

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2022

Overeating as a Coping Response to Workplace Gender Discrimination: The Role of Resilience and Social Support

Rosemarie Charmain Mitchell Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Psychology Commons, and the Public Health Education and Promotion Commons

Walden University

College of Psychology and Community Services

This is to certify that the doctoral dissertation by

Rosemarie Mitchell

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Silvia Bigatti, Committee Chairperson, Psychology Faculty
Dr. Debra Wilson, Committee Member, Psychology Faculty
Dr. Peggy Gallaher, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2022

Abstract

Overeating as a Coping Response to Workplace Gender Discrimination: The Role of Resilience and Social Support

by

Rosemarie Mitchell

MS, City College, 2009 MS, Cornell University, 2000

BA, Hunter College, 1998

Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

Walden University

September, 2022

Abstract

Gender discrimination in the workplace continues to be a persistent source of stress for women even after 5 decades of antidiscrimination legislation in the United States. Women are more likely than men to cope with stress by overeating, which is a risk factor for chronic illnesses and obesity. Much less is known about the protective factors that could weaken the association between perceived stress and overeating. The purpose of this quantitative study was to address this gap in the literature by examining whether resilience and social support are moderators of the overeating response for women who have experienced gender discrimination in the workplace. The transactional theory of stress and coping was used to evaluate the processes involved in coping with perceived stress and provided the theoretical framework in this study to address the research questions of whether resilience and social support moderated the relationship between gender discrimination in the workplace and overeating. A correlational design was employed using a self-report survey for a total of N = 315 participants who were working women ages 40-65 and who have worked for pay for 20 years or more. Results indicated that resilience and supervisor social support were not moderators of the association between gender discrimination in the workplace and overeating. Although the null hypotheses could not be rejected, the findings of this study may be useful to managers developing policies and programs that support inclusive workplaces. The findings from this study may also initiate positive social change by helping clinicians, social workers, and medical professionals to design appropriate treatment interventions for women who overeat in response to exposure to gender discrimination in the workplace.

Overeating as a Coping Response to Workplace Gender Discrimination: The Role of Resilience and Social Support

by

Rosemarie Mitchell

MS, City College, 2009 MS, Cornell University,2000

BA, Hunter College,1998

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Health Psychology

Walden University

September, 2022

Dedication

I dedicate this work to my father, the late Roy Livingston Clare McFarlane who was a scholar, and who first planted the seeds in my mind of pursuing a doctoral degree. I also dedicate this work to my sister Pam, whose constant support and generosity made this achievement possible. Lastly, I dedicate this work to my son Alec who has always believed in me and expected me to complete it.

Acknowledgments

I want to express sincere gratitude to my dissertation chair, Dr. Silvia Bigatti and my committee member Dr. Debra Wilson for their wisdom and guidance, and for holding me to high standards of academic performance. I have never felt so supported in an academic environment before and I am deeply grateful for your patience and expertise.

Table of Contents

List of Tables	iv
List of Figures	V
Chapter 1: Introduction to the Study	1
Background	3
Problem Statement	5
Purpose of the Study	6
Research Questions and Hypotheses	7
Conceptual Framework for the Study	8
Nature of the Study	9
Definitions	10
Assumptions	10
Scope and Delimitations	11
Limitations	11
Significance	12
Summary	12
Chapter 2: Literature Review	14
Literature Search Strategy	15
Theoretical Foundation	15
Stress	17
Gender Differences in Stress	
Gender Discrimination in the Workplace	19

	Overeating	20
	Overeating in Response to Stress	21
	Gender Differences in Stress and Overeating	23
	Gender Discrimination and Overeating	23
	Resilience and Social Support	24
	Resilience and Perceived Stress	24
	Social Support and Perceived Stress	25
	Stress Buffering Role of Resilience and Social Support	26
	Summary and Conclusions	27
Ch	napter 3: Research Method	29
	Research Design and Rationale	29
	Methodology	30
	Population	30
	Procedures	31
	Participants	31
	Data Collection	31
	Measures	32
	Data Analysis Plan	36
	Research Questions and Hypotheses	36
	Threats to Validity	39
	Ethical Procedures	39
	Summary	41

Chapter 4: Research Findings	42
Data Collection	43
Missing Data	43
Descriptive Statistics	43
Descriptive Information for Predictor and Moderator Variables: GDW	46
Examination of Multivariate Assumptions	47
Results 52	
Research Question 1	52
Research Question 2	53
Summary	54
Chapter 5: Discussion, Conclusions, and Recommendations	55
Interpretation of the Findings	56
Hypothesis 1	56
Hypothesis 2	57
Gender Discrimination in the Workplace and Overeating	59
Resilience and Social Support	60
Limitations	62
Recommendations	63
Implications for Positive Social Change	64
Conclusion	65
References	67

List of Tables

Table 1. Demographic Characteristics of Study Participants	. 45
Table 2. Descriptive Statistics of All Variables	. 47
Table 3. Correlation of Study Variables	. 50
Table 4. Prediction Model With Resilience as Moderator (RQ1)	. 52
Table 5. Prediction Model With Supervisor Social Support as Moderator (RO2)	. 53

List of Figures

Figure 1. Resilience as a Moderator Between Gender Discrimination and Overes	ating 38
Figure 2. Supervisor Social Support as a Moderator Between Gender Discrimina	ation and
Overeating	38

Chapter 1: Introduction to the Study

Despite more than 50 years of antidiscrimination legislation, full gender equity in U.S. workplaces remains elusive. The persistence of the gender pay gap means that the average full-time working woman earns around 81.1% of the wage of her male counterpart (Meara et al., 2020), that women continue to face discrimination when it comes to recruitment and selection practices (Baert, 2018), and that they are repeatedly overlooked in promotion decisions in favor of male peers (Webster et al., 2018).

Discrimination by gender is recognized as a stressor that can have a significant and injurious effect on women's wellbeing (Attell et al., 2017). However, while there is much knowledge on the manifestations of discrimination in the workplace, relatively limited research has examined the coping mechanisms employed by women who experience it. One coping mechanism that women might use is overeating (Calvert et al., 2014), but there is a lack of knowledge on the degree to which overeating is employed by women as a coping strategy, and the personal and social resources on which they may draw as a support mechanism.

Overeating as a coping mechanism is problematic because it has a maladaptive effect on health and is ineffective in reducing the experience of stress (Holton et al., 2016). People tend to reduce healthy eating habits when faced with stress (Schultchen et al., 2019), and this can factor into the type and quantity of food consumed in response to stress. Women tend to report higher levels of perceived stress (Constant et al., 2018) and are therefore more likely to overeat when the stress in their lives increases (Hardin et al., 2018). Overeating is also associated with the prevalence of obesity, which is a high-risk

factor for heart disease, diabetes, and cancer (Akamatsu, 2016). Furthermore, because overeating is associated with negative health outcomes, it follows that an exploration of protective factors that may weaken the association between perceived stress and the overeating response is justified.

In the extant literature, the problem of overeating in response to stress has been examined as emotional eating, which was not the goal of this study. Overeating and emotional eating are not one and the same. Emotional eating has been defined as eating larger than normal portions in response to negative emotions (Triana et al., 2019) such as anxiety and irritability (Frayn & Knäuper, 2018), and is associated with a loss of control (Yang & Han, 2020). Furthermore, Goldschmidt et al. (2016) noted that emotional eating is associated with binge eating disorder (BED), which is classified in DSM-5 (Bohon, 2019) as associated with pathological eating behaviors (Wever et al., 2018). On the other hand, overeating can occur in response to both positive and negative emotional states (Frayn & Knäuper, 2018) as well as other situational cues to eat, and is not always characterized by pathological behaviors (Triana et al., 2019). I avoided studies focused on the concept of emotional eating in the literature reviewed in this research.

In the present study, I examined whether two protective factors, resilience, or the ability to bounce back from challenges, and supervisor social support, moderated the relationship between the stressful experience of gender discrimination and overeating as a coping response. The knowledge derived from this study may provide insight for clinicians, social workers and medical professionals in developing treatment interventions for women who overeat as a coping response to exposure to discrimination. The findings

of the study could also be used by managers developing policies and programs to support inclusive workplaces and positive social change. In the remainder of this chapter, the background to the problem is further elaborated, the problem statement is outlined, and the purpose of the study, research questions and hypotheses, conceptual framework, nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance of the study are discussed.

Background

Overeating in response to stress is highly prevalent (Tomiyama, 2019), with 39% of adults in the United States self-reporting that they eat larger than normal portions at mealtime (Goldschmidt et al., 2016) to the point of being stuffed (Liu et al., 2017), or snack unconsciously in response to stress (Rogerson et al., 2016). Studies have shown that women crave and are more likely to overeat palatable foods in response to stress (Boswell et al., 2016) compared to men (Constant et al., 2018), and that they are more likely to select comfort foods with elevated sugar and salt contents and low nutritive value when stressed (Bartolomucci et al., 2017). This eating behavior can lead to severe health consequences such as diabetes, hypertension, and high cholesterol (Belter et al., 2016).

For working women, stress is a common occurrence (Ahadzadeh et al., 2017), and for some working women, there is high level of stress because they experience gender discrimination at work (GDW) Himmelstein et al., 2015). It is illegal for an employer to discriminate against anyone because of gender by treating them in a manner that negatively affects them or the terms or conditions of their employment (Park, 2018).

Under U.S. law, GDW can manifest itself in many ways, such as sexual harassment, exposure to sexist remarks, verbal and nonverbal negative behavior, being micromanaged, given limited access to job trainings, and being passed over for promotion simply because of an individual's gender (Attell et al., 2017). A total of 23,532 charges of GDW were made in 2019 (U.S. Equal Employment Opportunity Commission, 2020), which is likely only a portion of cases since GDW is considered heavily underreported (Mizzi, 2017).

As with other forms of stress, GDW can lead to overeating (Calvert et al., 2014). However, not all women respond to GDW stress by overeating (Garaulet et al., 2012), and studies show that there are psychological resources (Rabenu & Yaniv, 2017) and other protective factors that may make it more or less likely for women to overeat when exposed to GDW (Abdullah et al., 2013). Other studies have demonstrated that resilience mitigates the psychological effects of stress (Shatté et al., 2016) and that social support is protective against the adverse effects of stressful working environments (Lian & Tam, 2014). For example, Robertson et al. (2015) found that although resilience was widely reported to have positive effects on mental health, inconsistencies in measuring the variable across studies resulted in tentative conclusions. Johnstone and Feeney (2015) found that social support bolstered individuals who experience stress against maladaptive responses.

Studies such as these indicate that resilience and social support can often act as a moderator of the stress that individuals experience when they are experiencing discrimination at work. However, no known study has examined the roles of resilience

and social support in moderating overeating as a response to experiencing gender discrimination. Given the negative consequences of overeating on health, exploration of resources that could weaken the effects of the association between GDW and overeating, namely resilience and social support, would be of value (Hardin et al., 2018).

Problem Statement

Resilience is an intrapersonal psychological resource that has been defined as the ability to bounce back and achieve positive outcomes in the face of adversity (Hardin et al., 2018). This persistent and sustained effort and perseverance typically stems from some internalized, purpose-driven desire or personal strength and is a particular benefit for individuals who work in challenging occupational environments (Mishra & McDonald, 2017).

Resilience can decrease negative outcomes by providing insight and perspective on alternative positive courses of action (Bernburg et al., 2015). Researchers have shown correlations of resilience with outcomes such as subjective well-being, greater life satisfaction, and improved mental health (Robertson et al., 2015). Resilience has been shown to contribute positively to feelings of well-being (Harker et al., 2015). Studies also show that negative outcomes associated with job burnout are moderated by resilience (Bajaj & Pande, 2016).

Similarly, social support has been categorized as an important interpersonal resource (Johnstone & Feeney, 2015). Care and protection from family and friends can assist individuals exposed to stressors in sustaining positive feelings and adapting, thus buffering the negative health behaviors associated with stress by increasing perceptions

of the ability to use problem solving strategies to reduce depression and anxiety (Cai et al., 2014). The perception of having high levels of social support can reduce the level of perceived stress and increase the perception of ability to cope (Giurgescu et al., 2015). Martínez (2019) called for further exploration of the association between social support and eating habits and asserted that more studies are needed to confirm the association between social support from family and friends and positive eating behaviors.

Clearly, resilience and social support are important resources in preventing individuals from suffering negative personal outcomes because of stress. However, there is a gap in the literature in understanding whether resilience and social support moderate the association between the experience of GDW and overeating (Himmelstein et al., 2015). Although several studies have examined the role of resilience and social support in clinical settings, less is known about their role in moderating workplace stressors for women (Lian & Tam, 2014). This study sought to address this gap by focusing on the protective roles of these variables in the relationship between GDW and the overeating response.

Purpose of the Study

The purpose of this study was to examine whether resilience and social support are moderators of the overeating coping response for women who experience the stress of GDW. Resilience and social support are supported by behavioral theorists as positively associated with improvements in lifestyle behaviors (Lian & Tam, 2014) and reduction in negative outcomes (Bernburg et al., 2015). The relationship between stress and overeating has been established (Constant et al., 2018), and resilience and social support

have been identified as buffers against the negative outcomes caused by stress (Harker et al., 2015). However, what has not yet been explored is whether resilience and social support can protect against the adverse overeating effects associated with GDW (Clum et al., 2014). This gap in the literature would be filled by exploring whether these variables serve as moderators between GDW and overeating (Rani & Yadapadithaya, 2018).

Research Questions and Hypotheses

RQ1: Does resilience moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who have worked for pay for 20 years or more?

 H_01 : Resilience does not statistically significantly moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who have worked for pay for 20 years or more.

 H_11 : Resilience does statistically significantly moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who have worked for pay for 20 years or more?

RQ2: Does social support moderate the relationship between experience of GDW and overeating?

 H_02 : Social support does not statistically significantly moderate the relationship between experience of GDW and overeating.

 H_12 : Social support does statistically significantly moderate the relationship between experience of GDW and overeating.

Conceptual Framework for the Study

Folkman and Lazarus's transactional theory of stress and coping provides a framework for evaluating the process of coping with stress and emotions (Lazarus & Folkman, 1984). Under this theoretical framework, environmental stressors such as GDW can lead to maladaptive responses such as overeating (Calvert et al., 2014). This theory explains why variations exist in the way different people respond to stressors or antecedents, defined as the factors that trigger stress and lead to negative mood states (Solomon, 2001). The transactional theory of stress and coping has been used historically to help to understand and achieve adaptive outcomes in the field of health, and to reduce maladaptive coping behaviors (Folkman & Lazarus, 1988).

This model would be appropriate as a framework for addressing the research question, which asks whether resilience and social support moderate the relationship between the experience of GDW and overeating. It would also be appropriate for examining the role of contributing factors such as resilience and social support to account for differences in overeating behavior because according to Folkman and Lazarus (1988), stress is a perceived feeling based on individual appraisal. Environmental conditions, such as gender discrimination, that may be perceived as stressful by one individual, may not be perceived as stressful by another (Manochi, 2017). Furthermore, multiple pieces of research have indicated that management of stressful situations and encounters is a gendered process (Fakunmoju, 2018; Fila et al., 2017). For instance, Zurlo et al. (2020) found that male nurses experienced less stress when they felt more autonomous, but female nurses had more favorable outcomes with perceived social support. Fila et al.

(2017) posited that men responded positively to increasing demands and more control in their workflow, whereas the opposite was true for women. The commonly used transactional theory of stress and coping is therefore suitable for research that focuses on the behavioral responses to a gender discrimination event and was further discussed in Chapter 2.

Nature of the Study

For this study, I used a cross-sectional, quantitative, self-report survey method design. A quantitative approach was appropriate because the relationship between the variables is being examined and survey research measures characteristics of the population numerically. The predictor variable was gender discrimination in the workplace, the dependent variable was overeating, and the potential moderating variables were resilience and social support. Centiment (https://www.centiment.co), which is a national database with diverse representation and random sampling capabilities was used to recruit and assess participants for the study, who were national working women ages 40–65 who worked for pay for 20 years or more.

The Salzburg Stress Eating Scale (SSES; Meule et al., 2018) was developed for a study in Germany and Austria, and the authors developed English and German versions of the scale. Although it correlates with emotional eating, it is not considered an emotional eating scale and was designed to measure stress-related eating. The 10-item SSES contains response categories rated on a 5-point Likert scale (1 = I eat much less than usual to 5 = I eat much more than usual) and is based on the Mood Eating Scale and the Perceived Stress Scale. The 20-item Schedule of Sexist Events (SSE; Klonoff &

Landrine, 1995) measures perceptions of gender discrimination as sexist events that can occur in women's experiences. The 25-item Resilience at Work Scale (RAW; Winwood et al., 2013) was developed to measure workplace resilience in response to the pressures of work across seven dimensions including managing stress. The Support Appraisal for Work Stressors Inventory (SAWS; Lawrence et al., 2007) is a 12-item inventory developed to assess the role of three sources of support and four support functions.

Definitions

Gender discrimination in the workplace: Any manifestation of negative treatment of an individual because of gender, such as sexual harassment, exposure to sexist remarks, verbal and non-verbal negative behavior, being micromanaged, given limited access to job trainings, and being passed over for promotion (Attell et al., 2017).

Overeating: Consuming excess food and calories than the body needs to expend for energy (Bartolomucci et al., 2017).

Resilience: A protective factor that enhances the individual's ability to manage the negative impacts of work stress (Lian & Tam, 2014).

Social support: The perception that an individual is protected, cared for, and assisted by members of their social network (Johnstone & Feeney, 2015).

Assumptions

The data were collected using a self-report anonymous format, and it was assumed that the participants in the study understood the data collection instrument and provided truthful answers, unaffected by social desirability. Measures to reduce social desirability such as self-report and anonymity are important in order to improve the

potential for participants to provide responses that are an accurate reflection of reality (Larson, 2019). It was also assumed that the data collected would contribute to the topic of gender discrimination in the workplace and the relationship to overeating, resilience and social support.

Scope and Delimitations

The research sample was limited to working women ages 40–65 who worked for pay for 20 years or more. There are many other types of stress that can exist in an occupational setting, such as workplace bullying and time pressures, and while these might cause overeating, they were beyond the scope of this study. Men were excluded from this study, although it was acknowledged that men too can experience GDW. The study also excluded women who have experienced gender discrimination in a non-work setting.

Limitations

Several limitations should be acknowledged. Participants were all female, so the results of the study may not be generalizable to men. In fact, a non-probability-based sampling procedure was used, which would likely mean that the sample was not representative of the full population of working women. This would also impact the ability to generalize the results of the study beyond the sample. Recruiting all of the participants online further limited generalizability.

Efforts to control for demographics such as age, race, ethnicity, education, and annual income were made, however, there may have been other characteristics that impacted personal responses to gender discrimination which were not captured in the data

collection procedure. Furthermore, self-reports have a percentage of bias that may be difficult to control (Story & Tait, 2019).

Significance

The results of this study may contribute to the under researched area of potential protective factors that buffer against job stress (Harker et al., 2015), specifically gender discrimination-related stress for women (Johnstone & Feeney, 2015). Insights from this study may facilitate future studies on resilience and social support as contributing factors to the reduction of maladaptive responses such as overeating (Bajaj & Pande, 2016). Addressing gaps in the literature may impact the choice of resources offered by human resources departments to manage chronic stress at work and make positive social change (Robertson et al., 2015). The results from this study may also inform interventions targeted at reducing or eliminating unhealthy responses to stress that negatively impact job satisfaction and productivity (Boutelle et al., 2018).

Summary

This chapter introduced a study that examined whether resilience and social support moderate the relationship between experience of GDW and overeating as a coping response in women. The chapter provided contextual information that demonstrates that in spite of legislative efforts, gender discrimination continues to be a major problem in workplaces. Previous studies have demonstrated that overeating is a common emotion-focused (Guiné et al., 2020) coping response to stressors (Bartolomucci et al., 2017; Constant et al., 2018), and that resilience and social support are able to act as a buffer (Harker et al., 2015; Johnstone & Feeney, 2015; Laschinger & Nosko, 2015).

However, there is a lack of understanding of the degree to which resilience and social support can protect women against overeating as a coping response to GDW (Clum et al., 2014). This study was intended to address this gap in the literature. Chapter 2 offers a critical review of the current literature on resilience, social support, gender discrimination and overeating.

Chapter 2: Literature Review

This chapter begins with an overview of stress and the role of stress in negative health outcomes and gender differences in perceived stress, followed by a discussion of the research regarding Folkman and Lazarus's transactional theory of stress and coping as an appropriate framework for the present study (Lazarus & Folkman, 1984) as it connects stress to negative outcomes. In the present study, gender discrimination in the workplace is an environmental stressor that may lead to overeating as a maladaptive response. This chapter includes a description of the components of the transactional theory and explanation of individual variations in response. I discuss the association between overeating and stress and the problem of overeating as a stress response was further examined, and information about overeating as an unconscious eating pattern, physiological malfunctions that cause overeating, and associated health risks. The current research regarding gender discrimination in the workplace are also discussed. I then review literature on the problems with women being more likely to be affected by gender discrimination and the potential physiological and psychological effects of gender discrimination and overeating as a stress response. The related literature regarding resilience and social support as potential psychological resources that moderated gender discrimination are summarized. The chapter closes with a summary discussing the interaction between the chosen variables of gender discrimination, overeating, resilience and social support, and the hypotheses to be tested.

Literature Search Strategy

I conducted a search of the literature using the terms gender discrimination, gender-based discrimination, gender discrimination in the workplace, sexist events, sex discrimination, gender discrimination and overeating, overeating and stress, overeating and gender, stress-related eating, workplace resilience, resilience and stress, social support and stress, and protective factors that buffer stress. The searches were done in a variety of databases, including Academic Search Complete, Business Source Complete, CINAHL, Medline Combined, Google Scholar, Psych Info and Thoreau, to get differing views from business, psychology, and other behavioral sciences. The dates searched were 2014–2021. I explored review articles, current research and seminal articles; reviewed related citations for additional information; and consulted the American Psychological Association (APA) manual for information related to citations, sources, and references. Walden Library and Google Scholar were used frequently to research information.

Theoretical Foundation

The transactional theory of stress and coping developed by Lazarus and his colleagues (Folkman & Lazarus, 1984) has been used historically to explore adaptive outcomes in the field of health, and to understand maladaptive coping behaviors. It provides a framework for evaluating the process of coping with stress and emotions and offers two main processes of cognitive appraisal and coping as mediators of stressful circumstances and their outcomes (Folkman et al., 1986). Through cognitive appraisal, the individual does a primary appraisal to determine whether a situation should be deemed a threat or not, and the conclusions drawn from this appraisal contribute to the

type of emotions experienced and the intensity (Folkman & Lazarus, 1988). In other words, if the individual perceived a threat from discriminatory work practices, the emotions experienced might include anger and shame. These emotions would lead to adaptive responses or maladaptive responses that have negative psychological and physiological consequences. Through a secondary appraisal, the individual would determine whether they have the sufficient resources to cope with the situation or not. This evaluation affects the type of coping strategy employed to address the encounter. If the individual perceives that they can do something to change their situation (problem-solving coping) and sees themselves as having the internal and external resources available, they will feel empowered and appraise the situation as less threatening. Conversely, if they perceive that their situation is unchangeable and that they lack personal resources, such as resilience or access to social support, then emotions such as helplessness and defeat may lead to maladaptive and avoidant coping behaviors, often associated with depression and anxiety.

Under this theoretical framework, environmental stressors such as GDW would be considered as a stressor or antecedent. These are factors that trigger stress and may produce maladaptive coping responses (Solomon, 2001), such as overeating in this research study. Maladaptive responses such as overeating (Calvert et al., 2014) would be the outcome in this framework, based on the cognitive appraisal of the perceived threat, the available personal resources, and the emotions associated with the perception of their ability to cope (Folkman & Lazarus, 1988). Contributing factors such as resilience and social support would account for variations in the response to the stressor, GDW. For

example, not all women exposed to GDW respond by overeating, and according to this framework, circumstances that are appraised as stressful by one individual may not be by another (Manochi, 2017).

The transactional theory of stress and coping has been used widely to provide a framework for evaluating the process of coping with stress and explaining variations in responses and outcomes. This makes it appropriate for addressing the research question, which asks whether resilience and social support moderate the relationship between the experience of GDW and overeating. Additionally, strong evidence exists that management of stressful situations and encounters is a gendered process (Attell et al., 2017). For example, Bonneville-Roussy et al. (2017) asserted that women and men differ in the way they perceive and cope with stress.

Stress

Stress has been described as a product of an interaction between an individual and the environment (Sanaeinasab et al., 2017), where the individual appraises the perceived threat of a situation based on their perception of the resources available to them (Koenig, 2017). A myriad of physical health problems, such as cardiovascular disease, result from stress (Carroll et al., 2017). For individuals who lack internal and external resources to help buffer the effects of stress, it can lead to severe health conditions that can cause both psychological and physical harm (Hassard et al., 2018). Responses to stress may vary based on individual characteristics, the environment, accessibility to internal and external resources (Johnstone & Feeney, 2015), and gender (Attell et al., 2017). In the study, I

examined the effects of resilience (internal) and social support (external) as resources that protect women from the stress of GWD.

Gender Differences in Stress

The topic of gender differences in the stress response has been widely explored, and there is evidence that men and women respond differently to stressful situations (Sankar et al., 2018). Women perceive themselves as having more stress in their daily lives than men do (Bonneville-Roussy et al., 2017). This may be because women encounter different types of stress daily more frequently than men (Calvarese, 2015), such as childcare, running a household, and working a full-time job with excessive overtime hours (Gabriel et al., 2016). Consequently, this may lead to feelings of overwhelm and reactions such as worry, distress, despair, and self-blame (Anbumalar et al., 2017).

Women cope with stress differently than men, by utilizing external resources such as family and friends (Attell et al., 2017), compared to men who attempt to solve their problems alone using internal resources (Lee & Cho, 2016). Women tend to use emotion-based coping strategies (Gabriel et al., 2016) to manage the emotions associated with stressful situations, whereas men tend to use a problem-focused approach targeted solely at solving the problem (Van den Brande et al., 2016). Men also tend to externalize their response to stress through aggressive behavior and excessive drinking (Seo et al., 2017).

One explanation for this is that feminine and masculine gender roles are based on social and cultural norms (Van den Brande et al., 2016), in which work outside of the home has become associated with masculinity and traits such as dominance and

assertiveness (Par et al., 2015). On the other hand, feminine roles have been associated with caretaking and domestic work within the home, and traits such as nurturance and emotional sensitivity (Street et al., 2018).

Gender Discrimination in the Workplace

Gender discrimination in the workplace is a significant source of chronic and persistent stress (Manjunatha & Renukamurthy, 2017) and is the predictor variable in the research study. GDW describes the inequitable treatment of women and men in the workplace and refers to workplace decisions that are based on the individual's gender, rather than on their performance (Kim & Park, 2018; SteelFisher et al., 2019). GDW is therefore recognized by the United Nations (UN) and other organizations as an unfair practice (George et al., 2016; Sipe et al., 2016; Triana et al., 2019) that creates inequities in salaries, promotions, performance assessments and other rewards (George et al., 2016; Sipe et al., 2016; SteelFisher et al., 2019). Unfair practices such as discriminatory hiring practices, higher work expectations, fewer opportunities for career advancement, and limited access to information have persisted (Street et al., 2018). However, when women report incidences of perceived gender discrimination in the workplace to authorities it may have negative repercussions, such as exclusion from important meetings or limited access to advancement within the organization (Galupo & Resnick, 2016).

There is evidence that women are more likely to be targets of GDW (Johnstone & Feeney, 2015; Triana et al., 2019) and more likely to experience less political power in the workplace (Webster et al., 2018). They are excluded from positions of power in subtle ways (Van den Brande et al., 2016) and experience subtler forms of discrimination

(SteelFisher et al., 2019). Due to underrepresentation and lack of power, many women who work in male-dominated environments such as construction companies or car dealerships perceive gender discrimination more keenly than women who work in other settings (Jaffe, 2017). Lower compensation for comparable work (Street et al., 2018) and the need to work harder to prove themselves in order to qualify for promotions (Webster et al., 2018) still exists in many organizations.

GDW has debilitating effects on the individual's physiological and psychological response. Injustices at work, such as gender discrimination, are sources of chronic stress that can lead to maladaptive responses such as overeating (Kelly et al., 2020) and negative health conditions such as mental health disorders (Hassard et al., 2018), insomnia, anxiety, and depression (Bencsik et al., 2019). In one study of male and female Arab Americans, Assari and Lankarani (2017) found that there was a strong association between gender discrimination and unhealthy psychological symptoms, high blood pressure, heart disease, and other chronic stress conditions (Kim & Park, 2018). Increased feelings of vulnerability can lead to health problems such as depression and anxiety (Lekchiri & Kamm, 2020) that limit psychological and physiological health (Assari & Lankarani, 2017). Gender discrimination can also trigger negative physical and mental health outcomes, and studies show that gender discrimination may be associated with maladaptive coping responses such as overeating.

Overeating

Overeating is the outcome variable in this research study. Past research suggests that emotionally driven eating occurs when individuals are attempting to manage

negative emotional states (Willem et al., 2019). When adaptive emotion regulation strategies are used, emotions are managed without increasing the risks of negative outcomes. However, when maladaptive emotion regulation strategies such as overeating are used, they are ineffective and associated with negative long-term consequences (Akamatsu, 2016). This is of concern because women perceive more stress in their lives than men do (Constant et al., 2018) and tend to overeat during negative emotional states (Frayn & Knäuper, 2018). This suggests that women are at greater risk of engaging in maladaptive eating behaviors more so than men.

Maladaptive eating habits, such as overeating, can eventually lead to stress-related health problems such as overweight and obesity, reduced physical activity, and disturbed sleep patterns (Errisuriz et al., 2016). Increases in the consumption of foods that are highly palatable (Cotter & Kelly, 2018) have also been linked to severe health consequences such as diabetes, hypertension, and cholesterol (Belter et al., 2016). Additionally, these outcomes are positively associated with depressive symptoms and other risk factors that underlie many chronic diseases such as high blood pressure (Harward Health Publishing, 2020). This is of concern because research has shown that high levels of perceived stress increase the incidence of poor food choices made to address the need for psychological comfort (Constant et al., 2018).

Overeating in Response to Stress

Overeating is sometimes used as an emotion-focused coping mechanism to manage stress and emotions (Bartolomucci, et al., 2017). A national survey conducted in the United States established that about four in ten or 39% (Goldschmidt et al., 2016) of

Americans overeat unhealthy foods (Errisuriz et al., 2016) to manage stress (Kandiah et al., 2018). It is widely accepted that there is a strong relationship between stress and overeating (Tomiyama, 2019), especially for women (Constant et al., 2018) based on perceived stress levels (Bonneville-Roussy et al., 2017).

For many individuals, the consumption of sweet, salty, and fatty foods such as ice cream, cakes, chocolate, cookies, and potato chips can increase under stressful circumstances (Eliot & Kolasa, 2017). Stress can also interfere with cognitive and biological processes that affect self-regulation, the reward system in the brain, and hormones associated with the production of adipose cells (Tomiyama, 2019).

Cognitive processes such as self-regulation are disrupted during periods of chronic stress and are associated with overeating (Tomiyama, 2019). Stress undermines the part of the brain that is responsible for executive functions that regulate behavior, which means that decisions about diet and exercise may become impaired and lead to maladaptive coping behaviors such as overeating. Stress also brings about certain physiological changes that cause the disruption of processes in the brain associated with cognition, the reward system, and emotional reactivity (Bartolomucci et al., 2017).

Stress-related eating often leads to weight gain and unhealthy abdominal fat due to repeated activation of the hypothalamic-pituitary-adrenal axis (Klatzkin et al., 2019). This triggers an overproduction of cortisol, the stress hormone, and an increase of fat deposits in the abdominal region, which is associated with a high risk for diabetes and cardiovascular disease. When the production of certain biochemical hormones such as

leptin and ghrelin are triggered by stress, the metabolism is affected, which can lead to increased consumption of low nutrient, high calorie foods.

Gender Differences in Stress and Overeating

Women and men also tend to eat differently when they are experiencing stress (Bartolomucci et al., 2017). The results of a large-scale study with approximately 5.000 women and men (Harward Health Publishing, 2020) indicated that women were more likely to gain weight when they consumed large quantities of unhealthy foods to experience psychological comfort (Constant et al., 2018). Women tend to eat low nutritive comfort foods with high sugar and salt content, such as chocolate (Kandiah et al., 2018), unlike men who choose to eat warm, savory foods such as burgers (Boswell et al., 2016). For working women, stress is a common occurrence (Ahadzadeh et al., 2017) that increases the likelihood of stress-related eating and the associated health risks. For some working women, this high level of stress is due to GDW (Himmelstein et al., 2015).

Gender Discrimination and Overeating

Some women cope with gender discrimination by overeating, whereas others do not. Assari and Lankarani (2017) contributed that when faced with environmental stress such as perceived gender discrimination, African American women utilized unhealthy eating patterns to cope. Furthermore, for Latinas, GDW was both a psychological and social stressor associated with overeating (Beccia et al., 2020). However, not all women react to GDW by overeating, and some women use personal resources (Rabenu & Yaniv, 2017) when they are exposed to this type of stress (Abdullah et al., 2013). Personal resources such as resilience and social support have been effective at buffering the effects

of chronic stress (Hundera et al., 2019), and may also be effective at reducing the health risks associated with unhealthy eating behaviors.

Resilience and Social Support

Resilience and social support are protective factors associated with overall well-being and a decrease in the adverse consequences of stressful situations (Bernburg et al., 2015) and are the moderator variables in the research study. Internal resources such as resilience have been successful at managing stress, and the stress buffering effect of external resources such as social support has been widely discussed in the literature (Shavitt et al., 2016). For example, support from family, friends, and colleagues (Ron, 2020) is one of the main external resources that people use to cope with stress.

Furthermore, it can mitigate the debilitating health outcomes of job burnout (Bajaj & Pande, 2016). This suggests that resilience and social support may have a moderating effect on chronic stress in the workplace (Shatté et al., 2016). However, whether resilience and social support can prevent the negative outcomes associated with GDW and the overeating response is not conclusive in the literature (Clum et al., 2014).

Resilience and Perceived Stress

Resilience is an intrapersonal psychological resource defined as the ability to bounce back and achieve positive outcomes in the face of adversity (Hardin et al., 2018). Individuals who experience exposures to chronic stress have used resilience to decrease the negative health outcomes associated with stress (Rani & Yadapadithaya, 2018; Robertson et al., 2015). Studies show that individuals experience less stress-related health consequences (Harker et al., 2015) when they are more resilient, and improve their ability

to access positive emotions. The stress buffering effect of resilience against the adverse effects of occupational stress (Spence Laschinger & Nosko, 2015) has been widely reported. Bernburg et al. (2015) argued that resilience increases the ability to shift to a positive psychological state by improving feelings of well-being and mental health (Harker et al., 2015; Holton et al., 2016).

Resilience has been identified as a protective factor for work-related stress in women. Rani and Yadapadithaya (2018) disclosed that emotionally resilient working women were able to cope with stress better than women who lacked this personal resource. For example, there is evidence that resilience can have an empowering effect on women who work in male-dominated professions (Harker et al., 2015), and in one study resilience was found to moderate the relationship between stress caused by job burnout, trauma, and maladaptive eating behaviors (Bajaj & Pande, 2016). However, other studies found resilience training in the workplace to have limited impact on psychological and physical outcomes, (Robertson et al., 2015), and recommended further research to explore inconsistencies in the findings.

Social Support and Perceived Stress

Social support has been categorized as another important interpersonal resource (Andu et al., 2018; Johnstone & Feeney, 2015) that serves to decrease occupational stress and its adverse effects (Woodhead et al., 2016). There is evidence that social support from family and friends has helped individuals to have positive feelings under stress (Johnstone & Feeney, 2015) thereby decreasing the level of perceived stress, and increasing the perception of the ability to deal with it (Giurgescu et al., 2015). For

example, vulnerable groups such as African American women that are subject to both gender and racial discrimination, often have to seek networks of support outside of the workplace which increases their perception of their ability to cope (Giurgescu et al., 2015).

Furthermore, there is evidence to suggest a significant negative correlation between social support and maladaptive eating patterns, and a positive correlation between social support and positive eating behaviors (Himmelstein et al., 2015; Martínez, 2019). Based on these findings, Martínez (2019) called for further exploration of the stress buffering association between social support from family and friends and maladaptive eating behaviors to cope with stress.

Stress Buffering Role of Resilience and Social Support

Folkman and Lazarus (1984, 1988) argued that personal psychosocial resources such as resilience and social support are important resources that help individuals to cope with stress by acting as a buffer against maladaptive coping responses. He et al. (2018) and Spence Laschinger and Nosko (2015) both suggested that higher levels of social support served as a buffer against stress. Johnstone and Feeney (2015) further found that social support in the workplace had a greater chance of being perceived as effective by individuals whose internal resources were inadequate, when it was both saliant and consistent.

Resilience and social support have also been established as protective factors against the severe consequences of chronic stress (Harker et al., 2015). It follows that resilience and social support could act as protective factors that buffer its relationship

with overeating (Rani & Yadapadithaya, 2018). It is widely demonstrated in the literature that resilience and social support are positively associated with an increase in positive lifestyle behaviors and a decrease in unpleasant outcomes (Bernburg et al., 2015).

However, Himmelstein et al. (2015) noted a gap in the literature as to whether resilience and social support moderate the association between gender discrimination in the workplace and overeating. Further research is essential to assess and determine the adverse effects of perceived gender discrimination as a stressor for women in the workplace. I seek to fill this gap in this study by focusing on the protective roles of these variables against overeating as a maladaptive coping response to psychological stress associated with gender discrimination.

Summary and Conclusions

In this chapter, I presented the transactional theory of stress and coping developed by Folkman and Lazarus (1984) as a framework within which to explore the relationship between four variables: GDW (independent variable), overeating (dependent variable), resilience, and social support (protective resources). Previous research examined the relationship between stress, overweight, and chronic diseases (Tomiyama, 2019), which led to the conclusions that high levels of perceived stress increased the risks of poor food choices and overeating (Constant et al., 2018). The adverse psychological and physiological effects of stress, specifically GDW, was examined from different perspectives including gender and social norms (Van den Brande et al., 2016). Research to date showed that women perceived higher levels of stress than men and were therefore more likely to overeat in response and suffer adverse health consequences. However, not

all women overeat in response to stress, and some have personal resources and use adaptive ways of coping (Rabenu & Yaniv, 2017). The role of protective factors and their stress buffering effects is widely discussed in the literature, however their potential to reduce the overeating response for women who have experienced gender discrimination remains unexplored (Himmelstein et al., 2015; Robertson et al., 2015). This gap in the literature is the focus of the current study, which is to examine whether two established protective factors, resilience and social support can moderate the association between GDW and overeating for women ages 40-55 who are employed and work for pay. In Chapter 3, I discuss the design of the study and the rationale to examine the association between the variables, GDW, overeating, resilience, and social support. The methods used as well as the procedures and the plan for data analysis are discussed, as well as ethical procedures and any potential threats to validity.

Chapter 3: Research Method

The purpose of this study is to examine whether a relationship exists between GDW and overeating for working women. Specifically, in this study, I attempted to determine whether resilience and social support moderated the relationship between GDW and overeating. The research design was quantitative and used data collected through Centiment, a market research company that offers customized online survey capabilities when selecting an audience for research. The results from this study contributed to the existing research on GDW by facilitating an awareness of the factors that could reduce the adverse effects of GDW.

In this chapter, I present an overview of the research design and describe the rationale for the research design used to examine the relationship between GDW and overeating and the moderating variables resilience and social support. Additionally, the population used, the data collection methods, and the sampling methods used to identify and solicit research participants are presented. I also discuss the data analysis plan, potential threats to reliability and validity, and ethical considerations for the study.

Research Design and Rationale

This quantitative study was a cross-sectional, correlational self-report survey design using Centiment as a recruitment tool to examine the relationship between the predictor variable, GDW and the dependent variable overeating, and two potential moderator variables, resilience, and social support among women ages 40–65 who worked for pay for at least 20 years in the United States. A quantitative approach was appropriate since quantitative research quantifies and analyzes numerical data to

determine whether a relationship between the variables exists and survey research measures characteristics of the population numerically. The cross-sectional design is an efficient way to conduct a study that uses a survey design and collects data at a specific point in time (Spector, 2019). It differs from the longitudinal research design in which data are gathered at multiple points in time. The cross-sectional approach is intended to provide a snapshot of a current situation. Consequently, causal claims cannot be made, and I was only able to determine correlational relationships between variables of interest.

Methodology

Population

The target population for this study consisted of working women who were 40-65 years old, who worked for pay for 20 years or more, and were employed in the United States. The true population (i.e., all women who had the experience of gender discrimination in the workplace) was not known and was currently in flux because of the COVID-19 pandemic and its consequences. However, for quantitative studies, sample size may be calculated using a power analysis that considers alpha and power levels as well as effect size (Fugard & Potts, 2015). An online calculator, G*Power, used to determine statistical power, was used to calculate the appropriate sample size using F tests for a linear multiple regression fixed model study. The suggested sample size for a study with five predictor variables (i.e., one predictor, two moderators, two interaction terms), an alpha level of .05, an effect size of .05, and a power size of .80 was 263 participants.

Procedures

Participants

Participants were recruited using Centiment with a purposive sampling method in order to include a specific sample of participants who have had the experience of GDW and who were able to contribute the information needed for the study.

Data Collection

Participation in the study was voluntary, and Centiment was used to distribute the surveys and collect the data. Only participants who met the criteria of working women who are 40–65 years old, who worked for pay for 20 years or more, and who were employed in the United States were considered for the study. Among women, the experience of gender discrimination does not vary significantly based on age (Parker & Funk, 2017); however, women are generally in their childbearing years between the ages of 25 and 40 and therefore more likely to experience the challenges of balancing professional roles with raising children, a stressor I wanted to avoid (Stepanikova et al., 2020). This suggested that the age category of 40-65 would be most appropriate for this study. Self-reported mental health status was also collected, as it was expected that this could impact the seeking of social support, individual resilience, and eating behaviors.

Participants were asked to read an informed consent form at the start of the survey which explained the rationale for the survey, described the content, and informed them that their participation in the study was voluntary and that they could exit the study without penalty. It also included information on how their data would be used, and a letter of introduction, which would act as the solicitation for the survey. Participants

indicated their informed consent by clicking on the button to continue the survey and exited the survey when they clicked on the submit button to complete the survey. The survey was comprised of four prevalidated research instruments: the SSES, the SSE, the SAWS, and the RAW. In addition, I prepared screening questions and demographic questions (see Appendix A).

Exclusion criteria included not identifying as female, being under the age of 40, not being English speaking, and not being employed in the United States for at least 20 years. Some of the exclusion criteria were established for practical reasons. For example, not being an English speaker would likely have prevented the participant from being able to fully understand the data collection instrumentation. Other exclusion criteria were necessitated by the nature of the study. After the documentation was prepared, approval was sought from Walden University's Institutional Review Board (IRB). Approval was granted by the IRB, approval #11-10-21-0668396.

Centiment has millions of preselected respondents from the United States that fit the criteria. After the required number of participants were obtained, the survey tool was closed to participation, the data were downloaded and analyzed. The hypotheses were tested, and the results of the data collection procedure were tabulated. The data were stored in a lockbox, where they will kept for 5 years, after which they will be destroyed.

Measures

The SSES

The SSES (Meule et al., 2018) is a scale developed to measure stress-related eating. The authors developed both English and German versions of the scale for a study

in Germany and Austria, and although the SSES correlates with emotional eating, it is not considered an emotional eating scale. The SSES consists of 10 items based on six stress-related items of the Mood Eating Scale (Jackson & Hawkins, 1980) and four items of the Perceived Stress Scale (Cohen et al., 1983). Each item on the SSES described a stressful event, and participants used a 5-point scale, ranging from 1 = I eat much less than usual to 5 = I eat much more than usual. Higher scores indicated eating more when stressed and lower scores indicated eating less when stressed. In the developmental stages of the SSES, three studies were conducted by the authors. Study 1 (N = 340), the German SSES was found to have a one-factor structure and a correlation coefficient of .89 as scores were weakly correlated with related constructs such as emotional eating. In Studies 2 (N = 790) and 3 (N = 331), factor structure and internal consistency were replicated for both German and English versions of the SSES, which established it as psychometrically sound tool for the measurement of stress-related eating.

The SSE

The SSE (Klonoff & Landrine, 1995) is a self-report instrument to assess the stress associated with four different types of sexist experiences that can occur in women's experiences: sexist degradation, sexism in distant relationships, sexism in close relationships, and sexist discrimination in the workplace. The SSE consists of 20 items designed to assess the perceived frequency and appraisal of sexist events in the past year and over the entire lifetime. For the current study, I used the three items that comprise Factor IV, Sexist Discrimination in the Workplace (e.g., forced to take drastic steps such as filing a grievance, filing a lawsuit, quitting, and denied a raise, promotion, tenure or

other such thing at work). Participants ranked events as having occurred on a scale of 1 (the event never happened) to 6 (the event happened almost all of the time), with higher scores indicating a greater number of sexist experiences. Events assessed were diverse in nature and included exposure to sexism, being bullied, being threatened, or being called derogatory names. The SSE scale has high internal consistency of .90, reliability of .83, and convergent validity with two other measures of stressful events.

The RAW

The RAW (Winwood et al., 2013) was developed to measure workplace resilience in response to the pressures of work and specifically to assess individual responses that were reflective of resilience. The version of the scale used in this study was the 25-item scale. The RAW is a 20-item scale across seven dimensions of workplace resilience including items such as maintaining perspective, interacting cooperatively and managing stress. Sample items include "I am able to change my mood at work when I need to," "The work that I do helps to fulfil my sense of purpose in life," "I have developed some reliable ways to deal with the stress of challenging events at work." The RAW is rated on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. The RAW scale was used in a study promoting professional development and retention among nurse managers (Carpio et al., 2018). The Cronbach alpha for the scale total was 0.84, and it is a validated tool that specifically measures resilience at work. Reliability and validity of the RAW scale were previously established with study populations that included workers in health, education, commerce, information technology, finance, manufacturing, and others. The RAW assessment had strong reliability ($\alpha = 0.84$),

content (r = 0.85), and construct (r = 0.82) validity for the total RAW scale. Subscale reliability, however, varied, ranging from a strong $\alpha = .89$ for the building networks subscale to weaker $\alpha = .63$ for interacting cooperatively, and $\alpha = .60$ for staying healthy.

The SAWS

The SAWS (Lawrence et al., 2007) is a 12-item inventory developed to assess perceived available support using the role of three sources of support such as supervisor, colleague and non-work, and four different supportive functions such as emotional support, informational support, instrumental support, and appraisal support. SAWS scores have been used to study the moderation of the negative effects of workplace stress from both work and non-work sources, and sample items include "How much can you rely on your supervisor to help you feel better when you experience work-related problems?" and "How much can you rely on your supervisor to give you practical assistance when you experience work-related problems?" The buffering role of perceived support against workplace stress was assessed using samples of nursing staff. Evidence for discriminant validity and criterion-related validity of the SAWS constructs were supported by the results. The SAWS has a Cronbach's alpha coefficient in the range of .75 to .90. Discriminant validity was determined for each source of support and the four supportive function constructs (Lawrence et al., 2007).

Demographic Survey

The demographic data that were collected from participants included gender, age, income, education, ethnicity, sexual orientation, marital status, employment status, total

number of years employed including all jobs, type of recent work, and the length of tenure at their place of employment (see Appendix A).

Data Analysis Plan

After collecting the data, I downloaded them into my computer as an SPSS file and cleaned them. Scale and subscale totals were computed. Next, tests of normality and other tests of assumptions were performed.

Measures of central tendency (means) and dispersion (range and standard deviation) were used to describe the data, and a correlation was run to examine bivariate relations between variables. The results were presented in tabular and/or graphical format, as appropriate. Bivariate correlations were used to determine the relationships between all variables.

Each hypothesis was analyzed using multiple regression analysis and moderation analysis in SPSS to test whether the relationship between a variable (GDW) and an outcome variable (overeating) depended on a third variable or set of variables (resilience and social support; see Bolin, 2014). Statistical significance was determined through scrutiny of p values, using the standard cutoff points (p < .01 and p < .05).

Research Questions and Hypotheses

RQ1: Does resilience moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more?

 H_01 : Resilience does not statistically significantly moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more.

 H_1 1: Resilience does statistically significantly moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40 - 65 who worked for pay for 20 years or more?

RQ2: Does social support moderate the relationship between experience of GDW and overeating?

 H_02 : Social support does not statistically significantly moderate the relationship between experience of GDW and overeating.

H₁2: Social support does statistically significantly moderate the relationship between experience of GDW and overeating.

Figures 1 and 2 are conceptual models which are representative of the hypotheses that were tested in this study.

Figure 1Resilience as a Moderator Between Gender Discrimination and Overeating

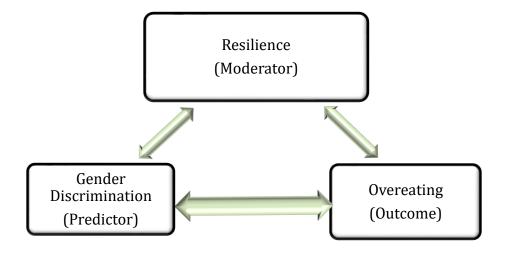
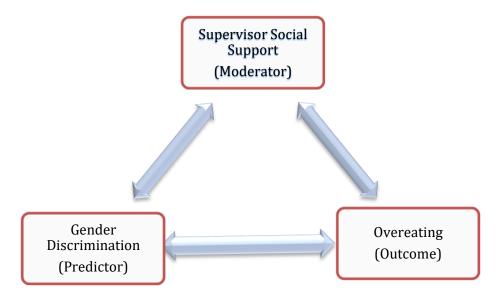


Figure 2
Supervisor Social Support as a Moderator Between Gender Discrimination and Overeating



Threats to Validity

Construct validity measures whether manipulated constructs have been properly operationalized. For this study, all core data collection instruments were prevalidated, which helped to minimize this threat. However, in order to confirm the internal reliability of the three main constructs (overeating, social support and resilience), I calculated Cronbach's alpha scores for my sample as part of data analysis.

Threats to internal validity caused by the presence of confounding variables, such as recall bias, can affect the participant's perception of the experience. No causal claims were made in the writing up of the results since correlation coefficients are the result of a test of association between quantitative variables (Gotay & Thatte, 2017) and not a causal relationship (Hayes, 2018). However, in the regression analysis, variables that could affect the relationship between the variables of interest were identified and if present, controlled.

External validity describes the extent to which the conclusions yielded from the study can be generalized beyond the study sample. It was not possible to employ a random sampling strategy because the population for this study was not known.

Therefore, no claims were made about the generalizability of the research conclusions, and caution was used when the results of the study were reported.

Ethical Procedures

The APA has a code of ethics to protect the rights and welfare of research participants and informed consent was the first thing that was obtained in order to participate in the study. Therefore, an information sheet preceded the survey and

provided details on the true nature of the study, its purpose and how the data was to be collected, stored, used, and reported. Participants were informed of the voluntary nature of the study and that they could withdraw at any time without consequences or penalties. Similarly, they could choose to not answer any question that made them uncomfortable. The principle of informed consent was met once the participant had read the information sheet and clicked through to the next page to begin the survey.

To ensure anonymity and confidentiality, participants were not required to share any identifying information such as their names, and all information obtained in the survey was confidential, thus meeting the principles of anonymity and confidentiality. The security agreements of Centiment were obtained to further reassure participants of confidentiality. Data collected was maintained on a password-protected computer or cloud storage available only to me and all identifying information was removed (Story & Tait, 2019). The data collected will be destroyed five years after the study.

Participation in the study was entirely voluntary and the survey was designed carefully to avoid sensitive or harmful questions. In so doing, the principle of non-maleficence which states that the researcher should make efforts to do no harm to research participants (Israel & Hay, 2006) was met. However, the possibility of emotional distress still existed as participants recalled incidences of gender discrimination, therefore contact information for national resources and helplines were provided.

In order to ensure that all ethical principles were addressed, ethical approval was sought from Walden's IRB prior to the collection of any data. The data was gathered,

stored and analyzed in accordance with the principles of informed consent, confidentiality, anonymity, and non-malfeasance (Israel & Hay, 2006).

Summary

The purpose of this chapter was to outline the research design used in the empirical study, and to describe the research participants, sampling approach, data collection procedures, instrumentation, method of data analysis, and processes for ensuring ethics and rigor. The purpose of this study was to examine whether resilience and social support were moderators of the overeating response for women who reported GDW. A cross-sectional, correlational survey design was employed, with data collected from a purposive sample of adult employed women. A tool consisting of 4 survey instruments was created. Specifically, demographic survey, the SSES, the SSE, and the RAW. The data were analyzed quantitatively, using SPSS, and the multiple regression technique. Procedures were developed to ensure that the data was collected in an ethical manner, and that ethics and rigor underpinned the entire empirical process.

Chapter 4: Research Findings

The purpose of this study was to examine the relationship between GDW and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more and to determine whether that relationship was moderated by resilience and social support. Analyses were performed to examine two research questions and associated hypotheses:

RQ1: Does resilience moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more?

 H_01 : Resilience does not statistically significantly moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more.

 H_11 : Resilience does statistically significantly moderate the relationship between experience of GDW and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more?

RQ2: Does social support moderate the relationship between experience of GDW and overeating?

 H_02 : Social support does not statistically significantly moderate the relationship between experience of GDW and overeating.

 H_12 : Social support does statistically significantly moderate the relationship between experience of GDW and overeating.

This chapter describes the research participants and data, and how the assumptions for testing were addressed. It includes tables to organize statistical findings and the tests of hypotheses related to the two research questions. The findings of the study are summarized.

Data Collection

The data for this research were gathered via Centiment, an online survey data collection service, between January 1, 2022, and January 7, 2022. Overall, 315 participants supplied data for this study. Participants were given the opportunity to participate voluntarily in a survey and provided demographic information such as age, education race/ethnicity, type of work performed, and years of employment. Centiment distributed the surveys and collected the data from qualified participants who met the criteria of working women who at the time of recruitment were 40–65 years old, had worked for pay for 20 years or more, and were employed in the United States.

Missing Data

Missing data were analyzed using the Little's Missing Completely at Random test (Li, 2013) and results showed that there were no missing data from any of the 315 participants.

Descriptive Statistics

All 315 participants identified as female and supplied a variety of demographic information, such as age, highest level of education completed, race/ethnicity, most recent type of work performed, and total number of years employed. Most of the sample were White Non-Hispanic/Caucasian women (n = 221, 70.2%) which was consistent with

the national average of 77% of women in the workplace (U.S. Bureau of Labor Statistics, 2021).

Demographic information for Black or African American women in the labor force was also consistent with the national average (n = 46, 14.6% vs. 13% nationally). Asian survey participants were underrepresented compared to the national averages (n = 15, 4.8% vs. 6% nationally). Similarly, Hispanic women were also underrepresented (n = 20, 6.3% vs. 18% nationally). The percentage of Native Hawaiian or Other Pacific Islander survey participants was consistent with national averages (n = 1, 0.3% vs. < 0.5% nationally), and for American Indian/Native Alaskan women the results were overrepresented (n = 5, 2.1% vs. 1% nationwide).

In 2019, women 40–65 were more likely than men to hold a bachelor's degree or higher (U.S. Bureau of Labor Statistics, 2021). Over 50% of the sample were college educated (n = 186, 59%), versus the national average of 45%. The percentage of women in professional, technical, or managerial roles was underrepresented (n = 109, 34.6% vs. the national average 51.8%) and were more likely to be Asian and White. Service occupations (n = 83, 26.3%) would most likely be filled by Black or African American and Hispanic workers. Descriptive demographics of study participants are in Table 1.

Table 1Demographic Characteristics of Study Participants

Demographic characteristics	M (SD)	%	n
Age	51.86		
	(7.437)		
Highest level of education			
Grade school		0.3	1
High school		27	85
College		59	186
Post grad		13.7	43
Ethnicity			
American Indian/Alaska Native		1.6	5
Asian		4.8	15
Native Hawaiian or Other Pacific Islander		0.3	1
Black or African American		14.6	46
White Non-Hispanic Caucasian		70.2	221
Hispanic		6.32	20
Other		2.2	7
Most recent type of work performed			
Professional or technical		34.6	109
Managerial		12.7	40
Clerical or sales		21	66
Service		26.3	83
Craft or operations		4.8	15
Agriculture, fishery or forestry		0.6	2
Total years employed			
20-30 years		48.3	152
30-40 years		27.6	87
40+ years		24.1	76

Descriptive Information for Predictor and Moderator Variables: GDW

The SSE was the scale used in this study to assess the study participants' perceived frequency and appraisal of the predictor variable, gender discrimination in the workplace. This instrument measures sexist events in two ways, over their entire lifetime and in the past year. It also includes items for perceived level of stress associated with gender discrimination over their entire lifetime and last year. The mean score value for the measure of lifetime GDW was low, suggesting that the experience of perceived lifetime gender discrimination was low. The mean score for last year GDW was also low, suggesting that perceived gender discrimination last year was low. The mean score for perceived stress from GDW was approximately 50% of the highest mean score chosen by participants, suggesting that approximately 50% of participants perceives stress due to gender discrimination. Participants scored on average closer to the high end of the range than to the low end for resilience and supervisor social support. Participants scored closer to the middle of the range for overeating. Other recent studies on overeating and coping behaviors have also identified stress, perceived discrimination, and adaptive or maladaptive coping strategies as associated with overeating (Lee et al., 2022). The descriptive statistics for all variables, including predictor, outcome, and moderators, are presented in Table 2.

Table 2Descriptive Statistics of All Variables

Variables	n	M	SD	Min	Max
Gender discrimination (GDW Lifetime Score)	315	6.83	3.60	3	18
Gender discrimination (GDW Last Year Score)	315	5.34	3.69	3	18
Gender discrimination (GDW Stress Score)	315	7.81	4.58	3	18
Resilience total score	315	95.87	16.05	25	129
Supervisor social support	315	31.37	11.30	12	48
Overeating total score	315	27.92	8.78	10	50

Note. GDW = gender discrimination at work.

Examination of Multivariate Assumptions

Multiple regression analysis is a statistical method performed to analyze the relationship between a dependent variable and two or more independent variables as well as account for any variation (Uyanık & Güler, 2013). In multivariate regression analysis, certain assumptions need to be met if the data are to be considered valid and reliable (Laerd Statistics, 2013a). Another measure used to ensure reliable data is Cronbach's alpha. I assessed Cronbach's alpha to measure the internal consistency and reliability of each scale and the extent to which a group of questions (items) within the scale were correlated with each other (see Connelly, 2011). Reliability can range from .00 to 1.0, and a construct is reliable when the alpha value is greater than .70 (Hair et al., 2013). The Cronbach's alpha reliability statistics based on standardized items and computed in SPSS were gender discrimination ($\alpha = .832, 3$ items), overeating ($\alpha = .932, 10$ items),

supervisor social support (α = .976, 12 items), and resilience (α = .872, 19 items). Thus, it can be concluded that each scale was reliable. I performed tests for the assumptions of linearity, homoscedasticity, normality, and independence (see Jeong & Jung, 2016) and address the assumptions below.

Linearity assumes that the relationship between the predictor variables and the outcome variable is linear, and a relationship cannot be accurately assessed if this is not met (Williams et al., 2013). One statistical test used to assess linearity is the scatterplot (Korn & Graubard, 1998). Linearity can be visually determined by observing the fit of the line going through the center of the data in a scatterplot for each of the predictor variables and the outcome variable. Given that the scatterplots were uniform around a linear fit line, this suggested that the assumption of linearity was met. Another test is the strength of the correlations between variables denoted by a correlation coefficient that is greater than 0.7. Correlations that were significant were (a) lifetime total GDW and overeating, r = .129, p < .05, indicating low positive strength; (b) last year total GDW and lifetime total GDW, r = .721, indicating high positive strength, p < .001; (c) lifetime total score GDW and total stress GDW, r = .621, indicating moderate positive strength, p < .001; (d) total stress GDW and last year total GDW, r = .529, p < .001, indicating moderate positive strength; and (e) supervisor social support total score and resilience total score, r = .551, p < .001, also indicating moderate positive strength.

The assumption of multicollinearity is that there is no strong relationship between the predictor values (Field, 2013). When two independent variables correlate highly with one another, it undermines the significance of the relationship between variables. Collinearity statistics were performed in SPSS for each of the predictor variables, lifetime total GWD, last year total GDW, and total stress GDW, resilience and supervisor social support with each variable in the role of the dependent variable. Correlations needed to be less than 0.7 and at least .3 (Field, 2013), as a correlation of > 0 .7 is an indication of multicollinearity. Lifetime total GDW and last year total GDW had a correlation of r =.721, which could potentially affect the outcome. Correlation coefficients for lifetime total GDW and last year total GDW were run in SPSS to see if the strong correlation between these two variables would be problematic. Two measures used to assess the assumption of no multicollinearity are the values for the tolerance and variance inflation factor (VIF) which should be above 0.1 and below 10 respectively. The value for tolerance was .480 (above 0.1) and the VIF was 2.084 (below 10) indicating no multicollinearity. For all other variables, the lowest tolerance value was .3999 and the highest VIF value was 2.50, which are acceptable values indicating no multicollinearity. Noteworthy is that lifetime total GDW was the only variable that correlated with the outcome variable, overeating; therefore, it was used in the regression model. A correlation matrix of the key variables is shown in Table 3.

Table 3Correlation of Study Variables

Variable	Over-	GDW	GDW	GDW	Resilience	Supervisor
		Total	Total	Total	Total	Social
	eating	Lifetime	Last Year	Stress	Total	Support
Overeating	1.000	.129*	.091	.071	.007	.056
GDW Total Lifetime	.129*	1.000	.721**	.621**	.011	055
GDW Total Last Year	.091	.721**	1.000	.529**	050	036
GDW Total Stress	.071	.621**	.529**	1.000	.043	003
Resilience Total	.007	011	050	.043	1.000	.571**
Supervisor Social Support	.056	055	036	003	.571**	1.000

Note. GDW = gender discrimination at work.

Independence is the assumption that the values of the residuals are independent. The Durbin-Watson statistic can be used to test the assumption that the residuals are not correlated and ranges in value from 0 to 4 (University of Notre Dame, n.d.). Durbin-Watson values that fall between +1 and +3 show no evidence of autocorrelation and are within the acceptable range. The Durbin-Watson statistic was 1.866 indicating that the assumption of independence was met.

Homoscedasticity is the assumption that the variation in the residuals is constant throughout the model and can be checked visually by examining the distribution of the dots (Osborne & Waters, 2002). This means that the spread of the residuals should be

^{**}Correlation is significant at the p = 0.01 level (2-tailed).

^{*}Correlation is significant at the p = 0.05 level (1-tailed).

constant at each point of the predictor variables. A scatter plot was used to test residual values against predicted values and should look like a random distribution of dots. When the distribution looks like a funnel shape, then it is likely that the assumption has not been met. The scatter plot did not show any evidence that the assumption of homoscedasticity was violated.

Regression analysis assumes that the values of the residuals are normally distributed (Osborne & Waters, 2002). The test of normality of residuals in SPSS was assessed using a P-P plot. The closer the dots lie to the diagonal line the greater the likelihood that the residuals are normally distributed. Based on the distribution of dots in this study, the assumption of normal distribution was met. Skewness and kurtosis are another way to assess normal distribution. Skewness indicates how much the distribution is around the mean and the median (Hayes, 2018). Acceptable values for skewness fall between -1 and +1 and, for kurtosis, between -3 and +3. The value for skewness for GDW last year was 1.667 and the value for kurtosis for the same variable was 1.805 which fell within the acceptable range.

The assumption that there are no influential cases biasing the model is met when there are no extreme data points or outliers (Diaz-Garcia & González-Farías, 2004). Any values over 1 were likely to be significant outliers, which would suggest that influential cases were biasing the model. Cook's Distance values were calculated, and the maximum value was .050 which suggests that this assumption was met.

Results

Research Question 1

Does resilience moderate the relationship between experience of GDW and overeating a national sample of working women ages 40 - 65 who worked for pay for 20 years or more? Research Question 1 was answered by performing a multiple linear regression and moderation analysis to assess the predictive role of resilience on GDW and overeating.

To test Hypothesis 1, I computed a new interaction term that was a product of resilience and gender discrimination, the independent variable in SPSS (resilience*GDW). Prior to the analysis all the means were centered to reduce the effects of multicollinearity (Aiken et al., 1991). The analysis was performed with overeating as the dependent variable and lifetime gender discrimination, total resiliency score, and the moderator as independent variables. The full model was not statistically significant F(3,314) = 2.345, p = .073, therefore, the null hypothesis could not be rejected. The results of the multiple regression with resilience as moderator are shown in Table 4.

Table 4Prediction Model With Resilience as Moderator (RQ1)

Variable model for resilience	R^2 .022	Adj. <i>R</i> ² .013	<i>F</i> 2.345	<i>p</i> .073
	В	SE	t	p
Lifetime gender discrimination	.322	.137	2.129	.019
Total resilience score	069	.033	.519	.604
Moderator for resilience	.191	.146	1.306	.192

Note. Dependent variable: Overeating Total Score.

Research Question 2

Does social support moderate the relationship between experience of GDW and overeating? Research Question 2 was answered by performing a multiple linear regression moderation analysis to assess the predictive role of supervisor social support on GDW and overeating.

To test Hypothesis 2, I computed a new interaction term that was a product of supervisor social support and gender discrimination, the independent variable in SPSS (supervisor social support*GDW). Prior to the analysis all the means were centered to reduce the effects of multicollinearity (Aiken et al., 1991). In the regression analysis the variables, lifetime gender discrimination, supervisor social support, and the moderator for supervisor social support were entered as independent variables and overeating as the dependent variable. The full regression model was statistically significant, F(3,314) = 2.821, p = .039, with only total lifetime gender discrimination statistically significantly predicting variance. However, the moderator for supervisor social support was not significant, therefore, the null hypothesis could not be rejected. The results of the multiple regression with supervisor social support as moderator are shown in Table 5.

Table 5Prediction Model With Supervisor Social Support as Moderator (RQ2)

	\mathbb{R}^2	Adj. R ²	F	p
Model for Supervisor Social Support	.026	.017	2.821	.039
	В	SE	t	p
Lifetime Gender Discrimination	.357	.139	2.571	.011
Supervisor Social Support	.047	.044	1.079	.281
Moderator for Supervisor Social Support	.601	.440	1.364	.174

Note. Dependent variable: Overeating Total Score.

Summary

This chapter described the process of data collection and the statistical results from testing hypotheses of the relationship between gender discrimination and overeating, and the role played by resilience and social support. The regression model for the moderator resilience was not statistically significant, indicating that resilience did not moderate the relationship between gender discrimination and overeating, and the null hypothesis could not be rejected. The regression model for the moderator supervisor social support was also not statistically significant, indicating that supervisor social support did not moderate the relationship between GDW and overeating, and the null hypothesis could not be rejected. The next chapter summarized these findings, identified the potential for social change, discussed implications for future research, as well as the limitations of this research.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to examine whether resilience and social support are moderators of overeating, a maladaptive coping response for women who experience the stress of gender discrimination in their work environment. Gender discrimination has been defined as any manifestation of negative treatment of an individual because of gender, such as sexual harassment, exposure to sexist remarks, verbal and nonverbal negative behavior, being micromanaged, given limited access to job trainings, and being passed over for promotion (Attell et al., 2017). The relationship between stress and overeating has been established in prior research (Constant et al., 2018), and resilience and social support have been recognized as protective resources that provide positive outcomes in the face of chronic stress (Harker et al., 2015).

A quantitative cross-sectional study with a self-report survey design was conducted to examine two hypotheses. The research questions addressed whether resilience and supervisor social support moderated the relationship between experience of gender discrimination and overeating among a national sample of working women ages 40–65 who worked for pay for 20 years or more. I ran a correlational analysis to examine the relationships between the predictor variable, the outcome variable, and two moderator variables. Each hypothesis was analyzed using multiple regression analysis and moderation analysis in SPSS. Neither resilience nor supervisor social support were significant in buffering the effects of gender discrimination and the null hypotheses could not be rejected.

Chapter 5 contains the study findings, interpretations of the findings, and how they compare with extant research. Relationships among variables and demographic patterns in the participant sample are also discussed. Additionally, I discuss the limitations of this study and the potential for generalizability, as well as recommendations for future studies. Finally, applications to social change, and conclusions of the research are discussed.

Interpretation of the Findings

Hypothesis 1

The research question for Hypothesis 1 asked, Does resilience moderate the relationship between experience of gender discrimination (GDW) and overeating for a national sample of working women ages 40–65 who worked for pay for 20 years or more?

Resilience is defined as an intrapersonal psychological resource (Hartmann et al., 2020) that enables one to bounce back from adversity (Hardin et al., 2018) and manage the negative impacts of work stress (Lian & Tam, 2014). In this study, resilience was measured with The RAW. A plethora of studies have found resilience to be a moderator of work-related stress (Bernburg et al., 2015; Spence Laschinger & Nosko, 2015) that results in better mental health outcomes (Harker et al., 2015). Resilience has also been found to play a significant role in minimizing overeating and increasing adaptive responses during periods of high stress (Gieniusz-Wojczyk et al., 2021; Pappa et al., 2021). Contrary to expectations based on the studies cited in Chapter 2, the null

hypothesis could not be rejected, and there was no significant correlation between resilience and gender discrimination.

Gender discrimination can produce negative psychological and physical outcomes, which may be too powerful for resilience to counteract. The stigma that surrounds GDW (George et al., 2016; Sipe et al., 2016; Triana et al., 2019), and ignorance of what constitutes unfair treatment offer support for the lack of consistency between my findings and that of prior research. Furthermore, retaliation against employees who report gender discrimination includes exclusion from important meetings and possible job loss (Galupo & Resnick, 2016), which would increase the level of fear and potentially impact answers on my survey.

Hartmann et al. (2020) called for future studies on resilience to take a multilevel approach in which resilience is regarded as not only an internal quality but also a dynamic process that can be affected by other social and personal processes (Wang et al., 2018) in the work environment. Perhaps this approach to resilience might make it more responsive to the stress of gender discrimination.

Hypothesis 2

The research question in Hypothesis 2 asked, Does supervisor social support moderate the relationship between experience of gender discrimination (GDW) and overeating for a national sample of working women ages 40–65 who worked for pay for 20 years or more?

Social support has been defined as an interpersonal resource (Andu et al., 2018; Johnstone & Feeney, 2015) that increases the perception that an individual is protected,

cared for, and assisted by members of their social network (Johnstone & Feeney, 2015). In this study, supervisor social support was measured with the SAWS. Several studies have indicated that social support reduces the distress of chronic stress and increases the ability to manage overeating in the face of stress (Mezuk et al., 2017). Moreover, an increase in available social support for women in the workplace has been shown to decrease work-related stress (Woodhead et al., 2016) and maladaptive outcomes (Tajvar et al., 2018).

Contrary to prior research, in the present study, supervisor social support was not found to be a significant moderator of gender discrimination, and the null hypothesis could not be rejected. There are many possible reasons why the results of this study are different from prior research. Social support from family and friends has helped many individuals to have positive feelings while undergoing stress (Johnston & Feeney, 2015), but this positive effect may be weakened when compounded by multiple exposures to discrimination. Certain vulnerable populations such as African Americans regularly experience the ill effects of racial discrimination in and outside of the workplace and perceive more stress in their experiences. For example, one recent study examined the discrimination against Asian Americans at the onset of COVID-19 (Lee & Waters, 2021), and reported an improvement in depressive symptoms and negative health outcomes when social support was increased.

These results point to the fact that increased supervisor social support beyond the accustomed support, may be needed in order to buffer the stress of gender discrimination.

It would be interesting to see whether different levels of supervisor social support vary in their ability to buffer the chronic stress and of gender discrimination in future research.

Gender Discrimination in the Workplace and Overeating

Overeating was defined in this study as consuming more food and calories than the body needs to expend for energy (Bartolomucci et al., 2017) and measured with the SSES. GDW was measured with the SSE). In the present study, only GDW was statistically significant as a predictor of overeating (r = .129, p < .05) in both moderation regressions. Folkman and Lazarus's theory of stress and coping (Lazarus & Folman, 1984) purports that stressors such as gender discrimination could lead to maladaptive coping responses such as overeating. Survey results showed evidence of low perceived GDW and reportedly low incidences of overeating which were inconsistent with prior research.

Possible reasons for low reports of discrimination may be that women who work in male-dominated environments perceive gender discrimination more so than women in other professions (Street et al., 2018). In this study, that demographic was low, such that 73% of the participants were college graduates, some of whom held postgraduate status, and 60% held a mix of professional, managerial, or technical positions. It is possible that these characteristics meant that the participants worked in positions where work-based gender discrimination was lower than in lower education positions. These findings are consistent with national averages, which show that only 1.9% are carpenters, 3.3% are in construction, and 5.5% are truckdrivers (U.S. Department of Labor, 2021). The low prevalence of women working in these lower education, male-dominated industries may

have influenced the present findings of low perceived gender discrimination. Also, low perceptions of GDW as a threat would indicate that participants believed they already had sufficient resilience and supervisor social support available to manage it (Lazarus & Folkman, 1984).

In the present study, only 5.7% of the participants overate in response to stress. I explored whether this low percentage could have been explained by extant literature that suggests that there are differences in the overeating response based on race/ethnicity and that African American and Latina women (Beccia et al., 2020) tend to eat more under stress (Assari & Lankarani, 2017). In the present study, however, over 20% of participants were African American or Latina. There are a few possibilities for these findings, one of which may be the higher education and job positions held by the participants, including Black women, of which 43% held professional or managerial positions, and 74% were college educated (n = 34). Given their professional status, it is possible that participants in the present study may have experienced more autonomy in their positions, as well as greater access to adaptive ways of managing stress than overeating.

Resilience and Social Support

An interesting finding in the present study was the relatively high correlation between resilience and supervisor social support. The relationship between resilience and social support has been affirmed in prior research, and the present study adds to the evidence that supervisor social support also contributes to resilience. Resilience and social support were identified in extant literature as being positively associated with

beneficial lifestyle behaviors, and as effective buffers against stress (Rani & Yadapadithaya, 2018). Researchers found that social support from supervisors and colleagues provided employees an opportunity to overcome the adverse effects of stress (Hartmann et al., 2020) and increase both individual and career resilience (Wang et al., 2018). Goyal et al. (2021) proposed that this relationship may be a bidirectional one in which more resilience leads to a willingness to seek more support and vice versa. This suggests that an increase in supervisor social support may be a predictor for an increase in resilience (Wang et al., 2018) and vice versa.

Future research on resilience and supervisor social support as moderators should also take into consideration that there may be other confounding factors affecting outcomes such as dynamics within the work environment. Factors such as the type of industry, company culture (Goyal et al., 2021), the distribution of power within the organization, and the style of leadership are important considerations that may influence the effectiveness of these protective factors.

The current study added to the research by addressing a gap in the literature that has not yet been explored regarding resilience and supervisor social support as buffers against the stress of gender discrimination. Although this study provided support for gender discrimination being a predictor of overeating, the results suggest that neither an individual's resilience nor the level of support offered by their supervisor was associated with the perceived stress of gender discrimination.

Limitations

There are several limitations in this study that should be remedied in future research. First, a cross-sectional survey design is only a snapshot of what is happening in the moment, and even though it offers valuable information about correlations, no causal claims can be made, and generalizability of results is limited (Solem, 2015). Longitudinal studies are well suited for observing the long-term effects of one variable upon another and capturing the effect of these variables over time. Future studies would benefit from giving this research design consideration.

Second, survey respondents may fall into a predictable pattern of response, often based on assumptions of what they believe is expected of them and what will put them in the most favorable light (Story & Tait, 2019). Although this is not intentional, errors in reporting due to recall bias or social desirability bias affect the quality of the data collected and trustworthiness, as well as the results of the statistical analyses.

Third, no assessment of participants' prior knowledge of gender discrimination was given nor was a definition of what constitutes unfair and discriminatory behavior offered. Not establishing a common understanding of gender discrimination prior to the survey could introduce bias into the reported survey results.

Fourth, 70% of the study population was Non-Hispanic White Caucasian, and the other 30% were made up of Black or African American, Hispanic, American Indian/Alaska Native, Asian and other Pacific Islander. The survey was only offered in English, which may have made it difficult for participants for whom English was not their first language to interpret and understand the questions. Furthermore, cultural

differences could also influence differences in interpretation which would create errors in response. Finally, a sample of participants who worked in male-dominated environments such as carpentry and construction (Jaffe, 2017) were underrepresented, and extant literature attests that this is where gender discrimination is most like to occur.

Recommendations

Future studies with a survey design should include a definition of gender discrimination to establish a common understanding of the term because language and cultural differences are important considerations. Offering the survey in multiple languages may improve comprehension and accuracy of responses, as this would impact the generalizability of results. Shorter surveys may produce more reliable outcomes, since less time is spent on each question when surveys exceed 10 minutes (Story & Tait, 2019). A larger sample size with greater diversity in education, race/ethnicity, and employment would increase the generalizability of results in future studies. Feedback from diverse samples could be instrumental in making more funding available to develop programs to address and prevent gender biases.

Job practices such as structured interviews would require that all individuals be asked the same questions regardless of gender, increasing the frequency of performance appraisals would reduce the practice of women not being recognized for their contributions due to memory lapses, and concrete systems for performance evaluations would reduce unfair practices (Heilman & Caleo, 2018). These findings might have a positive impact at the policy level.

Gender differences in pay and promotion due to the COVID-19 pandemic are predicted to increase and would result in increased loss of employment and a rise in caretaker responsibilities for women. Future investigation into protective resources capable of buffering the stress of gender discrimination is therefore, warranted.

Implications for Positive Social Change

Social change implies an event or series of events leading up to a major shift in the accustomed way of doing things on a large scale (Shove, 2010). The results of this study may contribute to social change in many ways. First, certain practices of inequality that affect women in the workplace may be examined more closely and challenged, making way for policies that are progressive and inclusive to be introduced (Heilman & Caleo, 2018). Women experience gender discrimination mostly in male-dominated professions. Black/African American and Latina women are doubly hit because they also encounter racial discrimination (Beccia et al., 2020).

Moreover, since gender discrimination continues to go underreported, the financial burden to organizations for absenteeism and sick leave continues to rise proportionately (Mizzi, 2017. Lower expenditures for managing stress-related illnesses would positively impact social change by making more funds available for other societal needs. The more definite steps are taken towards practices and policies in the workplace that enable women to have a say in discretionary policies (Bobbitt-Zeher, 2011) that lower stress, such as maternity leave, the greater the opportunity to develop more adaptive responses to work-related stress. Women play significant roles in our society and continue to wear many hats inside and outside of the workplace (Ahadzadeh et al.,

2017), often at great cost to their psychological and physical health (Hassard et al., 2018). Increasing the levels of social support available to them at the professional level would be a worthy investment.

Another way in which the findings of this study could lead to social change is through the adoption of new workplace practices that give women a more robust voice in corporate boardrooms and enable them to make more managerial decisions (Goyal et al., 2021). Women make decisions differently than men (Sankar et al., 2018), and the face of business as we know it today would likely look different if more women were in leadership roles. The findings from this study could expand the body of knowledge on the prevalence of overeating as a stress response in the workplace. The potential impact on social change has been discussed in the literature, as well as the association with overweight and obesity.

Conclusion

Women are at greater risk for chronic illnesses related to obesity, such as diabetes and heart disease (Akamatsu, 2016). Despite making strides in politics and education, women continue to be underpaid for performing identical jobs compared to their male counterparts and are more likely to be victims of gender discrimination and the resulting physical and psychological effects (Assari & Lankarani, 2017). There is limited research on gender discrimination and its association with overeating. Two protective resources, resilience and supervisor social support (Harker et al., 2015), were explored in this study. Multiple regression and moderation analyses revealed that neither resilience nor supervisor social support moderated the stress of gender discrimination on overeating.

This study contributes to the research by drawing attention to a gap in the literature that needs further exploration to uncover other protective resources that can buffer the stress of gender discrimination. On a national stage, women are taking positions in the political arena, becoming heads of states, and holding the highest positions in the judicial system. These shifts in power are encouraging; however, greater exploration of the underpinnings of gender discrimination in the workplace must continue to be investigated due to the persistent and challenging nature of the problem.

References

- Abdullah, H., Ahmad, N., Ibrahim, R., & Ortega, A. (2013). Stress indicators and eating habits among working Malaysian women. *Asian Social Science*, *9*(7), 12–21. https://doi.org/10.5539/ass.v9n7p12
- Ahadzadeh, A. S., Perdamen, H. K., & Sharif, S. P. (2017). Uncertainty and quality of life of Malaysian women with breast cancer: Mediating role of coping styles and mood states. *Applied Nursing Research*, *38*, 88–94.

 https://doi.org/10.1016/j.apnr.2017.09.012
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). Multiple regression: Testing and interpreting interactions. Sage.
- Akamatsu, R. (2016). Overeating at dinner time among Japanese workers: Is overeating related to stress response and late dinner times? *Appetite*, 101, 8–14. https://doi.org/10.1016/j.appet.2016.02.145
- Anbumalar, C., Dorathy, A. P., Jaswanti, V. P., & Reniangelin, D. (2017). Gender differences in perceived stress levels and coping strategies among colleges students. *The International Journal of Indian Psychology*, *4*(4), 22–33. https://doi.org/10.25215/0404.103
- Andu, E., Wagenaar, B. H., Kemp, C. G., Nevin, P. E., Simoni, J. M., Andrasik, M., Cohn, S. E., French, A. L., & Rao, D. (2018). Risk and protective factors of posttraumatic stress disorder among African American women living with HIV.
 AIDS Care, 30(11), 1393–1399. https://doi.org/10.1080/09540121.2018.1466981
- Assari, S., & Lankarani, M. M. (2017). Discrimination and psychological distress:

- Gender differences among Arab Americans. *Frontiers in Psychiatry*, 8, 1–10. https://doi.org/10.3389/fpsyt.2017.00023
- Attell, B. K., Kummerow Brown, K., & Treiber, L. A. (2017). Workplace bullying, perceived job stressors, and psychological distress: Gender and race differences in the stress process. *Social Science Research*, 65, 210–221. https://doi.org/10.1016/j.ssresearch.2017.02.0
- Baert, S. (2018) Hiring discrimination: An overview of (almost) all correspondence experiments since 2005. In S. Gaddis (Ed.), *Audit studies: Behind the scenes with theory, method, and nuance*. Springer. https://doi.org/10.1007/978-3-319-71153-9-3
- Bajaj, B., & Pande, N. (2016). Mediating role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. *Personality and Individual Differences*, 93, 63–67. https://doi.org/10.1016/j.paid.2015.09.005
- Bartolomucci, A., Crow, S., Pearson, C., & Razzoli, M., (2017). Stress, overeating, and obesity: Insights from human studies and preclinical models. *Neuroscience and Biobehavioral Reviews*, 76, 154–162.

 https://doi.org/10.1016/j.neubiorev.2017.01.026
- Beccia, A. L., Jesdale, W. M., & Lapane, K. L. (2020). Effects of gender discrimination and reported stress on drug use among racially/ethnically diverse women in Northern California. *Annals of Epidemiology*, 45, 32–39.

 https://doi.org/10.1016/j.annepidem.2020.03.012
- Belter, C. W., Coady, S. A., Fine, L. J., Lauer, M. S., & Loria, C. M. (2016). The

- productivity of NHLBI-funded obesity research, 1983–2013. *Obesity*, 24(6), 1356–1365. https://doi.org/10.1002/oby.21478
- Bencsik, A., Juhász, T., & Mura, L. (2019). Consequences of workplace stress—Company case study. *Littera Scripta*, 79. https://doi.org/10.36708/Littera_Scripta2019/2/0
- Bernburg, M., Danzer, G., Groneberg, D. A., Klapp, B. F., Mache, S., & Vitzthum, K., (2015). Managing work–family conflict in the medical profession: Working conditions and individual resources as related factors. *British Medical Journal Open*, 5. https://doi.org/10.1136/bmjopen-2014-006871
- Bobbitt-Zeher, D. (2011). Gender discrimination at work: Connecting gender stereotypes, institutional policies, and gender composition of workplace. *Gender & Society*, 25(6), 764–786. https://doi.org/10.1177/0891243211424741
- Bohon, C. (2019). Binge eating disorder in children and adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 28(4), 549–555. https://doi.org/10.1016/j.chc.2019.05.003
- Bolin, J. H. (2014). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. *Journal of Educational Measurement*, 51(3), 335–337. https://doi.org/10.1111/jedm.12050
- Bonneville-Roussy, A., Evans, P., Verner-Fillion, J., Vallerand, R. J., & Bouffard, T. (2017). Motivation and coping with the stress of assessment: Gender differences in outcomes for university students. *Contemporary Educational Psychology*, 48, 28–42. https://doi.org/10.1016/j.cedpsych.2016.08.003
- Boswell, R. G., DeVito, E. E., Hallam, J., & Kober, H. (2016). Gender-related

- differences in food craving and obesity. *The Yale Journal of Biology and Medicine*, 89(2), 161–173.
- Boutelle, K., Czajkowski, S. M., Epel, E. S., Green, P. A., Hunter, C. M., Rothman, A. J., & Sutin, A. R. (2018). Accumulating data to optimally predict obesity treatment (ADOPT) core measures: Psychosocial domain. *Obesity*, 26, S45–S54. https://doi.org/10.1002/oby.22160
- Browne-Yung, K., Walker, R. B., & Luszcz, M. A. (2017). An examination of resilience and coping in the oldest old using life narrative method. *The Gerontologist*, *57*(2) 282–291. https://doi.org/10.1093/geront/gnv137
- Cai, L., Peng, J., Qian, J., & Wang, X. (2014). Social support moderates stress effects on depression *International Journal of Mental Health Systems*, 8, 8–41.
 https://doi.org/10.1186/1752-4458
- Calvarese, M. (2015). The effect of gender on stress factors: An exploratory study among university students. *Social Sciences*, *4*(4), 1177–1184. https://doi.org/10.3390/socsci4041177
- Calvert, J. M., Dahlhamer, J. M., Luckhaupt, S. E., & Ward, B.W. (2014). Prevalence of obesity among U.S. workers and associations with occupational factors. *American Journal of Preventive Medicine*, 46, 237–248.
 https://doi.org/10.1016/j.ampere.2013./002
- Carpio, R. C., Castro, L. P., Huerto, H. M., Highfield, M. E., & Mendelson, S. (2018).
 Exploring Resilience at Work Among First-Line Nurse Managers. JONA: *The Journal of Nursing Administration*, 48(10), 481–486.

https://doi.org/10.1097/NNA.0000000000000655

- Carroll, D., Ginty, A. T., Whittaker, A. C., Lovallo, W. R., & de Rooij, S. R. (2017). The behavioural, cognitive, and neural corollaries of blunted cardiovascular and cortisol reactions to acute psychological stress. *Neuroscience & Biobehavioral Reviews*, 77, 74–86. https://doi.org/10.1016/j.neubiorev.2017.02.025
- Clum, G. A., Rice, J. C., Broussard, M., Johnson, C. C., & Webber, L. S. (2014).

 Associations between depressive symptoms, self-efficacy, eating styles, exercise and body mass index in women. *Journal Of Behavioral Medicine*, *37*(4), 577–586. https://doi.org/10.1007/s10865-013-9526-5
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385–396.
- Connelly, L. M. (2011). Research roundtable. Cronbach's alpha. *Medsurg Nursing*, 20(1), 45–44.
- Constant, A., Gautier, Y, Coquery, N., Thibault, R., Moirand, R., & Val-Laillet, D. (2018). Emotional overeating is common and negatively associated with alcohol use in normal-weight female university students. *Appetite*, *129*, 186–191. https://doi.org/10.1016/j.appet.2018.07.012
- Cotter, E. W., & Kelly, N. R. (2018). Stress-related eating, mindfulness, and obesity.

 Health Psychology, 37(6), 516–525. https://doi.org/10.1037/hea0000614
- Díaz-García, J. A., & González-Farías, G. (2004). A note on the Cook's distance. *Journal of Statistical Planning and Inference*, 120(1–2), 119–136.
- Eliot, K., & Kolasa, K. M. (2017). Stress-induced eating behaviors of health

- professionals: A registered dietitian nutritionist perspective. NAM Perspectives. Commentary, National Academy of Medicine. https://doi.org/10.31478/201703i
- Errisuriz, V. L., Pasch, K. E., & Perry, C. L. (2016). Perceived stress and dietary choices:

 The moderating role of stress management. *Eating Behaviors*, 22, 211–216.

 https://doi.org/10.1016/j.eatbeh.2016.06.008
- Fakunmoju, S. B. (2018). Work ethic and life satisfaction among social workers in Massachusetts: The moderating effect of gender. *Human Service Organizations:*Management, Leadership & Governance, 42(4), 396–416.

 https://doi.org/10.1080/23303131.2018.1464994
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage Publications.
- Fila, M., Purl, J., & Griffeth, R.W. (2017). Job demands, control and support: Metaanalyzing moderator effects of gender, nationality, and occupation. *Human Resource Management Review*, 27(1), 39–60. https://doi.org/10.1016/j.hrmr.2016.09.004
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, *54*(3), 466–475. https://doi.org/10.1037/0022-3514.54.3.466
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986).

 Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, *50*(5), 992–1003.

 https://doi.org/10.1037/0022-3514.50.5.992

- Frayn, M., & Knäuper, B. (2018). Emotional eating and weight in adults: A review:

 Research and reviews. *Current Psychology*, *37*(4), 924–933.

 https://doi.org/10.1007/s12144-017-9577-9
- Fugard, A. J. B., & Potts, H. W. W. (2015) Supporting thinking on sample sizes for thematic analyses: a quantitative tool, *International Journal of Social Research Methodology*, 18(6), 669–684. https://doi.org/10.1080/13645579.2015.1005453
- Gabriel, B., Bodenmann, G., & Beach, S. R. (2016). Gender differences in observed and perceived stress and coping in couples with a depressed partner. *Open Journal of Depression*, 5(2), 7–20. https://10.4236/ojd.2016.52002
- Galupo, M. P., & Resnick, C. A. (2016). Experiences of LGBT microaggressions in the workplace: Implications for policy. In *Sexual orientation and transgender issues in organizations* (pp. 271–287). Springer.
- Garaulet, M., Canteras, M., Morales, E., López-Guimera, G., Sánchez-Carracedo, D., & Corbalán-Tutau, M. (2012). Validation of a questionnaire on emotional eating for use in cases of obesity; the Emotional Eater Questionnaire EEQ). *Nutrición Hospitalaria*, 27(2), 645–651. https://doi.org/10.3305/nh.2012.27.2.5659
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, *59*(6), 880–1895. https://doi.org/10.5465/amj.2016.4007
- Gieniusz-Wojczyk, L., Dąbek, J., & Kulik, H. (2021). Risky behaviour among nurses in Poland: An analysis of nurses' physical condition, mental health, and resilience.

 International Journal of Environmental Research and Public Health, 18(4).

https://doi.org/10.3390/ijerph18041807

- Giurgescu, C., Misra, D. P., Sealy-Jefferson, S., Caldwell, C. H., Templin, T. N., Slaughter- Acey, J. C., & Osypuk, T. L. (2015). The impact of neighborhood quality, perceived stress, and social support on depressive symptoms during pregnancy in African American women. *Social Science & Medicine*, *130*, 172–180. https://doi.org/10.1016/j.socscimed.2015.02.006
- Goldschmidt, A. B., Wall, M. M., Zhang, J., Loth, K. A., & Neumark-Sztainer, D. (2016). Overeating and binge eating in emerging adulthood: 10-year stability and risk factors. *Developmental Psychology*, 52(3), 475–483. https://doi.org/10.1037/dev0000086
- Gotay, N. J., & Thatte, U. M. (2017). Principles of correlation analysis. *Journal of The Association of Physicians of India*, 65, 78–81.
- Guiné, R. P. F., Ferrão, A. C., Correia, P., Cardoso, A. P., Ferreira, M., & Duarte, J. (2019). Influence of emotional determinants on the food choices of the Portuguese. Eureka: Social and Humanities, (5), 31–44. https://doi.org/10.21303/2504-5571.2019.00995
- Goyal, R., Kakabadse, N., Kakabadse, A., & Talbot, D. (2021). Female board directors' resilience against gender discrimination. *Gender, Work & Organization*. https://doi.org/10.1111/gwao.12669
- Guiné, R. P. F., Ferrão, A. C., Ferreira, M., Correia, P., Mendes, M., Bartkiene, E., Szűcs, V., Tarcea, M., Sarić, M. M., Černelič-Bizjak, M., Isoldi, K., EL-Kenawy, A., Ferreira, V., Klava, D., Korzeniowska, M., Vittadini, E., Leal, M., Frez-Muñoz,

- L., Papageorgiou, M., & Djekić, I. (2020). Influence of sociodemographic factors on eating motivations modelling through artificial neural networks (ANN). *International Journal of Food Sciences & Nutrition*, 71(5), 614–627. https://doi.org/10.1080/09637486.2019.1695758 *Food Sciences and Nutrition*, 71(5), 614–627. https://doi.org/10.1080/09637486.2019.1695758
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1–12. https://ssrn.com/abstract=2233795
- Hardin, B., Herbozo, S., Kamody, R. C, Kaufman, C. & Thurston, I., R. (2018). The moderating role of resilience on the relationship between perceived stress and binge eating symptoms among young adult women. *Eating Behaviors*, 29, 114–119. https://doi.org/10.1016/j.eatbeh.2018.03.009
- Harker, R., Pidgeon, A. M., Klaassen, F., & King, S. (2015). Exploring resilience and mindfulness as preventative factors for psychological distress burnout and secondary traumatic stress among human service professionals. Work, 54(3), 631–637. https://doi.org/10.3233/WOR-162311
- Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2020). Resilience in the workplace:

 A multilevel review and synthesis. *Applied Psychology: An International Review*,

 69(3), 913–959. https://doi.org/10.1111/apps.12191
- Harward Health Publishing. (2020). *How stress can make us overeat*.

 https://www.health.harvard.edu/healthbeat/how-stress-can-make-us-overeat
 Hassard, J., Teoh, K. R. H., Visockaite, G., Dewe, P., & Cox, T. (2018). The cost of

- work-related stress to society: A systematic review. *Journal of Occupational Health Psychology*, 23(1), 1–17. https://doi.org/10.1037/ocp0000069
- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4–40.
 https://doi.org/10.1080/03637751.2017.1352100
- He, F. X., Turnbull, B., Kirshbaum, M. N., Phillips, B., & Klainin-Yobas, P. (2018).

 Assessing stress, protective factors and psychological well-being among undergraduate nursing students. *Nurse Education Today*, 68, 4–12.
- Heilman, M. E., & Caleo, S. (2018). Combatting gender discrimination: A lack of fit framework. *Group Processes & Intergroup Relations*, 21(5), 725–744. https://doi.org/10.1177/1368430218761587
- Himmelstein, M. S., Young, D. M., Sanchez, D. T., & Jackson, J. S. (2015). Vigilance in the discrimination-stress model for Black Americans. *Psychology & Health*, 30(3), 253–26. https://doi.org/10.1080/08870446.2014.966104
- Holton, M. K., Barry, A. E., & Chaney, J. D. (2016). Employee stress management: An examination of adaptive and maladaptive coping strategies on employee health.

 Work: A Journal of Prevention, Assessment, and Rehabilitation, 53, 299–305.

 https://doi.org/10.3233/wor-152145
- Hundera, M., Duysters, G., Naudé, W., & Dijkhuizen, J. (2019), "How do female entrepreneurs in developing countries cope with role conflict?", *International Journal of Gender and Entrepreneurship*, 11(2), 120–145.

 https://doi.org/10.1108/IJGE-12-2018-013

- Israel, M., & Hay, L. (2006). Research Ethics for Social Scientists: Between Ethical Conduct and Regulatory Compliance. Sage Publications.
- Jackson, L. J., & Hawkins, R. C. (1980). Stress-related overeating among college students: development of a mood eating scale. Paper Presented at the 26th Annual Convention of the Southwestern Psychological Association
- Jaffe, R. (2017). The relationship between perceived gender discrimination and counterproductive work behaviors [Honors thesis, University of Central Florida].

 UCF Theses and Dissertations.
- Jeong, Y., & Jung, M. (2016). Application and Interpretation of Hierarchical Multiple Regression. *Orthopaedic Nursing*, *35*(5), 338–341. https://doi.org/10.1097/NOR.000000000000279
- Johnstone, M., & Feeney, J. A. (2015). Individual differences in responses to workplace stress: the contribution of attachment theory. *Journal of Applied Social Psychology*, 45(7), 412–424. https://doi.org/10.1111/jasp.12308
- Kandiah, J., Saiki, D., Dues, K., & Adomaitis, A. D. (2018). Influence of perceived stress on dressing and eating behaviors of Chinese female university students residing in the United States. *Fashion and Textiles*, *5*(1), 6. https://doi.org./10.1186/s40691-017-0117-x
- Kelly, N. R., Cotter, E. W., Guidinger, C., & Williamson, G. (2020). Perceived discrimination, emotion dysregulation and loss of control eating in young men. *Eating Behaviors*, 37, 1–6. https://doi.org/10.1016/j.eatbeh.2020.101387
- Kim, E., & Park, H. (2018). Perceived gender discrimination, belief in a just world, self-

- esteem, and depression in Korean working women: A moderated mediation model. *Women's Studies International Forum*, 69, 143–150. https://doi.org/10.1016/j.wsif.2018.06.006
- King, T., Hewitt, B., Crammond, B., Sutherland, G., Maheen, H., & Kavanagh, A. (2020). Reordering gender systems: can COVID-19 lead to improved gender equality and health? *The Lancet*, *396*(10244), 80–81. https://doi.org/10.1016/S0140-6736(20)31418-5
- Klatzkin, R. R., Baldassaro, A., & Rashid, S. (2019). Physiological responses to acute stress and the drive to eat: The impact of perceived life stress. *Appetite*, *133*, 393–399. https://doi.org/10.1016/j.appet.2018.11.019
- Klonoff, E. A., & Landrine, H. (1995). The Schedule of Sexist Events: A measure of lifetime and recent sexist discrimination in women's lives. *Psychology of Women Quarterly*, 19(4), 439–472. https://doi.org/10.1111/j.1471-6402.1995.tb00086
- Koch, A. J., D'Mello, S. D., & Sackett, P. R. (2015). A meta-analysis of gender stereotypes and bias in experimental simulations of employment decision making. *Journal of Applied Psychology*, 100(1), 128–161. https://doi.org/10.1037/a0036734
- Koenig, H. G. (2017). Effect of a transactional model education program on coping effectiveness in women with multiple sclerosis. *Brain and Behavior*, 7(10). https://doi.org/10.1002/brb3.810
- Korn, E. L., & Graubard, B. I. (1998). Scatterplots with survey data. *The American Statistician*, 52(1), 58–69. https://www.proquest.com/scholarly-

- journals/scatterplots-with-survey-data/docview/228476174/se-2
- Laerd Statistics. (2013a). Basic requirements of a multiple regression. *Laerd Statistics*. https://statistics.laerd.com/premium/spss/mr/multiple-regression-in-spss-3.php
- Larson, R. B. (2019). Controlling social desirability bias. *International Journal of Market Research*, 61(5), 534–547. https://doi.org/10.1177/1470785318805305
- Laschinger, H. K. S., & Nosko, A. (2015). Exposure to workplace bullying and post-traumatic stress disorder symptomology: The role of protective psychological resources. *Journal of Nursing Management*, 23(2), 252–262.

 https://doi.org/10.1111/jonm.12122
- Lawrence, S. A., Gardner, J., & Callan, V. J. (2007). The support appraisal for work stressors inventory: Construction and initial validation. *Journal of Vocational Behavior*, 70, 172–204. https://doi.org/10.1016/j.jvb.2006.09.003
- Lazarus, R. S., & Folkman, S. (1984). Stress: Appraisal and coping. Springer.
- Lee, J., & Cho, Y. H. (2016). Gender differences in job stress and stress coping strategies among Korean nurses. *International Journal of Bio-Science and Bio-Technology*, 8(3), 143–148. https://doi.org/10.14257/ijbsbt.2016.8.3.15
- Lee, S., & Waters, S. F. (2021). Asians and Asian Americans' experiences of racial discrimination during the COVID-19 pandemic: Impacts on health outcomes and the buffering role of social support. *Stigma and Health*, 6(1), 70.

 https://psycnet.apa.org/doi/10.1037/sah0000275
- Lee, S. Y., Bede Agocha, V., Hernandez, P. R., Park, C. L., Williams, M., & Carney, L.M. (2022). Coping styles moderate the relationship between perceived

- discrimination and eating behaviors during the transition to college. *Appetite*, *168*. https://doi.org/10.1016/j.appet.2021.105699
- Lekchiri, S., & Kamm, J. D. (2020). Navigating barriers faced by women in leadership positions in the US construction industry: A retrospective on women's continued struggle in a male-dominated industry. *European Journal of Training and Development*, 44(6/7), 575–594. https://doi.org/10.1108/EJTD-11-2019-0186
- Li, C. (2013). Little's Test of Missing Completely at Random. *The Stata Journal*, *13*(4), 795–809. https://doi.org/10.1177/1536867X1301300407
- Lian, S. Y., & Tam, C. L. (2014). Work stress, coping strategies and resilience: A study among working females. *Asian Social Science*, *10*(12), 41–52. https://doi.org/10.5539/ass.v10n12p41
- Liu, Y., Song, Y., Koopmann, J., Wang, M., Chang, C. H., & Shi, J. (2017). Eating your feelings? Testing a model of employees' work-related stressors, sleep quality, and unhealthy eating. *Journal of Applied Psychology*, 102(8), 1237–1258.
 https://doi.org/10.1037/apl0000209
- Manjunatha, M. K., & Renukamurthy, T. (2017). Stress among banking employees- A literature review. *International Journal of Research Granthaalaya*, *5*(1), 206–213. https://doi.org/10.29121/granthaalayah.v5.i1.2017.1884
- Manochi, P. E. (2017). Fostering academic success in nursing through mindfulness: A literature review. *Teaching and Learning in Nursing*, *12*, 298–303. https://doi.org/10.1016/j.teln.2017.05.002
- Martínez, J. T. (2019) The role of social support in adult women's weight loss: A

- literature review. *Revista Salud Pública y Nutrición*, *18*(3), 38–44. https://doi.org/10.29105/respyn18.3-4
- Meara, K., Pastore, F., & Webster, A. (2020). The gender pay gap in the USA: a matching study. *Journal of Population*, *33*, 271–305. https://doi.org/10.1007/s00148-019-00743-8
- Meule, A., Reichenberger, J., & Blechert, J. (2018). Salzburg Stress Eating Scale.

 PsycTESTS, 120, 442–448. https://doi.org/10.1016/j.appet.2017.10.003
- Mezuk, B., Ratliff, S., Concha, J. B., Abdou, C. M., Rafferty, J., Lee, H., & Jackson, J. S. (2017). Stress, self-regulation, and context: Evidence from the Health and Retirement Survey. *SSM Population Health*, *3*, 455–463. https://doi.org/10.1016/j.ssmph.2017.05.004
- Mishra, P., & McDonald, K. (2017). Career resilience: An integrated review of the empirical literature. *Human Resource Development Review*, 16(3), 207–234. https://doi.org/10.1177/1534484317719622
- Mizzi, R. C. (2017). Tough Times: Adult Educators *Resource Development*, 29(2), 54–59. https://doi.org/10.1002/nha3.20179
- Nardone, M. (2018). The powerful and covert role of culture in gender discrimination and inequality, *Contemporary Psychoanalysis*, *54*(4), 747–762, https://doi.org/ 10.1080/00107530.2018.1540258
- National Heart Lung and Blood Institute. (2013). Managing Overweight and Obesity in Adults: Systematic Evidence Review from the Obesity Expert Panel. Evidence Report. https://www.nhlbi.nih.gov/health-topics/managing-overweight-obesity-in-

adults

- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8, 2. https://www.proquest.com/scholarly-journals/four-assumptions-multiple-regression-that/docview/2366834549/se-2
- Pappa, S., Barnett, J., Berges, I., & Sakkas, N. (2021). Tired, worried and burned out, but still resilient: A cross-sectional study of mental health workers in the UK during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(9). https://doi.org/10.3390/ijerph18094457
- Par, M., Hassan, S. A., Uba, I., & Baba, M. (2015). Perceived stress among international postgraduate students in Malaysia. *International Journal of Psychological Studies*, 7(4), 1–7. https://doi.org/10.5539/ijps.v7n4p1
- Park, L. D. (2018). L & E Evolution Part II: Discrimination. *Labor Law Journal*, 69(4), 204–241.
- Parker, K., & Funk, C. (2017, December 14). *Gender discrimination comes in many forms for today's working women*. http://www.pewresearch.org/fact-tank/2017/12/14/gender-discrimination-comes-in-many-forms-for-todays-working-women/
- Rabenu, E., & Yaniv, E. (2017). Psychological resources and strategies to cope with stress at work. *International Journal of Psychological Research*, *10*, 8–15. https://doi.org/10.21500/20112084.2698
- Rani, P. B., & Yadapadithaya, P. S. (2018). Conquering workplace stress through

- emotional intelligence: strategies and possibilities. *Indian Journal of Commerce* and Management Studies, 9(1), 7–12. https://doi.org/10.18843/ijcms/v9i1/02
- Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational & Organizational Psychology*, 88(3), 533–562. https://doi.org/10.1111/joop.12120
- Rogerson, D., Soltani, H., & Copeland, R. (2016). The weight-loss experience: A qualitative exploration. *British Medical Council Public Health*, *16*(1), 1–12. https://doi:10.1186/s12889-016-3045-6
- Ron, P. (2020). The relationship between internal and external resources, coping strategies, post-traumatic symptoms, and death-anxiety of round-the-clock paid Philippine immigrants and local workers taking care for the elderly during and after the Gaza war. *Psychology*, 11(4), 606–623.

 https://doi.org/10.4236/psych.2020.114041
- Sanaeinasab, H., Saffari, M., Hashempour, M., Ali-Akbar, K. Z., Waleed, A. A., & Koenig, H. G. (2017). Effect of a transactional model education program on coping effectiveness in women with multiple sclerosis. *Brain and Behavior*, 7, 1–9. https://doi.org/10.1002/brb3.810
- Sankar, V. S., Vasudha, P., & Reddy, V. S. (2018). Stress among elderly in relation to gender, age, social support and psychological well-being. *International journal of basic and applied research*, 8(11). https://www.pragatipublication.com
- Schultchen, D., Reichenberger, J., Mitt, T., Weh, T. R. M., Smyth, J. M., Blechert, J., &

- Pollato, O. (2019). Bidirectional relationship of stress and affect with physical activity and healthy eating. *British Journal of Health Psychology*, 24, 315–333. https://doi.org/10.1111/bjhp.12355
- Seo, D., Ahluwalia, A., Potenza, M. N., & Sinha, R. (2017). Gender differences in neural correlates of stress-induced anxiety. *Journal of Neuroscience Research*, 95, 115–125. https://doi.org/10.1002/jnr.23926
- Shatté, A., Perlman, A., Smith, B., & Lynch, W. D. (2016). The positive effect of resilience on stress and business outcomes in difficult work environments.

 *Journal of Occupational Environmental Medicine, 59, 135–140.

 https://doi.org/10.1097/JOM.000000000000014
- Shavitt, S., Cho, Y. I., Johnson, T. P., Jiang, D., Holbrook, A., & Stavrakantonaki, M. (2016). Culture moderates the relation between perceived stress, social support, and mental and physical health. *Journal of Cross-Cultural Psychology*, 47(7), 956–980. https://doi.org/10.1177/0022022116656132
- Shove, E. (2010). Beyond the ABC: Climate change policy and theories of social change. *Environment and Planning A: Economy and Space*, 42(6), 1273–1285. https://doi.org/10.1068/a42282
- Sipe, S. R., Larson, L., Mckay, B. A., & Moss, J. (2016). Taking off the blinders: A comparative study of university students' changing perceptions of gender discrimination in the workplace from 2006 to 2013. *Academy of Management Learning & Education*, 15(2), 232–249. https://doi.org/10.5465/amle.2014.0139
- Solem, R. C. (2015). Limitation of a cross-sectional study. American Journal of

- Orthodontics and Dentofacial Orthopedics, 148(2), 205. https://doi.org/10.1016/j.ajodo.2015.05.006
- Solomon, M. R. (2001). Eating as both coping and stressor in overweight control. *Journal of Advanced Nursing (Wiley-Blackwell)*, 36(4), 563–572.

 https://doi.org/10.1046/j.1365-2648.2001.02009.x
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs.

 Journal of Business & Psychology, 34(2), 125–137.

 https://doi.org/10.1007/s10869-018-09613-8
- Spence Laschinger, H. K., & Nosko, A. (2015). Exposure to workplace bullying and post-traumatic stress disorder symptomology: The role of protective psychological resources. *Journal of Nursing Management*, 23(2), 252–262. https://doi.org/10.1111/jonm.12122
- SteelFisher, G. K., Findling, M. G., Bleich, S. N., Casey, L. S., Blendon, R. J., Benson, J. M., Sayde, J. M., & Miller, C. (2019). Gender discrimination in the United States:
 Experiences of women. *Health Services Research*, 54, 1442–1453.
 https://doi.org/10.1111/1475-6773.13217
- Stepanikova, I., Acharya, S., Abdalla, S., Baker, E., Klanova, J., & Darmstadt, G., L. (2020). Gender discrimination and depressive symptoms among child-bearing women: ELSPAC-CZ cohort study. *EClinicalMedicine*, 20, 1–8. https://doi.org/10.1016/j.eclinm.2020.100297
- Story, D. A., & Tait, A. R. (2019). Survey Research. *Anesthesiology*, *130*, 192–202. https://doi.org/10.1097/ALN.0000000000002436

- Street, T. D., Lacey, S. J., & Somoray, K. (2018). Employee stress, reduced productivity, and interest in a workplace health program: A case study from the Australian mining industry. *International Journal of Environmental Research and Public Health*, *16*(1), 94. https://doi.org/10.3390/ijerph16010094
- Tajvar, M., Grundy, E., & Fletcher, A. (2018). Social support and mental health status of older people: a population-based study in Iran-Tehran. *Aging & Mental Health*, 22(3), 344–353. https://doi.org/10.1080/13607863.2016.1261800
- Tomiyama, A. J. (2019). Stress and o3besity. *Annual Review of Psychology*, 70, 703–718. https://doi.org/10.1146/annurev-psych-010418-102936
- Triana, M. D. C., Jayasinghe, M., Pieper, J. R., Delgado, D. M., & Li, M. (2019).

 Perceived workplace gender discrimination and employee consequences: a metaanalysis and complementary studies considering country context. *Journal of*management, 45(6), 2419–2447. https://doi.org/10.1177/0149206318776772
- University of Notre Dame. (n.d.). *Durbin-Watson Significance Tables*.

 https://www3.nd.edu/~wevans1/econ30331/Durbin_Watson_tables.pdf
- U.S. Bureau of Labor Statistics. (2021). Labor force characteristics by race and ethnicity, 2020. Bureau of Labor Statistics Reports, 1–84. https://www.bls.gov/opub/reports/race-and-ethnicity/2020/pdf/home.pdf
- U.S. Equal Employment Opportunity Commission. (2020). Sex-Based Charges (Charges filed with EEOC) FY 1997 FY 2021. https://www.eeoc.gov/statistics/sex-based-charges-charges-filed-eeoc-fy-1997-fy-2020
- Uyanık, G. K., & Güler, N. (2013). A Study on multiple linear regression analysis.

- Procedia Social and Behavioral Sciences, 106, 234–240. https://doi.org/10.1016/j.sbspro.2013.12.027
- Van den Brande, W., Baillien, E., De Witte, H., Vander Elst, T., & Godderis, L. (2016).

 The role of work stressors, coping strategies and coping resources in the process of workplace bullying: A systematic review and development of a comprehensive model. *Aggression and Violent Behavior*, 29, 61–71.

 https://doi.org/10.1016/j.avb.2016.06.004.
- Wang, L., Tao, H., Bowers, B. J., Brown, R., & Zhang, Y. (2018). Influence of social support and self-efficacy on resilience of early career registered nurses. Western Journal of Nursing Research, 40(5), 648–664.
 https://doi.org/10.1177/0193945916685712
- Webster, J. R., Adams, G. A., Maranto, C. L., & Beehr, T. A. (2018). "Dirty" workplace politics and well-being: The role of gender. *Psychology of Women Quarterly*, 42(3), 361–377. https://doi.org/10.1177/0361684318769909
- Wever, M. C. M., Dingemans, A.E., Geerets, T., & Danner, U.N. (2018). Screening for binge eating disorder in people with obesity. *Obesity Research & Clinical Practice*, 12, 299–306. https://doi.org/10.1016/j.orcp.2018.02.002
- Willem, C., Gandolphe, M. C., Roussel, M., Verkindt, H., Pattou, F., & Nandrino, J. L. (2019). Difficulties in emotion regulation and deficits in interoceptive awareness in moderate and severe obesity. *Eating and Weight Disorders*, 24(4), 633–644.
 https://doi.org/10.1007/s40519-019-00738-0
- Williams, M. N., Gomez Grajales, C. A., & Kurkiewicz, D. (2013). Assumptions of

multiple regression: Correcting two misconceptions. *Practical Assessment, Research & Evaluation*, *18*, 11. https://www.proquest.com/scholarly-journals/assumptions-multiple-regression-correcting-two/docview/2366796969/se-2

- Winwood, P. C., Colon, R., & McEwen, K. (2013). A practical measure of workplace resilience: Developing the resilience at work scale. *Journal of Occupational and Environmental Medicine*, 55(10), 1205–1212. https://doi.org/www.jstor.org/stable/48500326
- Woodhead, E. L., Northrop, L., & Edelstein, B. (2016). Stress, social support, and burnout among long-term care nursing staff. *Journal of Applied Gerontology*, 35(1), 84–105. https://doi.org/10.1177/0733464814542465
- World Health Organization. (2017). *Obesity and overweight*. Google Scholar. http://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight
- Yang, J., & Han, K. S. (2020). A rational emotive behavior therapy-based intervention for binge eating behavior management among female students: a quasi-experimental study. *Journal of Eating Disorders*, 8, 65.

 https://doi.org/10.1186/s40337-020-00347-8