

The Impact of Gendered Organizations on Worker Well-being

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**A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the
Requirements for the Degree Doctor of Philosophy**

McMaster University

TITLE: The Impact of Gendered Organizations

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NUMBER OF PAGES: 141

ABSTRACT

The ways in which paid work influences mental health and well-being is a topic of great interest to researchers focused on the social determinants of health. A primary focus in the literature has included the various conditions of work that can have both positive or negative effects on the mental health and well-being of workers. However, this perspective tends to disassociate the worker from the larger organizational context in which they are embedded. My dissertation addresses this limitation by examining the ways in which the organization and the workplace intersect to influence worker mental health and well-being through a gendered lens. Using data from the 2005 American Work Stress and Health survey, results from my research suggest that the gendered nature of organizations may matter *more* for worker mental health and well-being than work conditions or individual-level gender. Findings also suggest that this is dependent on both the occupation and workplace, and that consequences of the gendered organization can manifest in day-to-day interactions between workers.

ACKNOWLEDGEMENTS

I am very grateful for the people who supported me during this journey. In particular, I would like to thank my dissertation supervisor, Dr. Marisa Young, whose unrelenting patience, incredible knowledge, and remarkable integrity has made its mark on, not only this dissertation, but on me as a person. I am so privileged to have gotten to know you and will forever consider you a friend and mentor. I would also like to thank my committee members, Dr. Tina Fetner and Dr. Paul Glavin. Your feedback on this dissertation has been invaluable. Tina, you are one of the strongest women I have ever had the privilege to know. Your wisdom and openness have set an example for young women following in your footsteps. Paul, thank you for always keeping me laughing. I have cherished your sense of humour during this difficult process. To Dr. Kathy Georgiades, I would like to express my gratitude, for giving me a chance to grow as a researcher. I have learned so much from you. Your kindness and humility are very rare traits to come across and I will follow your example. To my friend and colleague Diana, who has been an integral part of this process. Diana, thank you for being such a good friend to me. Thank you for all of the laughs and for keeping me going when times got tough. To my partner Sabine, I have no words to express how grateful I am to have you in my life and for the life we are building together. You are my motivation. To my family, who are the most generous people in the world, I am forever grateful to know I will always have a soft place to fall. Finally, I want to thank Zac Walker, to whom I dedicate this dissertation. Without knowing you, I would not have done this. I am so grateful to have known you.

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Chapter 1

INTRODUCTION

Being a member of the labour force requires that we spend a substantial amount of time engaged in paid work. According to the Bureau of Labor Statistics (2019), the average American spends approximately a third of their lives at work or approximately 90,000 hours over the course of a lifetime. Thus, it is not surprising the extent to which conditions of work, occupations, and workplaces impact our physical and emotional well-being.

Conditions of work, such as those considered by the Job Demands-Resources (JD-R) model (Bakker and Demerouti 2007), have dominated the literature on work and well-being in the past two decades (Lesener, Gusy & Wolter, 2019). The JD-R model posits that certain job characteristics influence worker well-being and that these characteristics can be divided into two categories: 1) job demands that typically hinder worker well-being; and 2) job resources that tend to improve worker well-being. Some examples of commonly considered demands include job pressures that exceed what can reasonably be accomplished within a workday, while commonly considered resources include job autonomy or schedule flexibility. While this model has served to advance the study of the effects of work on worker well-being, the focus on individual conditions of work may blur the impact of work conditions, given the lack of consideration for the organizational context within which these jobs exist (Tausig, 2013).

Tausig and Fenwick (2011) argue that organizational structures are a focal determinant of job conditions, given that occupations, workplaces, and workers exist within them and their structures determine how jobs are performed and rewarded. From this perspective, conditions of work cannot be considered separately from the organizational context within which they

function. One major paradigm focused on the organizational context is the gendered organization perspective (Acker 1990).

Gender inequality in the workplace has been the subject of much research investigation and debate (Blau & Kahn, 2017; England, 2005; Reskin, 1993; Kanter, 1977). Familiar patterns include horizontal and vertical occupational segregation (Fortin & Huberman, 2002), the gender wage gap (Blau & Kahn, 2007), competing work and family obligations, (Blair-Loy, 2003) and workplace discrimination (Baxter & Wright, 2000; Roos & Reskin, 1992). A gendered organizations perspective argues that gender--and gendered processes--are embedded in all aspects of organizations, including occupations and workplaces, and that these processes contribute to gendered inequality (Acker, 1990; Britton & Logan, 2008). Gendered processes can include more formal inner workings of organizations including organizational policies, hiring processes, task allocation, and mobility requirements, to more informal processes of the day-to-day interactions between workers. These processes not only have implications for inequality in wages and occupational mobility, but also likely for differential experiences of well-being for men and women in paid work.

Perspectives on work and well-being (i.e., the JD-R model) and the gender and work literature (Kanter, 1977; Glass, 1990; England, 1992) very rarely converge. My dissertation, overall, posits that there are benefits to combining these two perspectives for our understanding of how work and work conditions influence wellbeing. To address this research gap, I examined the ways in which these two perspectives combine to help our understanding of mental health and employment outcomes in a representative sample of Americans from the 2005 Work Stress and Health Survey. My contributions are also methodological –where I introduce novel approaches to analyzing the hierarchical importance of demands and resources on individual

mental health and employment outcomes. Overall, my dissertation enhances our understanding of the multiple avenues through which gendered processes ingrained in organizations, occupations, workplaces, and everyday interpersonal experiences influence workers' well-being.

Work & Well-being

Research on work and well-being has focused on job/workplace conditions and individual-level outcomes of stress (Tausig, 2013). The predominant frameworks used to explain the relationship between job conditions and well-being is the Job Demands-Resources model (JD-R). The JD-R model has grown from the demand/control model (Karasek, 1979) which argues that the balance between job-related demands and job autonomy has significant implications for worker mental health and well-being. Evidence suggests that high job demands coupled with low job autonomy is an ideal recipe for individual distress (Kohn & Schooler, 1983). Job demands commonly include quantitative job demands such as whether the worker has enough time to complete their required tasks. Job autonomy refers to the extent to which a worker can make decisions in the design and execution of their own work (Tausig, 2013).

The JD-R model draws on these arguments but broadens the scope to include a wider variety of work demands and resources outside of the demand/control model (Bakker & Demerouti, 2007). Demands in the JD-R model can include work-related pressures, aspects of the physical environment, and interpersonal requirements of the job. Resources are expanded beyond job autonomy to consider income, mobility, security, social support, and task variety just to name a few, all of which have been found in various capacities to be associated with worker well-being.

The changing labour market has further emphasized divides between the jobs that provide adequate resources to meet demands and those that do not (Kalleberg, 2003). The workforce has

been restructured to reflect two categories of workers: 1) Standard full-time workers with salaried wages and benefits; 2) “Peripheral” workers characterized by nonstandard employment arrangements that often come with job insecurity, low or unpredictable pay and few or no benefits (Kalleberg et al., 2000; Hudson, 2007).

Understanding the relationship between work conditions and worker well-being outcomes is important, particularly for policy makers and employers making decisions to improve worker retention, job satisfaction and well-being. However, conditions of work can vary substantially across occupations and the exposure to stressful work conditions is often the result of structural and social contingencies that the JD-R cannot address.

Gendered Organizations and Worker Well-being

Occupations and workplaces do not exist in a vacuum. Instead, they are intrinsically linked to the organizations within which they function (Tausig & Fenwick, 2011). In her seminal work *Hierarchies, Jobs and Bodies: A Theory of Gendered Organizations*, Acker (1990) drew attention to the idea that gender is not just an individual-level phenomenon but that organizations and the structures that govern them are also gendered. She argues that organizations are built to reproduce gendered inequalities through role conceptualizations such as an “ideal worker” who is unencumbered by family demands and reflects traditional masculine qualities such as rationality and assertiveness.

While work focused on the gendered organization is diverse (see Britton & Logan, 2008), researchers have yet to consider in depth the ways in which gendered organizations influence worker well-being, and how this may differ for men and women. A common explanation for well-being differences for men and women workers stems from the work and family literature. Since women are still taking on most family-related responsibilities, women tend to experience

higher levels of work-family conflict which has been shown to have a negative effect on worker's well-being (Duxbury & Higgins, 1991; Frone, 2000; Greenhaus & Beutell, 1985; Grzywacz & Bass, 2003). While this explanation is an important one, it cannot be the sole explanation for gender differences in worker well-being. Instead, the organizational context within which both formal and informal processes dictate the rules regarding how work must be done, the organizational context likely has important implications for well-being consequences as a result of balancing work and family responsibilities.

Two important perspectives within the gendered organizations paradigm help shed light on how gendered processes and structures of organizations may influence well-being. The first comes from Kanter's (1977) work focused on proportional representation in *Men and Women of the Corporation*. Kanter demonstrated that gender inequalities existed in the structure of the organization in which people worked through showing how women within an organization had less opportunity, power, and were fewer in numbers in more prominent positions. Her argument focused on women's minority or "token" status and suggested that women would face heightened visibility, greater barriers to advancement and polarization and exclusion from workplace social networks.

While Kanter's (1977) perspective drew new attention to the ways in which gender exists within the structure of an organization, she argued that it was women's minority status that fueled the conditions that women faced within this organization. Therefore, Kanter's argument is considered by many as gender neutral in that it rests on the assertion that any minority, whether that be gender, race, or any other characteristic, would experience the same negative consequences as the women in her study.

Despite this argument, subsequent research found the opposite to be the case. A prime example includes the “glass escalator” hypothesis where men were found to benefit from their minority status in female-dominated occupations by receiving special treatment and heightened mobility catapulting men into positions of power and authority within these occupations (Williams, 1995).

While there is support in the literature for both positions, recent work suggests that the consequences associated with being a numerical minority in the workplace results in elevated stress for both men and women (Taylor, 2016). However, research focused on mental health and well-being outcomes in this literature is limited and with the majority of studies focusing on only one occupational context.

A second perspective within the gendered organizations paradigm is the “devaluation hypothesis”. The devaluation hypothesis states that gender segregation of the labour market has polarized men and women into female- and male-dominated jobs, and that the gender domination of an occupation has implications for its valuation and subsequent resources (England, 1992).

The gender wage gap is a persistent and well-documented pattern in the American labour market (Blau & Kahn, 2017). Despite having similar qualifications, women earn less on average than men. In 2020, women were only making 82 cents for every dollar men earn on average (BLS, 2020). While multiple explanations have been considered to explain this gap in wages, the gender segregation of the labour market and subsequent devaluation of women’s work is well-supported by the literature. Occupations dominated by women tend to require less on-the-job training, lower wages, shorter mobility ladders and fewer opportunities for promotion, as well as fewer resources such as schedule flexibility, and paid sick leave and vacation than comparable occupations dominated by men (Cohen & Huffman, 2003; England, 2018; Pearlman, 2018).

Despite these contributory patterns, the research on devaluation is segmented from literature on workers' well-being.

My dissertation helps to bridge these gaps by making multiple contributions to the literature. First, I amalgamate two distinct literatures: 1) Gendered organization literature; and 2) the work and well-being literature. Second, I contribute to devaluation theory by arguing that the devaluation of women's work does not only perpetuate wage and prestige inequality but has consequences for worker well-being. Finally, I utilize a representative sample and quantitative methods, both novel and traditional, to examine the overarching patterns. This allows more generalizable results for gendered organizations literatures that are often examined using qualitative methods and/or focus on one specific occupation.

Overview of the Dissertation

My dissertation includes three related, yet distinct, independent papers. Each paper uniquely examines how the gendered organization impacts mental health (e.g., psychological distress and anger) and employment consequences (e.g., job dissatisfaction). Chapter 2 uses a novel method of machine learning (the random forest) to examine the importance of various predictors drawn from the JD-R model and the gendered organizations perspective for worker well-being. This is a specialized approach that is often overlooked by researchers in sociology, but that helps to gauge the hierarchical importance of predictors on outcomes. Findings from this paper underscore that the gendered organization may matter more than traditionally considered demands and resources from the JD-R model for worker well-being. Chapter 3 explored the intersection of the gendered nature of the workplace and the occupation and its subsequent effect on well-being. The results reflect a complex narrative that suggests the gender of the worker is *less* important than the occupational gendered context in which they are embedded. Chapter 4

explores interpersonal consequences of gendered workplace influences by examining the effect of workplace gender composition at various levels in a hierarchy (i.e., supervisor, coworkers, and subordinates) on workplace interpersonal conflict. Results suggest that workplace relationships are not created equal and that power dynamics that heighten workplace conflict are exacerbated by the gendered nature of the organization. The final chapter (chapter 5) includes a brief discussion, conclusion, limitations of the study, and recommendations for future research.

Taken together, the chapters of this dissertation make an important contribution to the literature in several ways. Most importantly, I demonstrated that the gendered nature of organizations have implications for the occupations and workplaces that exist within them and in turn, the well-being of workers.

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Chapter 2

THE IMPORTANCE OF THE GENDERED ORGANIZATION, JOB DEMANDS AND RESOURCES FOR MENTAL HEALTH AND EMPLOYMENT CONSEQUENCES

Introduction

Work plays an important role in overall well-being (Litchfield et al., 2016). While substantial strides have been made in the study of work and well-being, there remains a disconnect in the literature between individual-level job conditions and the organizational contexts in which they are produced and reproduced (Tausig & Fenwick, 2011). Organizational structures define job tasks and provide the resources needed to accomplish these tasks making them vital to the understanding of the processes in which work can influence well-being.

Two major frameworks in sociology that aim to characterize the connection between work and well-being include the Job Demands-Resources Model (JD-R model) (Bakker & Demerouti, 2007), and the gendered organizations perspective (Acker, 1990; Williams 1995; Taylor, 2010; 2016). The JD-R model focuses on work conditions like job demands, or resources such as job autonomy, that can vary by occupations and workplaces and that have been found to affect worker well-being (Bakker & Demerouti, 2007). The JD-R model suggests that work-related demands cause stress for the worker but, balanced appropriately with resources, the stress of high demands is buffered. In occupations or workplaces where sufficient resources are not in place, demands placed on workers will cause consequences to worker-well-being (Bakker, Demerouti & Euwema, 2005; Bakker, Demerouti & Verbeke, 2004 Demerouti et al., 2001; Hansen, Sverke & Näswall, 2009; Xanthopoulou et al., 2007; Bakker and Demerouti, 2017).

In contrast, the gendered organization perspective underscores that gendered inequality is built into all aspects of organizations (Acker, 1990). Multiple perspectives stemming from gendered organizations, such as gender segregation of occupations or gender dissimilarity in the

workplace, have been found to influence worker well-being (Kanter, 1977; Williams, 1995; Jackson et al., 1995; Taylor, 2010; Taylor, 2016). For instance, recent studies find that women scored higher on negative mental health outcomes when working in male-dominated occupations, compared to men in similar occupations (Tophoven et al., 2015; Nyberg et al., 2018; Qian & Fan, 2019). This suggests that the gendered context of occupations and workplaces likely have an influence on worker well-being. However, this aspect of the organizational context is often left out of studies focused on the influence of work and job conditions on worker well-being (Bakker & Demerouti, 2017).

From these two research streams there is plenty of evidence that: first, demands and resources associated with the JD-R model; and second, aspects of the gendered organization, influence worker well-being, yet they very rarely converge. It remains unclear how important predictors from these two theoretical lenses are on worker well-being outcomes, or how important they are in relation to each other. Studies examining the impact of job demands and resources on outcomes such as psychological distress tend to be disjointed, limiting our understanding of the importance of one demand/resource over another in relation to worker well-being (Schaufeli & Taris, 2016).

Using data from the 2005 Work Stress and Health Study, I utilize an ensemble method of machine learning to examine the importance of predictors from the JD-R model and the gendered organizational context for the prediction of mental health outcomes (psychological distress and anger) and employment outcomes (job dissatisfaction and turnover intention).

The random forest method of machine learning allows the ranking of predictors by importance, making it possible to understand which predictors are best able to predict a particular outcome. While machine learning methods like the random forest are traditionally

used in fields unrelated to sociology, such as the prediction of disease presence in medicine, it lends itself well to any predictive analysis and encompasses some key advantages over more traditional linear models and generalized linear models commonly used in the field of sociology (Molina and Garip, 2019).

I operationalize the gendered organizational context by using two measures of gender composition, the percent of women in the occupation (an occupation-level measure) and the perceived gender composition of the respondent's workplace (an individual-level measure), to answer the following research questions:

- 1) What are the most important work-related predictors of mental health and employment outcomes?
- 2) How do predictors from each theoretical lens compare to one another in predicting mental health and employment consequences?

The findings indicate that the gendered context of the organization matters over and above common predictors considered by the JD-R model in the prediction of mental health and employment outcomes. Theories of the gendered organization are utilized to discuss and explain these results to highlight this key shortfall of the JD-R model.

Background

Work and Mental Health

The job-demands and resources model (JD-R) has dominated the literature on work and mental health in the last decade (Bakker and Demerouti, 2017). Growing from the job demand-control model first proposed by Karasek (1979), the JD-R model has drawn attention to a wide variety of job-related factors that influence worker health and well-being. The JD-R model posits that work conditions fall into the two broad classifications of demands and resources (Bakker &

Demerouti, 2007). Job demands refer to aspects of the job that require “sustained physical and/or mental effort and are therefore, associated with certain physiological and/or psychological costs” (Bakker & Geurts, 2004: 348). Central to the JD-R model are quantitative job demands that characterize excessive job pressures. However, this has been expanded to include other demand-related conditions such as noxious work conditions, and job insecurity, as well as interpersonal demands like workplace interpersonal conflict (Schieman, Milkie, & Glavin, 2009; Schaufeli, 2017).

Other theoretical insights draw attention to the consequences of work stress on family life. For example, border/boundary theories highlight the conflictual domains of work and family, and the psychological pressure this can pose for workers who must cross these domains on a daily basis (Clark, 2000; Nippert-Eng, 2006). Therefore, work-family conflict is considered here as a work-related demand that has an influence on worker mental health and job satisfaction.

Alternatively, job resources are the aspects of the job that can assist workers to meet the demands associated with their work, and therefore, can buffer the adverse effects of high demands on mental health (Bakker & Geurts, 2004). The JD-R model posits that the presence and interaction of various demands and resources can influence worker well-being. A central resource to the JD-R model is work autonomy, or the ability to have control over daily tasks while at work (Bakker & Demerouti, 2007). A related construct shown to be a positive workplace resource is schedule control, or the ability to decide when to start and end the work-day (Perlow & Kelly, 2014; Kelly & Moen, 2007; Hurtado et al., 2015). Interpersonal resources such as workplace social support has also been identified as a resource with the potential to

buffer the mental health consequences of work demands (Schieman, Milkie, & Glavin, 2009; Schaufeli, 2017).

Given the wide breadth of evidence suggesting that work demands and resources are integral to worker mental health and satisfaction, I would expect the aforementioned demands and resources to be substantially important predictors of worker mental health and employment outcomes.

The Influence of Gender Composition and Gendered Organizational Context

While the JD-R model covers a wide range of workplace conditions that have been shown to affect worker well-being, it largely ignores aspects of gender and gendered organizations that may also have an influence on mental health and well-being. Theories of gender, work, and gendered organizations suggest that the embodied processes, interpersonal dynamics, inequalities, and the work itself are all defined by gender (Acker, 1990; England et al., 2007a; Dill et al., 2016).

Gendered processes can occur at both the occupation and the workplace level. Theories focused on the gender composition of the workplace highlight the psychological and employment consequences that can occur for workers based on whether their workplace is dominated by one gender or the other. For example, Kanter's (1977) seminal work on proportional representation identifies the experiences of a gender numerical minority in a workplace (i.e., a token) and the psychological consequences that can occur due to this minority status. For example, numerical underrepresentation was found to result in performance pressures, and polarization. These processes have been shown to influence a variety of consequences such as promotion opportunities (Floge & Merrill, 1986), workplace social support (Taylor, 2010;

Wallace & Kay, 2012), and job satisfaction (Hagan & Kay, 2007), and are likely to have an impact on worker mental health.

While Kanter (1977) suggested that these consequences would occur for any group that is considered numerically underrepresented, more recent work has shown that gender minority status results in differential experiences for men and women (Williams, 1995; Budig, 2002; Hultin, 2003; Wingfield, 2009; Smith, 2012; Dill et al., 2016). The glass escalator hypothesis posits that men tend to benefit from being in a gender dissimilar workplace and tend to receive benefits and promotions above their female counterparts (Williams, 1995).

The gendered context of the occupation may influence mental health and employment consequences distinctly from, and possibly in combination with, workplace gender composition. Gender segregation of the labour force in the United States remains prevalent and can lead to imbalance by gender in certain occupations (Reskin 1993; Cohen, 2013; Bureau of Labour Statistics, 2016). Whether an occupation is male- or female-dominated has implications for job quality/rewards. The devaluation hypothesis suggests that cultural beliefs regarding gender tend to colour work typically done by women as less worthy of status and lower in skill than work typically done by men (Ridgeway & England, 2007; England, Allison, & Wu, 2007; Levanon, England, & Allison, 2009). This may have consequences for workers, particularly for their satisfaction with and commitment to their jobs, and in turn, their psychological well-being.

Furthermore, occupational gender composition can influence the occupational and/or workplace culture that can privilege one gender over another. Turco's (2010) theory of local cultural contingency suggests that the occupational gender composition influences workers' valuation of cultural resources which shapes their construction of an ideal worker. For example, Turco (2010) demonstrates that in the Leveraged Buyout Industry (LBO), certain knowledge

(e.g., a knowledge of sports) was a highly valued cultural resource that women were less likely to possess compared to their male counterparts. Other cultural aspects of the job, including full commitment, directly conflicted with motherhood, further disadvantaging women. Although less is known about how this theory applies to female-dominated occupations, men may experience some disadvantages in certain female-dominated occupations that privilege feminine cultural attributes such as nursing or childcare (Lupton, 2006; Pullen & Simpson, 2009).

Previous findings regarding the gender composition of the workplace and the occupation illustrate the potential for consequences to worker mental health and employment consequences. However, the importance of these gender-related predictors in comparison to predictors included in the JD-R model is not well understood.

Gender and Mental Health

Gender itself may also be an important predictor of mental health and employment outcomes. Women tend to report suffering from internalizing mental health disorders such as depression and anxiety, while men report issues with externalizing problems such as substance abuse, or antisocial behaviours (Rosenfeld & Mouzon, 2013). For example, women may be more likely to report higher levels of psychological distress, while men may report higher levels of anger. Gender may also be an important predictor of certain employment outcomes such as job satisfaction. Compared to men, women tend to report higher levels of satisfaction with their jobs (Pita and Torregrosa, 2020; Mason, 1995).

Despite these long-standing patterns that tend to hold internationally, gender differences in mental health are not traditionally considered in work and mental health models such as the JD-R model, beyond including it as a control in analytical models. Furthermore, the gender of the individual should be considered separately from the gender composition of the occupation

and workplace, given that the experience for men and women likely varies depending on whether the occupation is male- or female-dominated (Williams, 1995; Qian & Fan, 2019).

Methods

To examine the importance of work demands/resources, and the gender composition of the occupation and workplace, I analyze data from the Work Stress and Health Study (WSH). The WSH is a national telephone survey of working adults in the United States. The study was conducted from February through August of 2005 and includes a nationally representative sample of 1,800 respondents. To be eligible for the study, participants had to be employed at the time of the survey, fluent in English and over the age of 18. Seventy percent of respondents were successfully contacted and interviewed. Sampling for the study followed a list-assisted random digit-dialing (RDD) procedure and was drawn proportionally from all 50 states.

Focal Dependent Variables

I use two indicators to capture the mental health of respondents: 1) psychological distress; 2) anger. *Psychological distress* is measured by asking the respondents the number of days in the past week that she/he felt “that everything was an effort”, “sad”, “had trouble getting to sleep or staying asleep”, “had trouble keeping your mind on what you were doing”, “couldn’t get going”, “were unable to shake the blues”, “worried a lot about little things”, and/or “felt anxious or tense”. The items were averaged to create an index, where higher scores reflect greater distress ($\alpha=.85$). This index has been used in recent publications and is considered a reliable measure of psychological distress (Bird 1999; Mirowsky & Ross 2003). The items are a consolidation of items from the Center for Epidemiological Studies Depression Scale (Radloff 1977) and combined with the Twenty-Two Item Screening Score of Psychiatric Symptoms (Langner 1962).

Anger is measured by asking the respondents the number of days in the past week that she/he “felt annoyed or frustrated”, “felt angry”, “felt very critical of others”, “yelled at someone or something”, and/or “lost your temper”. The items are averaged so that higher scores reflect higher levels of anger ($\alpha=.78$) (Schieman, 2006).

I measure job dissatisfaction using two indicators: 1) perceived job dissatisfaction; 2) turnover intentions. *Job dissatisfaction* is measured using the question “How satisfied are you with your job?” with responses consisting of “not at all”, “somewhat”, “quite a bit” and “very much”. We coded these responses into a dummy variable of “dissatisfied” - including the two former categories (1) compared to “satisfied” - the latter two categories (0). This measure is similar to those used in previous research (Lutgen-Sandvik, Tracy et al. 2007; Steenbergen, Ellemers et al. 2007).

Turnover intentions are measured using the question “In the next two years, how likely is it that you will try to find a different job with another firm or organization?” with responses consisting of “very likely”, “somewhat likely” or “not at all likely”. We coded these three categories into a dummy variable with the former two categories representing an intention to turnover (1) and the latter category representing all else (0).

Focal Predictors

Work Demands¹

To capture work demands, I use multiple established measures of various identified demands that have been shown to impact mental health outcomes. *Job authority* is measured using four items: “Do you influence or set the rate of pay of others?” “Do you have the authority to hire or fire others?” “Do you supervise or manage anyone as part of your job?” If yes was

¹ For a more comprehensive list of demands and resources associated with the JD-R model, see Schaufeli and Taris, 2013.

reported for the previous question they were asked: “Do any of those individuals supervise or manage others?” Responses of ‘no’ were coded ‘0’ compared to yes responses, coded ‘1’. To create the index, I summed the responses.²

I measure *job pressures* using three items: “Felt overwhelmed by how much you had to do at work?” “Have to work on too many tasks at the same time?” “The demands of your job exceeded the time you have to do the work?” Response choices are coded: “never” (1), “rarely” (2), “sometimes” (3), “often” (4), and “very often” (5). We averaged the items to create the index; higher scores indicate more job pressure ($\alpha = .85$). These items are similar to those used in other previously published research on related themes like “pressure,” “work-load,” or “quantitative demands” (Kristensen et al. 2004; van den Broeck et al. 2010).

Interpersonal conflict is measured by asking respondents if in the last 30 days they experienced the following: “Has anyone at work treated you unfairly”, “gotten annoyed or angry with you”, “teased or nagged you”, “blamed or criticized you for something that wasn’t your fault,” “given you unclear directions about work you need to do,” “not done the work that needed to be done or done it in a sloppy or incompetent way?” with responses including “yes” or “no”. Respondents were also asked to report the frequency that they experienced each of these indicators with the response choices 0=never, 1=rarely, 2=sometimes, and 3=frequently. These responses were then summed to create an index ($\alpha=.76$).

Job noxiousness is measured using three items: 1) “How often is your workplace noisy?”; 2) “How often is your workplace dirty or dusty?”; 3) “How often is your workplace dangerous?”. Response options include “never”, “rarely”, “sometimes”, and “frequently”. Items were averaged to create an index ($\alpha=.73$)

² While job authority could be considered a resource, it has been found to have consequences for worker well-being (Schieman, Whitestone and Van Gundy 2006). I therefore treat it as a job demand.

Job insecurity is measured by asking the respondent: “In the next two years, how likely is it that you will lose your job or be laid off?” Response options include “not at all likely”, “somewhat likely”, and “very likely”. Responses were coded 1 if they responded to the two latter options and 0 for the former.

To evaluate *work-family conflict*, three questions were asked: “How often does your job interfere with your home or family life?”, “How often does your job interfere with your social or leisure activities?” and “How often do you think about things going on at work when you are not working?” Responses include never (1), rarely (2), sometimes (3) and frequently (4). These items are averaged so that higher scores correspond to higher work-to-home interference with a reliability coefficient of $\alpha=.85$. These items have been used in previous work to assess work-to-home interference (Schieman and Young 2010; Voydnoff 2007).

Work Resources

To assess *job autonomy*, I use respondents’ answers to the question “How often does someone else decide how you do your work?” with response choices of never (1), rarely (2), sometimes (3) and frequently (4).

Schedule control is measured by asking participants the question: “Who usually decides when you start and finish work each day at your main job?” Response options include: 1) someone else; 2) respondent within certain limits; 3) respondent is entirely free to decide when they start and finish work.

Social Support is measured using four items: 1) “Someone listened to your ideas or opinions”; 2) “Someone thanked you for the work you do”; 3) “Someone gave you positive feedback, guidance or advice”; 4) “Someone said or did something that made you feel pride in your work”. Response options include “yes” and “no”. Items were summed to create an index.

Gender, Work and Organizational Context

To assess *workplace gender composition*, respondents were asked whether their coworkers were all men, mostly men, all women, mostly women or an equal mix of both men and women. Options were coded 0) all or mostly men, 1) equal mix, and 2) all or mostly women.

Gender composition of the occupation is operationalized using a measure of the aggregate average of “percent of women” employed by occupation. These data, taken from the 2004 Current Population Survey, were matched with the occupation reported by each respondent using the O*NET – a public database of American occupational information. The O*NET contains characteristics of occupations in accordance with the Standard Occupation Classification (SOC) system that were matched with reported occupations in the WSH data to create a continuous measure of the average percent women in the occupation. Using these data, we created a continuous measure of percent women in the respondent’s corresponding occupation.

Gender was measured using a dummy variable, comparing women (1) to men (0).

Other Predictors

There are several other factors that can influence worker mental health and employment consequences, such as age, income, marital status and race. Research on the social antecedents of mental health disorder has found that the prevalence of poor mental health is not equally distributed, but instead, tends to be more prevalent among certain groups. In particular, psychological distress and disorder tend to be greater among those in groups with lower socio-economic status, or that are racialized or marginalized (Aneshensel, Phelan, & Bierman, 2013). There is some contention on whether or not marital status is beneficial to mental health, and whether the benefits are equal for men and women (Umberson, Thomeer, & Williams, 2013).

However, it is generally agreed that marital status does have an effect on mental health. Age also tends to be a strong predictor of mental health and employment outcomes with general patterns showing a decline in mental ill health as individuals grow older (see Ferraro & Wilkinson, 2013). Therefore, I anticipate the above-mentioned demographic predictors to be important in predicting mental health and employment outcomes and include these measures in the models.

Age is measured in years. *Race* was measured as a dummy variable with “white” coded ‘1’ compared to “other” (0). *Marital status* was measured as a dummy variable with “married” coded 1 in contrast to those who are “not married” (0). Information about *personal income* was obtained from the following question: “For the complete year of 2004, what was your total personal income, including income from all of your paid jobs including taxes?”

Analysis

To examine the importance of the predictors of the four outcomes, I utilize a method known as random forests. Random forests are a method of machine learning known as an *ensemble*. An *ensemble* aims to create a stronger predictive model from a variety of weaker ones (Lantz, 2013). In other words, a random forest is an iterative process that combines the results from multiple iterations to produce the strongest possible final model. In a random forest, multiple bootstrapped subsamples are taken from the original dataset with replacement. On each of these subsamples, a classification tree (for categorical outcomes) or a regression tree (for continuous outcomes) is grown using a set number of predictors.

A classification tree (aka., decision tree) is a model in the form of a tree structure that encompasses a series of decisions, similar to a flowchart. The tree begins at what is called a “root node” and is then passed through a series of decisions based on the predictors included in the model. For example, a decision on whether the observation is male or female can be made from

gender as a predictor. These observations are then separated into a “leaf node” that assigns a value based on the probability that they will fall into one class or another (i.e., satisfied vs. dissatisfied). Regression trees follow a similar logic, but instead of being based on the probability of falling into one category or another, an average of the outcome is taken at each leaf node. Therefore, regression trees differ from linear regression methods that rely on the best linear fit of the data. Instead, regression trees make predictions based on the average value of the outcome of the set of observations that reach a certain “leaf” in the tree. These predictions are not regression coefficients as the model is not multiplicative. Instead, they are the average of the observations that reach a particular node based on the decisions that were made prior.

Classification and regression trees are built by partitioning data using a “divide-and-conquer” strategy that will result in the most accurate prediction of the outcome. Although traditional regression methods, such as OLS and logistic regression, are often the preferred method given their inferential advantages, classification and regression trees also offer some distinct advantages over the more traditional methods (Breiman, 2001). For example, trees are better suited for capturing non-linear relationships between variables, which are not as easily accommodated by linear regression methods. It does so by partitioning the data in a way that arrives at the most accurate prediction of the outcome, rather than attempting to fit a line. Furthermore, linear regression methods make assumptions about the distribution of numeric data that are often violated in real-world data, while trees do not rely on these assumptions. In other words, data included in trees do not need to be normally distributed or homoscedastic. Finally, because there are multiple trees (typically 500-1000), each of which considers multiple predictors, interactions between predictors are implicitly taken into account.

To arrive at a final model, the random forest algorithm takes the predictions from each of the trees to understand the importance of each predictor variable to its respective outcome. Unlike traditional regression methods, prediction of an outcome is the primary goal of machine learning techniques such as the random forest and therefore, is not inferential in nature. For example, one could utilize a machine learning model to predict an outcome based on known predictors when the outcome has not been measured. Examples of its usage can be seen in various areas including many epidemiological studies aiming to predict health outcomes (Bellinger et al., 2017; Wiens & Shenoy, 2018). Therefore, random forests do not assess the direction and significance of a predictor on an outcome, but instead, can produce an estimate of variable importance³.

Variable importance is not a coefficient that can be interpreted as in traditional regression methods, but instead produces an estimate of how much the error in prediction might increase were that variable to be removed from the model (Azen & Budescu, 2003). Variable importance can be determined for both categorical and numerical outcomes, but they differ slightly. For classification of categorical outcomes, variable importance refers to the percentage increase in the “out-of-bag” error rate. The out-of-bag error rate is an unbiased estimator of how the model will perform on unseen data which is computed by taking the prediction of each observation each time it was held out of the bootstrapped subsample. For continuous outcomes, variable importance refers to the percentage increase in the mean squared error if that variable were to be removed from the model. The mean squared error is calculated by taking the average of the sum

³ Variable importance is not the same as reviewing standardized regression coefficients. Unlike regression, a random forest does not assume that variables are normally distributed or that they have linear relationships with the outcome. Therefore, the predictive accuracy and precision of a random forest model is often not attained with linear regression methods. This makes it ideal for examining the importance of predictors in a model, over and above regression methods with standardized coefficients.

of squared errors from each regression tree in the forest. Therefore, a variable with a higher importance value may be evaluated as a stronger predictor of the outcome compared to a variable with a lower value.

For each of the four outcomes, 60% of the data were used for the training set, and the remaining 40% for the test set. The data are divided in this way for the model to be established with the training data, and then tested using data not used to establish the model. This ensures that the model is not tuned to any irregularities or “noise” in the training data (i.e., overfitting) and allows an assessment of how the model may perform on subsequent datasets (Lantz, 2013). The dataset was split for each outcome by stratifying on the respective outcome variable. Each model was tuned using 3-fold cross-validation, meaning that the training data was split into three groups, each of which was used as a practice test data set, with the remaining data acting as a training dataset to ensure the most appropriate tuning parameters are chosen. This analysis was performed using the R package *randomForest* (Liaw & Wiener, 2002).

Model Fit

The fit of the model can be determined using the “out-of-bag” error rate and classification error for a random forest using classification trees, and the mean squared error and the pseudo R^2 for a random forest using regression trees.

Despite similarities, the pseudo R^2 produced by the random forest is not identical to the coefficient of determination produced by linear regression. The R^2 produced by the random forest is given by:

$$R^2 = 1 - \frac{MSE}{Var(outcome)}$$

The MSE is the mean squared error and $Var(outcome)$ is the variance of the observed values of the response variable.

Results

Mental Health Outcomes

Table 1 presents descriptive statistics for each of the variables included in the analyses. In Table 2, I present the pseudo R^2 (i.e., percentage of the variance explained in the outcome by the model) for each outcome. Predictors included in the models explain 19.96% of the variance in psychological distress and 13.89% of the variance in anger. Table 3 presents variable importance estimates for each predictor by outcome and these estimates are presented in Figures 1 and 2.

[insert table 1 and 2 here]

Job Demands-Resources Results for Mental Health Outcomes

Table 1 presents results from the random forest regression model for psychological distress. Predictors are listed in descending order of importance. Work-family conflict (125.61) is the job demand with the greatest importance for the prediction of psychological distress, followed by interpersonal conflict (116.11), job pressures (106.22 for distress), and noxiousness (85.61 for distress) respectively. Social support is the most important resource for the prediction of psychological distress (68.10). Somewhat contrary to the JD-R model, autonomy (38.78) and schedule control (24.18) are relatively less important to other work, occupational, and demographic predictors for predicting psychological distress. This is not to say they are not important as both still substantially increase the MSE if removed from the model.

Table 2 presents results from the random forest regression model for anger. Predictors are listed in descending order of importance. Similar to distress, work-family conflict (120.23) was the job demand most important for the prediction of anger, followed by interpersonal conflict (117.78), job pressures (106.22), and noxiousness (89.80) respectively with social support being

the most important resource (60.58). Again, predictors such as autonomy (35.04) and schedule control (20.09) are relatively less important, in contrast to the JD-R model.

Gendered Organization and Workplace Results for Mental Health Outcomes

The percentage women in the occupation is the second most important predictor for psychological distress (133.92), preceded only by personal income. It ranks above all other job demands and resources included in the model. While workplace gender composition (40.70 for distress) is a less important predictor to some prominent work demands and resources, it ranks above work resources such as autonomy and schedule control, two major resources highlighted by the JD-R model.

Similarly, the percentage women in the occupation was the third most important predictor for anger (129.16), following personal income and age. Again, while workplace gender composition (40.70) is a less important predictor, it still ranks above autonomy and schedule control.

Demographic Results for Mental Health Outcomes

Age and personal income are consistently top predictors in terms of importance for both outcomes. Personal income is the most important predictor for both psychological distress (149.21) and anger (149.68). Age is the third most important predictor for psychological distress (130.63), and the second most important predictor for anger (137.86). Somewhat contrary to the literature on gender and mental health, gender in and of itself is not as important a predictor of psychological distress (34.18) and anger (18.50), relative to the other predictors included in the model.

[insert table 3 and figures 1 and 2 here]

Employment Outcomes

In Table 4, I present the out-of-bag (OOB) error rate (i.e., estimate of model performance on new or unseen data) for each outcome. The job dissatisfaction model estimates predicting dissatisfaction in approximately 73% of cases while the turnover model estimates predicting intentions to turnover in approximately 66% of cases. Table 3 presents variable importance estimates for each predictor by outcome and these estimates are presented in Figures 3 and 4.

[insert table 4 here]

Job Demands-Resources Results for Employment Outcomes

In the case of predicting job dissatisfaction, the most important demand for prediction is job pressures (24.74), followed by interpersonal conflict (24.74), noxiousness (21.77) and work-family conflict (20.39), respectively. Like the mental health outcomes, social support is again the most important resource for prediction of job dissatisfaction (26.54 for dissatisfaction), while autonomy (9.01) and schedule control (5.62) are relatively less important.

For turnover, the most predictive demand is interpersonal conflict (24.37), followed by job pressures (24.17), noxiousness (23.30) and work-family conflict (23.1), respectively. Social support is again the most important resource for prediction for both outcomes (14.26) while autonomy (10.23) and schedule control (6.91) are relatively less important.

Gendered Organization and Workplace Results

The percentage women in the occupation is the third most important predictor for job dissatisfaction (29.63) similar to the results for distress and anger. Again, similar to the results for distress and anger, the gender composition of the workplace (10.22) is relatively less important compared to some prominent job demands and resources but ranks above autonomy and schedule control. Results for turnover reflect similar results with percentage women in the

occupation ranking third (33.88) with gender composition relatively less important (11.68) but still ranking above resources such as autonomy and schedule control.

Demographic Results

As in the case of distress and anger, personal income (31.66 for dissatisfaction; 35.56 for turnover) and age (29.78 for dissatisfaction; 51.44 for age) are the top predictors of job dissatisfaction and turnover. Gender is, again, a less important predictor relative to other predictors included in the models (4.03 for dissatisfaction; 5.47 for turnover).

[insert figures 3 and 4 here]

Discussion

This paper set out to analytically examine the importance of predictors of mental health and employment consequences as a foundation for the following dissertation papers. There are two predominant views in the Sociology of Work literature that are not often considered together. The JD-R model focuses on potential work demands and resources that can either elevate or reduce work-related stress, respectively. Alternatively, gendered organization theories focus on the gendered nature of organizations and the influence these may have on gendered inequality at work. Both perspectives highlight factors related to work and the workplace that can impact mental health and employment consequences. Using an ensemble method of machine learning called a random forest, this paper aims to disentangle the relevance of factors related to both the JD-R model and theories of gendered organizations as predictors of my four noted outcomes.

My findings suggest that, compared to popular predictors related to the JD-R model, the percentage of women in the occupation is among the top determinants of distress and anger,

above and beyond individual-level reports of job demands and resources⁴. Furthermore, percentage of women in the occupation is again among the top predictors of job dissatisfaction and turnover intentions, over and above job demands and resources typically considered by the JD-R model.

Finally, despite long standing evidence that suggests gender differences in mental health outcomes, my results suggest that gender, in and of itself, is not a strong predictor of these outcomes relative to other predictors considered in the model. Instead, the *gender composition of the workplace and the occupation* tend to matter more for mental health and employment consequences.

The Importance of Gender Composition

Among the top predictors of all outcomes is the gender composition of the occupation as measured by the percentage of women in the occupation. While the JD-R model has shed considerable light on various aspects of work that can influence mental health outcomes, it does not consider occupation or workplace context. Theories of gendered organizations highlight both structural and interpersonal factors that can influence worker mental health and employment outcomes (Kanter, 1977; Acker, 1990; Williams, 1995; Turco, 2010; Taylor, 2010). In particular, the devaluation hypothesis suggests that occupations dominated by women are often devalued, in turn influencing the rewards associated with those occupations (Levanon, England, and Allison, 2009). The percentage of women in the occupation is consistently among the top predictors for each of the four outcomes considered in this paper, over and above other work demands and resources more often considered predictors of work stress and employment consequences.

⁴ This finding underscores my decision to examine this in more detail in the following dissertation paper.

Despite being less important for the prediction of the outcomes than the gender composition of the occupation, workplace gender composition (at the individual-level) also has greater importance to the prediction of these outcomes than some demands often considered by the JD-R model, such as autonomy and schedule control. Workplace gender composition likely highlights the interpersonal factors related to mental health and employment consequences that are the result of gender dissimilarity in the workplace. Kanter's (1977) theory of proportional representation suggests that working in a workplace dominated by the opposite gender can result in stressors, such as polarization, that likely exacerbate mental health and employment consequences. More recent work in this area suggests that the consequences of workplace gender dissimilarity are not the same for men and women (Acker, 1990; Williams, 1995; Taylor, 2010, Taylor, 2016). However, this is beyond the scope of this paper and will be explored in subsequent papers in this dissertation.

The Importance of Gender

My findings further underscore that gender, in and of itself, is not a strong predictor of the outcomes included in this study, relative to the other predictors included in the models. It is estimated that removing gender from the psychological distress model, for example, would increase the mean-squared error by approximately 34%. This is very low when compared to other gender-related predictors such as percentage women in the occupation which is expected to increase the mean-squared error by approximately 133% if removed from the same model. Therefore, what seems to matter above and beyond gender itself are the gendered contexts in which one works.

These findings reflect classic theories of gender, that highlight gender as a socially constructed category that matters more in relation to others rather than as an innate biological

trait (West and Zimmerman, 1987; 2009; Martin, 2004; Ridgeway & Correll, 2004; Ridgeway, 2009). The gendered context of the occupation and workplace seem to matter over and above an individual's gender. Yet, quantitative researchers in the area of work and health continue to include it in a way that assumes that the variable gender will embody and reflect all gendered processes (Bakker & Demerouti, 2017). By considering the gendered composition of the occupation and workplace simultaneously with gender helps capture these complex and nuanced experiences of work that can lead to mental health and employment consequences.

The importance of income and age to all outcomes requires brief mention. In line with the literature on mental health, socio-economic status tends to be a very strong predictor of mental health (Herd et al., 2007; Meyer, Castro-Schilo, & Aguilar-Gaxiola, 2014). These models confirm these patterns as personal income is the top predictor in three of the four models in this paper with the exception of turnover intentions, of which it is the second most important predictor.

Similarly, life-course perspectives on mental health suggest that age tends to influence mental health and employment outcomes. More specifically, while there are multiple factors that can influence mental health at any age, older adults tend to experience more positive mental health (Ferraro & Wilkinson, 2013). Older adults are also likely more established in their careers and so are not as likely to be dissatisfied or leave their positions.

Limitations and Conclusion

Although there are many strengths of the current paper, there are some limitations I note. First, with ensemble methods of machine learning like the random forest, we are not able to determine the magnitude or direction of the predictors included in the model. This is because, unlike linear and generalized linear models, the random forest does not aim to fit a line that can give an estimate in the form of a coefficient. Instead, it is an iterative process focused on the

prediction of the outcome, rather than statistical inference. Despite this shortcoming, the random forest can estimate the importance of predictors to the prediction of a given outcome with increased precision and accuracy than a regression model with standardized coefficients, for example. This provides an alternative way to examine what factors matter to work-related mental health and employment consequences. While there is a tradeoff to interpretation, random forests tend to make up for this with a level of precision that cannot be attained with linear models. Further, the random forest has a tendency to be a more inductive approach to answering research questions, which works well here since hypothesizing is difficult given the few studies that take an approach that focuses on predictor importance rather than statistical inference.

Second, the data used was collected in 2005. However, this data was collected at a time where labour force participation for women was at an all-time high (Bureau of Labour Statistics, 2016), making it a key time period for examining the predictive effect of gendered occupational and workplace contexts on these outcomes. Furthermore, these data include individual-level measures of perceived workplace gender composition and percentage of women in the respondent's occupation, allowing for the inclusion of these predictors in the models.

Finally, I was only able to include two measures of context: percentage of women in the occupation and workplace gender composition. While theoretically important to the outcomes considered in this study, there may be many more contextual aspects of work that would influence these mental health and employment consequences that I was not able to include in the models. Further research can expand on the models included in this study to further understand work-related predictors of mental health and employment consequences.

This study highlights many areas for future research. First, further research should consider examining mechanisms associated with the gender composition of the occupation and

workplace that could have an effect on worker well-being given the strong predictive nature of these variables highlighted in this study. Second, utilizing alternative methods, outside of a traditional regression of cross-sectional data (e.g., longitudinal, multi-level, structural equation models, and machine-learning methods) should be considered to better understand the importance of, and the nature of the relationships between, predictors associated with the JD-R model on worker well-being outcomes. Finally, future research on work and well-being should consider the gendered organizations perspective as not only a theory intended to study gendered inequality, but also to highlight gendered processes that can have an influence on the well-being of both male and female workers.

Despite these limitations, this study contributes to the literature in multiple ways. First, the novel analytical technique utilized to examine the importance of predictors on the four noted outcomes provides an alternative evaluation to the linear models generally used to examine these associations. Second, the combination of predictors from two theoretical perspectives– the work and stress JD-R model and theories of gendered organizations – allows for the comparison of the importance of these predictors for work-related mental health consequences and employment consequences such as job dissatisfaction and turnover intention. Results highlight the importance of the gendered context of the occupation and workplace for the prediction of the four outcomes, over and above some well documented predictors highlighted by the JD-R model. Therefore, the importance of the gendered aspects of organizations and how they relate to mental health and employment outcomes should not be overlooked.

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Tables and Figures

Table 1: Sample Demographics

Variable	Mean or Proportion (SDs in brackets)
Outcomes	
Psychological Distress	1.98(1.47)
Anger	1.64(1.40)
Gendered Organization	
Percent Women	52.84(30.49)
Female-Dominated Workplace	24.79
Mixed Workplace	46.43
Job Demands	
Job Authority	0.88(1.18)
Job Pressures	2.60(0.61)
Interpersonal Conflict	2.48(2.09)
Job Noxiousness	2.48(0.85)
Job Insecurity (vs. Secure)	19.59
Work-family Conflict	2.53(0.82)
Job Resources	
Job Autonomy	2.33(0.72)
Schedule Control (vs. No Control)	53.06
Social Support	3.19(1.11)
Demographics	
Personal Income (in thousands)	45.59(108.96)
Age (in years)	43.47(13.22)
Female (vs. Male)	59.00
White (vs. Non-white)	74.27
Married (vs. Unmarried)	46.05

Table 2: Pseudo R² and MSE for Psychological Distress and Anger

	Pseudo R ²	MSE
Psychological Distress	19.96	1.65
Anger	13.89	1.66

Table 3: Variable Importance of Psychological Distress and Anger

Psychological Distress		Anger	
Variable	Importance	Variable	Importance
Personal Income	149.21	Personal Income	149.68
Percent Women	133.92	Age	137.86
Age	130.63	Percent Women	129.16
Work-Family Conflict	125.61	Work-Family Conflict	120.23
Interpersonal Conflict	116.11	Interpersonal Conflict	117.78

Job Pressures	106.22	Job Pressures	102.93
Noxiousness	85.61	Noxiousness	89.80
Social Support	68.10	Social Support	60.58
Workplace Gender Composition	40.70	Workplace Gender Composition	38.06
Autonomy	38.78	Authority	35.04
Authority	36.87	Autonomy	32.77
Gender	34.18	Insecurity	24.00
Insecurity	27.48	Schedule Control	20.09
Marital Status	24.35	Marital Status	19.80
Schedule Control	24.18	Gender	18.50
Race	19.81	Race	15.86

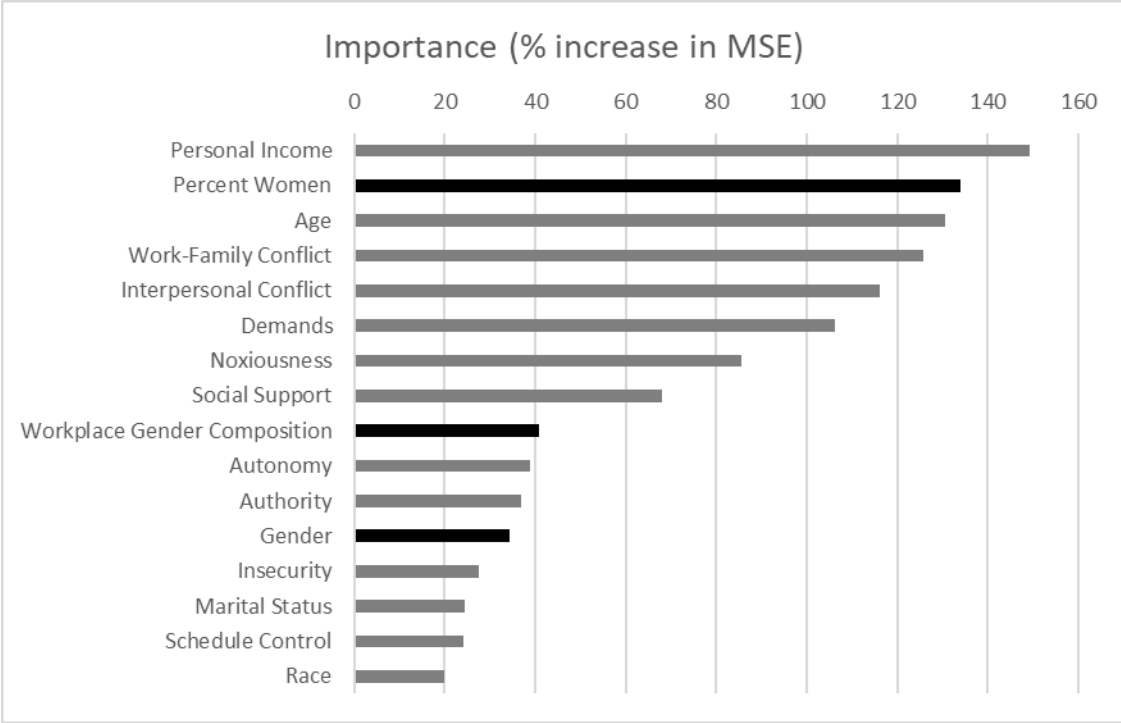


Figure 1: Importance of Predictors for Psychological Distress based on Table 2

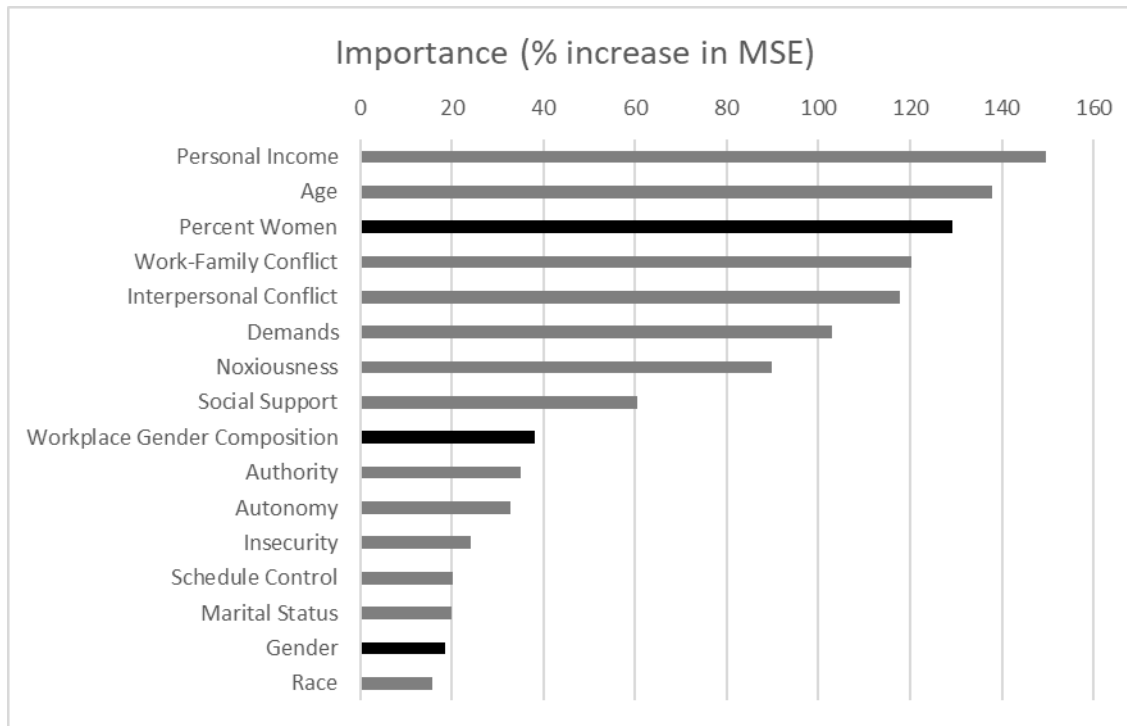


Figure 2: Importance of Predictors for Anger based on Table 2

Table 4: Out-of-Bag Error for Job Dissatisfaction and Turnover

	OOB Error
Job Dissatisfaction	27.01%
Turnover	33.54%

Table 5: Variable Importance for Job Dissatisfaction and Turnover

Job Dissatisfaction		Turnover	
Variable	Importance	Variable	Importance
Personal Income	31.66	Age	51.44
Age	29.78	Personal Income	35.56
Percent Women	29.63	Percent Women	33.88
Social Support	26.54	Interpersonal Conflict	24.37
Demands	24.74	Demands	24.17
Interpersonal Conflict	24.74	Noxiousness	23.3
Noxiousness	21.77	Work-Family Conflict	23.1
Work-Family Conflict	20.39	Authority	15.62
Authority	12.52	Social Support	14.26
Workplace Gender Composition	10.22	Marital Status	13.31
Autonomy	9.01	Workplace Gender Composition	11.68

Insecurity	5.8	Insecurity	10.63
Schedule Control	5.62	Autonomy	10.23
Marital Status	5.4	Race	7.39
Race	4.98	Schedule Control	6.91
Gender	4.03	Gender	5.47

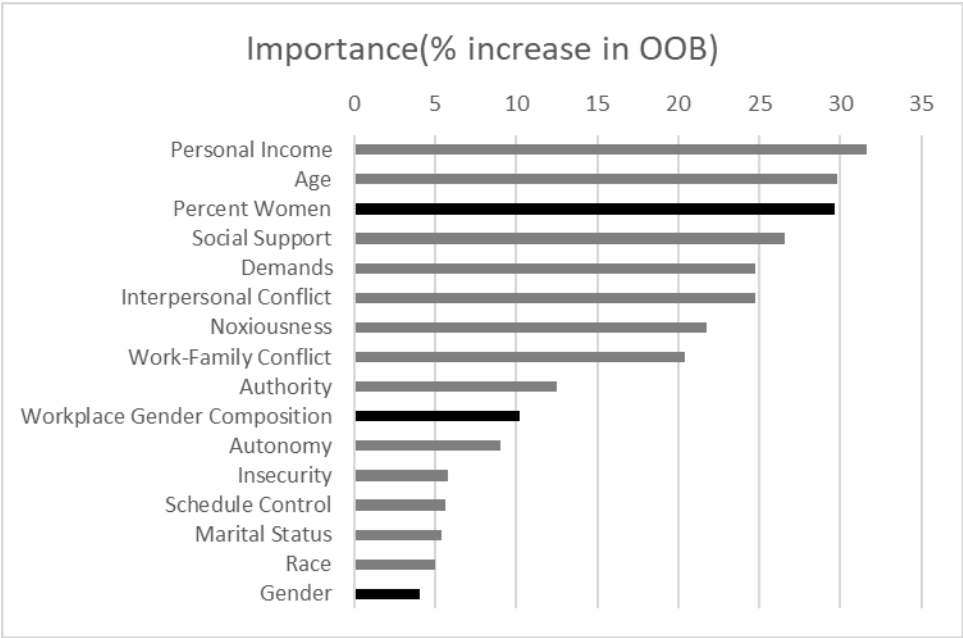


Figure 3: Importance of Predictors for Job Dissatisfaction based on Table 4

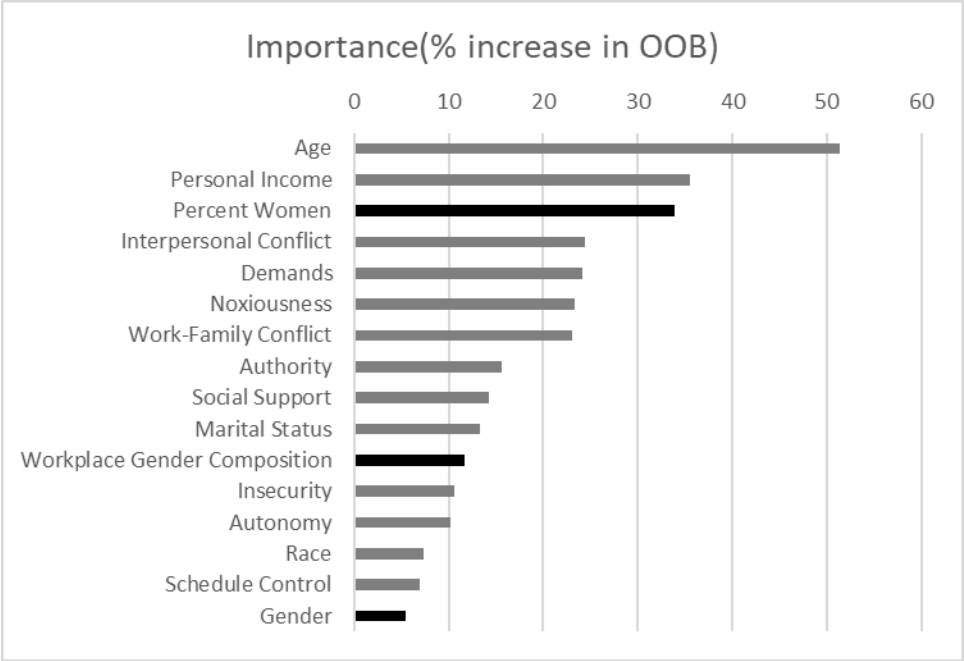


Figure 4: Importance of Predictors for Turnover based on Table 4

Chapter 3

THE COMBINED IMPACT OF WORKPLACE AND OCCUPATIONAL GENDER COMPOSITION ON WORKERS' MENTAL HEALTH AND EMPLOYMENT CONSEQUENCES⁵

Introduction

Debates about the impact of gender dissimilarity in the workplace have been developing for decades (Acker, 1990; Kanter, 1977; Taylor, 2010; Turco, 2010; Williams, 1995). Gender dissimilarity refers to individual perceptions of a workplace that is non-homogeneous—in other words, dominated by the opposite gender or gender mixed. Seminal pieces such as Kanter's (1977) book *Men and Women of the Corporation* signaled a notable advent in the conversation on gender dissimilarity and inequalities in the workplace. At the time, Kanter suggested that being a gender minority in the workplace leads to additional stressors, which may result in personal and workplace consequences. Subsequent studies that draw on Kanter's perspectives demonstrate similar results (Jackson, Thoits, & Taylor, 1995; Taylor, 2016).

Research on the topic has made giant strides in understanding the nuances of workplace gender dissimilarity and its various psychological and employment impacts on workers, with a particular emphasis on the differential experiences of men and women (Budig, 2002; Hultin, 2003; Taylor, 2010; Taylor, 2016; Williams, 1995; Wingfield, 2009). Findings from these studies suggest that men experience benefits from being a gender minority rather than facing the consequences Kanter outlined. However, organizational scholars posit that organizations and occupations *themselves* are gendered suggesting that the embodied processes, inequalities, and work itself are all defined by gender (Acker, 1990; Dill, Price-Glynn, & Rakovski, 2016;

⁵ A version of this paper has been published in *The Sociological Quarterly*.

England, Allison, & Wu, 2007). We argue that the gendered context of the occupation – specifically whether an occupation is female- or male-dominated – is vital to consider when examining the experiences of men and women in gender dissimilar workplaces. The gender composition of the occupation and the workplace are conceptually different entities. For example, a male in a female-dominated occupation like nursing might work with more women than men in his immediate workplace. Further, a woman working in a male-dominated occupation such as medical surgery is likely a gender minority in her occupation but may not perceive gender dissimilarity at the workplace level (Taylor 2010).

We operationalize the gendered context of the occupation using an aggregate measure of the average percent of women per occupation available through the Current Population Survey. We merge these data with individual-level data from the 2005 American Work, Stress and Health (WSH) study (N=1,457). The timing of our data is unique for two key reasons: *First*, this period of time represents the peak of women’s labor force participation in the US (Bureau of Labor Statistics, 2016). Our data capture a snapshot of workplaces’ adaptation to the influx of women workers from the late 90’s, and questions whether perceived gender dissimilarity among workers, as well as the gendered context of the occupation, influences mental health and employment consequences differently for men and women during this time period.

Second, our data are relevant for analyzing Kanter’s theory of proportional representation 30 years after publication –a time period when Sociology of Work and Organization scholars were testing and challenging Kanter’s assertions that numerical representation would affect all workers similarly (i.e., Acker, 1990; Fløge & Merrill, 1986; Hultin, 2003; Yoder, 1991). Our paper speaks to these notable arguments by taking a unique approach that addresses the social

psychological elements of proportional representation using a measure of respondents' perceptions of gender dissimilarity in their immediate workplace.

We theoretically and analytically separate the gender composition of the workplace and occupation to answer the following research questions: (1) What are the mental health and employment consequences of perceived gender dissimilarity within one's immediate work space? (2) How does the gendered occupational context influence the association between perceived gender dissimilarity and mental health/employment consequences? And (3) Do these associations differ for men and women?

Background

Gender and Mental Health

Women tend to report more symptoms of internalizing mental health disorders than men (Kessler, 2003; Rosenfeld, Lennon, & White, 2005). In particular, women suffer from depression and anxiety disorders at a higher rate than men (Kessler, 2003). Different types of stressors linked to gender and gendered practices have been touted as an explanation for the differences in mental health and health problems between women and men. These gendered practices lead to differences in risk factors for mental health problems which include different types of stressors experienced by men and women (Thoits, 2010). In particular, gendered practices linked to women's position of power and social roles such as lower earnings (Elliott, 2001) and dual work and family demands (Mirowsky & Ross, 2003) have been shown to lead to greater distress for women, and in turn, greater internalizing mental health problems such as depression and anxiety (Rosenfield and Mouzon, 2013). These explanations for women's higher rates of internalizing disorders are closely tied to women's participation in the labour force.

Workplace Gender Dissimilarity and its Consequences

Since women's entrance into the labor force, we have observed occupational gender segregation in North America (Bureau of Labor Statistics, 2014; 2016; Cohen, 2013; Reskin, 1993). Such segregation can lead to gender imbalanced workplaces or experiences of *tokenism*. Building from others, including more classical theories of numerical representation (Hughes, 1944; Laws, 1975; Simmel, 1950), Kanter (1977) defines tokenism as the presence and experiences of a numerical minority of a specific "other" in a group, often identifiable by gender or race. This theory, known as *proportional representation*, highlights the consequences of gender dissimilarity including the following: First, tokens are more visible in a group and in the context of work, this can create performance pressures. Second, polarization of tokens occurs because dominants tend to exaggerate the differences and strengthen the boundaries between them. Third, assimilation occurs because the attributes of the tokens are distorted by the dominants to fit with presumed social characteristics. For example, women may be stereotyped as a mother figure or a sexual object for the dominant male group. These three processes have been found not only to impact promotion opportunities (Floge & Merrill, 1986), workplace social support (Wallace and Kay, 2012), and job satisfaction (Hagan & Kay, 2007), but may also contribute to mental health consequences for gender minorities in the workplace (Jackson, Thoits, & Taylor, 1995).

Prior research indicates that these consequences of gender dissimilarity are not limited to a particular proportion of a gender minority. Blalock (1967) suggests that surges in numbers of the minority in a workgroup may threaten the majority group. In contrast to previous research, this has been found to result in majority group members reacting with increased discriminatory behaviour in order to keep minority group members from gaining too much power or influence at

work. Empirical research supports this claim. For example, studies find that when the workgroup is gender dissimilar, the importance of distinguishing differences between groups becomes more important (Randel, 2002; Randel & Jaussi, 2008). Roth's (2004) study of the minority of women on Wall Street found that in a group where women made up about a third, men reacted by excluding women from their social groups and distancing themselves. This suggests that the consequences of gender dissimilarity are not limited to the experiences of "tokens."

Others underscore the benefits of gender similarity. The principle of homophily suggests that employees will form workplace relationships with those socially and demographically similar to themselves (McPherson, Smith-Lovin, & Cook, 2001). This can result in greater social support, improving individuals' mental health and employment circumstances (Berkovich, 2018; Forret & Dougherty, 2004; Thoits, 2010). Furthermore, homogeneous workplaces have been linked to greater commitment and trust, and hiring preferences (Berkovich, 2018; Rivera, 2012).

We consider these previous studies and examine the impact of gender dissimilarity, operationalized as perceived gender dissimilarity in one's immediate workplace, on mental health and employment consequences.

Hypothesis 1: Perceived gender dissimilarity in the workplace will be positively associated with distress, anger, job dissatisfaction and turnover intentions.

Challenges to the Proportional Representation Hypothesis: Gender Differences in the Impact of Workplace Gender Dissimilarity

After the publication of Kanter's work, several scholars presented evidence to challenge her argument. For example, many have found that the consequences of gender dissimilarity are not the same for men and women (Budig, 2002; Dill, Price-Glynn, & Rakovski, 2016; Hultin, 2003; Smith, 2012; Williams, 1995; Wingfield, 2009). Instead, men tended to benefit more in

gender dissimilar workplaces, compared to women. Men in female-dominated workplaces rode on what Williams (1995) calls the “glass escalator,” while women remained in the lower tiers of the hierarchy.

Evidence from the 1990’s and early 2000’s suggested women tended to have less influence than men (Ridgeway, 2001), participate less (Myaskovsky et al., 2005), and assert less authority than their male counterparts in gender dissimilar workplaces (Karakowsky & Siegel, 1999). Overall, women were at a disadvantage in these workplaces since they reported a lower sense of entitlement than men in terms of compensation and job quality (Clark, 1997; Babcock & Laschever, 2007). Based on these results, we hypothesize that women may report worse mental health and employment consequences in gender dissimilar workplaces compared to their male counterparts.

Hypothesis 2: Perceived gender dissimilarity in the workplace will be more positively associated with distress, anger, job dissatisfaction and turnover intentions for women compared to men.

Challenges to the Proportional Representation Hypothesis: Conditional Influences of Occupational Gender Composition

A drawback to Kanter’s theory was the focus on gender dissimilarity in the *immediate* workplace, without considering the occupational context. We considered this important factor, and proposed that the gendered context of one’s occupation influenced the impact of perceived workplace gender dissimilarity on individual consequences. We defined the gendered context of the occupation based on its feminization or masculinization, operationalized as female- or male-dominated. Our theoretical reasoning here follows from Acker’s (1990) notion that organizations/occupations themselves are gendered. Acker’s (1990) theory posited that the

organizational structure of a workplace is not gender neutral. Instead, gendered cultural beliefs are ingrained in the day-to-day organizational processes, which in turn, contributed to the persistence of gender segregation in the labor market. These ideas contrast Kanter's (1977) argument that numerical underrepresentation of any particular group will lead to individual consequences.

Furthermore, whether an occupation is female- or male-dominated had implications for job quality and the resources associated with the occupation. The *devaluation hypothesis* suggested that cultural beliefs about gender stereotype work typically done by women as low skill and less status-worthy than work typically done by men (Ridgeway & England, 2007). Research on the proportion of women in an occupation and concomitant job rewards supported this view (England, Allison, & Wu, 2007; Levanon, England, & Allison, 2009; Tausig, 2013). Therefore, the gender composition of the occupation represented a gendered context that may influence the day-to-day experiences of workers.

Female-Dominated Occupations

Acker (1990) underscored that the gender of the occupation can influence evaluations and subsequent judgements regarding the knowledge, complexity and skill of each particular job or occupation. Feminized occupations, such as primary education or nursing, were viewed as 'women's work' and evaluated as requiring less skill and less deserving of prestige than male-dominated occupations (Acker, 1990; Duffy, 2011; England, 1992). The devaluation of feminized occupations resulted in fewer job rewards, such as earnings and job mobility (Dill, Price-Glynn, & Rakovski 2016; Gabriel and Schmitz, 2007; Wright, Baxter, & Birkelund, 1995).

Although female-dominated occupations likely resulted in decreased job rewards for both men and women, men in feminized occupations might experience additional challenges—like

ridicule and social isolation due to their non-traditional career choice (Cross & Bagilhole, 2002; Lupton, 2006; Pullen & Simson, 2009; Warming, 2013). Such experiences can lead to reduced workplace social support and increased stigmatization which may impact the mental health and employment consequences of working in female-dominated occupations.

However, it may be the case that men in female-dominated occupations work within a more homogenous, supportive workgroup. Men in female-dominated occupations are typically promoted to positions of authority faster than their female counterparts (Dill, Price-Glynn & Rakovski, 2016; Pierce, 1995; Williams, 1995). For example, while men make up about 10% of nurses in the United States, approximately 50% of leadership positions are held by male nurses (Brandford and Brandford-Stevenson, 2021). Thus, men in authoritative positions may have been more likely to be surrounded by other men in their immediate work environment which may differentially influence their mental health and employment consequences.

While some evidence may suggest that men would have experienced reduced mental health and employment consequences due to increased upward mobility due to the glass escalator phenomenon, lowered status due to devaluation and subsequent reduction in resources is more likely to increase mental health and employment consequences for men and women.

Male-Dominated Occupations

In contrast to female-dominated occupations, male-dominated jobs tended to reflect high-status positions in upper management, the professional sector, or skilled trades in the manual sector (Charles & Grusky, 2004). These occupations, while accompanied by high demands, tended to be associated with better rewards such as earnings, prestige, and promotion opportunities (Freeland & Harnois, 2020; Reskin, 1993; Tausig, 2013). Due to this, mental health consequences tended to be greater in the latter occupational group (Tausig, 2013).

Hypothesis 3: The negative consequences of perceived gender dissimilarity for distress, anger, job dissatisfaction and turnover intentions will be greater in female-dominated occupations compared to male-dominated occupations.

Potential Mediating Conditions

The literature on work and well-being suggests that certain work-related conditions, such as job autonomy, authority, income, demands and hours, can impact mental health and job rewards (see Bakker and Demerouti, 2007; Tausig & Fenwick, 2012). For example, having access to greater resources or being subjected to worse demands in the workplace can have consequences for mental health and employment outcomes. Based on this literature, we included measures of job autonomy, authority, work hours, demands, schedule control, and personal income as potential mediators of our associations.

Family conditions may also play a role in determining the mental health and employment consequences of gender dissimilarity, respondents' gender, and percent of women in the occupation. For example, Bianchi et al. (2012) highlight the differential contribution of women and men towards the domestic sphere. There is also a literature about how these inequalities result in worse mental health for women compared to men (Collins, 2019; Rosenfield & Mouzon, 2013). These associations might also be applicable to different workplace conditions, including feminized versus masculinized occupations. We consider these extraneous conditions in our study.

Hypothesis 4: The association between perceived gender dissimilarity and distress, anger, job dissatisfaction and turnover intentions by gender / percent of women in the occupation will be mediated by work and family confounders.

Methods

To test our hypotheses, we analyzed data from the Work Stress and Health survey (WSH) – a national telephone survey of working adults in the United States. This study was conducted from February through August 2005, and includes a nationally representative sample of 1,800 Americans asked about a variety of work and health conditions. Eligible respondents were employed at the time of the survey, fluent in English and were over the age of 18. The sample was obtained using a list-assisted random digit-dialing (RDD) method drawn proportionally from all states. Seventy percent of eligible respondents were successfully contacted and interviewed. We excluded respondents missing on focal measures. Our final sample included 1,457 respondents for all analyses. We weighted all analyses by age, gender, education and income.

Focal Dependent Variables

We used two indicators of respondents' mental health: *psychological distress* and *anger*. *Psychological distress* was measured by asking the number of days in the past week that they felt “that everything was an effort”, “sad”, “had trouble getting to sleep or staying asleep”, “had trouble keeping your mind on what you were doing”, “couldn't get going”, “were unable to shake the blues”, “worried a lot about little things”, and/or “felt anxious or tense”. The items were averaged to create an index, where higher scores reflect greater distress ($\alpha=.85$). This index has been used in recent publications and is considered a reliable measure of psychological distress (Bird, 1999; Mirowsky & Ross, 2003). The items are a consolidation of items from the Center for Epidemiological Studies Depression Scale (Radloff, 1977) and combined with the Twenty-Two Item Screening Score of Psychiatric Symptoms (Langner, 1962). The index was logged to reduce the negative skew and linearize the error distribution based on the predicted association between our focal independent and dependent variables, a common practice in research on psychological distress (see Allison, 1999; Young & Schieman, 2012).

Anger was measured by asking the respondents the number of days in the past week that they “felt annoyed or frustrated”, “felt angry”, “felt very critical of others”, “yelled at someone or something”, and/or “lost your temper”. The items were averaged so that higher scores reflect higher levels of anger ($\alpha=.78$). This measure is similar to those commonly used in previous studies (Young, Schieman, & Milkie, 2013).

We measure employment consequences with two indicators: *perceived job dissatisfaction* and *turnover intentions*: *Job dissatisfaction* was measured using the question “How satisfied are you with your job?” with responses consisting of “not at all”, “somewhat”, “quite a bit” and “very much”. We coded these responses into a dummy variable of “dissatisfied” - including the two former categories (1) compared to “satisfied” - the latter two categories (0). This measure is similar to those used in previous research (Lutgen-Sandvik, Tracy, & Alberts, 2007; Steenbergen, Ellemers, & Moojiart, 2007).

Turnover intentions were measured using the question “In the next two years, how likely is it that you will try to find a different job with another firm or organization?” with responses consisting of “very likely”, “somewhat likely” or “not at all likely”. We coded these three categories into a dummy variable with the former two categories representing an intention to turnover (1) and the latter category representing all else (0).

Focal Explanatory Measures

We operationalized *perceived workplace gender dissimilarity* using a single dummy variable derived from a series of questions about workplace composition. Questions asked whether the respondents coworker(s) and/or subordinate(s) are all men, all women or of equal mix. We coded these variables into a dummy variable where (1) includes those who reported workplaces as dominated by the opposite gender or an equal mix which we term “perceived

gender dissimilarity” and (0) including those who reported workplaces dominated by the same gender.

Gendered context of the occupation was operationalized using a measure of the aggregate average of “percent of women” employed by occupation. These data, taken from the 2004 Current Population Survey, were matched with the occupation reported by each respondent using the O*NET – a public database of American occupational information. The O*NET contains characteristics of occupations in accordance with the Standard Occupation Classification (SOC) system that were matched with reported occupations in the WSH data to create a continuous measure of the average percent women in the occupation. We treat occupations low in percent women as male-dominated (i.e., masculinized) and those high in percent women as female-dominated (i.e., feminized), based on the continuous measure. In other words, we do not impose distinct cutoffs between the two, but view gender domination as a continuum based on average percentages of men and women per occupation (see Taylor, 2010 for similar method).⁶

Potential Mediators: Work-Related Conditions

We included measures of job autonomy, authority, work hours, demands, schedule control, personal income, and occupation as potential mediators of our associations.

To assess *job autonomy*, we used respondents’ answers to the question “How often does someone else decide how you do your work?” with response choices of never (1), rarely (2), sometimes (3) and frequently (4). Responses were reverse coded so that higher scores reflect higher autonomy.

⁶ We tested our measure of “percent women” using categories (i.e., quartiles of percent women) in each of the regression models to see if this approach better captured the conditional impact of this variable. Results were consistent with those reported using the continuous measure. We retain models using the latter for presentation purposes.

Job authority was measured using four items: “Do you influence or set the rate of pay of others?” “Do you have the authority to hire or fire others?” “Do you supervise or manage anyone as part of your job?” If yes was reported for the previous question they were asked: “Do any of those individuals supervise or manage others?” Responses of ‘no’ were coded ‘0’ compared to yes responses, coded ‘1’. To create the index, we summed the responses.

Information about *personal income* was obtained from the following question: “For the complete year of 2004, what was your total personal income, including income from all of your paid jobs including taxes?” This measure was logged in order to best approximate a linear relationship between income and our focal outcome measures, based on the errors from predictions.

Respondents were asked to report the *number of hours worked per week* at their main job-reported in hours.

We measured *job demands* using three items: “Felt overwhelmed by how much you had to do at work?” “Have to work on too many tasks at the same time?” “The demands of your job exceeded the time you have to do the work?” Response choices are coded: “never” (1), “rarely” (2), “sometimes” (3), “often” (4), and “very often” (5). We averaged the items to create the index; higher scores indicate more job pressure ($\alpha = .85$). These items are similar to those used in other previously published research on related themes like “pressure,” “work-load,” or “quantitative demands” (Kristensen et al. 2004; van den Broeck et al. 2010).

Occupation is measured as a dummy variable with “professional” coded ‘1’ compared to “other” (0).

Potential Mediators: Family-Related Conditions

Because experiencing higher levels of conflict between work and family can lead to greater mental health and employment consequences (Blair-Loy, 2003; England, 2005), we considered potentially confounding family conditions that might influence our focal associations, including work-to-home conflict, presence of young children, and hours of housework.

To evaluate *work-to-home conflict*, three questions were asked: “How often does your job interfere with your home or family life?”, “How often does your job interfere with your social or leisure activities?” and “How often do you think about things going on at work when you are not working?” Responses include never (1), rarely (2), sometimes (3) and frequently (4). These items are averaged so that higher scores correspond to higher work-to-home interference with a reliability coefficient of $\alpha=.68$. These items have been used in previous work to assess work-to-home interference (Voydanoff, 2005).

Presence of young children was measured as a dummy variable with the presence of children under six coded (1) compared to no children under six (0).

Housework hours is measured as a continuous variable reported hours per week. Responses past the 95th percentile were considered unusual and top coded to help reduce the positive skew. Three responses over 100 hours were coded 100.

Demographic Variables

Gender was measured using a dummy variable, comparing women (1) to men (0). *Age* is measured in years. *Race* was measured as a dummy variable with “white” coded ‘1’ compared to “other” (0). *Marital status* was measured as a dummy variable with “married” coded 1 in contrast to those who are “not married” (0). Those who reported “common-law” were also included in the “married” category. Respondents were asked a follow up question of whether

they were currently living with someone they consider to be their partner. Those who responded “yes” to this question are included in the “married” category.

Plan of Analysis

We tested our focal hypotheses using a series of ordinary least squares and binary logistic regression models (distress and anger; job dissatisfaction and turnover, respectively). We took this approach in Tables 3 to 6, modelling psychological distress, anger, job dissatisfaction, and turnover in turn. Model 1 in each table tested the association between gender dissimilarity and the respective outcome (Hypothesis 1), accounting for focal covariates. We then tested our interaction term between gender dissimilarity and gender of the respondent in model 2 to predict whether the association of perceived dissimilarity and our respective outcomes varied by gender (Hypothesis 2). Model 3 included the work and family-related variables to the gender dissimilarity and gender of the respondent interaction (Hypothesis 4). We then tested whether the impact of perceived gender dissimilarity on our outcomes differed across levels of percent women accounting for focal covariates (Hypothesis 3). These results are presented in model 4 of Tables 3 to 6. Model 5 introduced the potentially intervening workplace variables and family-related variables with the interaction between perceived gender dissimilarity and occupational context to determine whether the interaction held when we controlled for these workplace and family factors (Hypothesis 3).

We also tested three-way interactions between gender, perceived gender dissimilarity and the gendered occupational context (this procedure tested our final, exploratory hypothesis of gender differences). We did not find any statistically significant three-way interactions, and do not present these results in the tables.

Additional Analyses for Interaction Associations using MLE in Logistic Regression

We provided additional results for our binary outcomes to correctly determine and interpret the conditional impact of gender dissimilarity and percent women in the occupation on employment-related consequences (dissatisfaction and turnover intentions). First, we estimated a full interaction model by gender dissimilarity. This is the equivalent of running separate models by gender similarity (results suppressed). Second, since the interaction coefficients estimated in logistic regression analyses do not necessarily indicate significant conditional effects (see Allison, 1999; Long & Mustillo, 2017; Mize, 2019), we instead used these estimates to calculate *average marginal effects* for each focal variable for those who perceived gender dissimilarity versus similarity in their immediate workplace. We then used Wald tests to determine statistically significant differences within and across gender groups (see Mize, 2019, p. 87). We presented relevant marginal effects of changes in % female in occupation predicting job consequences, only (Appendix Tables 1 and 2, respectively).

Results

All descriptive statistics are presented in Table 1. We highlight statistical differences by gender for each variable. Proportional or mean gender differences are indicated by asterisks, and detected by chi-square and t-tests, respectively. Table 2 reports the variation of respondents who perceive workplace dissimilarity/mixed/similarity across deciles of percent women in their respective occupation. This table indicates that there are sufficient numbers to test the regressions using a continuous measure of the percent women in the occupation. We chose to leave our measure of percent women as a continuous measure to avoid imposing arbitrary cutoffs and allow for a more intuitive analysis across a variety of occupations.

Psychological Distress

In Table 3, we presented findings for the association between psychological distress and perceived gender dissimilarity. In support of hypothesis 2, model 2 shows a significant interaction between gender and perceived gender dissimilarity ($b=.145, p<.05$), with women reporting greater distress than men in dissimilar workplaces. However, in model 3, this effect is mediated by the addition of work and family-related controls (partial support for Hypothesis 4).

The significant interaction term in model 4 between perceived gender dissimilarity and percent women suggests that the association between perceived gender dissimilarity and psychological distress was contingent upon the respondent's occupational context ($b=.003, p < .01$). These results supported our third hypothesis. In contrast to those who perceive similar workplaces, those who perceive their workplace to be dissimilar report greater distress in occupations with a high percentage of women compared to occupations with a low percent of women.

In model 5, we included the work and family-related variables to determine if the interaction term holds after various resources and demands are controlled. Although the coefficient was slightly less significant ($b=.003, p<.05$), the interaction term persisted despite the addition of work- and family-related controls (re: Hypothesis 4). Figure 1 illustrates this association. The dashed line represents distress levels for those who perceived gender dissimilarity. These levels increased as occupations become more feminized, compared to those who do not perceive gender dissimilarity, indicated by the solid line.

Anger

We presented the association between anger and perceived gender dissimilarity in Table 4. Consistent with the results for psychological distress, we found evidence to support our second hypothesis that perceived gender dissimilarity is positively associated with anger, depending on

the gender of the respondent. The significant interaction term in model 2 shows that women who perceive gender dissimilarity report greater anger on average than their male counterparts. However, this interaction was again mediated with the addition of work and family-related controls in model 3 (partial support for Hypothesis 4).

The significant interaction between perceived gender dissimilarity and percent women in model 4 suggested that the association between perceived gender dissimilarity and anger was contingent upon the respondents' occupational context ($b=.008$, $p < 0.01$). In contrast to those who perceived gender similar workplaces, perceived dissimilarity resulted in increased anger in occupations with a higher percentage of women.

In model 5, we included the work and family-related variables and again, consistent with results for psychological distress, the interaction held after the inclusion of these covariates ($b=.006$, $p < 0.05$; Hypothesis 4). In Figure 2, we present the interaction association predicting anger from this model. The dashed line shows anger levels for those who perceived dissimilarity in their workplaces across feminized occupations, compared to those who did not (solid line). The figure illustrates that those who perceived gender dissimilarity report greater levels of anger in female-dominated occupations than in male-dominated occupations compared to those who perceived gender similar workplaces.

Job Dissatisfaction

In Table 5, we presented the odds ratios from our logistic regression for the association between job dissatisfaction and perceived gender dissimilarity. Consistent with our previous results, perceived dissimilarity resulted in greater job dissatisfaction, contingent on the gender of the respondent in support of Hypothesis 2 as presented in model 2. An examination of the interaction again showed that women who perceived gender dissimilarity report being

dissatisfied more on average than their male counterparts. However, this association was again mediated by the addition of work and family-related controls in model 3 (Hypothesis 4).

Once again, the association between perceived gender dissimilarity and job dissatisfaction depended on the respondent's occupational context (OR=1.012, $p < .05$, model 4). In contrast to those who perceived similar workplaces, perceived dissimilarity resulted in an increased likelihood of being dissatisfied in occupations with a higher percentage of women employed.

We included work and family-related variables in model 5 (Hypothesis 4). The interaction remained statistically significant (OR=1.011, $p < .05$). We present this association in Figure 3. Here, the dashed line represents the predicted probability of job dissatisfaction for those who perceived gender dissimilar workplaces while the solid line presents those who perceived gender similar workplaces.

In Table 1A, we present the first and second differences in the marginal effects by gender similarity and aggregate averaged percent women in the respondent's occupation. These results best presented the conditional impact of these two factors in predicting job dissatisfaction. Noteworthy is the significant second differences, which showed that the impact of gender similar versus dissimilar workplaces on the likelihood of job dissatisfaction exponentially grows as the percentage of women in the occupation increases. Compared to occupations with no women employed, on average, occupations with 25%, 50%, 75% or 100% women employed all exacerbate the differential impact of perceived gender dissimilarity on the likelihood of job dissatisfaction (see Mize, 2019; Long & Mustillo, 2017, for further discussion on estimating and interpreting nonlinear interaction effects).

The increased differences calculated in the last column of Table 1A suggest that those who perceive gender dissimilarity in their immediate workplace are more likely to report dissatisfaction when employed in occupations where there are larger proportions of women employed.

Turnover Intention

In Table 6, we presented the odds ratios for the logistic regression for the association between turnover and perceived gender dissimilarity. We did not find evidence that perceived gender dissimilarity is associated with turnover or that it is contingent upon the gender of the respondent.

Consistent with previous results, we find that perceived gender dissimilarity is positively associated with the likelihood of turnover. Yet, once again, this association depended on the respondent's occupational context (OR=1.011, $p < .05$, model 4). In contrast to those who perceive gender similar workplaces, perceived dissimilarity results in an increased likelihood of turnover in more feminized occupations. Again, we observe in model 5 that the interaction holds even after the inclusion of work and family-related variables. We present this association in Figure 4. The dashed line represents the greater likelihood of turnover for those who perceive gender dissimilar workplaces while the solid line represents those who perceive gender similar workplaces.

First and second differences in marginal effects predicting turnover rates by gender dissimilarity and average aggregate percent women in the respondent's occupation are presented in Table 2A. Again, we focused here on the significant second differences, which showed that the effect of perceived gender similar versus dissimilar workplaces on the likelihood of turnover intentions exponentially grow as the percentage of women in the occupation increases. The

increased differences calculated in the last column of Table 2A suggest that those who perceive gender dissimilarity in their immediate workplace are more likely to report turnover intentions when employed in occupations where larger proportions of women are employed, on average.

Across all of our outcomes, we did not find gender differences in the conditional association of occupational context and perceived gender dissimilarity on our respective outcomes.

Some significant control measures require brief mention. Both job demands, age and work-to-home conflict are strong predictors of all four outcomes, although the addition of these variables does not detract from the significance of the interaction of perceived gender dissimilarity and the percent women in the occupation. Yet, the interaction coefficient is slightly reduced in the case of the mental health outcomes suggesting that these measures mediate a part of this association. We elaborate on these points in the discussion section.

Discussion

Our study aimed to answer three research questions: (1) What are the mental health and employment consequences of perceived gender dissimilarity within one's immediate workplace? (2) How does the occupational context influence the association between perceived gender dissimilarity and mental health / employment consequences? And, (3) Do these associations differ for men and women? Our study addressed previous research gaps by trying to capture the impact of gender dissimilarity in the workplace—as both perceived in one's immediate context, and based on the aggregate averaged women to men in the respondent's respective occupation. We used 2005 US representative data from the American Work, Stress and Health Study to answer our research questions—which captures a snapshot of the US labor force when women were represented in equal numbers to men (BLS, 2016). Our approach transcends previous

literature challenging Kanter's (1977) theory of proportional representation using these data. Our approach to measuring "perceptions" rather than simply "numbers" captures the social psychological impact of gender dissimilarity in the workplace. In addition, we use a more objective measure of the gendered occupational context – based on the feminization or masculinization of the respondent's respective job. While this latter measure reflects the aggregate average of gender representation by occupation, we discuss how these numbers reflect a culture of the workplace more broadly and attempt to measure the impact of that phenomenon.

We report two key findings that challenge previous research and contribute to literature on the topic: (1) There appear to be no gender differences in the association between perceived gender dissimilarity and mental health / employment consequences after controlling for work and family-related variables. However, gender moderates the impact of gender dissimilarity for most outcomes, prior to considering respondents' work and family conditions; (2) the association between perceived gender dissimilarity and mental health / employment consequences is dependent on the gender composition of the occupation. We discuss these findings in the following sections.

The Partial Absence of Gender Differences in the Consequences of Perceived Gender Dissimilarity after Mediation

While we initially found evidence to suggest that men and women differ in the consequences of perceived gender dissimilarity on mental health and employment outcomes, these associations were mediated with the addition of work and family-related variations. Our results suggest that the discrepancies in work-related demands and resources, and family considerations of domestic contributions might account for why gender may initially condition this association. After considering these variations, we conclude our results are due to several

factors. First, most studies reporting differences between men and women in dissimilar workplaces use qualitative methodologies and/or have focused on one type of occupation. Since we examine multiple occupations, patterns may vary. For example, Rollero, Fedi, and Piccoli (2015) find that when occupational status was considered, gender differences in work well-being are no longer observed.

Second, we focused on mental health outcomes previously neglected in the literature on the topic, including distress, anger, job dissatisfaction and turnover (see Jackson, Thoits, & Taylor, 1995; Miner-Rubino & Cortina, 2004; Taylor, 2016 for exceptions). Others have focused heavily on employment rewards, such as promotions (Hultin, 2003; Maume, 1999), earnings (Budig, 2002), or performance evaluations (Dickerson et al., 2010; Sackett, Dubois, and Noe, 1991). The outcomes used in the current study may be more sensitive to occupation and workplace conditions, which were added as mediators to the model.

Third, our measure of gender dissimilarity is unique. When the respondents' perceptions of the gender composition of their immediate workplace is used *in addition to* occupation-level data—such as we have done here—results may vary. In fact, our approach may better reflect the gender-relation experiences of the respondent at work, since it taps respondents' *perceptions* of the gender composition of their immediate workplace.

The Importance of the Occupational Context in Predicting the Consequences of Perceived Gender Dissimilarity

While the impact of perceived gender dissimilarity did not depend upon gender itself, the gendered context of the occupation did seem to matter. Perceived gender dissimilarity in female-dominated occupations resulted in worse mental health and employment consequences compared

to those who perceive similarity in the same context. Notably, our results were consistent across all four outcomes and held when considering individual-level work and family conditions.

We outlined several reasons why being in a feminized—compared to masculinized—occupation may exacerbate stressors of gender dissimilarity. According to the devaluation hypothesis, feminized occupations are negatively evaluated and judged as regarding less knowledge, complexity, and skill (England, Allison, & Wu, 2007; Levanon, England, & Allison, 2009; Ridgeway & England, 2007). We elaborated on research in the area to better understand our observed associations. Specifically, we drew upon Turco’s (2010) theory of local cultural contingency, which suggested that the occupational gender composition influenced the workers’ valuation of cultural resources and the construction of the *ideal worker*. For example, in the case of the Leveraged Buyout Industry (LBO), Turco (2010) demonstrated that knowledge of sports was a highly valued cultural resource that women tended to lack compared to men. Furthermore, in the LBO, the ideal worker was defined in a way that required full commitment to the job, conflicting directly with motherhood and further disadvantaging women.

This theory can aid our understanding of why perceived dissimilarity results in worse mental health outcomes in female-dominated occupations for both men and women. Perceiving dissimilarity in female-dominated occupations likely places men at lower ends of the hierarchy where occupational devaluation is at its highest. Since many female-dominated jobs involve care work, emotional labor demands, or childcare, feminine cultural resources, such as nurturing and caring, are likely viewed as more suited to this type of work (England, 1992; 2005). Men who choose female-dominated occupations like nursing, child-care or other feminized occupations have been found to experience social dynamics that might contribute to mental health and employment consequences (Cross & Bagilhole, 2002; Lupton, 2006; Pullen & Simpson, 2009;

Warming, 2013; Wingfield & Myles, 2014). For example, Lupton (2006) and Pullen and Simpson (2009) found that although men might welcome advantages of the glass escalator in female-dominated occupations, they also experienced harassment from family, friends and coworkers due to their non-traditional career choice and the questioning of their masculinity and sexuality.

Alternatively, women who perceived dissimilarity in female-dominated occupations, may be in more authoritative managerial positions where their surrounding workplace is male dominated. These women may be seen as lacking the necessary cultural resources associated with authority and experience greater distress or job dissatisfaction as a result (Fløge & Merrill, 1986; Kulik, Metz & Gould, 2016; Pudrovskaya & Karraker, 2014; Ridgeway & Correll, 2004). From this perspective, both men and women are likely to experience greater consequences in female-dominated occupations where they perceived gender dissimilarity⁷.

The relationship between gender dissimilarity and our outcomes, contingent on the gendered context of the occupation, held despite controlling for various job- and family-related demands and resources. Our results suggest that, despite job and family-related demands that function as stressors or potential resources that may act as buffers, there were still stressors that mattered over-and-above the respondents' experiences of gender dissimilarity in the immediate workplace, namely --the gendered context of the occupation. We argued that the gendered contexts of the workplace and occupation need to be considered when examining work-related

⁷ For a breakdown of occupations from the WSH, see Appendix B. We observe that women in male-dominated occupations hold some professional or skilled trade positions while men in female-dominated occupations hold positions that may be devalued. For example, positions held by women in occupations that are less than 10% women include Industry Relations Specialist and Forklift Driver while positions held by men in occupations that are more than 90% women include Housekeeper and Receptionist.

mental health and employment consequences because not doing so neglects focal considerations espoused by Sociology of Gender and Work Scholars (Kanter, 1977; Acker, 1990; Williams, 1995; Taylor, 2010; Taylor, 2016). Our findings revealed that, even at a time when workforce participation of men and women was similar (BLS, 2016), gender segregation and gendered occupations / workplace contexts still persist and result in individual-level consequences for the worker.

Limitations and Conclusions

Certain limitations of our study deserve brief mention. First, we do not know the exact proportion of same versus other gender workers identified by the respondent, nor do we know how much contact the respondent has with his or her coworkers or subordinates. Nevertheless, our measure of perceived gender dissimilarity has provided a way to distinguish between the immediate workplace context and the overall occupational gender composition. Future research might consider comparing and contrasting objective and subjective measures of gender composition to assess the accuracy of a self-reported measure.

Second, we do not know the extent of feminization or masculinization of the respondents' specific organization. We use a measure of average percent of women per occupation based on the Current Population Survey. While this is a commonly used measure (Budig, 2002; Taylor, 2010), it might not provide the most accurate presentation of respondents' specific organization. Moreover, we include a myriad of work-related conditions, but do not account for climate-based factors, such as family-friendliness, worker productivity expectations, or collegial support. Future analyses that consider more detailed measures of occupational type could provide further clarity to our study's conclusions.

Third, we use single-item measures of job dissatisfaction and turnover intention, which has limitations. Single-item measures of psychological constructs, such as job dissatisfaction, could be seen by some as unreliable (Wanous, Reichers, & Hudy, 1997). Yet, others have argued that single-item measures are comparable to multi-item measures of job satisfaction (Nagy, 2002). The use of a single item measure is not uncommon in recently published research (Lutgen-Sandvik et al., 2007; Steenbergen et al., 2007).

Fourth, due to low sample sizes in the extremes of the interactions, we are unable to disaggregate the results further and untangle the differential effects for men and women across male- and female-dominated occupations. Future research should take occupational context into account when examining the effects of gender composition on mental health and employment outcomes.

Finally, due to the nature of the data, there are few items focused specifically on health behaviours / social networks. However, we have specified our models based on previous literature and notable social and demographic variations. We recognize that there are several other factors (or co-morbid conditions) that could be considered, yet we provide parsimonious models for the ease of interpretation. We presume that the social interactions between respondents and their colleagues contribute to our observed associations. Due to limitations of our survey, we cannot directly measure these processes.

Despite these limitations, our study contributes to the literature in several ways. Using representative American survey data we devise a unique measure of gender dissimilarity based on respondents' perceptions to test Kanter's theory of proportional representation. By analytically exploring the impact of the gender composition of the occupation, we found that perceptions of dissimilarity are detrimental to mental health and employment outcomes in

female-dominated occupations. Our results speak to the importance of considering both perceived and objective circumstances of the workplace—specifically in terms of the gender composition. Our research therefore adds a nuanced angle to previous understandings of how the layers of gender composition impact our day-to-day work and mental health experiences.

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Tables and Figures

Table 1 Means and Proportions for All Variables (N=1,457)

	Men		Women	
	Mean	SD	Mean	SD
<i>Individual-Level Variables</i>				
Dissimilarity	.498	—	.494	—
Psychological Distress (unlogged)	1.699	1.274	2.191***	1.525
Anger	1.471	1.300	1.791***	1.427
Job Dissatisfaction	.308	—	.305	—
Turnover	.439	—	.446	—
Age	43.126	12.887	43.023	12.784
White	.782	—	.724***	—
Married	.935	—	.919	—
Professional	.717	—	.657**	—
Personal Income (unlogged)	60.513	105.454	41.205**	128.988
Autonomy	2.393	.699	2.299	.727
Authority	1.213	1.376	.863***	1.109
Job Demands	2.614	.592	2.639	.591
Hours	46.757	13.688	40.277***	12.912
Work-to-Home Conflict	2.633	.788	2.586	.779
Children under 6	.206	—	.208	—
Housework Hours /wk	12.282	9.802	15.981***	11.581
<i>Occupation-Level Variables</i>				
Percent Women	32.085	25.907	66.739***	24.004

Note: Asterisks identify significant mean or proportional gender differences, calculated through t-tests and chi-square tests, respectively. Unweighted data presented.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2 *Frequencies of Men and Women in Similar, Mixed and Dissimilar Workplaces across Categories of Percent Women (N=1,457)*

Gender Comparison	Percent Women										Total
	<=10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	>=91	
Similar	141	47	67	28	57	67	52	55	110	122	746
Mixed	31	36	82	36	68	92	54	59	46	61	565
Dissimilar	5	7	16	13	17	23	21	17	24	24	167
Total	177	90	165	77	142	182	127	131	180	207	1478

Note: Unweighted data is presented.

Table 3 Ordinary Least-Squares Regression of Psychological Distress (Logged) on Gender Dissimilarity (N=1,457)

	Model 1 (H1)	Model 2 (H2)	Model 3 (H4)	Model 4 (H3)	Model 5 (H4)
Focal Variables					
Dissimilarity	-.029 (.031)	-.103* (.051)	-.075 (.049)	-.199** (.067)	-.148* (.067)
Female	.218*** (.037)	.131* (.056)	.110* (.055)	.244*** (.037)	.189*** (.036)
Percent Women	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.002** (.001)	-.002 (.001)
Interaction Terms					
Female x Dissimilarity	—	.145* (.067)	.100 (.063)	—	—
Dissimilarity x Percent Women	—	—	—	.003** (.001)	.003* (.001)
Work-Related Variables					
Professional	—	—	.115** (.035)	—	.111** (.035)
Income (logged)	—	—	-.059* (.026)	—	-.057* (.026)
Autonomy	—	—	.032 (.028)	—	.032 (.028)
Authority	—	—	.001 (.014)	—	.001 (.014)
Hours	—	—	.001 (.001)	—	.001 (.001)
Job Demands	—	—	.181*** (.033)	—	.180*** (.033)
Family-Related Variables					
Work-to-Home Conflict	—	—	.144*** (.023)	—	.145*** (.023)
Children under 6	—	—	.047 (.039)	—	.050 (.039)
Housework Hours /wk	—	—	.003* (.001)	—	.003* (.001)
Control Variables					
Age	-.006*** (.001)	-.006*** (.001)	-.003 (.001)	-.006*** (.001)	-.003 (.001)
White	.006 (.038)	.012 (.038)	-.003 (.039)	.009 (.037)	-.004 (.038)
Married	-.005 (.059)	.001 (.059)	.031 (.058)	-.002 (.059)	.028 (.059)
Constant	1.124*** (.082)	1.126*** (.083)	.121 (.201)	1.166*** (.084)	.154 (.200)
R2	.063	.067	.189	.072	.191

Notes: Unstandardized regression coefficients presented. Robust standard errors in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4 Ordinary Least-Squares Regression of Anger on Gender Dissimilarity (N=1,457)

	Model 1 (H1)	Model 2 (H2)	Model 3 (H4)	Model 4 (H3)	Model 5 (H4)
Focal Variables					
Dissimilarity	.087 (.085)	-.095* (.124)	-.032 (.117)	-.296 (.174)	-.194 (.167)
Female	.485***(.101)	.270 (.150)	.192 (.144)	.541***(.103)	.388***(.093)
Percent Women	-.003 (.002)	-.002 (.002)	-.001 (.002)	-.006* (.002)	-.005* (.002)
Interaction Terms					
Female x Dissimilarity	—	.356* (.179)	.250 (.167)	—	—
Dissimilarity x Percent Women	—	—	—	.008** (.003)	.006* (.003)
Work-Related Variables					
Professional	—	—	.181* (.092)	—	.173 (.092)
Income (logged)	—	—	-.136 (.070)	—	-.131 (.069)
Autonomy	—	—	.058 (.078)	—	.058 (.078)
Authority	—	—	-.015 (.033)	—	-.014 (.033)
Hours	—	—	-.002 (.003)	—	-.001 (.003)
Job Demands	—	—	.318** (.098)	—	.316** (.097)
Family-Related Variables					
Work-to-Home Conflict	—	—	.437***(.064)	—	.440***(.064)
Children under 6	—	—	.334** (.115)	—	.341** (.115)
Housework Hours /wk	—	—	.014** (.004)	—	.013** (.004)
Control Variables					
Age	-.018***(.003)	-.018***(.003)	-.010** (.004)	-.018***(.003)	-.010** (.004)
White	.061 (.122)	.076 (.122)	.016 (.114)	.070 (.121)	.011 (.183)
Married	-.162 (.183)	-.147 (.188)	-.103 (.185)	-.155 (.185)	-.110 (.183)
Constant	2.340***(.257)	2.344***(.261)	.061 (.540)	2.434***(.265)	.136 (.544)
R2	.059	.062	.175	.065	.177

Notes: Unstandardized regression coefficients presented. Robust standard errors in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5 Logistic Regression of Job Dissatisfaction on Gender Dissimilarity (N=1,457)

	Model 1 (H1)	Model 2 (H2)	Model 3 (H4)	Model 4 (H3)	Model 5 (H4)
Focal Variables					
Dissimilarity	1.372 (.191)	.103* (.051)	1.112 (.259)	.733 (.224)	.855 (.284)
Female	1.049 (.183)	.131* (.056)	.846 (.216)	.244***(.037)	.900 (.182)
Percent Women	1.001 (.003)	-.001 (.001)	1.003 (.003)	1.145 (.004)	.997 (.004)
Interaction Terms					
Female x Dissimilarity	—	.145* (.067)	1.409 (.427)	—	—
Dissimilarity x Percent Women	—	—	—	1.012* (.005)	1.011* (.005)
Work-Related Variables					
Professional	—	—	1.276 (.234)	—	1.242 (.229)
Income (logged)	—	—	.842 (.099)	—	.846 (.101)
Autonomy	—	—	1.018 (.135)	—	1.017 (.135)
Authority	—	—	.895 (.062)	—	.898 (.062)
Hours	—	—	.986* (.006)	—	.985* (.006)
Job Demands	—	—	1.870***(.322)	—	1.868***(.325)
Family-Related Variables					
Work-to-Home Conflict	—	—	1.637***(.192)	—	1.644***(.194)
Children under 6	—	—	.711 (.137)	—	.716 (.139)
Housework Hours /wk	—	—	1.000 (.007)	—	.999 (.007)
Control Variables					
Age	.975***(.006)	-.006***(.001)	.981** (.007)	.975***(.006)	.981** (.007)
White	1.047 (.187)	.012 (.038)	.980 (.181)	1.063 (.193)	.983 (.183)
Married	1.043 (.292)	.001 (.059)	1.172 (.373)	1.054 (.299)	1.170 (.378)
Constant	.895 (.339)	.904 (.344)	.121* (.119)	1.048 (.414)	.143* (.142)
Wald Chi ²	23.69	25.83	88.39	29.22	91.96

Notes: Exponentiated coefficients presented; Robust standard errors in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

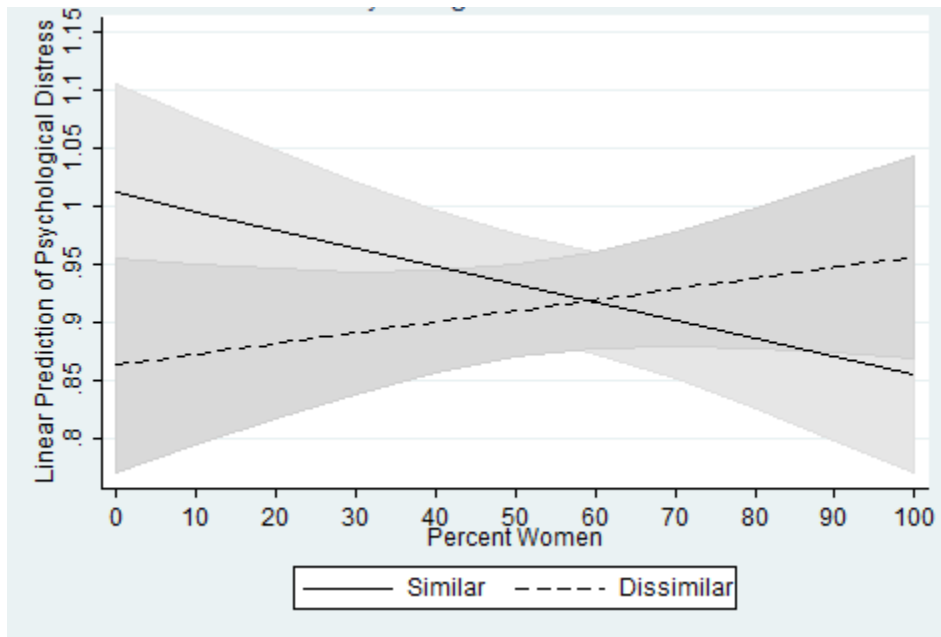
Table 6 Logistic Regression of Turnover on Gender Dissimilarity (N=1,457)

	Model 1 (H1)	Model 2 (H2)	Model 3 (H4)	Model 4 (H3)	Model 5 (H4)
Focal Variables					
Dissimilarity	.946 (.132)	.809 (.176)	.848 (.195)	.539* (.153)	.573 (.171)
Female	.718 (.123)	.597* (.154)	.472** (.132)	.778 (.136)	.615* (.118)
Percent Women	1.007* (.003)	1.008** (.001)	1.008* (.003)	1.002 (.004)	1.002 (.004)
Interaction Terms					
Female x Dissimilarity	—	1.361 (.404)	1.354 (.422)	—	—
Dissimilarity x Percent Women	—	—	—	1.011* (.005)	1.011* (.005)
Work-Related Variables					
Professional	—	—	.981 (.160)	—	.958 (.155)
Income (logged)	—	—	.710** (.078)	—	.715** (.078)
Autonomy	—	—	1.009 (.131)	—	1.006 (.131)
Authority	—	—	.945 (.063)	—	.948 (.063)
Hours	—	—	.986* (.006)	—	.986* (.006)
Job Demands	—	—	1.570** (.249)	—	1.559** (.247)
Family-Related Variables					
Work-to-Home Conflict	—	—	1.333** (.141)	—	1.338** (.143)
Children under 6	—	—	.694 (.132)	—	.700 (.135)
Housework Hours /wk	—	—	.993 (.006)	—	.992 (.006)
Control Variables					
Age	.944*** (.006)	.944*** (.006)	.950*** (.006)	.944*** (.005)	.950*** (.006)
White	.675* (.135)	.684 (.137)	.630* (.125)	.684 (.140)	.628* (.127)
Married	.589 (.162)	.597 (.164)	.627 (.172)	.592 (.164)	.617 (.172)
Constant	17.09*** (7.05)	17.16*** (7.08)	16.61** (15.1)	19.87*** (8.57)	20.38** (18.79)
Wald Chi ²	121.31	121.29	160.35	123.62	160.62

Notes: Exponentiated coefficients presented; Robust standard errors in parentheses.

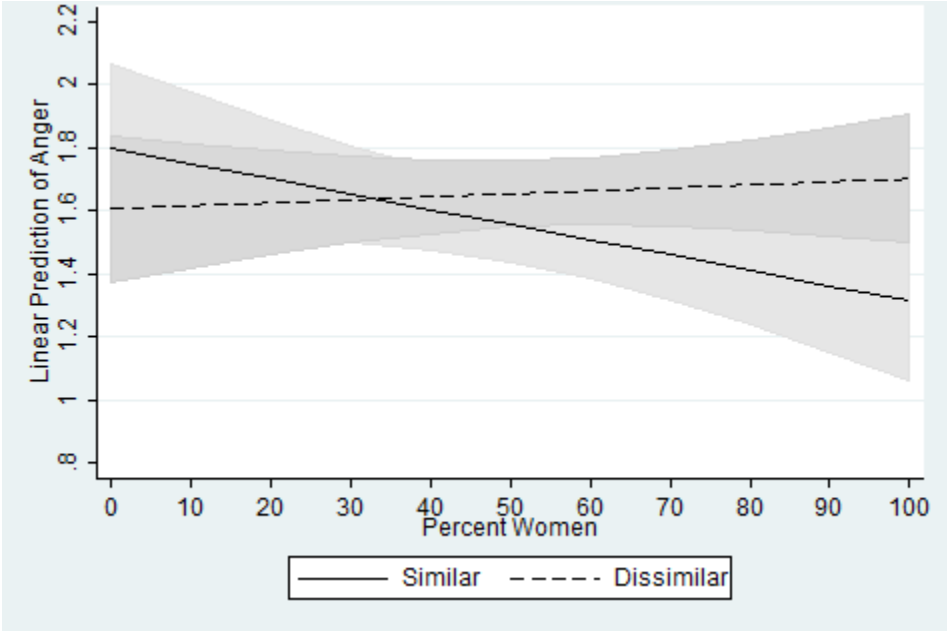
* $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1. *The Association between Psychological Distress and Percent Women for Dissimilar and Similar Workplaces.*



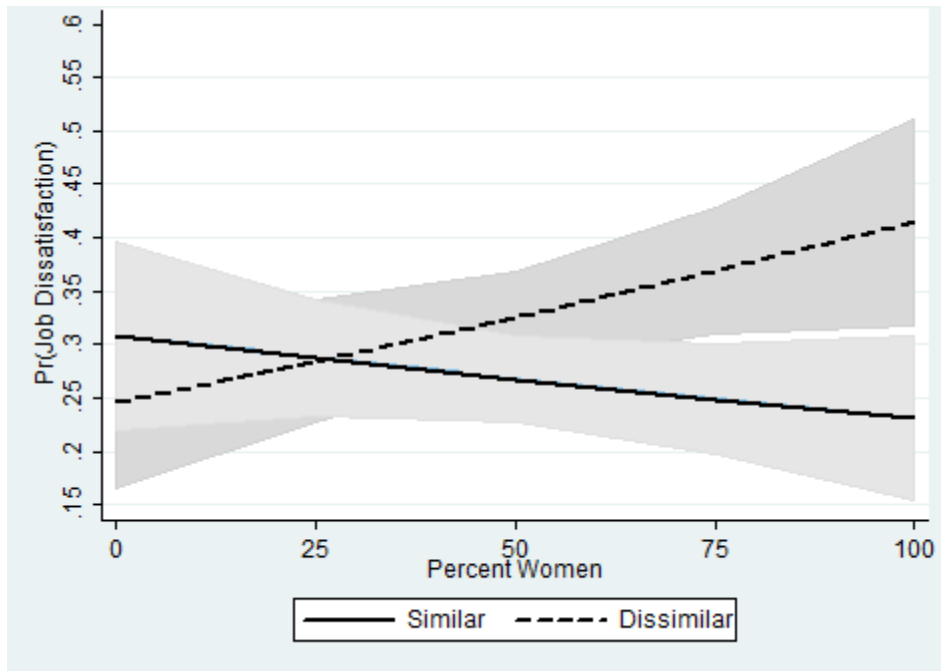
Note: Linear Predictions shown above are taken from model 5 of Table 3. Control variables are held constant at their respective means.

Figure 2. *The Association between Anger and Percent Women for Similar and Dissimilar Workplaces.*



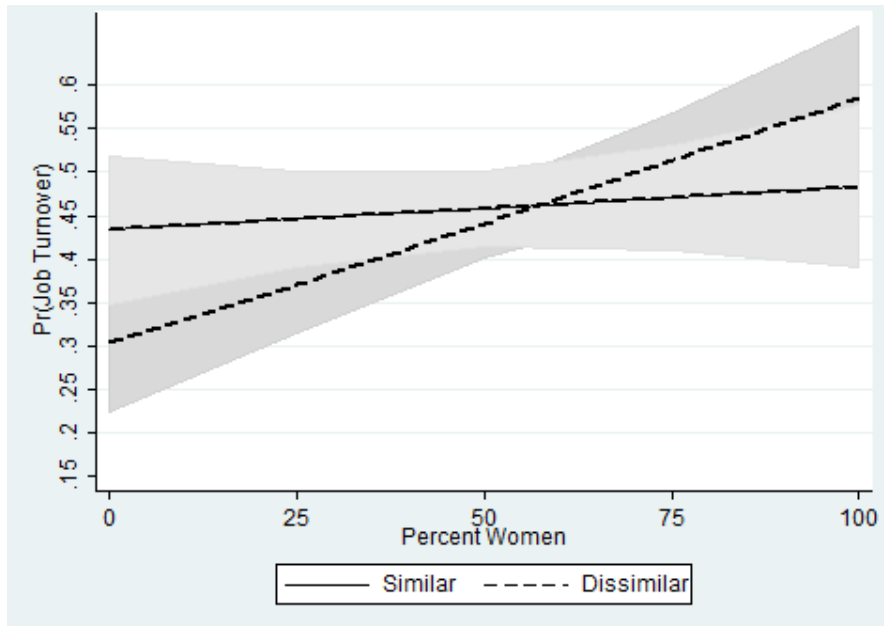
Note: Linear Predictions shown above are taken from model 5 of Table 4. Control variables are held constant at their respective means.

Figure 3. *The Association between Job Dissatisfaction and Percent Women for Similar and Dissimilar Workplaces.*



Note: Predicted values shown above are derived from model 5 in Table 5. Control variables are held constant at their respective means

Figure 4. *The Association between Turnover and Percent Women for Similar and Dissimilar Workplaces.*



Note: Predicted values shown above are derived from model 5 in Table 6. Control variables are held constant at their respective means.

Appendix A

Table 1A *Average Marginal Effects of Job Dissatisfaction for Similar vs. Dissimilar Workplaces Across Percent Women*

Percent Women	Similar	Dissimilar	First Differences	Second Differences ^a
0%	.308(.045)	.246(.041)	.246-.308=-.062(.059)	
25%	.288(.028)	.284(.029)	.284-.288=-.004(.040)	-.004-(-.062)=.058*(.024)
50%	.268(.020)	.325(.022)	.325-.268=.057(.029)	.057-(-.062)=.119*(.049)
75%	.249(.027)	.369(.030)	.369-.249=.120*(.037)	.120-(-.062)=.182*(.074)
100%	.231(.039)	.415(.049)	.415-.231=.184*(.056)	.184-(-.062)=.246*(.100)

^a Second differences show the difference between the first difference for the respective category of percent women relative to the first category (i.e., 0%).

Table 2A *Average Marginal Effects of Turnover for Similar vs. Dissimilar Workplaces Across Percent Women*

Percent Women	Similar	Dissimilar	First Differences	Second differences
0%	.434(.044)	.304(.041)	.304-.434=-.129*(.056)	
25%	.446(.028)	.370(.028)	.370-.446=-.076(.039)	-.076-(-.129)=.053*(.023)
50%	.458(.022)	.441(.021)	.441-.458=-.017(.030)	-.017-(-.129)=.112*(.048)
75%	.471(.031)	.513(.028)	.513-.471=.043(.039)	.043-(-.129)=.172*(.073)
100%	.483(.048)	.585(.043)	.585-.483=.102(.058)	.102-(-.129)=.232*(.098)

^a Second differences show the difference between the first difference for the respective category of percent women relative to the first category (i.e., 0%).

Appendix B

Table 1B *Male and Female Dominated Occupations in the WSH*

Male-Dominated Occupations <=10% women	Female-Dominated Occupations >=90% women
Equipment Operator	Housekeeper
Manual Labourer	Hostess/Greeter
Mechanic	Receptionist/Secretary/Admin. Assistant
Plumber/other trades	Nurse
Construction Worker	Teacher/Teacher's Assistant
Pilot	Child Care Provider
Firefighter	Dental Hygienist

Table 2B *Male and Female Dominated Occupations Held by the Opposite Gender in the WSH*

Male-dominated positions held by women <=10% women	Female-dominated positions held by men >=90% women
Industry Relations Specialist	Greeter
Forklift Driver	Housekeeper
Yard Maintenance	Desk Receptionist
Garbage Collector and Operator	Nurse Anesthetist
Landlord	Teaching Assistant
Machine Operator	Nurse
Hospital Corpsman	Bookkeeper
Delivery Driver	Nurse
Airspace Assembler	Nurse
Spinner	Receptionist
Assembler	Teacher
Transportation Driver	Client Expert
Construction Cleaner	Nurse
Switchman	Sales Rep
Factory Worker	Mental Health Worker
Service Advisor at Car Dealership	Mental Health Worker
Acupuncturer (Health Care Provider)	Land Development
	Executive Assistant
	General Contractor
	Administration Clerk

Chapter 4

INTERPERSONAL CONFLICT AND GENDER AT WORK: THE ROLE OF GENDER DISSIMILARITY ACROSS HIERARCHIES

Introduction

The workplace affects workers' well-being in various ways; through the organization of labour itself; the structural conditions to which workers are subjected; and, through relations with others in the workplace (Bakker & Demerouti, 2007; Kalleberg, 2003; Ducharme & Martin, 2000). In the current study, I concentrate on the latter mechanism with a particular focus on interpersonal conflict. Interpersonal conflict at work can negatively impact individuals' well-being and is considered a prevalent workplace stressor (Schieman & Reid, 2008; Hahn, 2000; Narayanan, Menon, & Spector, 1999). Interpersonal conflict has been defined as the perception of exposure to negative interactions ranging from minor conflicts and disagreements to more severe altercations involving verbal and/or physical violence or abuse (Schieman & Reid, 2008).

Despite research on the topic, few studies explore the connection between interpersonal conflict and the gender composition of the workplace (see Randel & Jaussi, 2008 for exception). The gender composition of one's workplace may either reduce or exacerbate interpersonal conflict at work. For example, being a gender minority at work can lead to consequences such as polarization where the dominant group tends to exaggerate group differences and intensify boundaries. My ideas here stem from Kanter's (1977) seminal work on tokenism in the workplace, which demonstrates the importance of organizational gender composition for the lived experiences of men and women. Further research has demonstrated interpersonal and career-related costs of non-homogeneous workplaces in general, rather than simply among

underrepresented groups (Randel & Jaussi, 2008; Yoder, 1991). I refer to this as “gender dissimilar” workplaces.

The theory of homophily suggests that individuals are more likely to form relationships with others that are demographically similar to themselves (McPherson, Smith-Lovin & Cook, 2001). The surface-level demographic of gender can also impact deeper similarities. An absence of this similarity can lead to differences of opinion on important decisions or tasks related to the workplace and therefore, increase workplace conflict. For these reasons, examining the costs of gender dissimilarity in the workplace on interpersonal consequences—particularly conflict-- is important.

I also take a unique approach in addressing the important nuances in the experience of gender dissimilarity within and across ranks, including supervisor, coworker and subordinate roles. I argue that the experience of workplace conflict may depend on whether the respondent’s supervisor(s), coworker(s) or subordinate(s) are of the same gender. Because this relationship is structured around authority and power, the supervisor-subordinate relationship is vulnerable to interpersonal conflict. For example, research suggests that supervisors tend to make up the majority of those that commit acts of nonsexual/physical abuse and workplace bullying (Helge, Cooper & Faragher, 2001; Keashley, Trott, & MacLean, 1994).

Finally, I examine whether these associations vary for men and women. Research suggests that gender dissimilarity in the workplace tends to affect men and women differently and thus, might impact the interpersonal relations resulting from such dissimilarity (Qian and Fan 2018; Hagan & Kay, 2007; Williams, 1995; Fløge & Merrill, 1986).

I operationalize gender dissimilarity in the workplace using a measure of the respondents’ perceptions of the gender composition of their supervisors, coworkers, and subordinates from the

Work, Stress and Health Study (WSH, N=1800). *I examine how having gender dissimilar supervisors, coworkers or subordinates impacts interpersonal conflict and how these associations vary for men and women.* Building on theories of proportional representation and the gendered organization, I argue that gender dissimilarities in the work environment matter beyond the objective gender composition of the workplace. Individuals may perceive a gender-similar work environment despite working in an opposite gender-dominated occupation.

The following sections draw on literature on the benefits and consequences of gender similarity/dissimilarity and how this may influence interpersonal conflict at work depending on whether supervisors, subordinates or coworkers are gender dissimilar. I follow the same approach to address why these associations may differ for men and women.

Background

General Influences of Gender Similarity/Dissimilarity on Workplace Conflict

The benefits of gender similarity at work have been well-documented, including greater access to social networks, improving mental health and lower instances of turnover (Thoits, 2010; Forret & Dougherty, 2004; Riordan & Shore, 1997; Jackson et al., 1991). Gender dissimilarity has also been linked to deleterious consequences such as greater mental health consequences (Taylor 2016; Jackson, Thoits & Taylor, 1995) and lower job satisfaction (Hagan & Kay, 2007). Roth's (2004) qualitative study of Wall street professionals found that homophily processes and status expectations were largely consequential to the effects that are generally associated with tokenism experienced by women in this profession. These benefits of gender similarity (or absence of consequences) are largely based on the homophily principle. The homophily hypothesis suggests that workers will form workplace relationships with those who are socially similar to themselves. Workplace rewards and opportunities are passed on to socially

comparable others (McPherson, Smith-Lovin & Cook, 2001). Easily identifiable characteristics, such as gender, aid individuals in easily categorizing others to determine whether they are socially similar (Reskin, 2002; Smith-Lovin, McPherson & Cook, 2001; Erickson, Albanese & Drakulic, 2000; Ridgeway, 1997). The perception of equivalence in characteristics, roles or status are taken as markers for similarities in beliefs, values and behaviour (Burt, 1978). These differences can lead to conflicting opinions on important issues which, in turn, may influence interpersonal conflict (Tsui & O'Reilly, 1989). Gender is an important characteristic used to identify others in all social settings—including at work.

The homophily principle extends to interpersonal consequences in the workplace (Taylor, 2010; Weeden & Grusky, 2005). Dissimilar others may be excluded from important social networks, resulting in less social support (Taylor 2016; Taylor, 2010; Roth, 2006; Pierce, 1995; Floge & Merrill, 1986; Kanter, 1977). Further, gender similarity at work tends to encourage attraction and trust, which in turn alleviates conflict (Reskin, McBrier & Kmec, 1999; South, Bonjean, Markham & Corder, 1983). When workplaces are gender dissimilar or non-homogeneous, literature has found that consequences can range from increases in hostility or decreases in trust between workers leading to greater interpersonal conflict (Ibarra, 1992; Wharton & Baron, 1991).

I extrapolate from this previous evidence and expect that gender dissimilarities among oneself relative to others in the workplace will increase interpersonal conflict overall. However, I expect the nature of these associations will depend upon one's rank/status relative to others—including relations between coworkers, supervisors, and subordinates, as well as one's own gender.

The Influence of Gender Dissimilarity on Workplace Conflict among Coworkers

Less is known about how gender dissimilarity at work impacts interpersonal relationships among coworkers. Coworkers tend to be a main source of social support for individuals (Sloan, 2013), and social support may be lacking without access to similar others. Evidence suggests that in workplaces with coworkers that are gender dissimilar, interpersonal conflict tends to be higher for both men and women (Randel & Jaussi, 2008; Jehn, Northcraft & Neale, 1999; Pelled, Eisenhardt & Xin, 1999; Jehn, Chadwick, & Thatcher, 1997). Blalock (1967) suggests that surges in numbers of the minority in a workgroup may threaten the majority group. In contrast to previous research, this has been found to result in majority group members reacting with increased discriminatory behaviour in order to keep minority group members from gaining too much power or influence at work. Empirical research supports this claim. For example, studies find that when the workgroup is gender dissimilar, the importance of distinguishing differences between groups becomes more important (Randel & Jaussi, 2008; Randel, 2002). Roth's (2004) study of the minority of women on Wall Street found that in a group where women made up about a third, men reacted by excluding women from their social groups and distancing themselves. Randel and Jaussi (2008) found that a gender dissimilar workgroup can have an impact on how important gender is to workers, in turn, having a negative impact on interpersonal relations in the workgroup.

Hypothesis 1a: Respondents' perceptions of gender dissimilarity among co-workers will result in higher reports of interpersonal conflict.

Gender Dissimilarity among Coworkers: Predicted Consequences for Men and Women

Working with coworkers of the opposite gender may have a different impact on women versus men. For example, recent research on gender composition suggests that being in a gender

dissimilar workplace may have more benefits for men in female-dominated workplaces compared to otherwise. Men in female-dominated occupations tend to ride on what Williams (1995) calls the “glass escalator,” while women remain in the lower tiers of the hierarchy. Acker’s (1990) notion of the “ideal worker” where men are valued above women due to their embodied work devotion further explains men’s ability to do well in workplaces with gender dissimilar coworkers.

These processes also manifest into interpersonal advantages for men. My hypothesized gender differences in the effects of gender dissimilarity among coworkers are also based on "expectation states" theory, which posits that high-status individuals (i.e., men) are likely to be deemed more competent and intelligent than low-status individuals (i.e., women) (Ridgeway & Correll, 2004). Evidence suggests that men in female-dominated workplaces receive more authority, reward and respect than their female counterparts (Schilt, 2006; Martin, 2003; Yancey & Martin, 2001; Williams, 1992). For example, a man is more likely to command attention in a meeting than a woman and report being encouraged to take leadership roles from their female colleagues (Schilt, 2006; Martin, 2003; Williams, 1992). Also, women tend to report giving and receiving more social support at work than men do which may also decrease the interpersonal conflict present for men working with female coworkers (Wallace, 2014; Turner & Turner, 2013; Schieman, 2006; Liebler & Sandefur, 2002).

The same commanding behaviour that is accepted and encouraged for men from a woman can be perceived as aggressive, over-controlling or difficult, from male coworkers in particular (Martin, 2003; Ely, 1992). These perceptions may cause tensions among dissimilar coworkers. Further, women tend to feel excluded from informal leadership and important decision making when in a gender dissimilar workgroup (Carothers & Crull, 1984). Being

perceived negatively or excluded when trying to participate in a workgroup may lead women working with dissimilar coworkers to report greater interpersonal conflict than men.

Hypothesis 1b: Women who perceive gender dissimilarity among co-workers will report greater interpersonal conflict compared to men in similar situations.

The Influence of Gender Dissimilarity on Workplace Conflict among Supervisors

Gender dissimilarity between oneself and one's supervisors may strongly influence workplace conflict (Schieman & Reid, 2008; Tsui & O'Reilly, 1989). While authority itself may have a negative impact on interpersonal relations in the workplace (Schieman & Reid, 2008; Kelloway, Sivanathan, Francis & Barling, 2005; Elliott & Smith, 2004; Mirowsky & Ross, 2003; Hodson, 2001), I argue that this will depend upon the gender contrast in the supervisor-subordinate relationship. Not all relationships are created equally and instead depend upon factors such as homophily. The relational demography literature reports consistent evidence that similarity based on demographic characteristics leads to interpersonal workplace benefits (Schieman & McMullen, 2008; Duffy & Ferrier, 2003; Reilly, Williams, & Barsade, 1998; Tsui & O'Reilly, 1989). Structural equivalence suggests that similar characteristics such as gender results in social homogeneity in beliefs, values, and norms, making it more likely that individuals of the same gender will congregate together (McPherson, Smith-Lovin & Cook, 2001; Burt, 1978).

An absence of this similarity in the supervisor-subordinate relationship may have interpersonal consequences for the subordinate. Although not tested explicitly, research on gender dissimilarity between supervisors and subordinates suggests that interpersonal conflict may be a more prevalent issue for subordinates when supervisors are gender dissimilar. Gender

dissimilar supervisors have been linked to increased role ambiguity and role conflict, decreased family-supportive supervision, greater perceived discrimination and psychological distress (Schieman & McMullen, 2008; Foley, Linnehan, Greenhaus & Weer, 2006; Tsui & O'Reilly, 1989). These consequences likely threaten workplace cohesion, in turn, increasing interpersonal conflict (Tsui et al., 1992; Tsui & O'Reilly, 1989).

Hypothesis 2a: Having gender dissimilar supervisors will result in greater perceived interpersonal conflict.

Gender Dissimilarity among Supervisors: Predicted Consequences for Men and Women

Previous literature suggests that interpersonal conflict due to gender dissimilarity in the supervisor-subordinate relationship will vary for men and women. According to the glass escalator argument, men who enter female-dominated occupations and have female supervisors report high levels of acceptance and encouragement from female supervisors (Simpson, 2004; Hultin, 2003; Williams, 1992; 1995). For example, in her study of men in a variety of female-dominated occupations, Simpson (2004) found that men in female-dominated occupations were given differential treatment by their female supervisors that resulted in more relaxed rules and expectations for them compared to their female counterparts. Therefore, men may actually experience interpersonal benefits from having a female supervisor.

The supervisor-subordinate relationship may be an even more important source of support for women since women are still more often responsible for family-related tasks such as childcare (Gerstel & Clawson, 2015). Therefore, a supervisor that is supportive of family-related demands may lower the perception of interpersonal conflict. Literature suggests that having a gender similar supervisor increases the perception of family-supportive supervision (Foley et al.,

2006) and that this was more prevalent among female supervisors (Basuil, Manegold & Casper, 2016; Hopkins, 2002). Female supervisors were found to be more accommodating to female subordinates work and family demands as well as creating more family-friendly environments at work (Wallen, 2002; Fagenson, 1993). Although literature has not focused on how these processes may play out (see Maume, 2011 for exception), conflict may arise between female subordinates and male supervisors when opinions on how to handle family-related demands differ. When issues arise related to family life that, in turn, have an impact on work performance, a workplace that is not family-friendly may exacerbate interpersonal conflict for women. For example, they may be perceived by their male counterparts as not being as committed to their job as others at work, potentially increasing conflict (Casper, Harris, Taylor-Bianco & Wayne, 2011).

Hypothesis 2b: Women with gender dissimilar supervisors will perceive greater interpersonal conflict than men with dissimilar supervisors.

Gender Dissimilarity among Subordinates: Predicted Consequences for Men and Women

The absence of gender similarity between oneself and one's subordinates may exacerbate difficulties attaining and maintaining workplace power and in turn, increase interpersonal conflict, for women especially. Gender dynamics and workplace power likely play a role in how authority is experienced by women in particular (Elliot & Smith, 2004). Due to the accepted position of men in power, interpersonal conflict for men and women with gender dissimilar subordinates will likely not play out equally. According to expectation states theory (Ridgeway & Correll, 2004), leadership abilities tend to be associated more strongly with masculine personas rather than feminine and women are less likely to be deemed capable of holding positions of authority compared with men in comparable roles (Scott & Brown, 2006; Valentine,

Godkin & Turner, 2002; Eagly, Johannesen-Schmidt & van Engen, 2003; Wacjman, 1998). For example, Ely (1994) found that negative stereotypes associated with female leaders, such as insecure, over-controlling and not team players, lead to relationships that are competitive and difficult with others in the workplace.

In a similar vein, *gender role congruity theory* states that there is an incompatibility between the female gender role and the leadership role (Eagly & Karau, 2002). This is referred to as a “double bind” and results in tension between characteristics of femininity and characteristics of a leader (Grunberg & Greenberg, 2005; Eagly & Karau, 2002). Studies show that male workers express a preference for male leaders and place different expectations on men and women as leaders (Eagly & Karau, 2002; Wacjman, 1998). Moreover, research finds that women leaders who are dominant and assertive tend to be less influential, particularly if they have male subordinates (Wajcman, 1998; Carli, 1990; Wiley & Eskilson, 1985).

Not only are there consequences to how a woman in a position of authority is perceived, but there are likely interpersonal consequences as well. Despite literature being limited on this topic, research on gender, authority, and power suggests that due to women's lower status and nontraditional gender role when they attain a position of power, female leaders face backlash from male subordinates (McLaughlin, Uggen & Blackstone, 2012). This literature has focused largely on harassment and discrimination finding that women in positions of power tend to be the most likely to face harassment or discrimination even when they hold greater organizational authority than the perpetrators (Stainback, Ratliff & Roscigno, 2011; Chamberlain, Crowley, Tope & Hodson, 2008; Rospenda, Richman & Nawyn, 1998). Arguments to explain this phenomenon posit that women in positions of authority threaten men's status and are then isolated, discriminated against or harassed to restore masculine dominance (Berdahl, 2007;

McLaughlin, Uggen & Blackstone, 2012). Therefore, women with male subordinates should report greater interpersonal conflict than men with female subordinates.

Hypothesis 2c: Women with gender dissimilar subordinates will perceive greater interpersonal conflict than men with gender dissimilar subordinates.

Methods

To test my hypotheses, I analyze data from the Work Stress and Health survey (WSH) – a national telephone survey of working adults in the United States. This study was conducted from February through August 2005 and includes a nationally representative sample of 1,800 Americans asked about a variety of questions regarding work and health. Eligible respondents were employed at the time of the survey, fluent in English and were over the age of 18. Seventy percent of eligible respondents were successfully contacted and interviewed.

The sample was obtained using a list-assisted random digit-dialing (RDD) method drawn proportionally from all 50 states. The sampling approach employed the List+1 method. This method tends to yield a higher proportion of productive numbers (Lepowski, 1988). List-assisted RDD increases the probability of residential numbers while reducing the biases associated with nontraditional RDD procedures (see Waksberg, 1978). I exclude respondents missing on all measures across analyses. There are three sub-samples included in the analyses. Because there are three focal independent variables that are tested separately, the sample sizes vary between models. For example, not all respondents reported having subordinates and cannot be included in analyses that test subordinate gender dissimilarity specifically. All analyses are weighted by age, gender, education, and income.

Focal Dependent Measure

*Interpersonal conflict*⁸ is measured by asking respondents if in the last 30 days they experienced the following: “Has anyone at work treated you unfairly”, “gotten annoyed or angry with you”, “teased or nagged you”, “blamed or criticized you for something that wasn’t your fault,” “given you unclear directions about work you need to do,” “not done the work that needed to be done or done it in a sloppy or incompetent way?” with responses including “yes” or “no”. Respondents were also asked to report the frequency that they experienced each of these indicators with the response choices 0=never, 1=rarely, 2=sometimes, and 3=frequently. These responses were then summed to create an index ($\alpha=.76$). This measure was created with a thorough review of the literature and has appeared in recently published research (Schieman & Reid, 2008).

Focal Independent Measures

Perceived coworker gender dissimilarity was derived from a measure asking if the respondent’s coworkers were all men, mostly men, all women, mostly women or a mix of the two. This was then coded into a dummy variable. The category coded 1 refers to the “dissimilar” category. This includes respondents who reported having different gender coworkers or a mix of men and women. The category coded 0 includes respondents that reported having similar gender coworkers and is referred to as “similar”.

Perceived supervisor gender dissimilarity is coded in the same way as perceived coworker gender dissimilarity where respondents were asked if their supervisors were all men,

⁸ The low mean of 5.089 is due to a heavy positive skew. However, regression diagnostics including plotting residuals against each predictor and component-plus-residual plots showed no evidence of non-linearity.

mostly men, all women, mostly women or a mix of the two. These were then coded into a dummy variable with 1 “dissimilar” and 0 “similar”.

Perceived subordinate gender dissimilarity is coded the same as both previous measures where respondents were asked if their subordinates were all men, mostly men, all women, mostly women or a mix of the two. These were then coded into a dummy variable with 1 “dissimilar” and 0 “similar”.

Gender is coded (1) female and (0) male.

Potentially Confounding Work and Family Conditions

When considering the effects of workplace gender dissimilarity on interpersonal conflict, it is important to consider various alternative explanations that could have an impact on interpersonal conflict. First, work conditions such as work hours, job autonomy, income, tenure and job demands can contribute to the experience of interpersonal conflict at work. Work hours, job autonomy and job demands may increase or decrease the amount of time spent interacting with others at work, in turn increasing the potential for conflict to occur. Furthermore, women tend to report giving and receiving greater social support than men at work suggesting that occupations more likely to be dominated by women may be associated with less conflict (Wallace, 2014).

Second, as gender is a focal component in analysis, it is important to consider family-related variables that could lead to contention for men and women differently. For example, literature suggests that taking time off or requesting more flexible work arrangements in order to fulfill family responsibilities is evaluated more favorably for men than for women (Munsch, 2016). Therefore, conflict could arise, particularly for women, who have young dependents to care for or are primarily responsible for household labour.

Percent women in the occupation is operationalized using a measure of “percent of women” employed by occupation. These data, taken from the 2004 Current Population Survey, were matched with the occupation reported by each respondent using the O*NET – a public database of American occupational information. The Current Population Survey is a monthly survey of households conducted by the United States Census Bureau. Using these data, a continuous measure of percent women in the respondent’s corresponding occupation was created.

Respondents were asked to report the *number of hours worked per week* at their main job-reported in hours.

Information about *personal income* was obtained from the following question: “For the complete year of 2004, what was your total personal income, including income from all of your paid jobs including taxes?” This measure was logged in order to best approximate a linear relationship between income and interpersonal conflict. This transformation has been used in recent studies (Schieman & Reid, 2008; 2009).

To assess *job autonomy*, respondents’ answers to the question “How often does someone else decide how you do your work?” with response choices of never (1), rarely (2), sometimes (3) and frequently (4) were used. Responses were reverse coded so that higher scores reflect higher autonomy.

Job tenure is measured in years.

Job demands are measured using three items: “Felt overwhelmed by how much you had to do at work?” “Have to work on too many tasks at the same time?” “The demands of your job exceeded the time you have to do the work?” Response choices are coded: “never” (1), “rarely” (2), “sometimes” (3), “often” (4), and “very often” (5). I averaged the items to

create the index; higher scores indicate more job demands ($\alpha = .85$). These items are similar to those used in other previously published research on related themes like “pressure,” “work-load,” or “quantitative demands” (van den Broeck, Bjorner, Christensen & Borg, 2010; Kristensen, Bjorner, Christensen, & Borg, 2004).

Presence of young children is the number of children under six present in the household.

Housework hours is a continuous variable of reported hours per week. Responses past the 95th percentile were considered unusual and top-coded to help reduce the positive skew. Three responses over 100 hours were coded 100.

Basic Control Variables

Occupation was measured by asking respondents the title of the main job at which they worked the previous week. Follow-up questions were asked regarding the main duties of this job in order to more precisely code responses. Responses were coded into five main categories in accordance with the Bureau of Labour Statistics: “administrative”, “professional”, “service”, “craft”, and “labour”. In analyses, I contrast the comparison category “professional” with the other four categories.

Age is measured in years. *Race* is measured as a dummy variable with “white” coded ‘1’ compared to “other” (0). *Marital status* is measured as a dummy variable with “married” coded 1 in contrast to those who are “not married” (0). Those who reported “common-law” were also included in the “married” category. Respondents were asked a follow up question of whether they were currently living with someone they consider to be their partner. Those who responded “yes” to this question are included in the “married” category.

Plan of Analysis

Descriptive statistics are presented in Table 1 and provided for each subsample. Subsample 1 presents descriptive statistics for coworker gender dissimilarity, subsample 2 for supervisor gender dissimilarity and subsample 3 for subordinate gender dissimilarity along with all controls. Proportional or mean differences between men and women were tested for using t-tests and chi-square tests and are indicated by asterisks.

I use a series of ordinary least squares regression models to test the impact of coworker gender dissimilarity, supervisor gender dissimilarity, and subordinate gender dissimilarity, respectively, on the focal dependent variable, interpersonal conflict. I take this approach in Tables 2 through 4. Model 1 in each table tests the main effect of perceived gender dissimilarity of coworkers, supervisors and subordinates, respectively, on interpersonal conflict (Hypotheses 1a and 2a) while model 2 tests the interaction effect between each of these variables and the respondent's gender on interpersonal conflict (Hypotheses 1b, 2b, and 2c). Model 3 includes all potentially confounding work and family variables to determine whether the interaction still holds after the addition of these conditions.

[Insert Table 1 here]

Results

Coworker Gender Dissimilarity

Table 2 includes findings for the association between interpersonal conflict and perceived coworker gender dissimilarity and includes all work, family and demographic controls. In model 1, I find no evidence that supports the hypothesis that coworker gender dissimilarity increases interpersonal conflict (hypothesis 1a). Furthermore, there are no findings in model 2 or 3 to suggest that this association is dependent on the gender of the respondent (hypothesis 1b).

[Insert Table 2 here]

Supervisor Gender Dissimilarity

Findings for the association between interpersonal conflict and perceived supervisor gender dissimilarity are presented in Table 3. I find evidence to suggest that perceived supervisor gender dissimilarity is associated with more interpersonal conflict. However, as seen in model 2, this association is dependent on the gender of the respondent. The significant interaction effect between perceived supervisor gender dissimilarity and the gender of the respondent is significant, suggesting that the association is not the same for men and women ($b=1.644$, $p<.05$). Model 3 includes potentially confounding work and family variables. The interaction remains significant after the inclusion of these variables ($b=1.697$, $p=.05$). These results support hypothesis 2b. Women with gender dissimilar supervisors report greater interpersonal conflict than men with gender dissimilar supervisors.

Figure 1 illustrates this association. The bars on the left represent levels of interpersonal conflict for men with mostly female supervisors. The bars on the right represent women who perceive mostly male supervisors. Women who perceive mostly male supervisors report significantly more interpersonal conflict than men in similar contexts.

[Insert Table 3 and Figure 1 here]

Subordinate Gender Dissimilarity

Table 4 presents results for the association between subordinate gender dissimilarity and interpersonal conflict. I find evidence that perceived gender dissimilarity of subordinates is associated with interpersonal conflict in accordance with hypothesis 2c. However, as seen in model 2, this association is again dependent on the gender of the respondent. The significant

interaction effect between perceived subordinate gender dissimilarity and the respondent's gender suggests that this relationship differs for men and women ($b=2.590$, $p<.05$). This result holds after the inclusion of potentially confounding work and family variables in model 3 ($b=2.444$, $p=.05$).

Figure 2 illustrates this association. The bars on the left illustrate levels of interpersonal conflict reported by men while the bars on the right represent levels of interpersonal conflict reported by women. In accordance with hypothesis 2c, women who perceive mostly male subordinates report higher levels of interpersonal conflict than men in similar contexts. However, unexpectedly, men who perceive mostly male subordinates report similar levels of interpersonal conflict as women who perceive mostly male subordinates.

[Insert Table 4 and Figure 2 here]

Discussion

My study aimed to answer three research questions: 1) Does gender dissimilarity of the workplace affect interpersonal conflict? 2) Does this association differ depending on the gender dissimilarity of supervisors, and subordinates? And 3) Does this association differ for men and women? I used a representative sample of working Americans from the Work Stress and Health Survey to answer these questions.

My study addresses two gaps in the literature on workplace gender dissimilarity. First, I tested the impact of workplace gender dissimilarity on interpersonal conflict. Previous research tends to be limited to employment outcomes rather than interpersonal ones that often use samples from one occupation rather than a representative sample from a spectrum of occupations (Turco, 2010; Gustafson, 2008; Ranson, 2005; Roth, 2004; Hultin, 2003; Budig, 2002; Maume, 1999;

Williams, 1992; 1995; Heikes, 1991; Floge & Merrill, 1986; Kanter, 1977; see Taylor, 2010, for an exception). Although there are qualitative studies that suggest that conflict is a likely consequence of gender dissimilarity at work, few quantitative studies have considered it as an outcome. As interpersonal conflict is considered a prevalent and intense workplace stressor (Schieman & Reid, 2008), analyzing potential causes is important to research on workplace conflict. By examining patterns across a multitude of occupations, my study contributes findings on the consequences of gender dissimilarity on a larger and more inclusive scale.

Second, I considered the role of respondents in their workplace and how this might determine the effect of gender dissimilarity on interpersonal conflict. Whether one's supervisor(s), coworker(s), or subordinate(s) are of the opposite gender has not been considered in the literature on the gender composition of the workplace (see Schieman & McMullen, 2008 for exception). Because the supervisor and subordinate relationship centers around authority and power in interpersonal dynamics at work, they are likely more prone to conflict (Hoel, Cooper & Faragher, 2001; Keashley et al., 1994). By considering how the workplace as a whole, impacts of gender dissimilarity on interpersonal conflict may have been more difficult to observe. My results defy previous theoretical ideas that rely solely on a specific gender ratio to explain adverse effects of gender dissimilarity. Conversely, my study suggests that the effect of gender dissimilarity depends on where the differences exist across positions in the hierarchy of a workplace.

In order to operationalize gender dissimilarity of supervisor(s), coworker(s), and subordinate(s), I used a perception-based measure from the Work Stress and Health Survey. This measure provides an advantage over previous studies focusing on gender composition that primarily rely on the gender composition of the occupation. Using a measure at the level of the

occupation may not capture the micro-level interactions of the respondent's workplace. In other words, when the occupation overall is dominated by one gender, it does not necessarily suggest that the workplace reflects this.

In order to test these assumptions, I analyzed interaction terms between the gender of the respondent and their perceptions of their supervisor(s), coworker(s), and subordinate(s) gender. I report three key findings that contribute to the literature on the consequences of gender dissimilarity: 1) The gender of one's coworkers does not seem to matter for interpersonal conflict; 2) The effect of supervisor gender dissimilarity on interpersonal conflict is dependent on the gender of the respondent; and 3) Perceiving mostly male subordinates resulted in greater conflict for both men and women.

The Absence of an Effect of the Gender Dissimilarity of Coworkers on Interpersonal Conflict

I observed no significant results for the association between coworker gender dissimilarity on interpersonal conflict. I also did not observe a contingent effect between coworker gender dissimilarity and the gender of the respondent on interpersonal conflict. This result is in conflict with theoretical ideas about the gender composition of the workplace.

Kanter's (1977) theory of proportional representation suggests that the overall gender composition of the workplace has an effect on the experiences of gender minorities at work. She posits that a specific ratio of women to men that results in a gender minority of "tokens" affects how the tokens are perceived in the workplace. In her analysis of managers in a corporation, she found that female tokens experienced consequences such as increased visibility and polarization which lead to performance pressures and exclusion at work. In light of these findings, Kanter's theory suggests that tokens or gender minorities at work should experience increased conflict due

to these consequences. By finding no effect of gender dissimilarity of coworkers on interpersonal conflict, my study illustrates that this theory does not hold when rankings in a hierarchy are taken into account. Therefore, the experience of being a gender minority at work may be caused less by the exact ratio of men to women but instead, be related to where this gender dissimilarity takes place across ranks in the hierarchy of a workplace.

Gender Differences in the Effect of Supervisor Gender Dissimilarity on Interpersonal Conflict

While the gender dissimilarity of coworkers had no effect on interpersonal conflict, gender dissimilarity of supervisors does seem to matter. Perceived gender dissimilarity of supervisors resulted in worse interpersonal conflict for women than for men in similar situations.

I have laid out reasons that this may be the case. In the case of supervisors, men who enter female-dominated occupations or workplaces tend to report being accepted and encouraged by female supervisors (Simpson, 2004; Hultin, 2003; Williams, 1995). Furthermore, female supervisors have been found to be more supportive of family-related demands which may further contribute to lower levels of interpersonal conflict (Foley et al., 2006). For women, this is likely an even more important source of support due to the responsibilities placed on women to be primary caregivers for children and household tasks (Gerstel & Clawson, 2015). Without this similarity with a supervisor, women may experience greater conflict at work as they may be perceived as being less committed to their jobs.

Additionally, women working in contexts where they perceive mostly male supervisors may be more vulnerable to workplace conflict when compared to women who perceive mostly female supervisors. Women who work with mostly male supervisors have been found to be less likely to identify with other women at work, be more likely to perceive female peers as

competition and be less likely to report workplace support (Ely, 1994). Women working in contexts with mostly male supervisors may be in situations where gendered stereotypes are more prevalent leading to constraints and devaluation for female employees (Ely, 1995). These stereotypes in contexts where there are few women in positions of power have been linked to consequences such as the devaluation of their performance, denial of credit for successful work, being penalized for competency, and harassment (Konrad, Cannings & Goldberg, 2010; Heilman, 2001).

Conversely, my findings suggest that working with female supervisors has a positive effect on interpersonal relations at work for both men and women. This is in line with much of the literature on working for female supervisors. Female supervisors have been linked to increased levels of mastery, autonomy, and social support experienced at work, decreased levels of work-family conflict and depression, and fewer work absences (Moore, Grunberg & Greenberg, 2005).

Theories of gendered organizations suggest that due to women's embodied experiences related to the household and child rearing, men are seen as the ideal workers and are more highly valued (Acker, 1990). This argument is supported by my findings. In contexts where women are working with mostly male supervisors, they perceive greater conflict at work, suggesting that they are viewed as not as well suited to the job as their male counterparts. Conversely, men report less interpersonal conflict at work regardless of whether their supervisors are mostly men or mostly women. This again contradicts Kanter's (1977) theory of proportional representation. Kanter argued that any tokens or minorities at work would experience the same consequences. According to this argument, men who perceive mostly female supervisors should experience the same effects as women who perceive mostly male supervisors. This is not the case in my study.

Effects of the Gender of Subordinates on Interpersonal Conflict

Similarly, results for the association between gender dissimilar subordinates and interpersonal conflict suggest that women who perceive dissimilar subordinates report greater conflict than men who perceive dissimilar subordinates. While this was expected and supports hypothesis 2c, the association between gender dissimilar subordinates and interpersonal conflict were also unexpected. While the effect of perceived gender dissimilar subordinates does vary by the gender of the respondent, women who perceive mostly male subordinates and men who perceive mostly male subordinates did not differ in reported levels of interpersonal conflict. Both men and women who perceived mostly male subordinates reported higher levels of interpersonal conflict.

Role congruity theory posits that women tend to value a more communal and cooperative approach to workplace relationships while men are more interested in pay and advancement (Eagly et al., 2003). As men tend to be more interested in striving for power and success, the competitiveness between them may increase interpersonal conflict. It has been suggested that having authority at work exposes individuals to greater interpersonal conflict and that men, in particular, young men, tend to bear the brunt of this conflict (Schieman & Reid, 2008). My study suggests that when the gender of subordinates is taken into account, women with authority who perceive mostly male subordinates are exposed to equal amounts of interpersonal conflict as men with mostly male subordinates. Both men and women report less interpersonal conflict when they perceive mostly female subordinates.

While research on the effects of the gender composition of subordinates is limited, there are potential explanations in the literature on authority. Men tend to have more freedom to compete with each other and tend to be more interested in striving for power than women (Eagly

et al., 2003). This behaviour likely increases the exposure to interpersonal conflict for men in positions of authority. Having more authority in general increases exposure to conflict (Schieman & Reid, 2008), while having male subordinates who are competitive and combative, particularly with other males, seems to further increase exposure to conflict.

While women with male subordinates report similar levels of interpersonal conflict as men, the mechanisms through which this occurs is likely different. Expectation states theory suggests that certain characteristics, such as gender, are markers for expectations and evaluations of behaviour that are appropriate (Correll & Ridgeway, 2003). This includes leadership abilities. The theory stresses gender as an important characteristic in power dynamics as individuals that are advantaged (i.e. men) are viewed as being more legitimate holders of authority and power, particularly at work (Scott & Brown, 2006; Miech et al., 2003). Literature supports this idea. For example, Netchaeva and colleagues (2015) found that women in a position of power above men caused subordinate men to feel threatened and engage in more assertive behaviour towards their female superior(s). This would likely increase exposure to interpersonal conflict. Despite these unexpected results, these findings are not incongruent to the literature on authority.

Limitations and Conclusions

Some limitations of my study require brief mention. First, I do not know the exact proportion of same versus other gender workers reported by the respondent. However, this measure allowed me to use respondent's perceptions rather than an overall gender composition of the occupation or workplace. The perception of the respondent likely gives a better indication of the type of individuals they encounter on a daily basis rather than assuming that the gender of the occupation or workplace, objectively, translates to their everyday lived experiences at work.

Future research should compare objective and subjective measures of gender composition to assess this matter.

Second, my measure of interpersonal conflict is somewhat limited. It is unknown exactly who instigated these conflicts and exactly what type of conflict occurs. It would be useful in future research to examine the types of conflicts that occur between supervisors/subordinates and if these differ from conflicts that occur between coworkers. This may also aid in further development of the conceptualization and operationalization of interpersonal conflict.

Despite these limitations, my study makes an important contribution to the literature. Using a measure of gender dissimilarity, I document that the gender dissimilarity of the workplace is detrimental to the outcome of interpersonal conflict. However, in contention to previous theories on the impact of gender dissimilarity, I find that this relationship differs depending on the position that this dissimilarity occurs in the hierarchy of a workplace. My results highlight the importance of authority and power in the workplace, particularly when it comes to gender relations at work. They also highlight the continued disadvantage women may experience when those in positions of power in their workplace are male. Therefore, my research disconfirms that proportional representation is a contributing factor to interpersonal conflict at work. Instead, conflict is greater when women report male supervisors or male subordinates. This suggests that ideals of the gendered organization likely continue to hinder women in the workplace, particularly when authority and power relations with men are concerned.

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Tables and Figures

Table 1 Means and Proportions for All Variables

	Subsample 1		Subsample 2		Subsample 3	
	Men (n=503)	Women (n=760)	Men (n=589)	Women (n=884)	Men (n=302)	Women (n=376)
<i>Focal Measures</i>						
Interpersonal Conflict	5.930	5.583	5.638	5.468	6.460	6.080
Coworker Dissimilarity	.509	.542	.510	.542	.461	.535
Supervisor Dissimilarity	.277	.449***	.273	.450***	.253	.469***
Subordinate Dissimilarity	.382	.336	.356	.352	.364	.351
<i>Work and Family Conditions</i>						
Occupation						
Professional	.272	.342**	.241	.303**	.341	.428*
Administrative	.288	.416***	.282	.428***	.212	.356***
Service	.125	.186**	.143	.205**	.156	.170
Craft	.141	.013***	.146	.012***	.166	.011***
Labor	.173	.043***	.189	.052***	.126	.035***
Percent Women	33.21	67.29***	31.99	67.81***	31.23	63.85***
Work Hours	46.35	39.87***	45.89	39.56***	48.72	43.75***
Personal Income (unlogged)	58.06	41.31*	53.66	38.37*	74.63	52.62
Autonomy	2.37	2.29*	2.30	2.27	2.42	2.39
Tenure	9.45	8.38*	8.77	7.90	11.64	9.42**
Job Demands	2.63	2.64	2.66	2.65	2.63	2.60
Children under 6	.266	.288	.263	.281	.271	.242
Housework Hours / wk	11.90	16.20***	11.95	15.92***	12.33	14.86***
<i>Basic Control Measures</i>						
Age	42.46	42.88	42.06	42.86	44.86	44.03
White	.769	.728	.772	.702**	.791	.718*
Married/Cohabiting	.944	.917	.939	.917	.924	.920

Note: Asterisks identify significant mean or proportional gender differences. Unweighted data presented.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2 Ordinary Least-Squares Regression of Interpersonal Conflict on Coworker Gender Dissimilarity (N=1263)

	Model 1	Model 2	Model 3
<i>Focal Independent Variables</i>			
Coworker Dissimilarity	-.820(.455)	-.850(.796)	-.863(.786)
Female	.114(.506)	-.088(.628)	.037(.645)
<i>Interaction Term</i>			
Coworker DissimilarityxFemale		-.056(.944)	.258(.935)
<i>Work and Family Conditions</i>			
Percent Women			-.005(.008)
Hours			.033(.021)
Personal Income (logged)			.469(.273)
Autonomy			-.546(.376)
Job Tenure			.002(.023)
Demands			1.868(.445)***
Children under 6			-.599(.413)
Housework Hours / wk			.043(.020)*
<i>Basic Control Variables</i>			
Age	-.066(.017)***	-.066(.017)***	-.069(.022)**
White	.837(.676)	.836(.670)	.505(.703)
Married/Cohabiting	-1.352(1.000)	-1.355(1.005)	-1.110(1.031)
Administrative	-.844(.518)	-.844(.521)	-.769(.545)
Service	.190(.777)	.190(.777)	.436(.751)
Craft	.501(1.091)	.515(1.167)	-.172(1.209)
Labor	-.435(.817)	-.426(.858)	-.714(.871)
Constant	9.677(1.639)***	9.694(1.588)***	2.996(3.247)
R ²	.037	.037	.106

Robust standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3 Ordinary Least-Squares Regression of Perceived Supervisor Gender Dissimilarity on Interpersonal Conflict (N=1473)

	Model 1	Model 2	Model 3
<i>Focal Independent Variables</i>			
Supervisor Dissimilarity	.221(.375)	-.698(.602)	-.642(.603)
Female	.438(.390)	-.198(.484)	.006(.592)
<i>Interaction Term</i>			
Supervisor DissimilarityxFemale		1.644(.764)*	1.697(.766)*
<i>Work and Family Conditions</i>			
Percent Women			.002(.008)
Hours			.052(.017)**
Personal Income (logged)			.500(.265)
Autonomy			-.152(.322)
Job Tenure			-.012(.022)
Demands			2.274(.368)***
Children under 6			-.534(.329)
Housework Hours / wk			.035(.016)*
<i>Basic Control Variables</i>			
Age	-.055(.013)***	-.055(.013)***	-.054(.015)***
White	1.429(.399)***	1.132(.394)***	1.133(.382)**
Married/Cohabiting	-1.263(.878)	-1.260(.877)	-.932(.899)
Administrative	-.687(.429)	-.705(.428)	-.486(.444)
Service	-.750(.566)	-.741(.564)	-.176(.575)
Craft	.029(.858)	-.186(.865)	-.193(.910)
Labor	-.756(.623)	-.940(.625)	-.882(.671)
Constant	7.887(1.110)***	8.292(1.135)***	-2.116(2.163)
R ²	.035	.039	.129

Robust standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

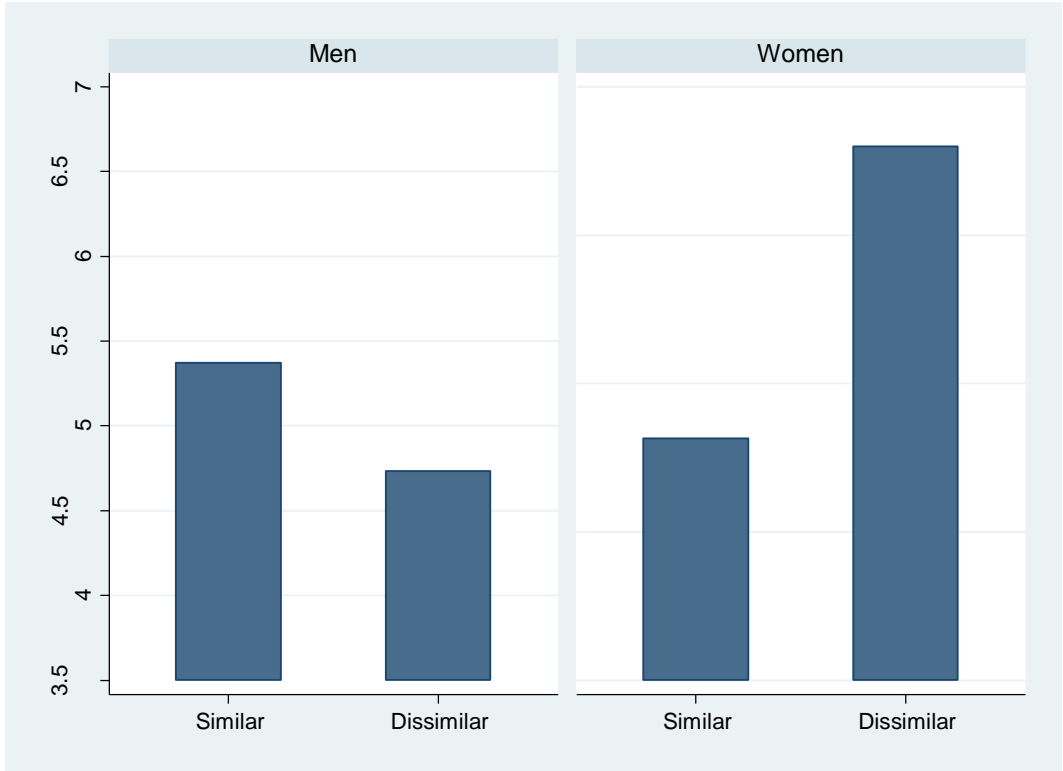


Figure 1: *The Association between Interpersonal Conflict and Supervisor Gender Dissimilarity for Men and Women*

Note: Linear predictions taken from model 3 of Table 3. All control variables are held constant at their respective means.

Table 4 Ordinary Least-Squares Regression of Perceived Subordinate Gender Dissimilarity on Interpersonal Conflict (N=678)

	Model 1	Model 2	Model 3
<i>Focal Independent Variables</i>			
Subordinate Dissimilarity	.189(.583)	-1.090(.924)	-1.248(.870)
Female	-.295(.703)	-1.285(.925)	-1.196(.975)
<i>Interaction Term</i>			
Subordinate DissimilarityxFemale		2.590(1.159)*	2.444(1.110)*
<i>Work and Family Conditions</i>			
Percent Women			-.002(.012)
Hours			.001(.028)
Personal Income (logged)			.162(.388)
Autonomy			-.381(.502)
Job Tenure			-.004(.029)
Demands			2.029(.582)***
Children under 6			-1.266(.634)*
Housework Hours / wk			-.017(.031)
<i>Basic Control Variables</i>			
Age	-.149(.028)***	-.144(.027)***	-.145(.037)***
White	.146(1.030)	.198(1.012)	.241(1.034)
Married/Cohabiting	.306(1.023)	.329(1.003)	.618(1.000)
Administrative	-.731(.686)	-.784(.682)	-.608(.711)
Service	-1.817(.927)	-1.851(.945)	-1.666(1.036)
Craft	-1.624(1.243)	-2.135(1.312)	-2.287(1.427)
Labor	-.304(1.137)	-.621(1.143)	-.858(1.275)
Constant	13.17(2.415)***	13.46(2.428)***	8.833(5.604)
R ²	.108	.117	.170

Robust standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

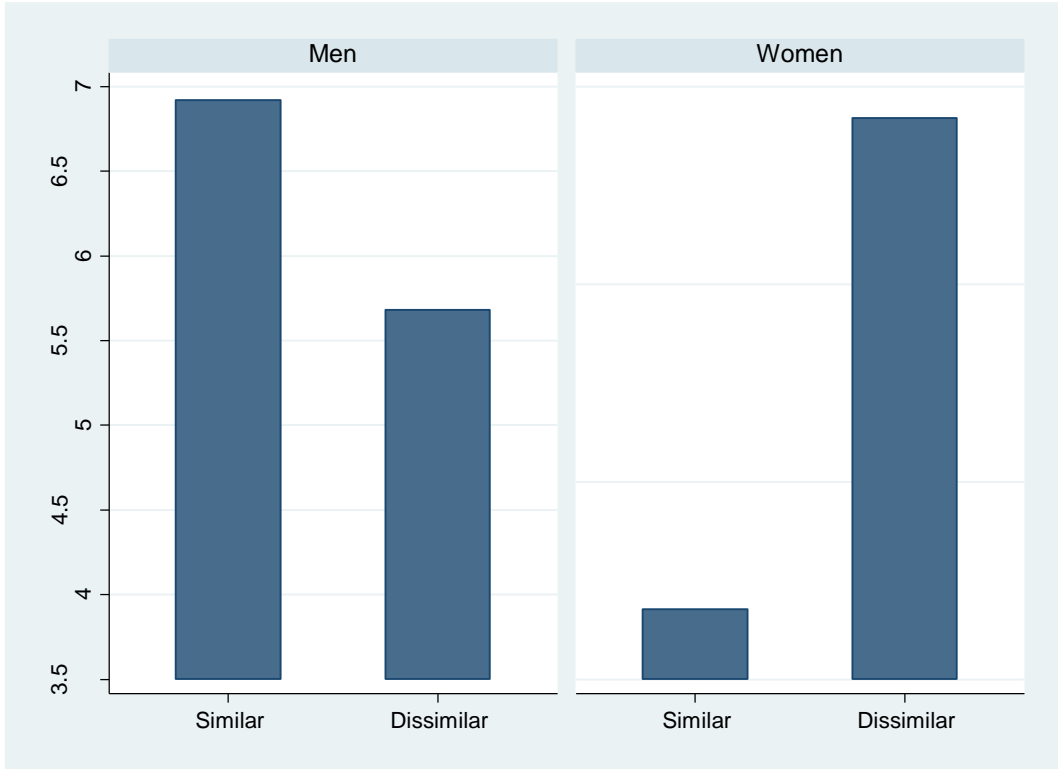


Figure 2: *The Association between Interpersonal Conflict and Subordinate Gender Dissimilarity for Men and Women*

Note: Linear predictions taken from model 3 of Table 4. All control variables are held constant at their respective means.

Chapter 5

CONCLUSION

My dissertation sought to re-examine the influence of work demands and resources, and organizational context on individuals' well-being through a gendered lens. While research on worker well-being has grown in the last two decades (Tausig 2013; Bakker & Demerouti 2017), the gendered nature of the organizations in which workers, workplaces, and occupations are embedded are often overlooked when considering worker well-being (see Taylor 2010; Turco 2010; Taylor 2016, for exceptions). Models such as the JD-R model have dominated the literature linking work and well-being, while more structural explanations of well-being have paled in comparison or considered secondarily (Tausig, 2013). This dissertation engaged a gendered organizations perspective to demonstrate the importance of context in understanding worker well-being.

Based on the findings of my research, I argue that we must go beyond family-related explanations for women's continued inequality in wages, positions in certain prestigious occupations, and the underrepresentation of women in positions of authority, all of which likely contribute to a lower accumulation of resources and subsequent negative consequences for well-being. This is not to discount family responsibilities, but these demands alone do not explain the gap between men's and women's well-being when it comes to paid work. My dissertation shed light on how gender is embedded within the organization itself and the resulting nuanced and complex pathways in which work affects the well-being of workers.

The Importance of the Gendered Organization for Worker Well-Being

The literature on workers' well-being is disconnected with individual-level job conditions considered separately from the organizational contexts in which they are produced and

reproduced. This is surprising given the rich history of sociological research demonstrating the myriad ways in which organizations influence and define worker's job tasks and provide the resources to accomplish these tasks (Tausig & Fenwick, 2011).

Theories and research on the gendered nature of organizations have demonstrated how gendered processes embedded within organizational structures serve to produce and *reproduce* inequalities in men's and women's employment outcomes including wages (Blau & Kahn 2017), promotions and occupational mobility (Lyness & Grotto, 2018), and social networks (Casciaro & Piskorski, 2005). However, the ways in which these gendered processes influence work conditions, which in turn, influence worker well-being are not well understood.

Two theoretical concepts from the gendered organizations literature help us understand how aspects of the organization may influence worker well-being. First, proportional representation, where gender segregation of occupations leads to an underrepresentation of a specific group at the level of the workplace, has been touted as an explanation for women's continued inequality in male-dominated occupations (Kanter, 1977; Jackson, Thoits & Taylor 1995; Taylor, 2016). Alternatively, theories on the devaluation of women's work suggests female-dominated occupations are often evaluated as requiring less skill, despite evidence to the contrary (England, 2018). This results in fewer resources allocated to these occupations in the form of wages, promotion, and other benefits (Tausig, 2013).

Chapter 2 of this dissertation contributes to this discussion by using a novel analytical method (the random forest) that allowed the examination of the importance of predictors from the JD-R model and the gendered organization paradigm on worker well-being outcomes including psychological distress, anger, job dissatisfaction and turnover intentions. Using data from the 2005 Work Stress and Health Survey, my results demonstrated that predictors

associated with the gendered organization paradigm, particularly the percent of women in an occupation, were consistently more important for predicting the outcomes than common predictors considered by the JD-R model such as autonomy and schedule control. By using the random forest method, I was able to consider multiple predictors simultaneously to begin to tease apart and compare the importance of work-related predictors on worker well-being. The results of this chapter served as a catalyst for chapter 3 that examined the intersection of the gendered nature of the workplace and the occupation to better understand their effect on worker well-being.

The Contingent Effect of Workplace and Occupational Dissimilarity on Worker Well-Being

Chapter 3 aimed to examine these associations from chapter 2 in more detail. In particular, this chapter examined the intersection of the gendered context of the workplace and occupation and how the contingent nature of these two contexts combine to influence worker well-being.

I drew upon theories of proportional representation (Kanter, 1977; Williams, 1995), and hypothesized that women in workplaces that were gender dissimilar would experience greater well-being consequences than men in gender dissimilar workplaces. I argued that the workplace and the occupation/organization within which they exist cannot be considered separately. I hypothesized that the effect of being in a gender dissimilar workplace on worker well-being would be contingent on the gendered context of the occupation.

Results supported my hypotheses. While evidence showed that women in dissimilar workplaces experience more negative well-being consequences than men, the effect of being in a gender dissimilar workplace on well-being was worse in occupations that were female-

dominated. I argue that while the gender composition of the workplace affects worker well-being and that this impact varies for men and women, this association needs to be examined within the gendered context of the occupation or organization in which the worker is embedded.

Interpersonal Consequences of the Gendered Organization on Worker Well-Being

The fourth chapter of my dissertation explored the interpersonal work demand, interpersonal conflict, shown to be an important predictor of the distress outcomes in chapter 2. I build on theories of proportional representation and the gendered organization to argue that the effects of gender dissimilarities in the workplace are not all created equal, but instead, gendered power dynamics influence these associations. The results support this argument: The effects of gender dissimilarity in the workplace plays out differently depending on the location of gender dissimilar others within the hierarchy of a workplace. In particular, interpersonal conflict was worse for women if they had a gender dissimilar supervisor or subordinate compared to men or women with gender similar supervisors/subordinates. However, this was not the case when considering gender dissimilar coworkers drawing attention to the need to consider power dynamics and the structure of the workplace when disentangling the interpersonal dynamics at work that influence worker well-being.

Contribution to the Literature on Work and Well-Being

Each chapter in this dissertation is distinct yet related to the others. Taken together, research conducted in my dissertation explored the interconnection between the organization and the occupations, workplaces, and workers experiences within these structures through a gendered lens. My dissertation draws attention to an overarching theme that contributes to the advancement of our understanding of how work affects worker well-being: the importance of the gendered organization.

In particular, my dissertation aimed to make the following contributions. First, I have brought together two distinct, yet related literatures that have rarely been considered together: the work and well-being literature and the literature on the gendered organization. Second, I have argued that devaluation theory should not just be used to explain wage and/or prestige differences between male and female-dominated occupations but that devaluation of an occupation has implications for worker well-being. Finally, I have used a representative sample and quantitative methods, both novel and traditional, to examine overarching patterns. This does not limit the results to one occupation as is often the case in the existing literature. In turn, my results extend to a general pattern that highlights the point that not all occupations are created equally, and whether they are male or female-dominated has consequences for worker well-being.

Limitations and Future Research

While this dissertation makes a substantial contribution to the literature on work and well-being, there are still several limitations and opportunities for further research.

First, due to limitations of the data and sample size, I was unable to disaggregate further in certain instances to examine differences for men and women or across occupational categories. This was particularly true for chapter 2. Results from this paper were particularly complex and I was only able to theorize about the nature of the associations observed. It would have been ideal to separate the gender of the individual and/or different occupations in the interpretation of these results. Future research should consider further examining the interconnection between the occupation and the workplace using large datasets and various methodologies to sharpen our understanding of the mechanisms through which the organizational context may influence day-to-day operations to influence worker well-being.

Second, scholars in the area of gender and work have largely focused on the need for intersectional analyses, showing, over and over, the importance of considering the intersections of gender with other characteristics known to create inequalities related to work such as race/ethnicity, sexuality and class (see for example Acker, 2012; Wingfield, 2009). For example, Wingfield (2009) showed that the glass escalator phenomenon, known to foster men's upward mobility at a faster rate than women's in female-dominated occupations, did not apply in the same way to Black men. Unfortunately, these potential analyses were beyond the scope of this dissertation and were largely constrained by the data used (i.e., binary classification of gender, and small cell sizes across other minority and demographic features of respondents, for example). Despite this, my dissertation drew attention to certain contingencies that require more consideration. For example, in chapter 2, income and age were consistently found to be top predictors of mental health outcomes (psychological distress and anger) as well as other worker well-being outcomes (job dissatisfaction and turnover intentions), highlighting the need to explore the intersections of age, class, and gender of the individual and how these intersections exacerbate or attenuate the influence of the gendered organization on worker well-being. Future research should consider these intersections.

Third, the data used for the analyses in this dissertation are from 2005 which may result in missing changes that have occurred since then. However, recent research suggests that, despite some strides, gender segregation of occupations still persists, particularly in female-dominated occupations (Torre, 2018; England, 2010). Furthermore, this data was collected at a time when women's labour force participation reached unprecedented levels (BLS, 2014) and many scholars were testing and challenging gendered theories of organization such as proportional representation and the glass escalator (Acker, 1990; Floge & Merrill, 1986; Hultin, 2003;

Williams, 1995; Yoder, 1991). This allows my dissertation to uniquely contribute to those arguments with data collected in a similar time period.

Fourth, I use American data that makes these analyses particularly constrained to a political context characterized by neo-liberalism and fewer universal family-supportive policies. Therefore, future research should consider comparative studies focused on international comparisons to deepen our understanding of how differential contexts may influence results related to the gendered organization.

Finally, while my dissertation focuses largely on theories of the gendered organization, I was only able to include two indicators to reflect the gendered context of organizations: 1) The perceived gender composition of the workplace; and 2) the aggregate gender composition of the occupation. These reflect specific theoretical aspects of the gendered organization, namely workplace/group proportional representation and occupational devaluation. Nevertheless, there are other, more specific approaches in which the gendered organization could be conceptualized and operationalized. Future research should consider looking more closely at the ways in which the gendered organization reproduces inequality in health and well-being to better understand which mechanisms in particular serve to perpetuate these inequalities.

Despite these limitations, my dissertation advances research on worker well-being from both a theoretical and analytical angle. The influence of job conditions on worker well-being can never be fully understood without taking into account the organizations within which workers are embedded. Gender inequality research must go beyond individual-level work and family circumstances to consider the organizational structures that produce and perpetuate the unequal distributions of resources among men and women across occupations. In doing so we can arrive at a more coherent perspective of gendered patterns of worker well-being.

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