measure of sexism and active and passive harm and facilitation. Recent research on facial cues and ambivalent sexism (Goh & Hall, 2015) suggests that videotaping interactions between interviewers and working women and mothers and coding their nonverbal responses may be one way to predict later discriminatory behavior. Fourth, I could take my questions out of the lab and use archives of performance evaluations of real workers both before and after they have children.

Additionally, Bernard and Correll (2010) found people only enforce the "motherhood penalty" when (1) mothers have ambiguous competency and commitment records and (2) people need to assign workplace rewards to working mothers vs. nonparent employees. Participants in my studies only evaluated one target. In the future, I will vary both the competency and commitment information about my targets, as well as have people make comparative judgments between parents and nonparents in a within-participants design study.

Implications

My research provides valuable contributions and future directions for intergroup relations theory, including the specific areas of backlash, the BIAS map, and ambivalent sexism. Further, my research has important real-world implications. Working mothers represent well over a third of primary family income providers in the United States, yet face even more income inequality than women without children. One reason may be

because they are seen as less competent, but lowered perceived competence may not be the entire story. If, stemming from mother's added warmth perceptions, mothers are treated with the "velvet glove" at work, they will be more likely to face the maternal wall – a barrier that can prevent mothers from achieving professional success because of their devalued state within the workplace (Crosby et al., 2004). Similar to the quote from Fauludi (1991) from Chapter One, working mothers are elevated in the workplace when it comes to warmth, but isolated due to their perceived departure from traditional motherhood. The present research tested one way that the velvet glove may harm mothers in the workplace. Policy makers, business owners, and managerial staff could use this information to guide their workplace policies and employment laws. Additionally, current and future research could lend support to legal recourse should a working mother seek to explain benevolent discrimination she may encounter in the workplace.

APPENDIX A

MTURK PARTICIPANT RECRUITMENT TEXT

Title: LUC Research Study

Description: This HIT is periodically re-posted. If you've already completed this HIT previously, please do not complete it a second time. You will not be compensated a second time. You will know quickly whether you have completed this survey before, and if so, please return the HIT. In this HIT you will see a short description of a person or social situation that relates to work, friends, or daily life. After reading the description you will answer several questions, complete a task intended to clear your mind, and then answer some more questions. ***This task requires you to use a computer and a keyboard. It cannot be completed on a phone or ipad/tablet. You must use a windows operating system to complete the study (software requirement).***

Criteria/Qualification Required: Must not have any experience as a parent or legal guardian to a child. Age 18 and over. Must be a United States resident and fluent in English. HIT approval rate (%) is not less than 95.

Reward: \$0.50

Time Allotted: 15 minutes

Keywords: research, psychology, survey, experiment, questionnaire, science

Survey Link: [link to the survey]

If you decide to participate in the study, you receive instructions about a code on the last page of the survey. Please place this code into the text box below to verify that you have completed the survey.

Provide the survey code here:

Please note: You must provide this code for the HIT to be approved.

APPENDIX B
STUDY 1 INFORMED CONSENT FORM

Consent to Participate in Research Project

Title: Workplace Decisions

Researcher: Kala Melchiori
Faculty Supervisor: Robyn Mallett

Introduction: You are being asked to take part in a research study being conducted by Kala Melchiori for a dissertation under the supervision of Dr. Mallett in the Department of Psychology at Loyola University of Chicago. Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose: You are invited to participate in research investigating either how people make decisions about employees in the workplace. The purpose of the study is to examine how people use employee information to make important decisions. Please know that you will not be informed of the full scope or hypotheses of the present study until after your participation.

Procedures: Participants will engage in one of two activities. 1) Some participants will read a short description of an employee and make several decisions about the employee. 2) Some participants will assume supervisory or employee roles and share personal information in a computer-mediated interaction. "Employees" will complete aptitude measures and "supervisors" will use the results to make several decisions. All participants also may be asked to complete a word-sorting task and be asked questions about themselves.

Risks and Benefits: There are minimal risks that do not exceed a level that you may encounter during your normal daily activities. There are no direct benefits to you participation, however if you have not participated in a psychological study before, this is a good opportunity to experience how psychological research is conducted.

Time Commitment: The experiment will take about 15 minutes to complete.

Compensation: You will receive \$0.50 for completion of this experiment. The researcher reserves the right to deny payment if the survey is incomplete or the participant did not follow directions.

Confidentiality: Your individual privacy will be maintained in all published and written data from the study. Your name will not be connected to the information you provide, nor will your individual responses be identified in any research reports describing the study. MTURK worker IDs will not be linked to survey responses. All information obtained during the study will remain confidential.

Joining of your own free will: Your participation in this study is voluntary. You may withhold information that you do not wish to disclose, and you do not have to answer any questions that you do not wish to answer. You may choose to withdraw from this study at any time and will receive full credit if you have completed more than half of the tasks.

This study has been approved by the Loyola Institutional Review Board for the Protection of Human Subjects. If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689. If you have any questions about the study, please contact please contact Ms. Melchiori (phone: 773.508.3037 email kmelchiori@luc.edu) or Dr. Mallett (phone: 773.508.3028 email: mallett@luc.edu).

Participant Statement: I have read the explanation provided to me and I understand that by continuing with the survey, I am verifying that I am at least 18 years of age and that I voluntarily agree to participate in this study.

APPENDIX C

MANIPULATION CHECKS: WARMTH AND COMPETENCE

Please rate the person described on the following traits. Remember to respond with your first, uncensored impressions.

	Not at all					Extremely			
1. Good-natured (W)	1	2	3	4	5	6	7	8	9
2. Capable (C)	1	2	3	4	5	6	7	8	9
3. Sincere (W)	1	2	3	4	5	6	7	8	9
4. Efficient (C)	1	2	3	4	5	6	7	8	9
5. Warm (W)	1	2	3	4	5	6	7	8	9
6. Organized (C)	1	2	3	4	5	6	7	8	9
7. Likeable (W)	1	2	3	4	5	6	7	8	9
8. Skillful (C)	1	2	3	4	5	6	7	8	9
9. Friendly (W)	1	2	3	4	5	6	7	8	9
10. Competent (C)	1	2	3	4	5	6	7	8	9
11. Well-intentioned (W)	1	2	3	4	5	6	7	8	9
12. Confident (C)	1	2	3	4	5	6	7	8	9
13. Trustworthy (W)	1	2	3	4	5	6	7	8	9
14. Intelligent (C)	1	2	3	4	5	6	7	8	9

Note. W = warmth, C = competence. These indicators will not be included in the actual study materials.

APPENDIX D
SHORT-FORM AMBIVALENT SEXISM INVENTORY

Instructions: Below is a series of statements concerning men, women, and relationships.

Please indicate the degree to which you agree or disagree with each statement using the following scale:

	Strongly Disagree					Strongly Agree			
	1	2	3	4	5	6	7	8	9
1. If a man and woman love each other they can overcome any differences and problems that may arise. (RBS)	1	2	3	4	5	6	7	8	9
2. A good woman should be set on a pedestal by her man. (ASI – BS)	1	2	3	4	5	6	7	8	9
3. People only get one “real love.” (RBS)	1	2	3	4	5	6	7	8	9
4. Most women fail to appreciate fully all that men do for them. (ASI – HS)	1	2	3	4	5	6	7	8	9
5. Women, compared to men, tend to have a superior moral sensibility. (ASI – BS)	1	2	3	4	5	6	7	8	9
6. Most women interpret innocent remarks or acts as being sexist. (ASI – HS)	1	2	3	4	5	6	7	8	9
7. Many women have a quality of purity that few men possess. (ASI – BS)	1	2	3	4	5	6	7	8	9
8. Relationships between “true loves” should be perfect. (RBS)	1	2	3	4	5	6	7	8	9
9. Women are too easily offended. (ASI – HS)	1	2	3	4	5	6	7	8	9
10. Men are complete without women. (ASI – BS; reverse-scored)	1	2	3	4	5	6	7	8	9
11. Romantic partners should be completely accepting, loving, and understanding. (RBS)	1	2	3	4	5	6	7	8	9
12. Women seek to gain power by getting control over men. (ASI – HS)	1	2	3	4	5	6	7	8	9
13. Romantic love will really last; it won’t fade with time. (RBS)	1	2	3	4	5	6	7	8	9
14. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives. (ASI – BS)	1	2	3	4	5	6	7	8	9
15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash. (ASI – HS)	1	2	3	4	5	6	7	8	9

APPENDIX E
PERCEIVER BIAS TREATMENT SCALE

Take a moment to recall [the description you read/the person you met] in the beginning of the study. Please use the following rating scale to indicate how likely the person would be to elicit the following behaviors from coworkers.

	Very unlikely								Very likely
1. Help even if the person did not ask for assistance. (PH)	1	2	3	4	5	6	7	8	9
2. Efforts to make the person feel welcome. (AF)	1	2	3	4	5	6	7	8	9
3. Offers to socialize with the person outside of the workplace. R (PF)	1	2	3	4	5	6	7	8	9
4. Efforts to make sure the person is comfortable. (AF)	1	2	3	4	5	6	7	8	9
5. Attempts to act in the person's best interests, even without consulting with the person first. (PH)	1	2	3	4	5	6	7	8	9
6. Intimidating behavior, such as threats. (AH)	1	2	3	4	5	6	7	8	9
7. Offers of assistance only when the other person expects to personally benefit. (PF)	1	2	3	4	5	6	7	8	9
8. Attempts to do what others think is best for the person. (PH)	1	2	3	4	5	6	7	8	9
9. Questionable behavior that could be considered harassment (AH)	1	2	3	4	5	6	7	8	9
10. Actively listening to the person's input. (AF)	1	2	3	4	5	6	7	8	9
11. Associate with the person only when the other person needs something done. (PF)	1	2	3	4	5	6	7	8	9
12. Do things that would threaten the person. (AH)	1	2	3	4	5	6	7	8	9
13. Interact with the person during formal situations but not in social ones. (PF)	1	2	3	4	5	6	7	8	9
14. Advice and opinions even when the person didn't ask for it. (PH)	1	2	3	4	5	6	7	8	9
15. Verbal attacks that are inappropriate for the workplace (AH)	1	2	3	4	5	6	7	8	9
16. Requests to hear the person's opinion about workplace issues. (AF)	1	2	3	4	5	6	7	8	9

Note. AH = active harm, PH = passive harm, AF = active facilitation, PF = passive facilitation

APPENDIX F
DEMOGRAPHICS

Please answer the following demographic questions.

Sex (choose one)

Male Female

Age _____

Ethnicity (choose one)

Hispanic or Latino

Not Hispanic or Latino

Unknown

Race (choose one)

American Indian/Alaska Native

East Asian

South Asian

Native Hawaiian or other Pacific Islander

Black or African American

White

Other _____

Strongly liberal

Neutral

Strongly Conservative

What are your political views
on SOCIAL ISSUES?

1 2 3 4 5 6 7

What are your political views
on ECONOMIC ISSUES?

1 2 3 4 5 6 7

Highest education level completed (choose one) [Study 1 only]

Some High School

High School

Some College

Associates degree/certificate

Undergraduate degree (BA/BS)

Some graduate school

Graduate degree (MA/MS/MBA/PHD/MD)

Year in school (choose one) [Study 2 only]

Freshman

Sophomore

Junior

Senior

Graduate Student

Country/Region of Primary Citizenship

	None	Under 5 years	5-10 years	Over 10 years
How many years have you been employed in the labor force?	0	1	2	3
How many years of managerial/supervisory experience have you had?	0	1	2	3
How many years of hiring/promotion/termination experience have you had?	0	1	2	3
If you grew up in a household with your mother, did she work outside of the home while you were growing up?		No	Yes	N/A

APPENDIX G
DEBRIEFING ITEMS

What was your overall impression of the study?

A lot of people in psychology experiments are suspicious that we're hiding something from them or that we are looking at something other than what we said we were looking at. Were you suspicious at all in this study?

If you had to guess, what would you say this study was trying to figure out? What was our hypothesis?

[Study 2 only] What did you think about the other participant in the study? Was there anything strange about how the participant acted?

APPENDIX H
DEBRIEFING FORM

Thank you for your participation in our experiment!

Our research attempts to clarify how people form impressions of others and how those impressions guide their decisions. Research has shown that people view working women in stereotypical ways (for example, as knowledgeable but unlikable), and that this unfair view of working women can result in discriminatory behavior in the workplace. The current project examines how working mothers (who are seen as less knowledgeable but more likable) are evaluated and treated in comparison to working women without children [STUDY 1 ONLY and men with and without children], and if hostile or paternalistic attitudes toward women explain any potential mistreatment of working women and mothers.

[STUDY 2 ONLY: In the study, you interacted with someone whom you thought was another participant. That participant was actually a “confederate” – a person who was actually working for the researchers and was trained to act in a particular way. If you were randomly assigned to the nonparent condition, the confederate was trained to tell you about her dog. If you were randomly assigned to the parent condition, the confederate was trained to tell you about her son. You then completed a “cognitive task” that was, in fact, designed to measure if you had any prejudicial motivations spring to mind. You viewed some “results” of an employee aptitude assessment; in fact, we created the results document. You then completed measures designed to detect instances of subtle prejudiced behavior. Overall, we are investigating parenthood might affect people’s responses to working women. We hypothesize that people may act on traditional forms of prejudicial attitudes when evaluating a woman in the workplace; however, if that woman is also a parent, people may act on more subtle, benevolent forms of prejudicial attitudes when evaluating mothers in the workplace.

We ask that you not discuss this experiment with other students, as that may bias individuals who may become participants in this study at a later time. If anyone asks about the study, just say that it was about how self-disclosure impacts workplace decisions.]

If you have any questions regarding this particular research project or psychological research in general, please feel free to contact the researcher, Kala Melchiori, whose information is at the top of this page, or the faculty supervisor for this project, Dr. Mallett, Psychology Department, Coffey Hall, Room 237, 773.508.3028, rmallett@luc.edu.

To learn more about how gender and parenthood impact people’s perceptions and behavior, please consult the following:

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When professionals become mothers, warmth doesn't cut the ice. *Journal of Social Issues, 60*, 201-718.

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology, 92*, 631-648.

Rudman, L. A., & Fairchild, K. (2004). Reactions to counterstereotypic behavior: The role of backlash in cultural stereotype maintenance. *Journal of Personality and Social Psychology, 87*, 157-176.

For information or questions regarding research ethics and guidelines, please contact: **Office of Research Services**, 6525 N. Sheridan Road, Granada Center, Suite 400, 773.508.2471, ORS@luc.edu

APPENDIX I
STUDY 2 INFORMED CONSENT FORMS

Consent to Participate in Research Project

Title: Workplace Decisions

Researcher: Kala Melchiori
Faculty Supervisor: Robyn Mallett

Introduction: You are being asked to take part in a research study being conducted by Kala Melchiori for a dissertation under the supervision of Dr. Mallett in the Department of Psychology at Loyola University of Chicago. Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose: You are invited to participate in research investigating either how people make decisions about employees in the workplace. The purpose of the study is to examine how people use employee information to make important decisions. Please know that you will not be informed of the full scope or hypotheses of the present study until after your participation.

Procedures: Participants will engage in one of two activities. 1) Some participants will read a short description of an employee and make several decisions about the employee. 2) Some participants will assume supervisory or employee roles and share personal information in a face-to-face or computer-mediated interaction. "Employees" will complete aptitude measures and "supervisors" will use the results to make several decisions. All participants also may be asked to complete a word-sorting task and be asked questions about themselves.

Risks and Benefits: There are minimal risks that do not exceed a level that you may encounter during your normal daily activities. There are no direct benefits to you participation, however if you have not participated in a psychological study before, this is a good opportunity to experience how psychological research is conducted.

Time Commitment: The experiment will take about 60 minutes to complete.

Compensation: You will receive one credit hour for the study that counts toward the fulfillment of the research participant component of your introductory psychology course.

Confidentiality: Your individual privacy will be maintained in all published and written data from the study. Your name will not be connected to the information you provide, nor will your individual responses be identified in any research reports describing the study. All information obtained during the study will remain confidential.

Joining of your own free will: Your participation is voluntary. You may withhold information that you do not wish to disclose, and you do not have to answer any questions that you do not wish to answer. You may choose not to serve as a participant or withdraw from this study at any time without penalty.

This study has been approved by the Loyola Institutional Review Board for the Protection of Human Subjects. If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689. If you have any questions about the study, please contact Ms. Melchiori (phone: 773.508.3037 email kmelchiori@luc.edu) or Dr. Mallett (phone: 773.508.3028 email: rmallett@luc.edu).

Participant Statement: I have read the explanation provided to me and all of my questions have been answered to my satisfaction. I voluntarily agree to participate in this study. I understand that by signing this consent form I am agreeing to participate in the study.

I am at least 18 years of age and I agree to participate in this study (please sign below):

Participant Signature: _____ Date: _____

Researcher Signature: _____ Date: _____

Consent to Participate in Research Project

Title: Workplace Decisions

Researcher: Kala Melchiori
Faculty Supervisor: Robyn Mallett

Introduction: You are being asked to take part in a research study being conducted by Kala Melchiori for a dissertation under the supervision of Dr. Mallett in the Department of Psychology at Loyola University of Chicago. Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose: You are invited to participate in research investigating either how people make decisions about employees in the workplace. The purpose of the study is to examine how people use employee information to make important decisions. Please know that you will not be informed of the full scope or hypotheses of the present study until after your participation.

Procedures: Participants will engage in one of two activities. 1) Some participants will read a short description of an employee and make several decisions about the employee. 2) Some participants will assume supervisory or employee roles and share personal information in a face-to-face or computer-mediated interaction. "Employees" will complete aptitude measures and "supervisors" will use the results to make several decisions. All participants also may be asked to complete a word-sorting task and be asked questions about themselves.

Risks and Benefits: There are minimal risks that do not exceed a level that you may encounter during your normal daily activities. There are no direct benefits to you participation, however if you have not participated in a psychological study before, this is a good opportunity to experience how psychological research is conducted.

Time Commitment: The experiment will take about 60 minutes to complete.

Compensation: You will be able to select one or more gift cards as compensation. The total value of the gift card(s) will be \$10.

Confidentiality: Your individual privacy will be maintained in all published and written data from the study. Your name will not be connected to the information you provide, nor will your individual responses be identified in any research reports describing the study. All information obtained during the study will remain confidential.

Joining of your own free will: Your participation in this study is voluntary. You may withhold information that you do not wish to disclose, and you do not have to answer any questions that you do not wish to answer. You may choose to withdraw from this study at any time and will receive full credit if you have completed more than half of the tasks.

This study has been approved by the Loyola Institutional Review Board for the Protection of Human Subjects. If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689. If you have any questions about the study, please contact Ms. Melchiori (phone: 773.508.3037 email kmelchiori@luc.edu) or Dr. Mallett (phone: 773.508.3028 email: rmallett@luc.edu).

Participant Statement: I have read the explanation provided to me and all of my questions have been answered to my satisfaction. I voluntarily agree to participate in this study. I understand that by signing this consent form I am agreeing to participate in the study.

I am at least 18 years of age and I agree to participate in this study (please sign below):

Participant Signature: _____ Date: _____

Researcher Signature: _____ Date: _____

APPENDIX J
SELF-DISCLOSURE TASK

Thank you for participating in this study. We are interested in how self-disclosure among employees influences workplace issues. Please answer the questions on this sheet in order. In order to make the experience as real as possible, please reply with TRUE personal information about yourself and elaborate on your answers as you see fit. Please alternate who answers each question first, starting with the SUPERVISOR.

REMEMBER, answer with REAL information about yourself.

1. What is your hometown?
2. How do you spend most of your time at home?
3. What kind of music do you listen to?
4. What is your favorite television show or movie?
5. What magazines, newspapers, or blogs do you read?
6. Who do you consider your personal role model?

APPENDIX K
STUDY 2 PICTURES



Picture of dog for Study 2



Picture of 1-year-old for Study 2

APPENDIX L
FALSE EMPLOYEE APTITUDE RESULTS

Clark Workplace Aptitude Assessment®
Industry: Financial

NAME: Thompson, Jennifer

	LOW	HIGH
Energy	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Stress Management	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Optimism	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Work Ethic	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Detail Oriented	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Flexibility	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Organization	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Self-Directed	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	
Interpersonal Skills	1.....2.....3.....4.....5.....6.....7.....8.....9.....10.....11.....12	

The use of the Clark Workplace Aptitude Assessment®, Industry: Financial, version 13.2 is limited to license holders conducting employee evaluations, educational demonstrations, or research. All other users must obtain the express consent of Clark Assessments, LLC.

APPENDIX M

BACKLASH IN MANAGERIAL DECISIONS MEASURE

<p>You are now going to view a list of tasks and behaviors that could be a good fit or a bad fit for the employee. Using all of the information you have on the employee, rate how much you think the employee would be good fit for the following tasks or behaviors.</p>								
1. Give the employee the opportunity to present ideas at a weekly staff meeting. (AF)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
2. Require the employee to develop training materials that you would then use with employees from other companies. (PF)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
3. Begin training the employee for promotion to a supervisory position. R (AH)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
4. Assign another Financial Advisor to collaborate with the employee on all of the employee's tasks. (PH)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
5. Invite the employee to give critical feedback on workplace policies. (AF)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
6. Invite the employee on optional social outings, such as a working lunch or happy hour. R (PF)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
7. Assign the employee a very difficult task to complete alone that usually requires two or more employees to complete. (AH)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
8. Regularly pull the employee aside to offer what you consider to be helpful advice. (PH)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9
9. Ask the employee to meet with you every week to discuss assignments. (AF)								
NOT A GOOD FIT						VERY GOOD FIT		
1	2	3	4	5	6	7	8	9

10. Due to workplace politics, you agree to promote the employee although doing so would not have been your first choice. (PF)								
NOT A GOOD FIT							VERY GOOD FIT	
1	2	3	4	5	6	7	8	9
11. Ask the employee to be in charge of ordering office supplies, making coffee, and other general office maintenance tasks although these are not standard job duties. (AH)								
NOT A GOOD FIT							VERY GOOD FIT	
1	2	3	4	5	6	7	8	9
12. Tell the employee how to best achieve work-life balance. (PH)								
NOT A GOOD FIT							VERY GOOD FIT	
1	2	3	4	5	6	7	8	9

APPENDIX N
FUNNELED DEBRIEFING SCRIPT

For Experimenter to Read Aloud and Fill Out

PID _____

RA _____

Thank you for your participation so far. We're almost finished, but I do need to ask you a few questions. This will help us understand your experience in the study. I'll also give you some information about the research process and our topic of interest. It's very important that you share your true thoughts with me because it will really help our research to know about your experience.

First, what was your overall impression of the study?

A lot of people in psychology experiments are suspicious that we're hiding something from them or that we are looking at something other than what we said we were looking at. Were you suspicious at all? *[if yes, determine at what point and how bad it was]*

What did you think of your partner in this study? Just tell me your first general impression.

I know you answered this question in writing, but if you had to guess, what would you say this study was trying to figure out? What was our hypothesis?

Do you know if any of your friends have been in this study?

Think back to the self-disclosure interaction with the other participant that you completed earlier in the session. What did the participant say she did in her spare time?

Okay, now I'd like to tell you a bit more about this study. I ask that you not share this information with any friends you have who might also participate in the study. Doing so could keep them from acting as they would if they had not heard the information. If they ask, just say we were looking at workplace self-disclosure, okay?

[Make eye contact and get a head nod or verbal acknowledgement]

Our research attempts to clarify how people form impressions of others and how those impressions guide their decisions. In the study, you interacted with someone whom you thought was another participant. That participant was actually a "confederate" – a person who was actually working for the researchers and was trained to act in a particular way. If you were randomly assigned to the nonparent condition, the confederate was trained to tell you about her dog. If you were randomly assigned to the parent condition, the confederate was trained to tell you about her son.

You then completed a "cognitive task" that was, in fact, designed to measure if you had any prejudicial motivations spring to mind. You also viewed some "results" of an employee aptitude assessment; in fact, we created the results document. Next, you completed measures designed to detect instances of subtle prejudiced behavior.

Overall, we are investigating parenthood might affect people's responses to working women. We hypothesize that people may act on traditional forms of prejudicial attitudes when evaluating a woman in the workplace; however, if that woman is also a parent, people may act on more subtle, benevolent forms of prejudicial attitudes when evaluating mothers in the workplace.

Do you have any questions about the study that you would like me to answer?

[If applicable, write question and the answer you provided]

Thanks for helping with the study.

Remember, it is extremely important that you do not tell other people the details of our study. If anyone asks about the study, just say that it was about how self-disclosure impacts workplace decisions.

[Give the participant a Debriefing Sheet and thank again for their participation]

After the participant has left:

1. Complete Suspicion Rating below.
2. Record the PID on the top of each of the participant's forms.
3. Paper clip the stack and place it in the Completed Forms folder.
4. Make sure to update credit on Experimentix and/or provide gift card and obtain signature.

	Not at all		Somewhat		Very Much
Level of Suspicion	* *		* * *		* *
	Not at all		Somewhat		Very Much
Involvement in Study	* *		* * *		* *

Comments:

REFERENCES

- Barnett, R. C. (2004). Women and work: Where are we, where did we come from, and where are we going? *Journal of Social Issues, 60*, 667-674.
- Baron, R. B., & Kenny, D. A. (1986). The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bernard, S., & Correll, S. J. (2010). Normative discrimination and the motherhood penalty. *Gender & Society, 24*, 616-646.
- Biernat, M. (1995). The shifting standards model: Implications of stereotype accuracy for social judgment. In Lee, Y., Jussim, L. J., & McCauley, C. R. (Eds.) *Stereotype accuracy: Toward appreciating group differences*. (pp. 87-114). Washington, DC: American Psychological Association, 330 pp.
- Biernat, M., Fuegen, K., & Kobrynowicz, D. (2010). Shifting standards and the inference of incompetence: Effects of formal and informal evaluation tools. *Personality and Social Psychology Bulletin, 36*, 855-868.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*, 3-5.
- Bureau of Labor Statistics (2012). *Employment characteristics of families -- 2012*. (News Release, No. USDL-13-0730). Retrieved from the Bureau of Labor Statistics website: www.bls.gov/news.release/pdf/famee.pdf
- Cesario, J., Plaks, J. E., & Higgins, E. T. (2006). Automatic social behavior as motivated preparation to interact. *Journal of Personality and Social Psychology, 90*, 893-910.
- Cohen, S. L., & Bunker, K. A. (1975). Subtle effects of sex role stereotypes on recruiters' hiring decisions. *Journal of Applied Psychology, 60*, 566-572.
- Crosby, F. J., Williams, J. C., & Biernat, M. (2004). The maternal wall. *Journal of Social Issues, 60*, 675-682.

- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When professionals become mothers, warmth doesn't cut the ice. *Journal of Social Issues, 60*, 201-718
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology, 92*, 631-648.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in Experimental Social Psychology, 40*, 61-149.
- Dovidio, J. F., & Gaertner, S. L. (2004). Aversive racism. *Advances in Experimental Social Psychology, 36*, 1-52.
- Dovidio, J. F., & Gaertner, S. L. (2010). Intergroup Bias. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.) *The handbook of social psychology* (5th ed., Vol. 2; pp. 1084-1121). Oxford University Press: New York.
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers, 28*, 1-11.
- Faludi, S. (1991). *Backlash: The undeclared war against American women*. Crown Publishers: New York.
- Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175-191.
- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research, 20*, 305-315.
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 2; pp. 357-411). Oxford University Press: New York.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878-902.
- Fitzgerald, L. F. (1993). Sexual harassment: Violence against women in the workplace. *American Psychologist, 48*, 1070-1076.

- Fuegen, K., Biernat, M., Haines, E., & Deaux, K. (2004). Mothers and fathers in the workplace: How gender and parental status influence judgments of job-related competence. *Journal of Social Issues, 60*, 737-754.
- Glick, P., Diebold, J., Bailey-Werner, B., & Zhu, L. (1997). The two faces of Adam: Ambivalent sexism and polarized attitudes toward women". *Personality and Social Psychology Bulletin, 23*, 1323-1334.
- Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist, 56*, 109-118.
- Glick, P., & Fiske, S. T. (2001b). Ambivalent stereotypes as legitimizing ideologies: Differentiating paternalistic and envious prejudice. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 278-306). American Psychological Association: New York.
- Glick, P., & Fiske, S. T. (2011). Ambivalent sexism revisited. *Psychology of Women Quarterly, 35*, 530-535.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. K. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*, 1464-1480.
- Goh, J. X., & Hall, J. A. (2015). Nonverbal and verbal expressions of men's sexism in mixed-gender interactions. *Sex Roles*, online first publication. DOI: 10.1007/s11199-015-0451-7
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hebl, M. R., King, E. B., Eden, B., Glick, P., Singletary, S. L., & Kazama, S. (2007). Hostile and benevolent reactions toward pregnant women: Complementary interpersonal punishments and rewards that maintain traditional roles. *Journal of Applied Psychology, 92*, 1499-1511.
- Heilman, M. E., & Okimoto, T. G. (2008). Motherhood: A potential source of bias in employment decisions. *Journal of Applied Psychology, 93*, 189-198.
- Holland, K. J., & Cortina, L. M. (2013). When sexism and feminism collide: The sexual harassment of feminist working women. *Psychology of Women Quarterly, 37*, 192-208.

- Jackman, M. R. (1994). *The velvet glove: Paternalism and conflict in gender, class, and race relations*. Berkeley, CA: University of California Press.
- 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*, 881–919.
- Krefting, L. A., Berger, P. K., & Wallace, M. J., Jr. (1978). The contribution of sex distribution, job content, and occupational classification to job sex-typing: Two studies. *Journal of Vocational Behavior, 13*, 181-191.
- Major, B. & O'Brien, L.T. (2005). The social psychology of stigma. *Annual Review of Psychology, 56*, 393-42.
- Martinko, M., & Gardner, W. (1983). A methodological review of sex-related access discrimination problems. *Sex Roles, 9*, 825-839.
- Masser, B. M., & Abrams, D. (2004). Reinforcing the glass ceiling: The consequences of hostile sexism for female managerial candidates. *Sex Roles, 51*, 609-615.
- Masser, B. M., Grass, K., & Nesie, M. (2007). 'We like you, but we don't want you' --The impact of pregnancy in the workplace. *Sex Roles, 57*, 703-712.
- Moss-Racusin, C. A., Phelan, J. E., & Rudman, L. A. (2010). When men break the gender rules: Status incongruity and backlash toward modest men. *Psychology of Men and Masculinity, 11*, 140–151.
- Moss-Racusin, C. A., & Rudman, L. A. (2010). Understanding disruptions in women's ability to self-promote: The backlash avoidance model. *Psychology of Women Quarterly, 34*, 186–202.
- Okimoto, T. G., & Heilman, M. E. (2012). The "bad parent" assumption: How gender stereotypes affect reactions to working mothers. *Journal of Social Issues, 68*, 704-724.
- Pavalko, E. K., Mossakowski, K. N., & Hamilton, V. J. (2003). Does perceived discrimination affect health? Longitudinal relationships between work discrimination and women's physical and emotional health. *Journal of Health and Social Behavior, 43*, 18-33.
- Peer, E., Vosgerau, J., & Acquisti, A. (2014). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. *Behavioral Research Methods, 46*, 1023-1031.

- Pew (2013). *Breadwinner moms: Mothers are the sole or primary provider in four-in-ten households with children; public conflicted about the growing trend*. Retrieved from www.pewsocialtrends.org/files/2013/05/Breadwinner_moms_final.pdf
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437-448.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.
- Ridgeway, C. L., & Correll, S. J. (2004). Motherhood as a status characteristic. *Journal of Social Issues, 60*, 683-700.
- Rudman, L. A., & Fairchild, K. (2004). Reactions to counterstereotypic behavior: The role of backlash in cultural stereotype maintenance. *Journal of Personality and Social Psychology, 87*, 157-176.
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues, 57*, 743-762.
- Rudman, L. A., Moss-Racusin, Glick, P., & C. A., Phelan (2012). Reactions to vanguards: Advances in backlash theory. *Advances in Experimental Social Psychology, 45*, 167-227.
- Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice toward female leaders. *Journal of Experimental Social Psychology, 48*, 165-179.
- Rudman, L. A., & Phelan, J. E. (2008). Backlash effects for disconfirming gender stereotypes in organizations. In A. P. Brief & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 28, pp. 61-79). Elsevier: New York.
- Sibley, C. G. (2011). The BIAS-treatment scale (BIAS-TS): A measure of the subjective experience of active and passive harm and facilitation. *Journal of Personality Assessment, 93*, 300-315. doi: 10.1080/00223891.2011.559389
- Spence, J. T., & Hahn, E. D. (1997). The attitudes toward women scale and attitude change in college students. *Psychology of Women Quarterly, 21*, 17-34.
- Spence, J. T., Helmreich, R., Stapp, J. (1973). A short version of the attitudes towards women scale (AWS). *Bulletin of the Psychonomic Society, 2*, 219-220.

- Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995) Sexism and racism: Old-fashioned and modern prejudices. *Journal of Personality and Social Psychology*, 68, 199-214.
- Twenge, J. M. (1997). Changes in masculine and feminine traits over time: A meta-analysis. *Sex Roles*, 36, 305-325.
- US Census Bureau (2013). *Mother's day: May 12, 2013*. (U.S. Census Bureau News, No. CB13-FF.11). Retrieved from U.S. Census Bureau website: www.census.gov/newsroom/releases/pdf/cb13ff-11_mothers.pdf
- Williams, J. C., (2005). The glass ceiling and the maternal wall in academia. *New Directions for Higher Education*, 130, 91-105.
- Wittenbrink, B., Judd, C. M., & Park, B. Evidence for racial prejudice at the implicit level and its relationship with questionnaire measures. *Journal of Personality and Social Psychology*, 72, 262-274.
- Wood, W., & Eagly, A. H. (2010). Gender. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.) *The handbook of social psychology* (5th ed., Vol. 1; pp. 629-667). Oxford University Press: New York.

VITA

Kala J. Melchiori was raised in Moundsville, WV. She received her Bachelor of Arts in Psychology, summa cum laude, from Marshall University in Huntington, WV, in 2008. She joined the Loyola University Chicago community in 2009 and received her Masters of Arts in Social Psychology from LUC in 2011.

While at LUC, Dr. Melchiori served on the Graduate School Advisory Council, the Psychology Department's Committee on Diversity Affairs, and subcommittees for the Faculty Senate. She has won several awards from the Psychology Department and the Graduate School. Most notably, Dr. Melchiori was a 2014 recipient of The President's Medallion, LUC's highest academic honor, awarded to those who exemplify leadership, scholarship, and service to the university and community.

Currently, Dr. Melchiori teaches courses in research methods and the psychology of gender at LUC while she applies for tenure-track professorships in psychology. She resides in Chicago, IL, with her family.