

## Gender dominated industries: Breaking through the glass ceiling

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### ABSTRACT

Previous research suggests that gender compositions have different effects on men and women in the workplace. Social norms regarding gender roles have a potential to create bias evaluations of individuals who violate their particular accepted gender role. This bias can affect the individual in a way that causes them to experience work stressors that may affect their performance. This study explores the differences between the type of stressors nontraditional men and women may experience based on their gender, providing a glimpse of the bridging gap between male and female dominated industries. Men in nursing were compared with women in construction based on their responses to the Workplace Stressor Assessment Questionnaire (WSAQ) developed and validated by professionals from Critical Path Institute which measures categories of work stressors. A one-way between subjects ANOVA was conducted to compare the effect of gender on workplace stressors in different categories of stressors: Demands, Control, Support, Role, Relationships, and Rewards on the conditions of either male-dominated industry (construction) or female dominated industry (nursing). There was a significant effect of IV gender on DV workplace stressors at the  $p < .05$  level for the “Demands” stressors [ $F(3,105) = 5.308, p = 0.002$ ], Control Stressors [ $F(3,105) = 4.803, p = 0.004$ ], Support Stressors [ $F(3,105) = 9.151, p = 0.000$ ], and Role Stressors [ $F(3,105) = 3.426, p = 0.020$ ].

Keywords: gender, sex-role, occupation, conflict, job satisfaction

## INTRODUCTION

Taylor (2010) introduces the concept of an occupational minority, defined as a worker who is a numerical rarity in his or her occupation. Examples of occupational minorities include: male nurses, female construction workers, male teachers, and female surgeons. This concept focuses on minorities at the occupational level and does not take into account actual gender composition of their specific organization. This view involves perceptions of appropriate gender roles, interactions, and support. It suggests that gender compositions have different effects on both men and women in the workplace.

In accordance with this theory, women are more likely to receive social backlash when successful in a male-dominated occupation (Heilman, Wallen, Fuchs, & Tamkins, 2004). This negative response stems from social norms regarding gender roles and stereotypes, which has a potential to create bias in evaluations of women in the workplace (Heilman et al., 2004). This bias can lead women to be perceived as having less workplace support than their male counterparts, which can create obstacles in accessing information and gaining assistance in the workplace (Taylor, 2010). Surprisingly, both men and women are prone to see women who violate social gender norms as not likeable, and both have a tendency for hostility against women who are successful in male-dominated occupations (Taylor, 2010; Heilman et al., 2004).

Negative evaluations of women may affect certain occupational rewards, such as salaries and promotions (Heilman et al., 2004). Research further suggests that it is not generally the same when the situation is reversed; when men are successful at female-dominated occupations, it does not produce social disapproval and when it does, it is of benefit to them (Heilman et al., 2004).

Current literature illustrates, for example, women in male-dominated industries are seen as less competent in their occupation when expressing stereotypical femininity. However, when expressing a stereotypically masculine leadership style, women are viewed as successful but not well liked by their peers (Bergman, 2008). Women in these industries seem to have the choice of conforming to unpopularity or viewed as incapable of performing their duties. Men in female-dominated industries face a different dilemma, to the extent that because co-workers or supervisors may feel that they are violating social norms, they are pushed into higher leadership type positions that are more in line with male gender roles (i.e., Director of Nursing) (Taylor, 2010). This process, labeled as *access and treatment discrimination* (McLean & Kalin, 1994), occur when women and men are selected by employers into gender-traditional occupations, and include as well exclusion from gender-nontraditional occupations.

Furthermore, another form of this type of discrimination is evident in the formation of network ties in which women in male-dominated industries are at a disadvantage in the creation of these ties because in order to establish networking opportunities, one would need to express similar interests and characteristics to the target population. This is difficult for women to reach out to their male supervisors whom they do not express shared interests. Men, on the other hand, do share interests with their same-sex supervisors and therefore have more resources available to obtain assistance/information than their female counterparts (Taylor, 2010).

A 1999 study conducted by Graham & Welbourne found that women have a higher pay satisfaction compared to men, despite women's pay rate being significantly less than men. Additionally, women generally tend to have lower expectations on what they are worth compared to men (Major & Konar, 1984). This lower expectation is assumed to be a result of feelings of alienation and inadequacy in the workplace which stems from the inability of women to receive social support in their male-dominated industry (Bergman, 2008). As a

result, women may feel less compelled to seek or ask for promotions and/or pay raises which further hinder their ability to advance in their careers leading to the creation of the glass ceiling effect (Cotter, Hermsen, Ovadia, & Vanneman, 2001). The glass ceiling effect refers to the phenomenon of women receiving a wider gap in earnings and status as they gain more experience compared to their male counterparts (Morgan, 1998). Even those who surpass the glass ceiling still experience less authority and fewer benefits compared to their male counterparts (Zhang, Schmader, & Forbes, 2009). In another study conducted regarding gender gap concerning garnishments, it was reported that women choose to stay in occupations that are compatible with female gender stereotypes because they earn more than in a male-dominated occupation (Gabriel & Schmitz, 2006). For example, if they were to pursue a career in a male-dominated occupation they would more than likely only receive two-thirds of the pay rate of men in the same industry (Gabriel & Schmitz, 2006).

Apart from these consequences, there are three other factors on how the minority status may have adverse effects on individuals (Mastekaasa, 2004). The first is visibility, in which the minority will stand out in contrast, receiving more attention which can lead to higher performance pressure. The second is assimilation, in which a minority member is perceived as a representative of their category and therefore more subject to stereotyping. The third is polarization, in which the presence of minority members is in sharp contrast to the similarities between the members of the majority (Mastekaasa, 2004). These factors can cause increase in work stressors, add negative effects in health, and decrease motivation which can result in negative evaluations further hindering the minority and adding to the stereotype (Mastekaasa, 2004).

Also to consider is gender differences in family-work conflict. Family-work conflict is a source of stress that can affect an individual's work productivity, emotional and physical well being, as well as parenting performance (Duxbury & Higgins, 1991). Even though more women are working full time and there is a sharp increase in dual earning couples today, society still holds traditional gender specific perceptions of work and family responsibilities (Duxbury & Higgins, 1991). This view can create a unique stress for women who are compelled to balance work and family life effectively, almost to impossible standards. Duxbury's and Higgins (1991) study reports that a redistribution of family responsibilities within the home has not occurred, despite the redistribution of responsibilities outside the home. What this means is that women still have all the responsibilities of the home, with the added bread-winning responsibilities. Other researchers have also found that women receive less support from family than men in their respective fields (Mallincrodt & Leong, 1992). This can be particularly stressful to handle when women are involved in male dominated occupations which are notorious for investing more time and resources to the organization rather than their home life.

Given the current literature, women in male dominated industries face a plethora of dilemmas and obstacles that can add stress to their workplace, many of which men in female dominated industries do not experience. This study seeks to measure the scope of workplace stressors between men and women in gender dominated industries, specifically construction and nursing. Based on previous research, it is hypothesized that women in male dominated industries will have a higher score in overall workplace stressors than that of men in their industry. It is also hypothesized that the gap between the stressors of female construction workers and male construction workers (male-dominated industry) is wider than that of male nurses and female nurses (female-dominated industry).

## **METHOD**

### **Participants**

Due to the specific nature of the study, participants were selected on the basis of their occupational status in either the industries of construction or nursing. Because of the rarities of the participants in this field, both a paper-and-pencil and an online survey were administered. Participants were selected from construction companies and hospitals in the South Florida area. The National Association of Women in Construction and the Male Nursing Association were also contacted.

Respondent's demographics included forty four female nurses, nine male nurses, thirty seven female construction workers, and eighteen male construction workers totaling one hundred and eight participants.

### **Instrument**

The Workplace Stressor Assessment Questionnaire (WSAQ) and scoring guide were developed and validated by professionals from Critical Path Institute, permission was granted for use by Executive Director, Stephen Joel Coons, and PhD. The WSAQ is a 22-item likert scale based questionnaire, included with the WSAQ there are also seven additional questions designed to measure participant demographics. The WSAQ measure stressors according to categories: demands, control support, rewards, relationships, and role.

### **Procedure**

Participants were handed a package containing the informed consent form, demographic questionnaire, and WSAQ. When meeting with participants personally at associate meetings, instructions were given verbally to fill out survey and return to researcher; where participants were not present physically, they were given written instructions via email with a link to the online survey that included the same. The web based data was extracted from the website (Kwiksurveys.com) and kept in a secure location by the researcher a long with the collected paper formats.

The data was then scored and coded in accordance to the WSAQ scoring guide provided by the Critical Path Institute and the demographic information was also coded for analysis.

## **RESULTS**

A one-way between subjects ANOVA was conducted to compare the effect of (IV) gender on (DV) workplace stressors in different categories of stressors: Demands, Control, Support, Role, Relationships, and Rewards on the conditions of either male-dominated industry (construction) or female dominated industry (nursing). There was a significant effect of IV gender on DV workplace stressors at the  $p < .05$  level for the "Demands" stressors [ $F(3,105) = 5.308, p = 0.002$ ], Control Stressors [ $F(3,105) = 4.803, p = 0.004$ ], Support Stressors [ $F(3,105) = 9.151, p = 0.000$ ], and Role Stressors [ $F(3,105) = 3.426, p = 0.020$ ]. The relationship stressors [ $F(3,105) = .418, p = .741$ ] and Rewards stressors [ $F(3,105) = .634, p = .595$ ] were not significant.

Tukey Scheffe Post hoc test revealed on only one level was female construction workers significantly different in their stress levels compared to their male counterparts, and

that is on the Demands stress level category. On all other categories of control, support, role, relationships, and rewards, the female minority did not represent significant results compared to their male counterparts. A closer look at the analysis reveals that the female construction workers represented less stress levels than that of male construction workers; therefore, we cannot accept the study's hypothesis.

## DISCUSSION

Based on the results, the hypothesis that women in a male dominated industry would experience higher levels of workplace stressors than that of their male counterparts was not supported by the study. Also not supported, was the hypothesis that males in female dominated occupations will significantly less workplace stressors than that of their female counterparts. One possible explanation based on these findings is that gender roles are changing with women increasingly becoming less stigmatized in the workplace, even in a male dominated industry. Ulku-Steiner, Kurtz-Costes, & Kinlaw (2000) note that because of recent changes in gender ratios, the experiences of men and women could be more similar now than previously, a prominent theme in the present findings.

Researchers have illustrated that role-model relationships are more important to women's professional development than that of men (Ulku-Steiner, Kurtz-Costes & Kinlaw, 2000). Given that the majority of females who partake in male dominated industry were contacted through associations like the National Association of Women in Construction (NAWIC), this may explain the study's reported findings of low relationship and role stressors in female construction workers.

In support with these findings, a study conducted by Goyder, Guppy, and Thomson (2003) claimed that they found no differences in the allocation of male and female occupational prestige. They stress, however, that the overall equality of scores in their study of prestige occupational titles do not mean "sex-role factors" have disappeared entirely. Nonetheless, it does hold interesting implications, along with the current study, that there is a growing acceptance of conflicting gender roles in occupations, with a breakdown of gender stereotypes.

Future implications for research should include a broader range of participants, perhaps an addition of more classes of gender dominated occupations to compare between groups; for instance, McClean and Kalin (1994) detail how men are generally over presented in professional and technical occupations while women are largely found in clerical, sales and service occupations.

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