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Perceptions of Role Conflict and Workplace Stress Among Women Working in Two Traditionally Male Professions

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Abstract

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MS, Walden University, 2004

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Abstract

Role conflict and workplace stress can result in psychological and physical disorders. Research has indicated that societal forces are ingrained concerning how gendered behaviors are manifested in the workplace. However, research has not included women working in male-dominated professions, nor has research examined how stress and role conflict might differ for women in these professions. Understanding the different experiences of women in two distinct professions might illuminate the diversity of experiences in these understudied environments. This quantitative study, based on role-congruity and transactional stress theories, examined and compared women's perceptions of role conflict and stress in 2 male-dominated professions. A cross-sectional survey design was used to collect data on perceived workplace role conflict and workplace stress from female aviators ($n = 66$) recruited from the Ninety-Nines Association of Professional Aviators and female marketing executives ($n = 63$) recruited from the Women's Marketers of the Berkshires. ANOVA revealed that female marketers reported higher role conflict on the success, power, and competition and conflicts in family relations subscales than did female aviators. Female aviators reported higher role conflict on the restrictive emotionality and restrictive affectionate behavior subscales than did female marketers. Female aviators perceived greater workplace stress severity whereas female marketers perceived greater workplace stress frequency. Correlations revealed relationships between role conflict and stress for female marketers, but not for female aviators. This research creates greater awareness of role conflict and workplace stress in women. Organizations may use these findings to develop strategies to eliminate the negative ramifications of gender-role conflict and workplace stress on women.

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Chapter 1: Introduction

Background

As the global economy evolves, researchers and organizations have become increasingly concerned about the effects of role conflict and workplace stress among employees (Beehr, Bowling, & Bennett, 2010; Lyness & Heilman, 2006). Women who experience role conflict may suffer economically in loss of pay and position in organizations, compared to their male counterparts (Catalyst, 2006). In addition, it may take women more than 40 years to reach parity with men who have attained senior-management positions (Catalyst, 2006). Beehr et al. (2010) determined that the impact of workplace stress on professional women cannot be overstated; the effects of workplace stress on women can range from psychological disorders to physical manifestations such as anxiety and high blood pressure.

Women have made some progress in attaining senior-level management positions in corporations (Eagly, Johannesen-Schmidt, & Van Engen, 2003). However, women are still a small minority in executive management positions in organizations because of gender stereotyping in the workplace (Eagly et al., 2003). Additionally, because leadership positions are predominately male dominated, an imbalance exists in management with respect to gender. Last, the stereotyping of leadership traits in organizations and society as being masculine in nature (assertive and decisive) rather than feminine (indecisive and communal) means women may lack leadership traits (Eagly et al., 2003).

Society places gender expectations on both men and women that become standard in the workplace and the home (Eagly & Karau, 2002). In their review of gender

expectations, Eagly and Karau (2002) argued that societal rules markedly impact how each gender acts in society and in the workplace. Gender-role expectations are so powerful, they reinforce gender stereotypes of men and women (Eagly & Karau, 2002).

Corporations are slowly starting to understand the importance of a diversified management team that is more inclusive of women (Catalyst, 2009). For example, after reviewing the board composition of Fortune 500 companies, Catalyst (2009) concluded that 85% of corporate boardroom positions are held by men, leaving women with only 15%. At the present rate, it will take 73 years for women to reach parity with men in corporate boardrooms (Catalyst, 2009). The societal expectations placed on men create a greater hierarchal status for men in society than women (Billing & Alvesson, 2000). As a result of this hierarchal status, men are able to attain greater access to management positions, thereby creating a spill-over effect. In contrast, women tend to have lower hierarchal status than men, creating a disadvantage in attaining management positions in organizations (Billing & Alvesson, 2000).

The societal hierarchical status of men and women is based on gender stereotypes (Giscombe & Mattis, 2003). These stereotypes are composed of belief systems individuals hold in which traits and actions of men and women are attributed to gender. They serve as societal expectations and are prescribed as "social norms." Individuals who exhibit behaviors that are not in compliance with these social norms risk potential discriminatory action by society (Giscombe & Mattis, 2003).

In a study by Catalyst (2009), researchers found that the demographics in many corporations show they are male dominated. An organizational culture that is masculine in nature reinforces the belief that autocratic traits are needed to have effective leadership

in an organization and that an organization's culture that embraces masculinity clearly benefits men rather than women (Rudman & Glick, 2001). This viewpoint is a result of the social expectation being placed on women of behaving communally in nature.

Men and women can experience role conflict in a variety of ways. One type of role conflict a woman may experience in the work place is work–family conflict. This conflict occurs as the result of women and men trying to balance the complex aspects of career and family. As a result of societal expectations, most burden of work–family conflict is placed on women because they are viewed as the primary caretakers in society (Livingston & Judge, 2008). As a result of work–family conflict, women may be more prone to psychological and physical illnesses resulting from stress (Livingston & Judge, 2008).

Another way women can experience role conflict is when they adapt their behavior to be closer to stereotypes of male behavior when working in an organization. When women adopt stereotypical masculine traits to meet an organization's culture they may experience role conflict (Eagly & Johnson, 1990). Women who are in leadership positions run the risk of discrimination as a result of acting incongruently with stereotypical societal expectations regarding gender actions. Further, discrimination against women in leadership positions increased more as the result of women acting more autocratically than if they did not adopt the traits associated with being autocratic in nature (Eagly & Johnson, 1990).

Workplace stress in men and women is a common occurrence in all areas of an organizational setting (Maki, Moore, Grunberg, & Greenberg, 2005). Workplace stress occurs as the result of individuals feeling that the demands placed on them in the

workplace are greater than the ability of their emotional resources to effectively address those demands (Maki et al., 2005). Workplace stress can have a variety of negative consequences for employees and organizations that manifest in psychological and physical issues among employees. Furthermore, negative economic impact occurs from this organizational stress (Maki et al., 2005). Stress may not be the result of a single entity (environment or individuals), but rather is derived from the interaction (transaction) between entities (Lazarus & Folkman, 1984). The outcome of stress is determined by the appraisal and coping styles of the individual involved in a given event or situation.

The cost of workplace stress for organizations has escalated in recent years, and costs have now exceeded $300 billion per year (Cynkar, 2007). The costs associated with employee workplace stress include increased tardiness and absenteeism, lower productivity, higher health costs, and increased liabilities. Given that the costs have grown substantially over the past decade (Cynkar, 2007), it is reasonable to assume that these costs will continue to grow exponentially in the future.

A variety of stress-related factors occur in the workplace that can contribute to workplace stress for working professional women. One such factor is discrimination, which can manifest as gender stereotyping (Iwasaki, MacKay, & Ristock, 2004). As a result of gender stereotyping, a woman may experience sexual harassment, biased job evaluations, and limited job and promotional opportunities in organizations (Iwasaki et al., 2004), Additionally, when a woman experiences gender stereotyping in the workplace, it may be accompanied by increased risk for greater amounts of workplace stress (Iwasaki et al., 2004). Discriminatory practices toward women in organizations can

also lead to women experiencing role conflict (Eagly & Karau, 2002). For example, role conflict can occur in women who hold minority status in an organization (e.g., working in male-dominated organizations; Eagly & Karau, 2002).Women will experience greater amounts of workplace stress as the result of working in male-dominated professions when acting in an incongruent manner to the gender roles prescribed to them by society (Eagly & Karau, 2002).

Statement of the Problem

Women are entering professions that traditionally have been male dominated. Researchers have noted the importance of understanding societal gender-role expectations in the prevention of role conflict (Eagly & Karau, 2002) and workplace stress (Colligan & Higgins 2005). Although research has been conducted regarding role conflict and workplace stress, very little research has been conducted on gender-role conflict and workplace stress among women employed in traditionally male-dominated professions. Therefore, in this study I examined gender-role conflict and workplace stress together among women in traditionally male environments. This study is more robust than prior studies of either gender-role conflict or workplace stress as individual variables. This study fills a gap in the literature by providing empirical support for the relationship between role conflict and workplace stress occurring in women working in traditionally male-dominated professions.

Although considerable research has been conducted on role conflict and workplace stress, a review of the literature revealed two things. First, the nature of the relationship between an individual's gender-role characteristics and the constraints placed on an individual as a result of societal gender-role expectations are not fully understood.

Second, the impact of societal gender-role expectations on women working in male-dominated professions is still not fully understood. The importance of women being able to work in male-dominated professions without experiencing heightened levels of role conflict and workplace stress will be of even greater importance as the global economy evolves. The problem is that stakeholders do not fully know how role conflict and workplace stress are related to societal gender expectations and the potential mechanisms by which societal gender expectations can affect women working in male-dominated environments.

Even though researchers have examined factors related to women experiencing role conflict and workplace stress, studies are limited in scope and knowledge and do not thoroughly examine the effects of societal gender expectations on individuals in society and organizations. For example, female-leadership styles are continually called into question. On one hand women are expected to act communally, yet this characteristic is feminine in nature and is in direct contrast to the view of effective stereotypical leadership traits being agentic, which are masculine in nature (Eagly, 2007).

As society evolves, men and women's gender roles are beginning to be redefined in relation to the workplace and family. However, women continue to face the pressure of needing to act in a manner that is incongruent with societal expectations, particularly while working in male-dominated professions in which the organizational culture is masculine in nature. This pressure is still occurring even though women comprise almost 50% of the workforce (Portello & Long, 2001). Additionally, if a woman fails to adopt the stereotypical masculine traits of an organization, she may face a variety of prejudices such as indifferent attitudes toward her, poor evaluations, and wage disparity (Portello &

Long, 2001). Yet if a woman adopts the stereotypical masculine traits, she may experience role conflict and workplace stress (Colligan & Higgins, 2005; Eagly & Karau, 2002).

The importance of stress research and its effects on an individual's psychological and physical health have been well documented. The study of stress enables researchers to identify and quantify potential stressors on an individual as well as on the organization as a whole (Iwasaki et al., 2004). The present study extends knowledge of factors that contribute to workplace stress. Further identification of the contributing factors that increase the risk for workplace stress may influence policies and procedures in male-dominated organizations toward women.

In their study of workplace stress, Lazarus and Folkman (1984) developed transactional theory, arguing that it is neither the environment nor the individual that produces stress, rather the interaction that takes place between the environment and the individual. For female marketers and aviators working in male-dominated environments, the transaction in the workplace between a woman and a male counterpart may be perceived as risky, detrimental, or taxing. Researchers labeled this view a primary appraisal (Lazarus & Folkman, 1984). Additionally, professional working women may believe their options are limited as a result of being part of the minority group in an organization. As a result of feeling inferior, a woman may resort to using emotion-focused coping skills, which raise the potential for workplace stress, labeled a secondary appraisal (Lazarus & Folkman, 1984).

Research Questions and Hypotheses

The following research questions guided the study:

1. Do women working in the male-dominated professions of marketing and aviation experience personal-role conflict differently from each other?

2. Do women working in the male-dominated professions of marketing and aviation experience workplace stress differently from each other?

3. Is there a relationship between workplace stress and role conflict in women working in the male-dominated professions of marketing and aviation?

The null and alternative hypotheses associated with each research question follow:

H_{01}: There will be no statistically significant differences in personal-role conflict, measured by the Gender-Role Conflict Scale (GRCS) subscales, between female aviators and female marketers.

H_{a1}: There will be statistically significant differences in personal-role conflict, measured by the GRCS subscales, between female aviators and female marketers.

H_{02}: There will be no statistically significant differences in workplace stress, measured by the Job-Stress Survey scale (JSS) subscales, between female aviators and female marketers.

H_{a2}: There will be statistically significant differences in workplace stress, measured by the JSS subscales, between female aviators and female marketers.

H_{03}: There will be no relationship between workplace stress and role conflict, measured by the GRCS and JSS subscales, respectively, among female aviators and female marketers.

H_{a3}: There will be a relationship between workplace stress and role conflict, measured by the GRCS and JSS subscales respectively, among female aviators and female marketers.

Theoretical Framework

For this study, two theories provided the foundation from which to investigate the effects of role conflict and workplace stress for women working in male-dominated professions. Role-congruity theory (Eagly & Karau, 2002) suggests that individual prejudices can arise when a person believes that the social norms of a particular social group are not being followed. When a woman's occupation is in a field that is traditionally dominated by men, a woman may be seen as acting incongruently with the societal expectations that are set for her gender. The theoretical background for the study of workplace stress was transactional-stress theory (Lazarus & Folkman, 1984), which maintains that when environmental demands outweigh an individual's capacity to cope with those demands, the resulting environmental demands create stress. I present a more detailed description of role-congruity theory (Eagly & Karau, 2002) and transactional-stress theory in Chapter 2.

Nature of the Study

To answer the research questions, I sampled women participants from two distinct professional organizations: The Ninety-Nines Association of Professional Aviators and the Women's Marketers of the Berkshires. I chose both organizations because they represent professions that are male dominated, and they are industries in which female professionals are likely to be subject to role conflict and workplace stress due to their minority status. I used an online survey methodology to collect data. The instrument to

examine role conflict was the GRCS (O'Neil et al., 1986). The instrument used to examine workplace stress was the JSS (Spielberger & Vagg, 1999). The measures of stress and role conflict are described in Chapter 3. Both measures are represented by several subscales. I describe the research design, sampling method, and instruments in more detail in Chapter 3.

Purpose of the Study

The purpose of this quantitative study was to examine women's perceptions of role conflict and stress in the workplace in two stereotypically traditional male professions: marketing and aviation. Additionally, this study extends the knowledge and understanding of role conflict and workplace stress in women and places the importance of this knowledge on producing prevention policies and programs. Last, in this study I compared the two professions to ascertain if there are differences in role conflict and workplace stress among women working in marketing and aviation. Overall, the study contributes to the understanding of whether women in traditionally male-dominated professions experience role conflict and workplace stress while working in these environments.

The potential negative implications for professional women working in male-dominated professions experiencing role conflict and workplace stress have far-reaching effects for women as well as for organizations. Women working in organizations with a masculine culture fare less well in leadership roles than their male counterparts (Eagly, 2007) in that women may encounter obstacles that are strictly related to their gender. Additionally, women might have been denied promotion, access to leadership positions, or access to the evaluative process in organizations that were male dominated,

particularly if executives were mostly male (Eagly & Diekman, 2005). This practice is discriminatory in nature. Male and female leadership effectiveness is equal, but men receive an unfair advantage in the workplace simply because they are male (Portello & Long, 2001).

Societal expectations regarding gender favor men as leaders. The expectation given to men and to women from society is that men are better equipped to be leaders (Eagly, Makhijani, & Klonsky, 1992). This societal expectation has created a "social lens" through which men do not face the same biases women face when seeking leadership positions (Eagly et al., 1992). In other words, men who seek a leadership position are seen as acting congruently with societal expectations and thereby are viewed as acting in a consistent manner with societal-held beliefs regarding appropriate gender behavior (Eagly et al., 1992). In contrast, when a woman seeks a leadership position, she is viewed as acting incongruously with societal gender expectations of appropriate behavior (Eagly et al., 1992). As a result of this view, women may experience role conflict and workplace stress.

Men have an unfair advantage over women who are seeking to be promoted, evaluated, or hired at the leadership level (Eagly, 2007; Eagly & Diekman, 2005; Eagly et al., 1992; Portello & Long, 2001). Societal expectations have created a negative bias toward women and have resulted in the stereotyping of men and women; when men and women have equal ability, organizations may choose a man for a leadership position due to these societal expectations (Eagly, 2007). Although these expectations still exist and men still benefit from the negative stereotyping of female leaders, progressive organizations disregard the negative stereotyping of women as leaders (Eagly, 2007).

Definitions

Identification and definitions of the terms used in the study appear as follows:

Gender-role conflict: A psychological state in which socialization of the gender roles of each sex have negative consequences for the person or others (O'Neil et al., 1986).

Gender-role congruity: The desirable expectation for each gender, taking on the descriptive and injunctive norms that society expects (Conway, Pizzamigilo, & Mount, 1996).

Gender stereotypes: Categorical beliefs composed of traits and behavioral characteristics assigned to men and women only on the basis of their group label, serving as a type of expectation of behavior depending on the gender group to which members are assigned by society (Hamilton & Sherman, 1994).

Glass ceiling: A barrier women in the workplace face in getting promoted to upper levels of management in an organization (Elacqua, Beehr, Hansen, & Webster, 2009).

Role conflict: An interrole conflict in which the gender-role pressures from society are incompatible with an individual (Eagly & Karau, 2002).

Stereotyping: An unjustifiable, usually fixed mental picture of individuals or groups (Hamilton & Sherman, 1994).

Stress: An altered state in individuals that occurs due to situations in which individuals view a threat to their current physical or psychological state (Zimbardo, Weber, & Johnson, 2003).

Workplace stress: The conditions in the workplace that can have harmful physical and emotional responses for an individual. Workplace stress can occur as a result of a variety of factors such as poor job fit, events occurring in an organization, job demands, lack of resources, or family demands (Iwasaki et al., 2004).

Assumptions, Limitations, and Scope

Assumptions

I assumed that the two instruments used for this study—the GRCS (O'Neil et al., 1986) and the JSS (Spielberger & Vagg, 1999)—are valid and reliable measures of perceptions of role conflict and workplace stress, respectively. In addition, I assumed that the sample chosen for this study responded in a manner that was representative of women who are members of the two groups in the study: The Ninety-Nines Association of Professional Aviators and the Women's Marketers of the Berkshires. This study was based on the assumption that personal-role conflict and workplace stress are greater for women in male-dominated professions than for women in nonmale-dominated professions. I also assumed that personal-role conflict and workplace stress in professional women may differ among women in different professions.

Limitations

This study has a number of limitations: (a) For this study, I used career-women participants representing two professional organizations; thus, the study may not generalize to other populations of career women; (b) the self-selected participants might not have been a representative sample of the two populations of career women; and (c) the two male-dominated professions were not expected to be representative of all

male-dominated professions. A substantial body of literature supports the concept that

men and women experience stress in the same way (Ayman & Korabik, 2010).

Scope

This study focused on the effects of role conflict and workplace stress on women

working in predominately male professions. I chose the two variables (role conflict and

workplace stress) because although many studies addressed role conflict and workplace

stress as independent factors, few authors looked at these constructs in conjunction.

Additionally, I chose women working in male-dominated professions as the sample. This

sample enabled me to narrow the focus of the research and add an important social issue

to this study in relation to women. I did not intend to cover corporate change in relation

to women, which would have been problematic because of the politics involved in

corporations.

Significance of the Study

In an evolving global economy, women increasingly enter male-dominated

professions (Catalyst, 2009), although slowly. As the global economy continues to

change, a study of this nature is timely. As a result of the negative effects of role conflict

and workplace stress, women may develop debilitating physical and mental conditions

(Beehr et al., 2010). For instance, high blood pressure can lead to strokes as well as other

heart conditions, and mental health conditions such as anxiety can lead to variety of

mental disorders. Mental and physical disorders may negatively affect organizations in

absenteeism, loss of productivity, and lack of employee satisfaction (Beehr et al., 2010).

A study of this nature can bring about social change for individuals and organizations,

yielding a better chance for women working in male-dominated industries to develop

coping mechanisms to help alleviate the negative effects of role conflict and workplace stress. Attention to the results from this study may create a more competitive workforce that will enable workers and corporations to be more competitive in the global economy.

Psychologists, sociologists, and economists have provided research on the adverse effects of workplace stress and role conflict on employees, organizations, and society as a whole. The social cost to society cannot be overstated: this cost is reflected in poor productivity, absenteeism, job turnover, and unemployment, due to greater levels of anxiety and stress that, in turn, produce poor mental health in women (Beehr et al. (2010). A positive outgrowth of this study on society would be a greater awareness of the discrimination women confront while working in male-dominated professions. A byproduct of workplace stress and role conflict is stereotyping of women in executive management positions.

Discriminatory practices toward women persist, even though new laws have been enacted to protect women from discrimination. The term *glass ceiling* describes bias against women working in male-dominated industries (Daily, Trevis Certo, & Dalton, 1999). As a result of this discrimination against women working in male-dominated professions, the majority of women in these organizations seek female-gender-type occupations, whereas men seek more heterogeneous occupations, including senior-management positions (Abella, 1984).

Women in significant numbers have not been included in senior-management positions in the past, compared to men. In a survey conducted by Inside Business (2001), only four women had reached the CEO level of management in all of the Fortune 500 companies. Educating organizations and society has the potential to aid in reducing the

stereotyping of women, thereby reducing the adverse effects of workplace stress and role conflict in women. For society, this positive social change has the potential to promote greater employee productivity, less unemployment, and more economic activity for women, which in turn would benefit society as a whole. Increasing the gender diversity in organizations would create more opportunities for women to attain senior-management positions in organizations, thereby raising the standard of living of women (Schein, 2001). With greater enlightenment about the adverse effects of workplace stress and role conflict in women working in male-dominated professions, new coping techniques and enhanced educational tools can be developed to reduce those adverse effects.

Summary

Societal gender expectations placed on men and women create a hierarchical status for people of both genders. As a result of the hierarchical status placed on women in an organization, women face greater barriers to attaining leadership or management positions in organizations than do men (Eagly, 2007). Additionally, as an outgrowth of societal expectations, men have an advantage in attaining leadership or management positions due to the perception that men have greater leadership abilities than women (Eagly, 2007).

Even though abundant literature describes workplace stress and role conflict, further research is needed on these topics, querying how they relate to women working in male-dominated professions. Women have made progress in attaining leadership and managerial positions; however, progress has been slow and women continue to experience discrimination and sexual harassment (Beehr et al., 2010). Continued discrimination against women may induce role conflict and workplace stress in women

(Eagly & Karau, 2002). In addition, role conflict and workplace stress negatively impact an organization's profit margin in a number of ways, such as through greater absenteeism and tardiness, which lead to less productivity (Beehr et al., 2010).

I discuss the research reviewed for this study regarding role conflict and workplace stress at length in Chapter 2. In Chapter 2, I explore the following topics: role congruity, management styles, role conflict, workplace stress, and discriminatory practices, and how they relate to women working in male-dominated environments. In addition, I examine the two theories used for this study—role-congruity theory and transactional theory—in relation to role conflict and workplace stress in professional working women working in male-dominated professions.

In Chapter 3, I described the research methodology, including a description of the participants, survey instruments, data-collection procedures, and statistics employed in the present study. In Chapter 4, I presented the results of the study, which include the following: data collection, results, demographics, statistical analyses, and a summary. In Chapter 5, I presented the interpretations of the findings, the limitations of study, recommendations, implications, and conclusions.

Chapter 2: Literature Review

Introduction to the Literature Review

Researchers in sociology, psychology, and economics, as well as other sciences, have long debated if there are any inherent differences between the genders (Roughgarden, 2004). For organizational psychologists, that debate is less central; however, the use of gender studies in organizations is an often-researched variable (Hyde, 2005). Many organizational studies that use gender as a variable include work–family conflict, conflict, role congruity, effective leadership, job performance, and workplace stress. Organizational psychologists have concluded that differences between the genders in relation to psychological makeup are small, if at all noticeable (Hyde, 2005).

In all societies, women and men are expected to follow unwritten social rules, and this social order is hierarchical in nature. These hierarchies are formed in all areas in a given society, such as in the workplace and the home. These societal rules or norms predetermine what manner of behavior is acceptable for each gender. For example, in organizations, men and women may be typecast into certain positions (Heilman, 1995). This typecasting can lead to a variety of discriminatory practices; for example, in the evaluation of leaders, men and women can be evaluated differently based on the societal view of what characteristic traits are thought to result in effective leadership. Typecasting is part of the organizational culture of many organizations (Heilman, 1995), the result of an organization trying to match positions to a society's or organization's view of the behaviors of a particular group, in this case, to gender. Additionally, hierarchical gender roles established by society impact which specific occupations are thought to meet societal expectations for a given gender (Cejka & Eagly, 1999).

The focus of Rudman and Glick's (2001) study was to ascertain if women seeking to be hired or promoted, who display stereotypical masculine traits, would experience discrimination for acting incongruently with stereotypical feminine traits. Hierarchical belief systems in society are much more ingrained in men than women and women tend to be more democratic in nature. Additionally, as a result of hierarchical belief systems, stereotypical gender-role viewpoints manifest frequently. This manifestation has the potential to greatly affect negative actions and behavior toward women who act incongruently with the stereotypical viewpoint placed on their gender by society (Rudman & Glick, 2001).

Today gender discrimination is still a common occurrence in organizations. For example, in many organizations, senior-level positions held by women are still paltry in number compared to those held by men. Fewer than 20% of organizations have three or more female executive officers and more than 33% have no female representation at the level of executive officers (Catalyst, 2009). One of the main reasons for this is gender stereotyping in organizations, particularly at the leadership level. Organizations maintain the view that individuals at the leadership level must have qualities that are considered stereotypically masculine in nature such as assertiveness, competiveness, and behaving autocratically, rather than stereotypical feminine qualities such as sensitivity, femininity, and sympathy (Eagly & Carli, 2007). For a society to become more supportive of women in the future, it is important to recognize the potential harmful effects gender stereotyping can have on working professional women.

This chapter presents a comprehensive review of role conflict and workplace stress that professional working women experience. It begins with a discussion of the

approach I took to search for applicable literature. This explanation is followed by a review of the literature on the stereotyping of professional working women. The next section contains a review of the literature on societal gender-role expectations and management style, with emphasis on the potential effects of stereotypical male and female characteristics adopted in management style. Women have made greater progress in attaining leadership positions than in the past. However, the common theme between the past and the present is that leadership in itself is usually defined using masculine terminology (Martell & DeSmet, 2001). This discussion is then followed by considering the potential role conflict that professional working women face when working in male-dominated industries in leadership style, leadership evaluation, and work and family commitments, all of which can have a negative impact on women and on an organization. Then, I review potential workplace stress that can occur in professional working women, followed by looking at the discriminatory practices carried out against women in the workplace. The next section is a review of current workplace dynamics that have an impact on working women. The last section is a summarization of literature in which the following topics were researched: stereotyping female managers, characteristics of female managers, different types of role conflict, discriminatory practices, penalties that women face in the workplace, workplace stress that women experience, and current workplace dynamics.

Research Strategy

I used computer-based information searches with the key words *role conflict* and *workplace stress* when paired with terms such as *gender, sex, leadership, power, occupational stress, sex differences, stereotyping,* and *women*. These key words were

searched in the following databases: PsycINFO, Psychological Abstracts, Dissertation

Abstracts International, Business Source Complete, and Social Science Citation Index.

Also, I searched for the key words *discrimination* and *women,* when paired with terms

such as *role conflict, leadership, power,* and *workplace stress,* in the following databases:

Psychological Abstracts, Dissertation Abstracts International, and Social Science Citation

Index. I conducted research through the reference lists of numerous review articles,

chapters, and books, as well as the reference lists of all located studies. The data-based

search yielded 200 relevant articles, journals, dissertations, and books, from which I

focused on 100 articles, journals, dissertations, and books that were current for the

literature review and focused on women in finance and medical professions.

Gender Stereotyping

Researchers in sociology, psychology, and economics, as well as other sciences,

have long debated if there are any inherent differences between the genders

(Roughgarden, 2004; Rudman & Glick, 2001). For many organizational psychologists,

that debate is less central in that many organizational psychologists have concluded that

the differences between the genders are minimal (Iwasaki et al., 2004). However, the use

of gender studies in organizations is an often-researched variable (Hyde, 2005). Many

organizational studies that used gender as a variable include work–family conflict,

conflict, role congruity, effective leadership, job performance, and workplace stress

(Eagly et al., 2003).

Men and women are expected to follow unwritten social rules, and this social

order is hierarchical in nature (Heilman, 1995). These hierarchies form in certain areas in

a given society such as in the workplace and the home. These societal rules or norms

predetermine acceptable behaviors for each gender. For example, in organizations, men and women may be typecast into certain roles (Eagly & Karau, 2002). This typecasting can lead to a variety of discriminatory practices; for example, in the evaluation of leaders, men and women can be evaluated differently based on the societal view of what type of characteristic traits are thought to result in effective leadership (Eagly & Karau, 2002). Typecasting, part of the organizational culture of many organizations (Heilman, 1995), results when an organization tries to match positions to a society's or organization's view of the behaviors of a particular group, in this case, to gender. Additionally, hierarchical gender roles established by society impact which specific occupations are thought to meet societal expectations for a given gender (Cejka & Eagly, 1999). For example, if a given society views men as more qualified in leadership positions, then it will be more acceptable for a man to either assume a leadership position or apply or be promoted to a leadership position.

The focus of Rudman and Glick's (2001) study was to ascertain if women seeking to be hired or promoted, who display stereotypical masculine traits, would experience discrimination for acting incongruently with stereotypical feminine traits. Rudman and Glick concluded that hierarchical belief systems in society are much more ingrained in men than women and women tend to be more democratic in nature. Additionally, as a result of hierarchical belief systems, stereotypical gender-role viewpoints are more likely to manifest. This manifestation has the potential to greatly affect negative actions and behavior toward women who act incongruently with the stereotypical viewpoint placed on their gender by society.

Researchers in organizational and social psychology have shown that in societies, stereotypical views are prevalent among men and women. In their cross-cultural study, S. H. Schwartz and Rubel (2005) asserted, from 127 samples in 70 countries ($N = 77,528$), that men hold such stereotypical traits as assertiveness and decisiveness more than women. Further, they found stereotypical traits to be associated with women, such as nurturing and empathy, cross-culturally. In addition, societal views of gender traits were unpredictable and some countries had more gender equality than others. In other words, an individual's belief system regarding male and female characteristic traits are viewed through a group lens rather than applying these characteristic traits at the individual level. Using a group-level view of gender, characteristic traits are not just psychological in nature; they include physical traits, sexual orientation, gender orientation, abilities, and occupational roles (S. H. Schwartz & Rubel, 2005).

In their study, Martell and DeSmet (2001) concluded that during leadership evaluations among men and women, the perceptions of a female leader's ability in comparison to male leaders was influenced negatively by stereotypically held beliefs. Further, senior leadership in most organizations was overwhelmingly male (Catalyst, 2009), continuing to impact women's ability to obtain senior-management positions. Gender stereotyping can have negative consequences when it is used to understand and generalize an individual's behavior. Eagly and Chin (2010) argued that the stereotypical characteristics of women, such as hyperemotionality, can give the impression that women are not in control of their emotions. In contrast, they found that when men are perceived as being hypoemotional, this characteristic is sometimes seen as a strength, as it implies they can control their emotions better than women.

In their review, LaFrance and Banaji (1992) examined whether there are emotional differences between men and women. They identified several modalities used to evaluate emotionality and focused on the expressive component of emotionality. Further, they used self-report indicators to look for differences in emotionality between men and women. They concluded that differences between emotionality expressed by men and women occasionally existed, but depended on how emotionality was measured. Additionally, they concluded that, in relation to physiological indices of emotionality of men and women, little or no difference exists between the genders.

The concept of agency, in which individuals' focus is on themselves, was developed by Bakan (1966), who put forth that a man's central focus is on himself and women are the opposite, with a central focus that is more communal in nature, focused on others. Fiske, Cuddy, Glick, and Xu (2002) confirmed that these two dimensions of agency and communion are abundant in most of the literature on gender psychology. In support of Bakan's concept of agency, more recent research, such as that by Fiske et al., indicated that belief systems are formed along the dimensions of agency and communion. In their research, Fiske et al. expanded on the dimensions set forth by Bakan and added competence and warmth. The new dimensions added by Fiske et al. designated that characteristic traits of men or women should be labeled as either positive or negative in nature.

Additionally, Glick et al. (2004) determined that when men are perceived to be high in agency, this factor favors men in power in many organizational structures. When women are perceived to be high on communion, this factor favors women in an evaluative hierarchical environment. Traits such as agency or communion cannot be

valued relative to each other. In the case of women, the stereotypical traits of women are thought of more positively than those of men; however, male traits are thought to be more positively associated with status and power (Glick et al., 2004).

As I discussed earlier in relation to gender, discrimination is still a common occurrence in organizations. For example, in many organizations, senior-level positions held by women are still paltry in number compared to those held by men. Fewer than 20% of organizations have three or more female executive officers and more than 33% have no female representation at the level of executive officers (Catalyst, 2009). One of the main reasons for this is gender stereotyping in organizations, particularly at the leadership level. Organizations maintain the view that individuals at the leadership level must have qualities that are considered stereotypically masculine in nature such as assertiveness, competiveness, and behaving autocratically, rather than stereotypical feminine qualities such as sensitivity, femininity, and sympathy (Eagly & Carli, 2007). For a society to become more supportive of women in the future, it is important to recognize the potential harmful effects gender stereotyping can have on working professional women.

Gender and Management Style

Masculine and feminine characteristics define gender roles. Gender researcher Bem (1974) categorized masculine characteristic traits as exhibiting autonomy, competitiveness, and decisiveness, in contrast to feminine characteristic traits that exhibit caring, empathy, and collectivism. Today, senior-management-level executive positions are still dominated by men. According to Catalyst (2009), the organizational makeup of companies having three or more female executive officers is less than one fifth, and

another third of companies surveyed have no female executive officers at all. Rudman and Glick (2001) determined that organizations that seek to promote or hire senior-level managers still expect an individual's profile to exhibit stereotypical male characteristic traits. This stance by organizations has had a negative impact on women seeking senior-level management positions (Rudman & Glick, 2001). In contrast, from an organizational point of view, a feminine management style is perceived to be incongruent with an organization's culture (Rudman & Glick, 2001)

In addition, Rudman and Glick (2001) argued that women would not be the target of discrimination if they acted incongruently with the stereotypical female-gender characteristics held by society, particularly when women are seeking to be hired or promoted, and the job or position in the organization is viewed as being masculine in nature. Last, Rudman and Glick concluded that as organizations evolve, the preference for a masculine management style will decline and styles that are feminine or androgynous in nature will increase.

In other words, as the business world evolves, a feminine or androgynous management style may be viewed as aligned with an organization's and society's cultural view of what type of individual traits are best suited for senior-level management positions. Additionally, as organizations evolve from strictly masculine management in nature to a feminine or androgynous management style, a new type of discrimination may arise in which female managers will not be promoted or hired in an organization if they do not exhibit feminine or androgynous traits (Eagly et al., 2003; Rudman & Glick, 2001). Although this discrimination may seem new, it is merely a change from past discrimination that was described in Eagly and Karau's (2002) study, in which they found

that individuals in leadership positions were viewed negatively if they did not act congruently with societal gender expectations of women.

Today, women struggle to attain access to top-management positions as well as to get pay equal to that of their male counterparts. According to the U.S. Census Bureau (2009), women working full time in wage and salary jobs earned 20% less than their male counterparts in similar jobs and positions in companies. Additionally, women who do attain top-level management positions in most cases must disregard their feminine characteristic traits and adopt stereotypical masculine traits to be viewed as congruent with an organization's culture (Eagly & Carli, 2007; Eagly & Karau, 2002). As organizations evolve, their culture will be more accepting of feminine or androgynous management styles (Eagly & Carli, 2007; Eagly & Karau, 2002). When this occurs more frequently in the future, women and organizations will have a greater choice to determine which type of management style is the best fit for an organization, rather than being locked into one type of management style (Eagly & Carli, 2007; Eagly & Karau, 2002).

Currently, women are still adopting masculine characteristic traits to succeed in their environments (Eagly & Karau, 2002). An organization's culture will greatly influence the type of management style that a woman will exhibit, particularly in a leadership position (Eagly & Karau, 2002). Further, the degree of backlash or discrimination a female manager will encounter is related to her profession as well as her position in an organization (Eagly et al., 1992). For example, if a woman holds a position in upper management, the expectation will be that she assimilates to the culture of the organization. This becomes even more evident if the profession or the position is viewed as requiring stereotypical masculine traits to succeed.

Role Conflict

Researchers over the past decades have focused on the importance of understanding gender stereotyping and the potential conflicts that may arise in individuals as a result of stereotypical societal expectations (Lyness & Heilman, 2006). O'Neil et al. (1986) described the occurrence of gender-role conflict in an individual as a form of distress for that individual. In addition, the formation of gender-role conflict in an individual is not grounded in biology. In other words, an individual who suffers from gender-role conflict is afflicted by societal expectations of how each gender is supposed to behave in that society (Eagly & Karau, 2002). This coincides with a previous study by O'Neil et al. (1986) in which the authors argued that it is the societal expectations of a given society that have the greatest influence on determining the behavior men and women in that society will exhibit. Additionally, the occurrence of gender-role conflict will increase an individuals' own view of how they interpret which types of characteristic traits are male or female (O'Neil, Good, & Holmes, 1995).

For example, if a man's belief system is that he, as well as any man, must act in accordance with stereotypical masculine traits, this may increase the risk for gender-role conflict in the individual (Eisler & Skidmore, 1987). In contrast, when a woman's belief system is that she must act in accordance with stereotypical feminine traits, there is increased risk for gender-role conflict. This gender-role conflict will be expressed as a stressor in the individual, as a result of either their feminine or masculine identity coming into question. Additionally, changing workplace demographics are thought to be a contributing factor in the increase in gender-role conflict. Last, men may see an even larger increase of gender-role conflict as a result of feeling their hierarchical status is

being threatened as a result of shifting workplace demographics (Wade & Brittan-Powell, 2001). In both genders, underlying the stereotypical traits that are associated with gender-role conflict is fear or rejection of any characteristic traits that represent the other gender (O'Neil et al., 1986).

Swanson (2000) found that women who worked in male-dominated professions had greater amounts of stress than men in the same professions. Further, many of the negative effects felt by women, such as stereotyping, discrimination, and sexual harassment, can all be associated with role conflict (Swanson, 2000). Women can experience role conflict in a multitude of ways; for example, as a result of having a limited amount of time to meet the demands placed on them.

An example of this is work–family conflict, which is an interrole stressor that arises from incompatible demands of the workplace and the home place and a lack of time to satisfy both demands. Additionally, societal expectations are placed on women in the form of stereotypical ways women should act in the workplace. When a woman works in a male-dominated profession, she may feel she has to act in accordance with male stereotypical characteristic traits; as a result of this behavior, she may experience role conflict. Further, she may face backlash from women and from men for adopting male traits in the form of harassment or being passed over for a management position (Eagly & Karau, 2002).

Abundant research showed the detrimental effects of role conflict that occurs as a result of workplace and family demands. The effects of role conflict in the workplace include tardiness, ineffectiveness, and inefficiency (Eagly & Karau, 2002). In the home, effects include divorce, childrearing issues, and depression. As a result of these stressors,

women may face other mental and physical disorders that are detrimental to a woman's well-being (Maki et al., 2005).

Workplace Stress

Portello and Long (2001) examined the impact that interpersonal stressors had on women in the workplace. Workplace stress in organizations is a result of interchanges between employees, managers, or customers. In addition, workplace stress occurs as the result of employees feeling that the demands placed on them in an organization go beyond their capability to successfully resolve a given situation. As a result of a given stressful situation, an employee may exhibit physical problems such as high blood pressure as well as psychological disturbances such as anxiety (Portello & Long, 2001).

Portello and Long (2001) concluded that appraisals (when viewed as threats) in the workplace were directly and indirectly related to the acquisition of workplace stress in individuals. Their findings emphasized that organizations must focus on the significance of certain stressors that may affect their employees, to develop courses of action to manage workplace stress. Researchers conducted studies on workplace stress with a focus on working women. Iwasaki et al. (2004) affirmed that the most common area related to workplace stress that has been researched is work–family stress, which men and women both experience (e.g., working long hours, family conflicts, and sick children). Women experience greater levels of work–family stress as a result of societal expectations and thus bear the burden of greater levels of work–family stress than men (Iwasaki et al., 2004). The expectation in most societies is that the woman will be the caretaker of the family, regardless of whether she holds a position in the workforce that is equal to that of a man (Iwasaki et al., 2004).

In a review of previous studies, Cryer, McCraty, and Childre (2003) examined the relationship that workplace stress has on organizations and individuals. They pointed out that workplace stress in organizations has been steadily rising, and as of 2001, had increased by as much as 10%. Additionally they reported that the cost of health care had risen 147% since 1999 for individuals and organizations as a result of the psychological and physical consequences of stress-related illnesses. Cryer et al. examined workplace stress, the mechanisms that contribute to workplace stress, and the type of psychological and physical illnesses that can occur as a result of workplace stress. They examined the various coping mechanisms that could be employed to counteract the negative effects of workplace stress. After working with several Fortune 100 companies with more than 50,000 workers and managers, Cryer et al. concluded that managing workplace stress is imperative for the organization and the individual, and that reversal of workplace stress is achievable, resulting in positive consequences for the organization and the individual.

One such workplace stressor can be gender-role conflict, experienced by professional working women as a result of adapting to or not adapting to their workplace environment. For example, in the case of professional working women, stress may come in the form of backlash or discriminatory practices. The stressor may come from either men or women employees whose view is that a female manager is acting incongruently with their belief system on how women should act. The female manager feels threatened by this stressor placed on her by other employees, which causes her distress. As a result, the female manager may exhibit negative physical and psychological conditions (Lazarus & Folkman, 1984). However, workplace stress may not always occur in an individual as

a negative condition. Some employees and managers operate in a stressful work environment and are not affected by the stressors present in the organization.

Evolving Workplace and Family Dynamics

The population of women in the United States in the workforce is increasingly equal to or greater than the number of men, though this population varies by industry (Eagly & Karau, 2002). This shift in workforce demographics has created an even greater need to understand and provide relief to women who experience role conflict and workplace stress. Organizations continue to be out of touch with changing workforce demographics (Lyness & Heilman 2006), even though women are gaining ground in the management area and the area of equitable pay (Lyness & Heilman 2006). The pace of change has been slow as a result of the imbalances of management in many organizations. This persistent discriminatory behavior by organizations is the result of decades of business practices put in place by men (Fletcher & Merrill-Sands, 2000). These business practices are ingrained in the belief system that effective leadership qualities were needed that include stereotypical masculine characteristics.

Presently, the discriminatory practices of many organizations have been reduced as the result of past and present legislation that has limited organizations in some discriminatory practices. However, the gap between the number of women and men in leadership positions, as well as the disparity in wages, is still quite large. Legislation was enacted to protect women and prevent discrimination that was committed deliberately; however, this legislation has done little to effectively reduce the gender imbalances that exist in the workplace (Lyness & Heilman, 2006)

Lyness and Heilman (2006) examined organizations' hiring and promoting processes to understand if they need to be reviewed to ascertain if hiring and promoting leaders is based on their qualifications and not on sex typing. In an effort to enhance the significance of their results, they used organizational archived data instead of research instruments to ascertain how performance appraisals were conducted. Lyness and Heilman found that women who were evaluated for promotion were held to higher standards than men; and in lower management positions women were more likely to receive a lower performance review, thereby ensuring they are passed over for promotion. Additionally, Lyness and Heilman acknowledged that women who are denied leadership positions are not denied because of a single factor; rather, a multitude of factors along a woman's career path interfered with her advancement in the workforce. Last, Lyness and Heilman clarified that the evaluative process for women played a greater role in determining the career path for a woman than it did for a man.

As the presence of women increases in leadership positions in organizations, women have raised the standard in creating a better understanding of the benefits of female leadership. This new standard is starting to create a greater awareness of the benefits female leadership may provide organizations and the potential exists for the glass ceiling to be lifted (Eagly, 2007). However, this task is difficult for organizations because gender stereotypes are deeply ingrained in the workplace and in society.

Societal expectations concerning gender behavior are part of an organization's culture. In the case of women working in male-dominated professions, the expectation is for women and men to act congruently in the societal-held belief system regarding gender behavior (Eagly & Karau, 2002). To understand how gender is viewed, organizations

need to reflect on past social themes in society as well as in organizations (Ely, Meyerson, & Thomas, 1999). Specifically, because most organizations were originally started by men, masculine tendencies run so deep that the masculine features of organizational culture are viewed as being normal or the only manner in which organizations can be structured. For example, societal expectations regarding gender behavior in women places women in a "nurturing light" in which promotions for women will only be given if the position in the organization is people oriented (Ely et al., 1999); a woman may be considered for a managerial position in a human-resource department, whereas men are viewed in a "competent light" for a multitude of task-oriented and leadership positions (Ely et al., 1999, p. 6).

Discriminatory Practices

Organizations can be seen as acting in a discriminatory manner toward women in a variety of ways. Women working in male-dominated industries may encounter discrimination as the result of being viewed as successful in their position in the organization. The discrimination results from the woman's actions being incongruent with societal-held beliefs regarding her gender (Eagly & Karau, 2002). In other words, a woman may be extremely competent in performing her tasks at a job in a male-dominated industry. This success would seem to be a perfect match for the organization, because the female employee would be meeting and exceeding organizational goals. However, Eagly and Karau (2002) concluded that the female employee will often encounter disapproval and penalties as a result of the gender stereotypes that exist. The potential penalties for successful women in male-dominated industries include backlash (such as poor performance evaluations) and social exclusion (such as unfriendliness) from employers as

well as employees. Researchers have argued that women who take on stereotypical masculine traits in the workplace are less likely to be socially appealing. This is in direct contrast to men who adopt stereotypical masculine traits and women who adopt stereotypical feminine traits (Rudman & Glick, 1999). This research suggests that when a woman acts in a gender-incongruent manner in a workplace setting, she will experience negative social consequences. A woman who has success in her position in an organization that is predominantly male will be the recipient of discrimination for acting incongruently with the social belief system of her society.

The social consequences that successful working women may incur may come in forms of social disapproval. For example, researchers Eagly and Karau (2002) found that working women who were successful, when compared with their male counterparts, were viewed as being cold and less socially desirable than other employers and employees. In addition, women in leadership positions who achieved success were thought to have negative personality traits such as being angry, resentful, argumentative, and untrustworthy when compared to male leaders who achieved the same level of success (Eagly & Chin, 2010). This stereotype of female leaders is in direct opposition to Eagly and Chin's (2010) conclusion that female leaders are viewed as having a more positive managerial approach then their male counterparts as a result of rewarding employees, in contrast to male leaders using a more negative approach that trades on reprimands. In other words, a double standard exists when descriptive words are used regarding male and female leaders by employers as well as employees. Further, the negative social consequences that women working in male-dominated industries incur are the result of women acting with stereotypical masculine traits that conflict with societal beliefs of how

each gender should act. In other words, a woman is expected to act in a stereotypical manner, having traits such as nurturing, communality, and passivity. These traits are in direct contrast to the traits associated with leadership qualities, such as assertiveness and decisiveness.

Professional working women may face additional discriminatory practices by employees and employers when they decide to start a family. In changing workforce dynamics, Cleveland, Stockdale, and Murphy (2000) reported more women are entering the workforce and seeking jobs in traditionally male-dominated professions. As a result, a number of changing dynamics are affecting women and organizations. For example, three quarters of all women who are about to enter the workforce will become pregnant at some point in their career and a sizable portion of these women will be seeking employment for the first time while they are pregnant (Cleveland et al., 2000). Organizations will need to adapt to the changing workplace–family dynamics and incorporate more supportive programs for women and their families.

In their study, Hebl, Glick, King, Singletary, and Kazama (2007) concluded that women are being held back in the workplace due to negative stereotypes about pregnant women in the workplace. For example, Hebl et al. reported that pregnant working women face a potentially hostile environment as a result of being pregnant. This hostility in the workplace toward women is manifested in social censorship. Employers and employees may exclude pregnant women from social activities that occur daily in the workplace environment. Additionally, pregnant women may receive poor evaluations and be passed up for promotions. In an earlier study, Halpert, Wilson, and Hickman (1993) found that when participants in their study viewed a video of pregnant women working, they saw

her in a negative light regarding performance of work-related tasks. In addition, when asked if they would promote a pregnant woman, most said they would be less likely to promote a pregnant woman. Additionally, participants in this study were less likely to hire a pregnant woman.

Bragger, Kutcher, Morgan, and Firth (2002) examined possible bias toward pregnant women during structured interviews. They reported that when employees and employers believed a woman was having any type of physical or psychological issue as a result of her pregnancy, she was viewed in a much more negative manner. Conversely, if a pregnant woman showed no sign of physical or psychological issues related to her pregnancy, she would be seen in a more positive light.

The hostile attitudes of employees and employers toward pregnant women are supported by Eagly and Karau's (2002) theory of gender-role congruity; they concluded that when women adopt stereotypical male traits, a backlash can occur from coworkers and supervisors. I discuss this theory in detail later in this chapter. In the case of pregnant women, hostile attitudes are the result of prejudices and stereotypes that are set in motion as a result of pregnant women working and being seen as not acting in a congruent manner with societal expectations. Researchers suggested that the mere sight of a pregnant woman working invokes men and women to associate pregnancy with a traditional belief system in which pregnant women are thought to be unable to work at certain positions (Walton et al., 1988). In addition, with respect to leadership positions and pregnant women, the stereotypes are even stronger (Halpert & Burg, 1997). These stereotypical feelings are aligned with Eagly and Karau's gender-role congruity theory in

which leadership positions are thought to require characteristics that are stereotypically masculine in nature, such as assertiveness and decisiveness.

Today, despite changing views regarding pregnant women working, much controversy still exists; it has been widely recognized that two incomes are needed to maintain a certain social status. Despite this knowledge, there is a social undercurrent that debates whether women who are pregnant or those who have young children should be working or raising a family (Wilson, 2005). The recent media portrayal of family values seems to suggest that women who want to have a family would be better off being stay-at-home mothers.

This debate is not only between men and women, but between women and women as well. In the workplace, employees in an organization may become resentful of pregnant working women. This resentment results from the belief of other employees that the pregnant woman in the workplace is getting preferential treatment. For example, maternity leave may grant a woman several months of paid leave from work. This benefit of family leave has the potential to create additional burdens on other employees, such as longer hours and increased workloads.

The legal protection that women receive is necessary and fair (Glick & Fiske, 2001). However, many individuals in the workplace may consciously or unconsciously harbor even greater resentment toward pregnant working women as the result of current and potential future legislation. This resentment rests on the belief that the laws enacted favor one employee more than another (Glick & Fiske, 2001). Although the need for legal protection of working pregnant women is a priority, the potential negative impact that such laws may create needs to be considered as well.

Hebl, Foster, Mannix, and Dovidio (2002) categorized discrimination toward legislatively protected groups into two categories: formal discrimination includes employees or employers who break the laws that have been enacted; interpersonal discrimination is social censorship in which employees avoid eye contact or behave in an unfriendly manner to employees of a protected group such as pregnant working women. This new type of discrimination has occurred increasingly as an unintended consequence of legislative protection for certain groups.

The potential costs to employees and employers as the result of workplace discrimination have far-reaching consequences. At the employee level, discrimination can lead to absenteeism and tardiness, which in turn leads to wage loss and potential job loss. On the organizational level, the occurrence of employee dissatisfaction can lead to lower productivity. Lower morale can occur as a result of an employee who has been discriminated against speaking to others about his or her discriminatory issue (Goldman, Gutek, Stein, & Lewis, 2006).

The potential for employee lawsuits against an organization are an additional cost. An organization will not only suffer from the cost of the lawsuit from a discriminatory practice, but will often suffer in public relations as a result of an employee lawsuit. In addition, in the case of a public company, the negative publicity can lead to a stock loss for shareholders. Also, as the result of a high-profile lawsuit, consumers may decide to boycott the company. Consumers may be offended by the company's actions and decide not to purchase their products for an extended time period. This may have an additional negative effect on the company in sales earnings and stock price (Ursel & Armstrong-Stassen, 2006).

Professional Costs to Women: Penalties

Today, women have made progress in attaining executive-management positions and pay equity for those positions. However, progress has been slow. The glass ceiling persists and there is still a sizable gap in women receiving equal pay and promotions, compared to their male counterparts (Blau & Kahn, 2006). Additionally, women have suffered a social cost as well, as a result of female leaders failing to act in a congruent manner with societal expectations of women. This can result in social censorship and being made a social outcast. Negative statistics regarding women attaining equal pay and potential promotion opportunities are daunting (Blau & Kahn, 2006). For example, the median annual income for women in comparison to men is approximately $10,000 less. Additionally, in the area of management, men out-earn women by 38% (Catalyst, 2009).

The potential for progress can be viewed through evolution in the workplace. For example, the wage gap between women and men is dependent on age. The younger a women is, the smaller the difference in the wage gap between the woman and a male of equal age (Catalyst, 2009). Statistics have continually shown that attaining an education provides workers with better wages. However, when comparing genders, women are still at a disadvantage when compared to men in wages at any education level. This disparity exists although the number of college degrees issued in the United States increased by 31% for women, compared to only 18% for men (Catalyst, 2009). Last, in terms of the economic benefits of marriage, economic gains were higher for men than they were for women (Catalyst, 2009).

Theoretical Framework of This Study

For this study, two theories provided the foundation from which to investigate the effects of role conflict and workplace stress for women working in male-dominated professions. Role-congruity theory suggests that individual prejudices can arise when a person believes that the social norms of a particular social group are not being followed (Eagly & Karau, 2002). When a woman's occupation is in a field traditionally dominated by men, a woman may be seen as acting incongruently with the societal expectations that are set for her gender. The theoretical background for workplace stress is transactional-stress theory (Lazarus & Folkman, 1984), which states that when environmental demands outweigh an individual's capacity to cope with demands, those environmental demands create stress.

Gender-Role-Conflict Theory

The theoretical framework for role conflict is Eagly and Karau's (2002) role-congruity theory, which states that an individual in a leadership position is expected to act in a consistent manner with the gender expectations of a given society. In other words, each gender is expected to act in accordance with the stereotypical belief system of their society. In the case of professional working women in the United States, those who have attained or seek a leadership position and act with stereotypical feminine traits will be seen as acting in a congruent manner that is aligned with the stereotypical views of society as well as with many organizations. In contrast, a female leader who acts in accordance with stereotypical masculine traits will be seen as acting in an incongruent manner in the view of society.

In addition, the more a female leader violates the societal belief system regarding gender roles, the greater the chance that the female leader will experience role conflict (Eagly & Karau, 2002). This theory is grounded in earlier research by Eagly (1987) in which the author developed the social-role theory of sex differences in social behavior. This theory put forth that individuals in a given society are expected to act in accordance with prescribed culturally defined gender behavior. From a societal viewpoint, members of each gender understand and need to abide by these cultural expectations in their society. From an organizational point of view, the organization becomes a microcosm of society and enforces stereotypical gender traits on employees. For example, many organizations concur with society in the characteristics that a leader should engender. The organizational viewpoint aligns with society's view that stereotypical masculine characteristics are needed for leadership positions and that these traits are exclusive to men. In addition, when women exhibit stereotypical male characteristics, they are seen as acting incongruently with their gender role and are subject to backlash and potential discrimination.

Transactional Theory

The theoretical framework for workplace stress is Lazarus and Folkman's (1984) transactional theory, in which individuals self-assess their stress to determine if an event is stressful and how to potentially cope with it. In other words, there is no set rule on what will be viewed as a stressor to an individual in the workplace, though there are some general scenarios that the majority of individuals would consider stressful. However, the stressor is subjectively dependent on the assessment by the individual employee (Lazarus, 1991).

Workplace stress in organizations may exhibit elements such as extreme demands on employees and managers, pressure in completing tasks, and callousness toward employees (Macklem, 2005). Mausner-Dorsch and Eaton (2000) observed that employees who are affected by workplace stress may exhibit fear of losing their job, paranoid behavior, and heightened anxiety. These behaviors are the result of employees feeling threatened by the extreme demands of their workplace environment, where stress is generated for the employee.

Israel, House, Schurman, Heaney, and Mero (1989) described the effects of workplace stress on physical consequences, such as high blood pressure and diabetes. In addition, consequences can be cognitive in nature such as focus-related issues and memory lapses. Emotional consequences may occur as a result of workplace stress such as hostility, increased anxiety, and irritability. Additionally, the effects of workplace stress have a negative effect on an organization. Employers may be faced with absenteeism, lower morale, and less efficient employees (Levin-Epstein, 2002). According to Dyck (2001), organizations may lose up to 10% of their yearly earnings due to stress-related issues among their employees. Dyck advocated for organizations to better understand the causes of workplace stress and develop prevention and coping programs for employees.

Review of the Methodology

This study was a nonexperimental quantitative study that employed an online survey method. Quantitative research uses surveys or questionnaires to collect and analyze data regarding individual or group opinion, attitudes, and preferences in a numerical format such as Likert-type responses (Yoshikawa, Weisner, Kalil, & Way,

2008). Quantitative research seeks to understand if there is a correlation between the variables in a given study and uses questions formulated into testable hypotheses. One of the advantages of quantitative research is that it can be quantifiable in reliability and validity (Bagdoniene & Zemblyte, 2005). One disadvantage of quantitative research is that it lacks the ability to probe participants on subjects that are deeply personal in nature. The use of quantitative methodologies is quite common in the study of role conflict and workplace stress. Silva (2002) examined whether gender-role expectations in Latino men and women led to gender-role conflict using a survey methodology. In another study, Newman (1997) investigated if self-silencing, depression, and gender-role conflict occur similarly in men and women, using survey methodology. Christensen (2001) examined the effects of masculine socialization on adolescent boys using survey methodology.

In addition, a number of studies have used quantitative research to examine workplace stress. For example, González-Morales, Peiró, Rodríguez, and Greenglass (2006) examined the positive manner in which women cope with stress due to societal expectations relating to gender. Participants in the study were men and women; the authors worked to ascertain if there were any differences in the use of direct-action coping between the genders, using a survey methodology. In another study, Beehr et al. (2010) explored three different types of potentially supportive interactions with other people that could lead to additional workplace stress, using survey methodology. Shaffer, Joplin, Bell, Lau, and Oguz (2000) used a survey to conduct a study in three different countries to ascertain if women would experience different levels of workplace stress.

Researchers have used other methodologies to study gender-role conflict. Rochlen, McKelley, and Pituch (2006) conducted a qualitative study in which they

evaluated the most helpful components of the brochures published by the National Institute of Mental Health, which sponsors the Real Men Real Depression campaign. In a comparison study, Sanchez, Bocklandt, and Vilain (2009) compared single and gay men to ascertain if there were differences in their attitudes regarding traditional masculine roles and interest in casual sex. Iwasaki et al. (2004) employed a qualitative study that explored the differing levels of stress among female and male managers, using a series of single-sex and mixed-sex focus groups. The researchers considered the different stressors related to women that are set by societal expectations on how women should act in society.

Maki et al. (2005) conducted a longitudinal study that examined the effects of downsizing on employees' psychological and physical health. Darr and Johns (2008) conducted a theory meta-analysis of 275 effects from 153 studies that revealed positive but small associations between workplace stress and negative effects on physical and psychological health.

Summary

The review of the literature has provided evidence of the different types of challenges women face while working in male-dominated industries. I explored the prevalence of role conflict and workplace stress and their impact on women through this literature review. For example, the literature supported the concept that role conflict is a result of working women acting incongruently with societal expectations regarding appropriate gender behavior. This review also explored how individuals in organizations and organizations themselves still view women through a stereotypical gender lens.

The literature review explored the research of gender stereotyping and its relationship to women working in male-dominated industries. Researchers suggested that societal forces are ingrained concerning how each gender should conduct themselves in a workplace environment. Further, evidence pointed to the harmful effects of gender stereotyping on working women in psychological and physical terms. The irony that researchers suggested is that to be a successful working woman, a woman must adopt stereotypical masculine traits to be seen as being potentially successful in the workplace (Eagly & Karau, 2002). The result of this action, however, is that the woman who acts in this manner will experience backlash for her actions in the form of some type of penalty. The potential discriminatory penalties for women working in male-dominated industries include a number of inequities, such as poor evaluations, wage disparity, social disapproval, and additional discrimination for those who are starting a family (Eagly & Karau, 2002).

The review provided information regarding workplace stress and the harmful effects of such stress, including negative psychological and physical issues. In addition, researchers pointed out that the harmful effects of workplace stress are not limited to an individual employee, but to the organizational cost as well, with increasing absenteeism, lower productivity, and monetary costs to the organization.

Although more women enter the workforce each year, the challenges and barriers presented to women have not lessened at an equal pace (Eagly & Karau, 2002). This study contributes to the further understanding of the effects of role conflict and workplace stress occurring in women. Additionally, the current literature is amended by this study on gender stereotyping and how it contributes to role conflict and workplace

stress. As society evolves, the impact of role conflict may lessen to some degree for women (Eagly, 2007). The importance of understanding role conflict and workplace stress occurring in women is of great importance to protect women in the future and also to further productivity in the workplace, as the marketplace is globalized.

This study contributes to the knowledge of role conflict, workplace stress, organizational culture, and family issues that have a profound effect on the well-being of professional working women. In Chapter 3, I describe the research methodology, including a description of the participants, survey instruments, data-collection procedures, and statistics employed in the present study.

Chapter 3: Method

Introduction

Although research has been reported regarding role conflict and workplace stress (e.g., Colligan & Higgins 2005; Eagly & Karau, 2002), very little research has been conducted on gender-role conflict and workplace stress among women employed in traditionally male-dominated professions. To decrease this gap in the literature, the purpose of this study was to examine women's perceptions of role conflict and stress in the workplace, in the two stereotypically traditional male professions of marketing and aviation.

This chapter presents the research methodology. The chapter is divided into several sections that include the research design and rationale, population and sample, instruments, data collection, data analysis, and the measures employed to protect the participants. Below, I describe the research design, participants, instruments, procedure for data collection, protection of human subjects, and data analysis, which is summarized at the end of the chapter.

Research Design and Rationale

This study employed a nonexperimental quantitative design. Quantitative research is generally based on research questions that can be empirically examined through the testing of hypotheses that seek to determine the relationships among variables (Bagdoniene & Zemblyte, 2005; Field, 2000; Yoshikawa, Weisner, Kalil, & Way, 2008). Specifically, I implemented a cross-sectional survey design for this research. This design allows for the gathering of information at a single point in time to obtain data from participants on the variables of interest (Mitchell & Jolley, 2004). Analysis of the data

allowed for inferences about differences and relationships based on participants'

responses (Kippendorff, 2004).

The design was appropriate, in light of some of the advantages of using a cross-

sectional design. For example, cross-sectional designs are efficient in that they enable

researchers to collect a large amount of data in a short period of time, and thereby are less

expensive to employ than other forms of data collection (Mitchell & Jolley, 2004). I

collected data in this study by delivering the survey online. The benefit of using this

approach was that participants were able to complete the instruments at convenient times

and locations of their choice.

Methodology

Participants

The overall population of interest was women working in male-dominated

professions. The logistics of identifying and obtaining a sample from the overall

population were such that the sample was limited to volunteers from the professions of

aviation and marketing executives. Both of these professions have been traditionally

viewed as predominantly male dominated. In such male-oriented settings, bias can occur

due to stereotypical gender-role expectancy, theorized to be more prevalent than in other

occupations due to the majority status of men in the particular professions of interest

(Eagly & Diekman, 2005).

The participants were recruited from The Ninety-Nines Association of

Professional Aviators and the Women's Marketers of the Berkshires. The Ninety-Nines

Association of Professional Aviators mission is to promote educational and scholarship

opportunities for women employed in the aviation industry. Additionally, it is a support

and networking group. It has approximately 1,000 members with nearly 86% of the members employed in the aviation industry for 11 years or more, with 39% having advanced degrees, and 42% having an annual incomes exceeding $100,000. Most women in this group are long-term members and members are evenly divided between being employed at very large and very small organizations (Ninety-Nines Association of Professional Aviators, 2002).

According to results of my demographics questionnaire, the Women's Marketers of the Berkshires is open to all women in the marketing field. Of the 63 female marketers surveyed, 40% have been employed for 11 to 15 years. The Women's Marketers of the Berkshires recently reported that the median salary for marketers is $150,000 per annum.

I sent a letter of introduction to the president of The Women's Marketers of the Berkshires and the president of the Ninety-Nines, Association of Professional Pilots for permission to recruit their members to participate in the study. Both groups granted permission (see Appendix A). After receiving Walden Institutional Review Board (IRB) approval, I sent an e-mail including the following items to each participating member.

1. A letter of introduction, including a brief description of the study (see Appendix B).

2. An informed-consent form (see Appendix C).

3. A sociodemographic questionnaire (see Appendix D).

4. Directions for accessing and completing the measures (see Appendixes E and F).

Prior to data collection, a power analysis resulted in a need for approximately 65 participants per group, based on an effect size of .50, alpha .05, and power of .80. The

effect size was based on previous research where a meta-analysis on 35 occupational-stress studies found that the overall effect size (Cohen's *d*) was .53 (Richardson & Rothstein, 2008). The total number of participants was 129 with 66 representing female aviators and 63 female marketers. Thus the sample size needed was obtained.

Instrumentation and Materials

Gender-Role Conflict Scale. The GRCS has been used primarily in research on male role conflict and was modified for use with female participants (O'Neil et al., 1986). The instrument has been used in more than 230 studies, eight of which involved female samples. The GRCS is a 37-item self-report measure that uses a 6-point Likert-type response ranging from *strongly disagree* (1) to *strongly agree* (6). The format is designed to assess personal dimensions of gender-role conflict (see Appendix E).

The GRCS contains four subscales derived through factor analysis. The success, power, and competition subscale consists of 13 items. An example item is, "I worry about failing and how it affects my doing well as a woman" (Factor 1). Success, power, and competition are three separate but related constructs (O'Neil et al., 1986). Success brings with it persistent worries about personal achievements, competence, failure, upward mobility, wealth, and career success; power is obtaining authority, dominance, influence, or ascendancy over others; competition is striving against others to gain something or the comparison of self with others to establish one's superiority in a given situation (O'Neil et al., 1986).

The restrictive emotionality subscale consists of 10 items. An example is "I have difficulty expressing my tender feelings" (Factor 2). Restrictive emotionality is defined as having difficulty and fears about expressing feelings and difficulty finding words to

express basic emotions. The restrictive affectionate behavior between women subscale consists of eight items. An example is "Affection with other women makes me tense" (Factor 3). Restrictive and affectionate behavior means having limited ways to express feelings and thoughts with women and difficulty touching women. The conflict between work and family-relations subscale consists of six items. An example is "My work or school often disrupts other parts of my life in relation to my home life, health and leisure" (Factor 4). Conflict between work and family relations means experiencing difficulties balancing work, school, and family relations, resulting in health problems, overwork, stress, and lack of leisure and relaxation (O'Neil et al., 1986).

The subscale scores were derived by adding the Likert responses on each subscale for an overall subscale score. Because the number of items is different in the subscales, the overall score was then divided by the number of items in the subscale. This procedure makes it possible to compare across the four subscales based on the 1 through 6 Likert scale. Although not used in this study, a total score can be calculated by adding all 37 items and dividing by 37 and is defined as an overall assessment of gender-role conflict. Assessment of the four subscales' reliabilities has reported internal consistency reliability scores ranging from .75 to .85 and test–retest reliabilities ranging from .72 to .86 for each factor. Total score reliabilities have been shown to range from .73 to .93 (O'Neil et al., 1986). Subscale reliabilities (Cronbach's alpha) are provided in the next chapter as part of the data analysis. Convergent validity was reported to range from .25 to .56 when correlated with a feminist-attitude ideology scale as well as an index of homophobia scale (Tokar, Fischer, & Schaub, 1998; Walker, 2008). Divergent validity has ranged from -.04 to -.39 (Englar-Carlson & Vandiver, 2002; Sharpe, Heppner, & Dixon, 1995).

Job-Stress Survey Scale. Workplace stress was measured by the JSS (Spielberger & Vagg, 1999; see Appendix F). The JSS was used to measure how an individual perceives the severity and frequency of 30 general sources of incidents that may occur in the workplace (Spielberger & Vagg, 1999). Participants first rate the severity of each incident on a 9-point scale in which 1 reflects *low stress* and 9 reflects *high stress*. The job-stress-severity score (JS-S) is obtained by summing the responses to the 30 severity incidents. Item 1 is scored as 5 (midpoint of the 9-point scale) for all participants as a "standard" stressor. The lowest score possible is 34 and the highest is 266. The sum divided by 30 results in a severity score that could range from a low of 1.13 to a high of 8.87 (Spielberger & Vagg, 1999).

Second, participants then rate the same 30 items with respect to the frequency (number of days) the incident occurred in the previous 6 months (Spielberger & Vagg, 1999). Frequency is based on a 10-point scale where zero reflects *no occurrence* and 10 reflects *occurring 10 days or more in the previous 6 months.* The job-stress-frequency score (JS-F) is obtained by summing the responses to all 30 frequency items and dividing the sum by 30. Thus, the lowest frequency can be 0.00 if none of the incidents was experienced during the previous 6-month period, to a high of 270 for an individual who experienced all 30 incidents 9 or more times during the 6 months. This sum divided by 30 results with a minimum frequency score of zero and a maximum score of nine (Spielberger & Vagg, 1999).

The overall stress score—the Job Stress Index (JS-X)—is based on the 30 items and computed by multiplying the severity rating (JS-S) for each item by its frequency rating (JS-F; Spielberger & Vagg, 1999). This result is divided by 30. The minimum

overall stress score (JS-X) is 0.00 for an individual who did not experience an incident in the previous 6 months. Taking into account the constant score of five assigned to Severity Item 1, a maximum overall stress score is 79.8. Six additional JSS subscale scores can be obtained using various combinations of the 30 items with scoring procedures similar to those described. Primary interest was in the three stress indicators described: severity, frequency, and overall stress. The JSS instrument can be administered in pencil and paper format or in an electronic format on the Internet. In their *Job Stress Survey: Professional Manual,* Spielberger and Vagg (1999) referenced specific past studies that verified validity and reliability of the JSS. In addition, Spielberger and Vagg reported they conducted factor analysis to verify construct validity of the JSS instrument. Alpha coefficients for internal consistency ranged from .77 to .93 with a median of .88 (Berger & Pinkney, 2012; Spielberger & Vagg, 1999). I provide reliabilities for the severity and frequency subscales, as well as for the overall stress score in the next chapter as part of the data analysis. Although support for the validity of the JSS is somewhat limited, divergent validity ranged from -.52 to -.66 in a study on the job satisfaction of engineers. Convergent validity was reported to range from .16 to .18 when correlated with a locus-of-control scale (Berger & Pinkney, 2012)

Sociodemographic questionnaire. Sociodemographic questionnaires are a quantitative method of obtaining social data on a given population sample. The questions are general in nature, but the potential for commonality among results of the two other instruments used for this cross-sectional study added useful analyses. The sociodemographic questionnaire for the study collected data on age, income, marital

status, number of years in the field of work, number of years at the current workplace, and educational level.

Data Collection

After receiving Walden IRB approval, I sent an e-mail with a letter of introduction to the president of The Women's Marketers of the Berkshires and the president of The Ninety-Nines, Association of Professional Pilots for permission to recruit their members to participate in this study. Both groups granted permission. The Women's Marketers of the Berkshires sent the survey by e-mail to its members. The Ninety-Nines, Association of Professional posted my introduction letter to their website forum where any member could contact me directly (via e-mail) to participate in the study.

After members of The Ninety-Nines, Association of Professional Pilots contacted me, I sent them an e-mail with a link to SurveyMonkey containing the consent form, sociodemographic questionnaire, GRCS (O'Neil et al., 1986), and JSS. Additionally, when the letter of introduction was sent by Women's Marketers of the Berkshires, their members clicked on the SurveyMonkey link provided in their letter of introduction. This letter, provided to both groups, contained a unique personal identification number (PIN) for each participant. Upon entering one's PIN, the informed consent form was presented. If participants agreed to proceed, the consent form was followed by the GRCS, the JSS, and the sociodemographic questionnaire. Participants could e-mail me to request the results of the study.

Data Analysis

I exported Excel raw data files from SurveyMonkey and converted them to Statistical Package for the Social Sciences (SPSS) for statistical analysis. Multivariate analysis of variance (MANOVA) and correlation were the primary statistical procedures employed. In the next chapter, I describe the data-screening procedures, the scoring of the GRCS and JSS subscales, subscale reliabilities, the demographic characteristics of the sample, and the results of the statistical analyses.

Measures to Protect Participants

To maximize participants' protection, I did not obtain participants' names**.** I sent a letter of introduction to the president of The Women's Marketers of the Berkshires and the president of The Ninety-Nines, Association of Professional Pilots for permission to recruit their members to participate in the study. Both organizations granted permission, encrypting participants' names and e-mail addresses, thereby keeping participants anonymous. Each participant was e-mailed a link to SurveyMonkey, which facilitated the online survey along with a PIN code that limited access to only to the participants who were sampled for the study (Dillman, 2007). After a participant entered a PIN code, the screen of the computer listed clear instructions for completing the informed consent form, filling out the sociodemographic questionnaire, GRCS, and JSS. It was made clear, as part of the instructions, that the study was entirely voluntary. At the bottom of the consent form page was a question asking whether the participant had read and clearly understood the instructions and the nature of the study.

Additionally, to protect the rights of participants, I obtained permission from Walden University's IRB before this study began. The participants' confidentiality was

maintained during the study. I explained to participants the purpose of the study, including an optional question-and-answer meeting through a webinar when the study was completed. Additionally, I gave participants my name, contact number, and e-mail address. Last, the informed-consent form assured participants that their responses to the questionnaires would be kept strictly confidential.

Summary

I described the nonexperimental design approach using the survey method to survey professional women working in two male-dominated professions about role conflict and stress. This chapter provided a description of the design, the participants, instruments, procedure for data collection, data analysis, and protection of human subjects. The next chapter presents the results of the study, which include the following: data collection, results, demographics, statistical analyses, and a summary.

Chapter 4: Results

Introduction

The purpose of this study was to examine women's perceptions of role conflict

and stress in the workplace in two stereotypically traditional male professions. Women

who belonged to an association of professional aviators and a marketing association

participated. The research questions that guided this study examined if the women from

these two professional groups differed from each other in their perceptions of role

conflict and stress in their work environments. Also of interest was if there was a

relationship between role conflict and workplace stress in each group. In this chapter, I

describe the treatment of the data after they were downloaded from the collection site

(SurveyMonkey), including the data screening and scoring of the instruments, instrument

reliabilities, the demographic characteristics of the sample, and the results of the

statistical analyses.

Data Collection

I initially sought to recruit participants from professional associations affiliated

with women in medicine and finance, but due to time restraints, I was unable to secure

permission and recruit from their memberships. As a result, I sought out professional

associations in the aviation and marketing professions and secured permissions to recruit

from their memberships.

I collected data over a period of 3 months after concluding the data-collection

procedures; the data were downloaded from SurveyMonkey into Excel files. There were

four files: responses to the demographic questionnaire, GRCS, and JSS. I then converted

each Excel file to SPSS. SurveyMonkey assigned the participants individual 10-digit ID

numbers with the same ID number on each of the four files. Matching ID numbers allowed the four files to be merged into one overall SPSS file that included the item-by-item responses on each instrument for each participant ($N = 138$).

I then screened the data for missing responses to individual items. Four participants did not respond to the item about which profession they belonged to and therefore were excluded from analysis. Five did not respond to any items on the JSS and were deleted. This left a total sample of 129 participants with 66 female aviators and 63 female marketers. I then screened the data for missing responses to individual items on the GRCS and the JSS. Most participants responded to most items and no one item had more than four missing responses. A missing response to an item was replaced with the item mean for those who did respond on both the GRCS and the JSS scales (Little & Rubin, 1987)

The next step included the scoring of the GRCS and the JSS. I performed the scoring using the SPSS Compute module, resulting in scores for the four subscales of the GRCS [Success, Power, Competition (SPC); Restrictive Emotionality (RE); Restrictive Affectionate Behavior Between Women (RABBW); and Conflicts Between Family Relations (CBFR)] and two JSS subscales (Job Stress and Stress Severity). I also obtained the GRCS and JSS total scores as part of the procedure, although they were not used in the analyses.

During the scoring process, I discovered that some GRCS items were not in the SurveyMonkey download file. A review of the GRCS instrument, as shown on the SurveyMonkey site, revealed that the last six items of the 37 items were inadvertently not included. Fortunately, the six items were spread among several of the subscales and not

all from one scale. The scoring of the GRCS divides the subscale score by the number of subscale items to arrive at scores that can be compared across the scales. This procedure reduced and limited any impact the missing items may have had. Any effect was the same for both groups of women and the analysis proceeded as proposed.

As part of the scoring process, I obtained the reliabilities (Cronbach's α) for each of the scales, as shown in Table 1. A commonly used criterion is to consider a reliability of approximately .70 or greater as adequate (van Belle, 1998). Based on this benchmark, although the SPC, RE, and CBFR subscale reliabilities of the GRCS were marginal, as shown in Table 1, I retained these subscales in the analysis. Although unknown for these data, the six missing items may have reduced the reliabilities. The interpretation and discussion associated with this subscale, as well as the other subscale reliabilities below .70, should be treated with caution.

Table 1

Reliabilities (Cronbach's Alpha) for the Gender-Role Conflict Scale and Job-Stress Survey Subscales

	Subscales	A
GRCS	Success, Power, Competition	.62
	Restrictive Emotionality	.68
	Restrictive Affectionate Behavior Between Women	.86
	Conflicts Between Family Relations	.67
JSS	Stress Severity	.70
	Stress Frequency	.89

Note. GRCS = Gender Role Conflict Scale; JSS = Job-Stress Survey.

The final step in the overall screening process was to identify outliers (extreme scores). I accomplished this by converting the raw scores on each subscale to *z*-scores. I defined an outlier as a *z*-score equal to or greater than 3.29 ($p < .001$; Field, 2000). Thus,

an outlier was a score just over three standard deviations from the mean. I found several

outlier scores in the female-aviators group and one in the female-marketers group. I

addressed outlier scores by changing the extreme raw score to one more than the next

highest score in the group if the outlier was an extreme high score. If the outlier was an

extreme low score, I changed it to one less than the next lowest score (Field, 2000).

Results

Demographics

The mean age of female aviators was 51.36 (*SD* = 5.78) and ranged from 35 to 59;

the mean age of female marketers was 49.02 (*SD* = 5.92) ranging from 34 to 57. A large

percentage of the participants were White with 66.7% female aviators and 47.6% of

female marketers and the numbers of years of employed ranged from 11 to 20 years. For

the educational level of the female-pilots group, 59.1% of their participants earned a

bachelor's degree and 39.4% had a master's degree. In contrast, female marketers

reported that 38.1% of their participants earned a bachelor's degree and 57.1% earned a

master's degree. Table 2 provides the frequencies and percentages for the remaining

demographics. Based on the above demographics several differences in percentages

emerged, associated with particular characteristics (e.g., education and income).

Preliminary exploratory analyses using the variables as covariates showed they did not

impact the results.

Statistical Analyses

Three research questions guided the analyses. For the first two analyses I

employed a MANOVA and for the third analysis I used correlation. One MANOVA

examined differences between female aviators and female marketers on the four

subscales of the GRCS, whereas the second MANOVA examined differences between female aviators and female marketers on the two JSS subscales.

I reported the GRCS MANOVA analysis first. I repeat the research question and accompanying null and alternative hypotheses. I used the .05 level of probability to reject or fail to reject the null hypotheses.

Table 2

Demographic Characteristics of Participants

Characteristic	Female aviators		Female marketers	
	F	%	*F*	%
Years of employment in occupation				
1–5			3	4.8
6–10	9	13.6	13	20.6
11–15	37	56.1	25	39.7
16–20	20	30.3	21	33.3
Skipped questions			1	1.6
Years of employment in current workplace				
1–5	20	30.3	21	33.3
6–10	29	43.9	31	49.2
11–15	17	25.8	8	12.7
16–20			1	1.6
Skipped question			2	3.2
Years of continuing education/training				
1–5	30	45.5	33	52.4
6–10	32	48.5	25	39.7
11–15	2	3.0	3	4.8
16–20				
21–25	1	1.5		
Skipped question	1	1.5	2	3.2
Marital status				
Married	27	40.9	23	36.5
Divorced	23	34.8	19	30.2
Separated	8	12.1	8	12.7
Single	6	9.1	9	14.3
Widowed	1	1.5	2	3.2
Skipped question	1	1.5	2	3.2

table continues

Characteristic	Female aviators		Female marketers	
	F	%	*F*	%
Ethnicity				
Black/African American	5	7.6	8	12.7
Asian	6	9.1	7	11.1
White/Caucasian	44	66.7	30	47.6
Hispanic or Latino	10	15.2	17	27.0
Hawaiian or other Pacific Islander	1	1.5		
Skipped question			1	1.6
Educational degree				
Bachelor's	39	59.1	24	38.1
Master's	26	39.4	36	57.1
Doctorate	1	1.5		
Skipped question			3	4.8
Annual income ($)				
50,000–100,000	11	16.7	20	31.7
100,000–150,000	42	63.6	29	46.0
150,000–200,000	12	18.2	13	20.6
> 200,000	1	1.5		
Skipped question			1	1.6

Research Question 1

RQ1. Do women working in the male-dominated professions of marketing and aviation experience personal-role conflict differently from each other?

H_{01}: There will be no statistically significant differences in personal-role conflict, measured by the GRCS subscales, between female aviators and female marketers.

H_{a1}: There will be statistically significant differences in personal-role conflict, measured by the GRCS subscales, between female aviators and female marketers.

For the analyses, the predictor variable was profession type with two levels. The criterion variables were four GRCS scores on the SPC, RE, RABBW, and CBFR subscales. Prior to the MANOVA analysis, I screened the data for assumptions of multivariate normality, homogeneity of variance, linearity, and multicollinearity. I evaluated normality, homogeneity of variance, and linearity by examining standardized residuals scatterplots. The assumptions are met if the residuals are normally distributed about the criterion scores and the shape of the scatterplot is rectangular. No violations emerged that would unduly influence the results. Multicollinearity occurs when two or more dependent variables are too highly correlated. One collinearity statistic is labeled tolerance. If tolerance is less than .20, multicollinearity may be an issue. All of the tolerance values were greater than .20 for the data (Tabachnick & Fidell, 2013). As described earlier, the GRCS consists of a 6-point Likert-type scale ranging from *strongly disagree* (1) to *strongly agree* (6). Table 3 shows the descriptive statistics for the two groups. Female aviators showed greater conflict on RE and RABBW. Female marketers showed greater role conflict on SPC and CBFR.

Table 3

Means and Standard Deviations on the Gender-Role Conflict Scale Subscales by Occupation

Group	SPC		RE		RABBW		CBFR	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Aviators	4.36	.35	3.58	.33	4.03	.45	4.02	.43
Marketers	4.87	.46	3.06	.41	2.40	.50	5.10	.42

Note. SPC = Success, Power, and Competition; RE = Restrictive Emotionality; RABBW = Restrictive Affectionate Behavior Between Women; CBFR = Conflicts Between Family Relations.

The largest observed difference between the two groups was on the RABBW scale where female aviators indicated greater conflict (*M* = 4.03, *SD* = .45) than female marketers (*M* = 2.40, *SD* = .50). Overall, the greatest role conflict was shown by female marketers on CBFR (*M* = 5.10, *SD* = .42). These observations will be expanded through an effect-size analysis provided later this chapter.

Table 4 provides the overall MANOVA result as well as analysis of variance (ANOVA) results for the group comparisons on each of the GRCS subscales. The overall multivariate test was statistically significant (*F* = 214.25, *p* < .01). This indicates that when all four GRCS subscales were considered in combination, a statistically significant difference emerged in role conflict between female aviators and female marketers. Statistical significance, however, provides no information about the size of a difference with respect to its magnitude. Effect size is an indicator of the magnitude of a difference and is reported in conjunction with statistical-probability results (American Psychological Association, 2009). One indicator of magnitude is η^2 and is shown for this analysis in Table 4 for the overall MANOVA (η^2 =.87). The larger η^2 the greater is the magnitude. A benchmark for interpreting η^2 is .01 = small, .06 = medium, and .14 = large in magnitude

(van Belle, 1998). Thus, the multivariate effect size indicates a very large difference between the two groups ($\eta^2 = .87$).

Although the omnibus multivariate test was statistically significant and indicated an overall large difference between the two groups, reflected by the effect size, it does not indicate which criterion variables differed between the two groups. Therefore, I ran univariate ANOVAs on each criterion variable. The results of these analyses are shown on Table 4. As can be observed in Table 4, there was a statistically significant difference between the two groups on each of the four GRCS subscales (SPC, $F = 49.08$, $p < .01$; RE, $F = 61.14$, $p < .01$; RABBW, $F = 375.46$, $p < .01$, CBFR, $F = 205.27$, $p < .01$). Thus, the null hypothesis was rejected for each subscale. Female aviators and marketers significantly differed on each of the subscales.

Table 4

Multivariate and Univariate Analyses of Variance Between Occupations and Gender-Role Conflict Scale Subscales

Source	Multivariate			SPC			RE			RABBW			CBFR		
	F^a	p	η^2	F^a	P	η^2	F^a	p	η^2	F^a	p	η^2	F^a	p	η^2
Occupation	214.25	.01	.87	49.08	.01	.28	61.14	.01	.32	375.46	.10	.75	205.27	.01	.62

Note. SPC = Success, Power, and Competition; RE = Restrictive Emotionality; RABBW = Restrictive Affectionate Behavior Between Women; CBFR = Conflicts Between Family Relations; The multivariate F ratio was Pillai's statistic; [a]Multivariate $df = 4, 124$. [b]Univariate $df = 1, 128$.

Although the ANOVA results indicated statistically significant differences between the two groups on each GRCS subscale, the means shown on earlier Table 3 showed the direction of the differences. Female marketers reported greater role conflict than female aviators on the SPC subscale ($M = 4.87$ vs. $M = 4.36$) and the CBFR subscale ($M = 5.10$ vs. $M = 4.02$). Female aviators showed greater role conflict than female marketers on the RE subscale ($M = 3.58$ vs. $M = 3.06$, respectively) and the RABBW subscale ($M = 4.03$ vs. $M = 2.40$).

The magnitude of the differences (η^2) ranged from .28 on the SPC difference to .75 on the RABBW difference. Using the benchmark of $\eta^2 = .14$ or greater as indicating a large effect size, each of the differences between female aviators and female marketers can be interpreted as large differences between the two groups on the GRCS subscales.

Research Question 2

The second research question was concerned with the stress perceived by the women in the two groups. The research question and associated hypotheses for this analysis are repeated below.

RQ2. Do women working in the male-dominated professions of marketing and aviation experience workplace stress differently from each other?

H_{02}: There will be no statistically significant differences in workplace stress, measured by the JSS subscales between female aviators and female marketers.

H_{a2}: There will be statistically significant differences in workplace stress, measured by the JSS subscales between female aviators and female marketers.

I also used a MANOVA for this analysis. The predictor variable was profession with two levels. The criterion variables were the JSS subscale scores on severity (JS-S)

frequency (JS-F). As in the GRCS analysis, the results are provided in a descriptive statistics table and a MANOVA summary table. Preliminary screening revealed no assumption violations that would influence the results.

For the JS-S subscale, participants rated 30 job-severity incidents on a 9-point scale in which 1 reflected low stress and 9 reflected high stress. The severity score was obtained by summing the responses to the 30 severity incidents. The lowest score possible was 34 and the highest was 266. The sum divided by 30 resulted in a severity score that could range between a low of 1.13 and a high of 8.87. For the JS-F, participants rated the same 30 items with respect to the frequency (number of days) the incident occurred in the previous 6 months. Frequency was based on a 10-point scale where zero reflected no occurrence and 10 reflected occurring 10 days or more in the previous 6 months. I obtained the JS-F subscale score by summing the responses to the 30 frequency items and dividing the sum by 30. Thus, the lowest frequency could be 0.00 if none of the incidents was experienced during the previous 6-month period, to a high of 270 for an individual who experienced all 30 incidents nine or more times during the 6 months. This sum divided by 30 can result in a minimum JS-F score of zero and a maximum score of nine. For the JS-S and the JS-F subscales, the higher the score the greater stress is indicated.

I provide descriptive statistics for the JS-S and JS-F subscales in Table 5. Female aviators ($M = 5.76$) perceived greater overall stress severity than did female marketers ($M = 5.18$). On the 9-point scale, means in the range of 4 to 6 are considered moderate stress (Spielberger & Vagg,1999). Thus, neither group expressed minimum stress (mean in the 1 to 3 range) or maximum stress (mean in the 7 to 9 range).

Table 5

Means and Standard Deviations for the Job-Stress Survey Subscales on Severity and Frequency by Occupation

	JS-S		JS-F	
Group	*M*	*SD*	*M*	*SD*
Aviators	5.76	.34	4.71	.36
Marketers	5.18	.36	6.61	.40

Note. JS-S = Job Stress Severity; JS-F = Job Stress Frequency.

On the JS-F subscale, female marketers showed greater stress frequency than female aviators ($M = 6.61$ vs. $M = 4.71$, respectively). This was a difference of almost two points on the 10-point frequency scale, indicating that female marketers as a group experienced stress approximately seven times over the previous 6 months, whereas the frequency for female aviators was approximately five times.

Table 6 shows the overall MANOVA and ANOVA results for the group comparisons on the two JSS subscales. The overall multivariate test was statistically significant ($F = 720.47$, $p < .01$). This result indicates that when the two JSS subscales were considered in combination, a statistically significant difference emerged between female aviators and marketers. Similar to the GRCS analysis, the multivariate effect size indicates a very large difference between the two groups ($\eta^2 = .92$).

Reading across Table 6, it can be seen that the ANOVA *F*-ratios were statistically significant for the JS-S and JS-F subscales (JS-F, $F = 88.71$, $p < .01$; JS-F, $F = 815.28$, $p < .01$. Thus, the null hypothesis of no difference was rejected for each subscale and the alternative hypotheses were supported, indicating that the groups differed on severity and frequency of stress. Specifically, female aviators scored higher on the JS-S than did

female marketers, whereas the marketers scored higher than the aviators on the JS-F.

Further, using the benchmark of $\eta^2 = .14$ or greater as reflecting a large difference

between means, the difference between the groups on stress severity was large ($\eta^2 = .41$)

and larger on stress frequency ($\eta^2 = .87$).

Table 6

Multivariate and Univariate Analyses of Variance Between Occupations and Job-Stress Survey Measures

	Multivariate			JS-S			JS-F		
Source	F^a	p	η^2	F^a	P	η^2	F^a	P	η^2
Occupation	720.47	.01	.92	88.71	.01	.41	815.28	.01	.87

Note. The multivariate F ratio was Pillai's statistic, JS-S = Job Stress Severity; JS-F = Job Stress Frequency; [a]Multivariate $df = 2, 126$. [b]Univariate $df = 1, 128$.

The GRCS and the JSS analyses resulted in statistically significant differences

between the two groups. In addition, the effect sizes reported as η^2 were each large in

magnitude. The η^2 measure of effect size is best understood as a measure of association

that indicates the shared variation between the predictor and the criterion variables and

can range from zero to 1.00. A η^2 of 1.00 would show 100% shared variation. However,

when differences between means are of primary interest, as in this study, another

meaningful measure of effect size is Cohen's *d* (Field, 2000). This measure of effect size

makes it possible to compare the magnitude of a difference between two means in

standard-deviation units.

Table 7 provides Cohen's *d* for each of the group comparisons on the GRCS and

JSS subscales, intended to supplement the statistical probability ANOVA results. Briefly,

to determine *d,* four values are needed for each comparison: the means for the two groups

on each subscale, the difference between the two means, and the standard deviations of

the total group on each measure. Table 7 shows these values. For example, for the SPC

comparison, the difference between the two means was .51. To calculate *d*, the difference

is divided by the standard deviation on SPC for the total group (.51/.48 = 1.06). The *d* of

1.06 indicates that the two groups differed by more than one standard deviation on SPC.

Observation of the *d* column shows that the differences ranged from *d* =1.06 to *d* = 1.86,

nearly two standard deviations. For ease of reading, the largest mean in each comparison

is shown in bold type. Based on the rule of thumb, the effect sizes can be interpreted as

large. To support this contention, in relation to the JSS *d* values, a meta-analysis based on

35 occupational stress studies found the mean overall effect size (Cohen's *d*) to be .53

(Richardson & Rothstein, 2008).

Table 7

Effect Sizes (Cohen's d) Between Female Aviators and Female Marketers on the Gender-Role Conflict Scale and Job-Stress Survey Subscales

Subscale	Aviators M	Marketers M	Difference	SD^a	D
SPC	4.36	**4.87**	.51	.48	1.06
RE	**3.58**	3.06	.52	.45	1.16
RABBW	**4.03**	2.40	1.63	.95	1.72
CBFR	4.02	**5.10**	1.08	.69	1.57
JS-S	**5.76**	5.18	.58	.45	1.28
JS-F	4.71	**6.61**	1.90	1.02	1.86

Note. SPC = Success, Power, and Competition; RE = Restrictive Emotionality; RABBW = Restrictive Affectionate Behavior Between Women; CBFR = Conflicts Between Family Relations; JS-S = Job Stress Severity; JS-F = Job Stress Frequency; [a]Standard deviation for total group (*N* = 129).

A rule of thumb typically used to interpret Cohen's *d* (van Belle, 1998) follows:

- small effect size .20

- medium effect size .50

- large effect size .80

In summary, the MANOVA, ANOVA, and Cohen's *d* results showed differences between female aviators and marketers on both the GRCS and JSS subscales. However, although there were differences, neither group showed extreme role conflict or stress. These findings are discussed further in the next chapter.

Research Question 3

Whereas Research Questions 1 and 2 were concerned with differences between the two groups with respect to stress and role conflict, the third research question examined if there was a relationship between stress and role conflict in the two groups. The research question and associated hypotheses for this analysis are repeated below.

RQ3.   Is there a relationship between workplace stress and role conflict in women working in the male-dominated professions of marketing and aviation?

The null and alternative hypotheses associated with RQ3 follow:

H_{03}: There will be no relationship between workplace stress and role conflict, measured by the GRCS and JSS subscales respectively among women working in marketing and aviation.

H_{a3}: There will be a relationship between workplace stress and role conflict, measured by the GRCS and JSS subscales respectively among women in working in marketing and aviation.

H_{03} was analyzed through bivariate correlation analyses, one for each group of women, to determine any intercorrelations between the conflict and stress subscales in each group. I used the .05 level of probability as the criterion for rejecting the null hypotheses. The first analysis was on the JSS. The descriptive statistics and

intercorrelations for both groups of women appear on Table 8. Part (a) provides the

results for female aviators whereas Part (b) shows the results for female marketers. For

both groups the correlations between SPC and the other three GRCS subscales were

statistically significant ($p < .05$). Further, all of the intercorrelations were statistically

significant for female marketers, supporting the alternative hypothesis with respect to the

interrelationships among the role-conflict scales. However, this held only for female

marketers. There were no statistically significant correlations between RE, RABBW, and

CBFR for female aviators except on the SPC subscale.

Table 8

*Means, Standard Deviations, and Intercorrelations for Female Aviators and Female
Marketers on the Four Subscales of the Gender-Role Conflict Scale*

Measure	*M*	*SD*	1	2	3	4
a) Female aviators						
1. SPC	4.36	.35	—			
2. RE	3.58	.33	.39*	—		
3. RABBW	4.03	.45	.40*	.13	—	
4. CBFR	4.02	.43	.54*	.00	.07	—
b) Female marketers						
1. SPC	4.87	.46	—			
2. RE	3.06	.41	.68*	—		
3. RABBW	2.40	.50	.26*	.32*	—	
4. CBFR	5.10	.42	.47*	.30*	.37*	—

Note. SPC = Success, Power, and Competition; RE = Restrictive Emotionality; RABBW = Restrictive
Affectionate Behavior Between Women; CBFR = Conflicts Between Family Relations; *$p < .05$.

Results for the JSS analysis are shown on Table 9 for both groups of women. As

was the case for the GRCS relationships, the JSS relationships were different for the two

groups. The correlation between JSS frequency and severity was not statistically

significant for female aviators ($r = .22, p > .05$), but was statistically significant ($r = .67$,

$p < .05$) for female marketers. Thus, the alternative hypothesis was supported for female

marketers and not supported for female aviators.

Table 9

Means, Standard Deviations, and Intercorrelations for Female Aviators and Female Marketers on the Subscales of the Job-Stress Survey

Measure	*M*	*SD*	JS-F	JS-S
Women Pilots Part (a)				
JS-F	5.76	.34	—	
JS-S	4.71	.36	.22	—
Women Marketers Part (b)				
JS-F	5.18	.36	—	
JS-S	6.61	.40	.68*	—

Note. JS-S = Job Stress Severity; JS-F = Job Stress Frequency; *p < .05.

Summary

In summary, statistically significant differences emerged as well as large effect-

size differences between female aviators and female marketers for role conflict and job

stress. Thus, I rejected the null hypotheses and determined the alternative hypotheses

were supported for both the role-conflict and job-stress research questions. With respect

to role conflict, female marketers scored higher than female aviators on the SPC GRCS

subscale as well as the CBFR subscale. Female aviators scored higher than female

marketers on the GRCS RE and RABBW subscales. For job stress, aviators scored higher

than marketers on the JS-S subscale and marketers scored higher than the aviators on the

JS-F subscale.

Bivariate correlations performed for each group of women showed positive

correlations between each of the four GRCS subscales for female marketers. For female

aviators, the SPC subscale correlated with the other three subscales, whereas no

statistically significant correlations emerged among the other three subscales. Thus, the hypothesis stating that the subscales would be correlated was supported for marketers but only partially supported for aviators. For JSS intercorrelations, a positive correlation emerged between JS-S and JS-F subscales for female marketers but not for female aviators. As with the GRCS, the hypothesis that the two subscales would be correlated was supported for marketers and not supported for aviators.

This chapter provided the data collection, results including demographics, statistical analyses, and a summary. The next chapter presents the interpretations of the findings, the limitations of study, recommendations, implications, and conclusions.

Chapter 5: Introduction

The purpose of this study was to examine women's perceptions of role conflict and stress in the workplace in two stereotypically traditional male professions: aviation and marketing. This study extends the knowledge base of the understanding of role conflict and workplace stress in women, and supports the importance of this knowledge on producing prevention policies and programs.

I compared two groups to ascertain if there were differences in role conflict and workplace stress among women working in two distinctly different male-dominated professions. Overall, the study contributes to the understanding about whether women in traditionally male-dominated professions experience role conflict and workplace stress while working in these environments.

Researchers noted the importance of understanding societal gender-role expectations in the prevention of role conflict (Eagly & Karau, 2002) and workplace stress (Colligan & Higgins 2005). However, little research has been conducted on how women are affected by gender-role conflict and workplace stress together. Therefore, looking at gender-role conflict and workplace stress together among women in traditionally male environments is much more dynamic in nature than prior studies that looked at either gender role conflict or workplace stress as individual variables. This study helps fill a gap in the literature by providing empirical support for the relationship between role conflict and workplace stress occurring in women working in traditionally in male-dominated professions.

The analyses resulted in statistically significant differences as well as large effect-size differences between female aviators and female marketers for role conflict and job

stress. Thus, the null hypotheses were rejected and the alternative hypotheses were supported for the role-conflict and job-stress research questions. With respect to role conflict, female marketers scored higher than female aviators on the SPC and CBFR subscales. Female aviators scored higher than female marketers on the GRCS RE and RABBW subscales. For job stress, aviators scored higher than marketers on the severity (JS-S) subscale and marketers scored higher than aviators on the frequency (JS-F) subscale.

The third research question considered the relationship between role conflict and workplace stress in women working in male-dominated professions. The first analysis on the GRCS for both groups revealed statistically significant correlations between SPC and the other three GRCS subscales. Further, all intercorrelations were statistically significant for female marketers, thereby supporting the alternative hypothesis in the interrelationships among the role-conflict scales. However, this held only for female marketers. No statistically significant correlations between RE, RABBW, and CBFR subscales emerged for female aviators; however, a statistically significant correlation did emerge for SPC. JSS relationships were different for the two groups. The correlation between frequency (JS-F) and severity (JS-S) was not statistically significant for female aviators but was statistically significant for female marketers. Thus the alternative hypothesis was supported for female marketers and not supported for female aviators.

Interpretation of the Findings

For the first two analyses I employed a MANOVA and for the third analysis I used correlation. The first MANOVA examined differences between female aviators and female marketers on the four subscales of the GRCS: SPC, RE, RABBW, and CBFR.

The second MANOVA examined differences between female aviators and female marketers on the two JSS subscales: JS-S and JS-F.

Statistically significant differences emerged as well as large effect-size differences between female aviators and female marketers for role conflict and job stress. Thus, I rejected the null hypotheses and determined the alternative hypotheses were supported for the role-conflict and job-stress research questions. With respect to role conflict, female marketers scored higher than female aviators on the SPC GRCS subscale as well as the CBFR subscale. Female aviators scored higher than female marketers on the GRCS RE and the RABBW subscales. For job stress, aviators scored higher than marketers on the severity (JS-S) subscale and marketers scored higher than aviators on the frequency (JS-F) subscale.

The results are comparable to findings in past literature with respect to role conflict and workplace stress. For example, Swanson (2000) found that women who worked in male-dominated professions had greater amounts of stress than men in the same professions. Further, many of the negative effects felt by women, such as stereotyping, discrimination, and sexual harassment, can be associated with role conflict (Swanson, 2000). Additionally, Portello and Long (2001) examined the impact that interpersonal stressors had on women in the workplace. Workplace stress in organizations result from interchanges among employees, managers, and customers. In addition, workplace stress occurs as the result of employees feeling the demands placed on them in an organization go beyond their capability to successfully resolve a given situation.

The findings for Hypotheses 1 and 2 were confirmed when compared to the two theoretical frameworks: Eagly and Karau's (2002) role-congruity theory and Lazarus and Folkman's (1984) transactional theory. Role-congruity theory states that an individual in a leadership position is expected to act in a consistent manner with the gender expectations of a given society (Eagly & Karau's, 2002). The findings align with both theories. For example, female marketers were higher on success, power, and competition as well as on conflicts in family relations than were female aviators. Female aviators were higher in restrictive emotionality and restrictive affectionate behavior between women than were female marketers. The theoretical framework for workplace stress was Lazarus and Folkman's (1984) transactional theory, in which individuals assess stress on an individual basis to determine if an event is stressful and how they may cope with it. In other words, no set rule describes what will be viewed as a stressor to an individual in the workplace, though there are certainly some general scenarios that the majority of individuals would consider stressful. Here again, findings were consistent with transactional theory. With respect to workplace stress, female aviators perceived greater stress severity whereas female marketers perceived greater stress frequency. This concurs as a major aspect of transactional theory, which states that the stressor is subjectively dependent on the evaluation of the individual employee (Lazarus, 1991).

The third analysis, which queried if there was any relationship between role conflict and workplace stress in women working in male-dominated professions, supported the alternative hypothesis for female marketers, but only partially for female aviators. This analysis was conducted through bivariate correlation analyses, one for each group of women, to determine any intercorrelations between the conflict and stress

subscales . Bivariate correlations performed for each group of women showed positive correlations between each of the four GRCS subscales: SPC, RE, RABBW, and CBFR for female marketers. For female aviators, the SPC subscale correlated with the other three subscales; however, no statistically significant correlations emerged among the other three subscales. Thus, the hypothesis stating that the subscales would be correlated was supported for the marketers but only partially supported for the aviators. For JSS intercorrelations, a positive correlation emerged between the JS-S and JS-F subscales for female marketers but not for female aviators. As with the GRCS, the hypothesis that the two subscales would be correlated was supported for marketers and not supported for aviators

In findings for Hypothesis 3, the alternative hypothesis was supported for female marketers and only partially supported for female aviators. I compared the results to the two theoretical frameworks: Eagly and Karau's (2002) role-congruity theory and Lazarus and Folkman's (1984) transactional theory. Role-congruity theory states that an individual in a leadership position is expected to act in a consistent manner with the gender expectations of a given society Eagly and Karau's (2002) theory was supported for aviators. For JSS intercorrelations, a positive correlation emerged between the JS-S and JS-F subscales for female marketers but not for female aviators. As with the GRCS, the hypothesis that the two subscales would be correlated was supported for the marketers and not supported for the aviators.

With respect to the literature and the two theories, perhaps this outcome is a result of the organizational environment. For example, aviators or pilots may spend considerably less time in a physical location and much of their time is spent flying planes,

not interacting with their peers and management in one set location. Pilots can impact consumers in terms of arriving on time even though being on time is somewhat out of their control. In this way Pilot's may have less impact on a company's profits, which creates an atmosphere of less stress on each individual pilot in an organization. In contrast, marketers may spend their time in the same physical location and interact more often with peers and managers. In addition marketers have many objectives to meet: introducing new products, meeting return-on-investment objectives regarding new products, and advertising. These types of responsibilities put additional stressors on marketers and a marketer can have a great impact on a company's profit.

Limitations of Study

The limitations may be described best from the perspective of internal and external validity. External validity is concerned with the inferences and generalizations that can be made beyond the study itself. Because I studied only two professions of many that could have been studied, I can make no generalizations related to work stress and role conflict about women working in all male-dominated professions. Moreover, unknown numbers of women work in the aviation and marketing professions outside the two organizations that did not have the opportunity to participate. Further, the women who did participate were volunteers. Originally, I targeted two different women's groups for the study, but was unable to invite them. Whether their results would show similar patterns as those found here is unknown. Consequently, I make no intent to generalize beyond the results of this one study.

Internal validity refers to aspects of a study that must be considered in the interpretation of the results. No causal claims can be made based on the results. That is,

whereas the two groups of women differed on the role-conflict and workplace-stress scales, I cannot claim that the particular male-dominated profession was the cause of the differences. This caveat exists because it was not feasible to randomly select professions or randomly assign participants. Thus, any number of unmeasured intervening variables may have contributed to cause the differences. Given this reality, the study is considered descriptive rather than causal.

The measurements of role conflict and workplace stress also need to be considered. Although the two constructs have strong theoretical frameworks, their operational definitions are based on the specific instruments used in any particular study. Any interpretation of statistical results is limited to the instruments used.

Overall, putting the limitations in perspective, the results add to the knowledge base of empirical research on workplace role conflict and stress. External and internal validity are products of continued research on the topic under different settings, different designs, and using different instruments.

Recommendations

Research should be conducted with women in other male-dominated professions to examine if the results of this study would be similar to those examining stress in women working in different male-dominated professions. With respect to the question of whether women and men experience stress in the same manner—another limitation of this study—Iwasaki et al. (2004) argued that women and men experience stress differently. For example, in the Iwasaki et al. study, women experienced a higher level of stress than men and felt emotionally depleted due to this higher stress level. In contrast, men tended to focus inward and as a result experienced lower stress levels. The

difference in stress levels is a result of societal gender expectations placed on men and women (Iwasaki et al. 2004). A future study that includes this question would make the results from this study more robust in nature. As society continues to evolve, the difference in stress levels may lessen. As a result, additional studies may need to be longitudinal to strengthen inferences found in the current study.

An interesting study would look at men working in female-dominated professions to see if role conflict and workplace stress affects men as it did women in this study in such professions as nursing or airline stewardship. Researchers suggested that societal forces are ingrained in how each gender should conduct themselves in a workplace environment (Livingston, & Judge, 2008).Further the evidence points to the harmful psychological and physical effects of gender stereotyping on working women (Eagly & Diekman, 2005). The irony that researchers suggest is that to be a successful working woman, a woman must adopt stereotypical masculine traits to be seen as being successful in the workplace (Eagly & Diekman, 2005).

Lastly a study to explore any inferences and or relationships that could be drawn based on the educational background differences between the aviators and the marketers. The educational level of the female-pilots group, 59.1% of their participants earned a bachelor's degree and 39.4% had a master's degree. In contrast, female marketers reported that 38.1% of their participants earned a bachelor's degree and 57.1% earned a master's degree.

Implications

This study contributes to the knowledge of role conflict, workplace stress, organizational culture, and family issues that have a profound effect on the well-being of

professional working women. On an individual level, this study will bring greater understanding to the consequences of gender-role conflict in women. For example, gender-role conflict has been shown to increase levels of anxiety and stress, and produce poor mental health in women (Chusmir, Koberg, & Mills 2001). Perhaps with this knowledge, individuals could find coping mechanisms to help them avoid the harmful effects of gender-role conflict and workplace stress.

Women face potential discriminatory penalties such as poor evaluations, wage disparity, social disapproval, and additional discrimination for those who are starting a family (Eagly & Karau, 2002). Positive social change can occur as a result of a study of this nature. For example, organizations can have their human-resource departments assess if these types of discriminatory actions are occurring in the organization and take action to correct them. Additionally, an employee who is affected by role conflict or workplace stress adds a significant cost to the organization in absenteeism, tardiness, and lower productivity (Chusmir et al., 2001). Organizations would benefit monetarily from putting an action plan together to combat role conflict and workplace stress in women in their organizations.

Societal role conflict, in particular, needs to be addressed to create greater awareness, so society begins to accept that both men and women can work in environments that are predominantly male or female dominated. For example, Eagly and Karau (2002) found that working women who were successful, when compared with their male counterparts, were viewed as being cold and less socially desirable than other employers and employees.

This study has the potential to help organizations eschew discriminatory practices against women and their families. Although workplace polices have been changed in recent years to be more supportive and inclusive of families, discrimination still occurs with respect to pregnancy and family rights in the workplace. For example, Hebl et al. (2007) concluded that women are being held back in the workplace due to the negative stereotypes about pregnant women in the workplace. For example, Hebl et al. reported that pregnant working women face a potentially hostile environment as a result of being pregnant. This hostility in the workplace toward women is manifested in social censorship. Employers and employees may exclude pregnant women from social activities that occur daily in the workplace environment. Additionally, pregnant women may receive poor evaluations and be passed up for promotions. In knowing this, organizations can put policies and programs in place that would protect women against such discriminatory practices. This study reflects Walden's mission statement for positive social change in that many of the outcomes of the study can be viewed through a positive social-change lens. Potentially, organizations can develop strategies and action plans to help improve the negative ramifications of gender-role conflict and workplace stress. For example, a human-resource department can develop educational programs to bring greater awareness and sensitivity to the potential negative consequences that may occur as a result of gender-role conflict and workplace stress, aiding individuals in the organization and the organization itself.

Conclusions

As society evolves, the impact of role conflict and workplace stress may lessen for women (Eagly, 2007). Understanding role conflict and workplace stress occurring in

women is of great importance to protect women in the future and also to further

productivity in the workplace, as the marketplace is globalized. Much progress needs to

accrue in understanding the female and male genders and how individuals and

organizations conduct themselves in the workplace and in society. Hopefully, this study

and many that follow will clarify discriminatory issues that may affect men and women

in the workplace. Additionally, it is my hope that men do not perceive a study like this as

an attack on them. In the end all are affected by discriminatory practices and men can

also be the recipient of discrimination. Last, the mainstream media should closely assess

gender-role conflict and workplace stress so that a great light can be shone on these

issues.

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Appendix A: Permission to Collect Data From Each Participating Group

Women Marketers of the Berkshires, a Division of Sun Services

Dear Mr. Herley,

My organization of Women Marketers of the Berkshires, a Division of Sun Services, INC, would be happy to participate in your survey

Please don't hesitate to send your questionnaire to our group.

Sincerely,

Janice Stefanacci Seward
President and CEO
Sun Services INC

The Ninety-Nines, Association of Professional Pilots

Hello Tim,

Rebecca Hempel here. I am the Chairperson of the 99s Careers Committee. I represent the professional pilots of the 99s. I would be happy to forward your request for participants to our Pro Pilots group. I cannot guarantee that everyone will participate however.

As far as demographics go our propilots range in ages from 20-50 somethings. All of us work either in the airline or business aviation industry as pilots. We have captains as well as copilots for the majors as well as regional airlines. I'd say 99% of us are degreed, either Bachelors or Masters levels.
Perhaps I can complete your survey and then pass the info along to the rest of the group with my endorsement about how easy and painless it was. Would that work? I could also forward the info to the International Society of Women Airline Pilots. There is some overlap in membership w/the 99s, but there are a lot of members that are not 99s. There are some women from international airlines that you may or may not want/need to participate, you would just need to let me know.

I am currently on a 16 day trip around the world so email is best communication for now. I can complete the survey on line while on a layover if you wish. I will be home around the 27th otherwise.

Looking forward to working with you.
Rebecca Hempel
99s Int'l Careers Committee Chair

Appendix B: Introduction Letter

My name is Timothy Herley, and I am a doctoral candidate in the Ph.D. Program in Organizational Psychology at Walden University. I am seeking participants for a research project. The aim of this project is to examine role conflict and workplace stress in women working in male dominated professions. I am the Principal Investigator of this project, which is my dissertation.

Participation in this study involves completing an online questionnaire, which takes about 20 minutes to complete. Participation in this study is voluntary and poses no risks. You will not be asked to provide your name or any other identifying information. You can choose not to complete the questionnaire, and you can stop participation at any time.

When you agree to participate you will receive an e-mail from me with a link from SurveyMonkey containing the consent form, sociodemographic questionnaire and Gender Role Conflict Scale and the Job Stress Survey Scale.

If you have any questions about this study, you can contact me at therl001@waldenu.edu.

Sincerely,

Timothy Herley
Doctoral Candidate
Walden University

Appendix C: Informed Consent

You are invited to take part in a research study about professional women's experiences working in male-dominated professions. Two professions have been asked to participate, The Women Marketers of the Berkshires, a Division of Sun Services, INC and The Ninety-Nines Association of Professional Pilots. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Timothy Herley who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to examine role conflict and workplace stress in women working in male dominated professions.

Procedures:
If you agree to be in this study, you will be asked to:
- Complete a sociodemographic questionnaire
- Complete a role conflict scale
- Complete a job stress scale

Your participation will take approximately 20 minutes.

Here are some sample questions:

Using a Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree):

1.   Moving up the career ladder is important to me.
2.   I have difficulty telling others I care about them.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at The Women Marketers of the Berkshires, a Division of Sun Services, INC or The Ninety-Nines, Association of Professional Pilots will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue or stress. Being in this study would not pose risk to your safety or wellbeing.

You are encouraged to call the National Crisis Hotline at 1-800-273-TALK (1-800-273-8255) to talk with a counselor if you feel the need to do so.

A study of this nature can bring about social change for individuals and organizations, thus yielding a better chance for women working in male-dominated industries to develop coping mechanisms to help alleviate the negative effects of role conflict and workplace stress. This may create a more competitive workforce that will enable workers and corporations to be more competitive in the global economy.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. To maximize participants' protection, participants' names will not be used in reporting data. Data will be retained for at least 5 years then the electronic file will be deleted, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at therl001@waldenu.edu or by calling 516 375 0330. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is 10-24-13-0098759 and it expires on October 23, 2014.

Please print or save this consent form for your records.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By clicking the link below, I understand that I am agreeing to the terms described above.

Appendix D: Demographic Questionnaire

Please indicate your responses to the questions below. Your responses will remain anonymous.

1.Please indicate your age: _____

2. Please select your professional occupation:

_____Marketing
_____Airlines
_____Business aviation industry

3.Please indicate your professional title:

_____Marketing
_____Pilot
_____Other

7. Please indicate the length of your employment in your current professional occupation: _____years _____months.

8. Please indicate the length of your employment at your current workplace:
 _____years _____months.

10. Please indicate number of years of continuing education and/or training you have completed:

_____1 to 2 years
_____3 to 5 years
_____6 to 8 years
_____8 to 10 years
_____Over 10 years

4. Please indicate your marital status:

_____Married
_____Single
_____Divorced
_____Widowed
_____Separated

5. Please indicate your ethnicity:

_____Black/African American

_____Asian,
_____White
_____Hispanic or Latino
_____Not Hispanic or Latino
_____American Indian or Alaska Native
_____Native Hawaiian or other Pacific Islander

6.Please indicate your educational background by checking the highest level of earned academic degree:

_____High School diploma
_____Associate's Degree
_____Bachelor's Degree
_____Master's Degree
_____Doctoral Degree

9. Please indicate your income level:

_____$50,000 to $100,000
_____$100,000 to $150,000
_____$150,000 to $200,000
_____$200,000 to $300,000
_____Above $300,000

Appendix E: Gender Role Conflict Scale: Female Version

Instructions: In the space to the left of each sentence below, type in the number which most closely represents the degree that you Agree or Disagree with the statement. There is no right or wrong answer to each statement; your own reaction is what is asked for.

Strongly agree					Strongly disagree
6	5	4	3	2	1

1. ___ Moving up the career ladder is important to me.

2. ___ I have difficulty telling others I care about them.

3. ___ Verbally expressing my love to another woman is difficult for me.

4. ___ I feel torn between my hectic work schedule and caring for my health.

5. ___ Making money is part of my idea of being a successful woman.

6. ___ Strong emotions are difficult for me to understand.

7. ___ Affection with other women makes me tense.

8. ___ I sometimes define my personal value by my career success.

9. ___ Expressing feelings makes me feel open to attack by other people.

10. ___ Expressing my emotions to other women is risky.

11. ___ My career, job or school affects the quality of my leisure or family life.

12. ___ I evaluate other people's value by their level of achievement and success.

13. ___ Talking (about my feelings) during sexual relations is difficult for me.

14. ___ I worry about failing and how it affects my doing well as a woman.

15. ___ I have difficulty expressing my emotional needs to my partner.

16. ___ Women who touch other women make me uncomfortable.

17. ___ Finding time to relax is difficult for me.

18. ___ Doing well all the time is important for me.

19. ___ I have difficulty expressing my tender feelings.

20. ___ Hugging other women is difficult for me.

21. ___ I often feel that I need to be in charge of those around me.

22. ___ Telling others of my strong feelings is not part of my sexual behavior.

23. ___ Competing with others is the best way to succeed.

24. ___ Winning is a measure of my value and personal worth.

25. ___ I often have trouble finding words that describe how I am feeling.

26. ___ I am sometimes hesitant to show my affection to women because of how others might perceive me.

27. ___ My needs to work or study keep me from my family or leisure more than I would like.

28. ___ I strive to be more successful than others.

29. ___ I do not like to show my emotions to other people.

30. ___ Telling my partner my feelings about him/her during sex is difficult for me.

31. ___ My work or school often disrupts other parts of my life (home, family, health, leisure).

32. ___ I am often concerned about how others evaluate my performance at work or school.

33. ____ Being very personal with other women makes me feel uncomfortable.

34. ____ Being smarter or physically stronger than other women is important to me.

35. ____ Women who are overly friendly to me make me wonder about their sexual preference (men or women).

36. ____ Overwork and stress, caused by a need to achieve on the job or in school, affects/hurts my life.

37. ____ I like to feel superior to other people.

Appendix F: Job Stress Survey Scale

Name _____ Age _____ Gender _____ Date _____

Education _____ Job Title _____

Part A. Instructions: For job-related events judged to produce approximately the same amount of stress as the **ASSIGNMENT OF DISAGREEABLE DUTIES**, circle the number "5." For those events that you feel are <u>more</u> stressful than the standard, circle a number proportionately larger than "5." If you feel an event is <u>less</u> stressful the standard, circle a number proportionately lower than "5."

STRESSFUL JOB-RELATED EVENTS	Amount of Stress
	Low Moderate High
1A. ASSIGNMENT OF DISAGREEABLE DUTIES	1 2 3 4 ⑤ 6 7 8 9
2A. Working overtime	1 2 3 4 5 6 7 8 9
3A. Lack of opportunity for advancement	1 2 3 4 5 6 7 8 9
4A. Assignment of new or unfamiliar duties	1 2 3 4 5 6 7 8 9
5A. Fellow workers not doing their job	1 2 3 4 5 6 7 8 9
6A. Inadequate support by supervisor	1 2 3 4 5 6 7 8 9
7A. Dealing with crisis situations	1 2 3 4 5 6 7 8 9
8A. Lack of recognition for good work	1 2 3 4 5 6 7 8 9
9A. Performing tasks not in job description	1 2 3 4 5 6 7 8 9
10A. Inadequate or poor quality equipment	1 2 3 4 5 6 7 8 9
11A. Assignment of increased responsibility	1 2 3 4 5 6 7 8 9
12A. Periods of inactivity	1 2 3 4 5 6 7 8 9
13A. Difficulty getting along with supervisor	1 2 3 4 5 6 7 8 9
14A. Experiencing negative attitudes toward the organization	1 2 3 4 5 6 7 8 9
15A. Insufficient personnel to handle an assignment	1 2 3 4 5 6 7 8 9
16A. Making critical on-the-spot decisions	1 2 3 4 5 6 7 8 9
17A. Personal insult from customer/consumer/colleague	1 2 3 4 5 6 7 8 9
18A. Lack of participation in policy-making decisions	1 2 3 4 5 6 7 8 9
19A. Inadequate salary	1 2 3 4 5 6 7 8 9
20A. Competition for advancement	1 2 3 4 5 6 7 8 9
21A. Poor or inadequate supervision	1 2 3 4 5 6 7 8 9
22A. Noisy work area	1 2 3 4 5 6 7 8 9
23A. Frequent interruptions	1 2 3 4 5 6 7 8 9
24A. Frequent changes from boring to demanding activities	1 2 3 4 5 6 7 8 9
25A. Excessive paperwork	1 2 3 4 5 6 7 8 9
26A. Meeting deadlines	1 2 3 4 5 6 7 8 9
27A. Insufficient personal time (e.g., coffee breaks, lunch)	1 2 3 4 5 6 7 8 9
28A. Covering work for another employee	1 2 3 4 5 6 7 8 9
29A. Poorly motivated coworkers	1 2 3 4 5 6 7 8 9
30A. Conflicts with other departments	1 2 3 4 5 6 7 8 9

Part B. Instructions: For each of the job-related events listed, please indicate the approximate <u>number of days</u> during the past <u>6 months</u> on which you have personally experienced this event. Circle "0" if the event did <u>not</u> occur circle the number "9+" for each event that you experienced personally on <u>9 or more days</u> during the past 6 month

STRESSFUL JOB-RELATED EVENTS	Number of Days on Which the Event Occurred During the Past 6 Months
1B. Assignment of disagreeable duties	0 1 2 3 4 5 6 7 8 9+
2B. Working overtime	0 1 2 3 4 5 6 7 8 9+
3B. Lack of opportunity for advancement	0 1 2 3 4 5 6 7 8 9+
4B. Assignment of new or unfamiliar duties	0 1 2 3 4 5 6 7 8 9+
5B. Fellow workers not doing their job	0 1 2 3 4 5 6 7 8 9+
6B. Inadequate support by supervisor	0 1 2 3 4 5 6 7 8 9+
7B. Dealing with crisis situations	0 1 2 3 4 5 6 7 8 9+
8B. Lack of recognition for good work	0 1 2 3 4 5 6 7 8 9+
9B. Performing tasks not in job description	0 1 2 3 4 5 6 7 8 9+
10B. Inadequate or poor quality equipment	0 1 2 3 4 5 6 7 8 9+
11B. Assignment of increased responsibility	0 1 2 3 4 5 6 7 8 9+
12B. Periods of inactivity	0 1 2 3 4 5 6 7 8 9+
13B. Difficulty getting along with supervisor	0 1 2 3 4 5 6 7 8 9+
14B. Experiencing negative attitudes toward the organization	0 1 2 3 4 5 6 7 8 9+
15B. Insufficient personnel to handle an assignment	0 1 2 3 4 5 6 7 8 9+
16B. Making critical on-the-spot decisions	0 1 2 3 4 5 6 7 8 9+
17B. Personal insult from customer/consumer/colleague	0 1 2 3 4 5 6 7 8 9+
18B. Lack of participation in policy-making decisions	0 1 2 3 4 5 6 7 8 9+
19B. Inadequate salary	0 1 2 3 4 5 6 7 8 9+
20B. Competition for advancement	0 1 2 3 4 5 6 7 8 9+
21B. Poor or inadequate supervision	0 1 2 3 4 5 6 7 8 9+
22B. Noisy work area	0 1 2 3 4 5 6 7 8 9+
23B. Frequent interruptions	0 1 2 3 4 5 6 7 8 9+
24B. Frequent changes from boring to demanding activities	0 1 2 3 4 5 6 7 8 9+
25B. Excessive paperwork	0 1 2 3 4 5 6 7 8 9+
26B. Meeting deadlines	0 1 2 3 4 5 6 7 8 9+
27B. Insufficient personal time (e.g., coffee breaks, lunch)	0 1 2 3 4 5 6 7 8 9+
28B. Covering work for another employee	0 1 2 3 4 5 6 7 8 9+
29B. Poorly motivated coworkers	0 1 2 3 4 5 6 7 8 9+
30B. Conflicts with other departments	0 1 2 3 4 5 6 7 8 9+

Appendix G Permission to Use Job Stress Survey

From: Vicki McFadden <vmark@parinc.com>
To: therley <therley@aol.com>
Sent: Fri, Jan 24, 2014 12:17 pm
Subject: License Agr for JSS

I apologize. I did not realize it was attached until after I sent this e-mail!

By way of this e-mail, PAR is extending your License Agreement until December 31, 2014.

Please let me know if you have any questions.

Have a great day!
Vicki McFadden
Permissions Specialist

Psychological Assessment Resources, Inc., 16204 N. Florida Avenue, Lutz, FL 33549,
www.parinc.com
Telephone: (888) 799-6082; Fax: (800) 727-9329; Intl Fax: (813) 449-4109; e-mail:
vmark@parinc.com