

PERCEPTIONS OF WORKPLACE BEHAVIORS IN THE WORKFORCE: THE INFLUENCE OF
AGE AND GENDER STEREOTYPES

by

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requirements for the degree of Master of Arts in the Department of Psychology

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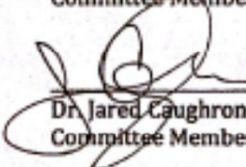
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Abstract

Previous research has shown that gender stereotyping occurs in the workforce. Findings on gender stereotypes clearly paint a picture of a male-dominated workforce, with common stereotypes focusing on male strength and assertiveness, while women are portrayed as more nurturing and less capable. Stereotyping based on age can also be detrimental to employees in the workforce; their chances of excelling are limited. Many individuals may be denied a job based on the idea that older workers are less flexible, or that hiring older workers is not beneficial due to competence. The goal of this research study was to examine age and gender stereotypes in the workplace and how it affects student ratings of target employees based on performance evaluation, competence, reward recommendation, and punishment severity. Using a survey method, 245 undergraduate students participated and were randomly assigned to rate two workplace scenarios based on both organizational citizenship behaviors (OCB; behaviors that go above and beyond organizational expectations) and counterproductive work behaviors (CWB, deviant behaviors that go against organizational expectations). Data analysis revealed a significant main effect for performance evaluation and a significant two-way age by gender interaction for reward recommendation when performing an OCB. Specifically, for both measures, participants rated older females significantly lower than younger females. Additionally, for reward recommendation, participants rated older females significantly lower than older males. Implications for organizations to implement action of a discrimination-free employee selection and review process are discussed.

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Statement of the Problem

A healthy work environment is instrumental to the success of the workplace, yet age and gender stereotypes still exist (DeArmond, Tye, Chen, Krauss, Rogers, & Sintek, 2006). This inevitably creates issues for many employees and employers alike, affecting performance, job security, communication, motivation to engage in organizational citizenship behaviors (OCB), and hiring decisions (DeArmond et al., 2006). When these factors are non-existent or improperly enacted, a positive work culture is unable to flourish due to the decreased well-being of stressed employees, as seen by a 2013 survey revealing that 70% of US workers are either disengaged or miserable (Gallup, Inc., 2013). Despite this, research exists mainly on gender stereotypes in the workplace, and not enough focus on understanding the consequences of age stereotypes and its relation to OCBs and CWBs.

Previous research has shown that gender stereotyping occurs in the workforce, with a clear benefit to men (Heilman, 2001). This is problematic because statistics show that as time passes; more women are entering the workforce (women account for 52% of the workforce) and expressing interest in management positions (Heilman, 2001; U.S. Bureau of Labor Statistics, 2014). Findings on gender stereotypes reveal that men are most often associated with traits like strong, assertive, emotionally stable, and workplace achievers. On the other hand, women are portrayed as emotionally unstable, weak, and timid in the workplace (Kite, Deaux, & Miele, 1991; DeArmond et al., 2006).

In addition, stereotyping based on age also occurs and can be disadvantageous to employees in the workforce; their chance of reward and promotion are limited or at times nonexistent (Rosen, Jerdee, & Lunn, 1981; Dennis & Thomas, 2007; Billett et. al., 2011).

Many of the common age stereotypes surrounding older workers centers on three important dimensions of the workplace: productivity, reliability, and adaptability (Henkens, 2005). For older employees, the unfavorable attitude of employers can negatively influence the overall atmosphere in the workplace and the worker's well-being. It may also result in a lack of interest, and a drop in motivation and productivity (Turek & Perek-Bialas, 2013). This is a serious issue because statistics show that the workforce is also aging; over 20% of the workforce is expected to be aged 55 and over by the year 2015 (U.S. Bureau of Labor Statistics).

The workplace is clearly aging in the United States due to low birth rates and longevity (Kunze, Boehm & Bruch, 2010) and in order to keep older employees in the workforce, we need to fully understand age discrimination. Research has shown that job performance often improves with age and that even though younger employees may be faster at certain tasks, they aren't always as accurate as an older adult (Posthuma & Campion, 2008). Therefore, promoting workforce diversity and addressing the issue of stereotyping in the workplace is of utmost importance. Although there are negative aspects of age diversity, promoting workforce diversity is ultimately a very important tool to increase organizational effectiveness. An organization benefits from diversity due to a wide range of opinions and ideas that can provide creative problem solving approaches, which in turn help increase organizational performance. In addition, benefits of workplace diversity include increased creativity and innovation, improved decision making, and better distribution of economic prospects (Henry & Evans, 2007).

Consequently, it is important to keep in mind the increasingly diverse age and gender workforce (Billett, Dymock, Johnson, & Martin, 2011) and the stereotyping that

occurs throughout many organizations. Stereotypes are defined as category-based traits or attributes that are often applied to a group of people as a result of accepted beliefs about the members of the group (Koch, D'Mello, & Sackett, 2014). The current study assessed both age and gender stereotypes of this type in the workplace and the discrimination that occurs as a result of it, specifically in the form of performance evaluation, competence, reward recommendation, and punishment severity.

Chapter 1: Introduction

Gender Stereotypes: General Overview

Current attitudes toward women in the workplace stem from centuries of cultural and religious beliefs that are still prominent today. Traditionally, men were the primary breadwinners and were thought of as the strong gender. Even though women sometimes worked, their jobs were referred to as “women’s work”, which consisted of childcare and domestic-related duties (Freedman, 2010). Therefore, men are associated with traits like hardiness and strength, while women are perceived as caring and nurturing. Society has come a long way as more women are entering the workforce and are able to hold the same jobs as men. However, the ways of the past still dominate the mindset of many individuals in the workforce (Freedman, 2010) and it is clear that gender stereotypes are linked to societal roles and issues of power inequality (Prentice & Carranza, 2002).

In terms of stereotyping in the workplace, gender stereotypes and discrimination have been extensively researched and the negative effects of such discrimination are clearly outlined and stated. Continued research examining gender stereotypes and discrimination in the workplace is particularly necessary because women account for 52% of all workers employed in management, professional, and related occupations, slightly more than their share of total employment (U.S. Bureau of Labor Statistics, 2014). In today’s workforce, women represent nearly half of the workforce but are often paid less and have fewer opportunities for upward mobility (Freedman, 2010). After reviewing countless studies on gender discrimination, DeArmond et al., 2006, concluded that the idea that males are superior overall dominates the workforce managerial mindset. The common consensus in the literature is the idea that women are associated with

communal traits, while men are associated with agentic traits (Koch, D’Mello, Sackett, 2014; Heilman, 2001). This means that men are almost always seen as strong, aggressive, forceful, independent, and decisive individuals. Women, on the other hand, are seen as kind, helpful, concerned about others, and sympathetic (Heilman, 2001).

In a study conducted by Schein (1989), the authors re-visited the relationship between sex role stereotypes and perceived management characteristics. A sample of 420 male and 173 female managers, aged 23 to 64, completed the sex stereotypes questionnaire on successful middle managers. The study revealed that male participants still believed in a male dominated workplace and expected males to fill managerial positions.

Similar findings can be seen in a study conducted by Heilman, Wallen, Fuchs, & Tamkins (2004), where the authors recruited a total of 243 participants for three mini-studies to assess reactions to women’s success in managerial positions. Findings were indicative of gender stereotyping in the workplace. The authors stated that successful women in top management positions were looked down upon and liked less than successful men in the same positions. The study also revealed that negative reactions to women’s success also affected the likelihood that they would be rated high on performance evaluations. Women in successful positions were also rated less likely than men to be given organizational rewards for their good behavior. Results of this study once again show that gender stereotyping still continues to occur in the workforce, and that occupational roles are still gender based (Heilman et. al., 2004).

Women are clearly affected by this because it makes it harder for them to climb the corporate ladder and because they are not always offered the same organizational

awards as men. Because of the stereotype that men perform better than women, certain job roles (managers) are typically filled by them. Therefore, the negative expectation that women will fail at these job roles takes away the opportunity for them to fill these positions (Heilman & Eagly, 2008). As a result of gender stereotypes in the workplace, negative biases towards women are formed, affecting women's advancement in the organization and chance to excel (Heilman, 2001). Correcting this issue is important, because improving gender equality is crucial to increasing the number of employees and skill variety in the workplace (Newman, 2014).

Age Stereotypes: General Overview

America's workforce is undoubtedly aging; statistics reveal that individuals aged 55 and over will account for 20% of the workforce by the year 2015, an increase of nearly 50% through the year 2014. By the year 2022, workers aged 55 and over are projected to account for almost 25% of the workforce (U.S. Bureau of Labor Statistics). However, it is clear that age discrimination still occurs in the workforce despite the signing of the Age Discrimination in Employment Act (ADEA) in 1967 by President Lyndon B. Johnson (Dennis & Thomas, 2007). Moreover, according to the Economic Policy Institute, employees over the age of 40 are not afforded the same privileges (promotion opportunities, training, compensation, etc.) as their younger co-workers (Billett et. al., 2011; Dennis & Thomas, 2007). Sadly, much like gender, age closes doors of opportunity for many individuals and with the baby-boomer generation accounting for more than seventy million workers in the U.S. workforce, this poses a serious problem (Gregory, 2001).

Stereotypes about older individuals in the workforce revolve around the three

main issues of productivity, reliability, and adaptability (Henkens, 2005). Some of the common age stereotypes that exist are the ideas that creativity wanes as people get older, that older individuals are less able to communicate, that they are old-fashioned, prejudiced, ill tempered, easily upset, and less culturally sensitive (Billett et. al., 2011; DeArmond, et al., 2006; Malinen & Johnston, 2013). Older workers are also typically seen as egocentric, incompetent, less social in general, and less open-minded. The standard mindset is that older persons are unable to compromise in the workplace and their performance suffers because of it. (DeArmond, et al., 2006; Iweins, Desmette, & Yzerbyt, 2012; Kunze, Boehm, & Bruch, 2013). Furthermore, results based on a questionnaire assessing age stereotypes revealed that participants viewed younger men as more efficient, motivated, and capable of working under serious pressure (Rosen & Jerdee, 1976). Also, older men were seen as less innovative and logical (Rosen & Jerdee, 1976). In another study conducted by the same researchers, the authors examined age stereotypes in the workplace and after administering a national survey, the authors noted that data analysis clearly revealed a trend in discriminating against older employees based on the common stereotype that these persons are less capable than the younger generation (Rosen & Jerdee, 1977).

The presence of age discrimination may lead to an increased number of counterproductive behaviors in the workplace, resulting in severe and unjust punishment, and eventually the loss of employees. The loss of employees due to retirement and unfair treatment is a serious concern within organizations (Henkens, 2005), so the need to address age discrimination in order to better support and treat older employees in the workforce should be a major focus.

Although research shows that age discrimination occurs in the workforce, extensive research exists only on gender stereotypes in the workplace, lacking focus on understanding the consequences of age stereotypes. Thus, the innovative focus of age in this study was important because continuous research can expand our knowledge on workplace bias. Future study findings can provide companies with the necessary push to base employment decisions solely on job-related information. Accepting that stereotypes exist and understanding the reasons why they exist can lead to better approaches used to reduce the stereotypes, eventually reducing the negative impacts associated with older employee discrimination. Therefore, it is clear that there is much to be gained from further research on stereotypes in the workplace, especially stereotypes of age.

Organizational Citizenship Behavior

The concept of job performance is widely researched and is typically divided into task (obligatory behaviors) and contextual performance (voluntary behaviors) (Borman & Motowidlow, 1993). One of the dimensions of contextual performance that's of primary interest to the current study is referred to as an Organizational Citizenship Behavior (OCB). An OCB is defined as an informal and voluntary workplace behavior that helps improve the organization and plays a vital role in the workforce (Organ, 1988). Some individuals are more likely than others to partake in citizenship behaviors, but the predictors of OCBs consistently remain the same. Although there is no accepted definition of OCB and researchers continue to study the concept, the majority of studies have shown that the typical OCB is characterized by altruism, conscientiousness, sportsmanship, civic virtue, and courtesy (Organ, 1988). Job satisfaction has been shown to predict citizenship behaviors, and individuals who work within a healthy and happy

work environment most often display these characteristics (Smith, Organ & Near, 1983). Additionally, Smith, Organ & Near (1983), discovered that along with job satisfaction, positive mood serves as a predictor for influencing how likely individuals engage in citizenship behaviors. This suggests that if an organization fosters a healthy work environment free of discrimination, employees are more likely to experience good mood and in return engage in OCBs.

Work behaviors in general are typically thought of as a combination of in-role (core-task behavior) and extra-role behaviors; the extra-role behaviors representing the OCBs (Podsakoff, Mackenzie, Paine, & Bachrach, 2000; Zhu, 2013). Individuals who engage in OCBs are essentially going the extra mile to get things done and are very motivated and committed to their organization. Furthermore, OCBs are usually broken down into two categories that encompass behaviors performed both towards other individuals and the organization itself. The first category of OCB refers to citizenship behaviors specifically benefitting the organization (OCB-O), like volunteering to serve on work committees and adhering to all organizational rules in order to maintain stability in the workplace. Some specific examples include using work hours wisely and efficiently, consistently showing up at work and notifying the proper individuals in case of necessary absenteeism, and finally, conserving and protecting organizational property (Williams & Anderson, 1991). The second dimension refers to behaviors that benefit specific individuals in the workplace (OCB-I), such as helping out other co-workers with difficult tasks and listening to their problems and worries. Additionally, OCB-Is represents behaviors where employees go out of their way to help train new employees and actively pass along information to co-workers who may be absent (Williams &

Anderson, 1991). In a sense, OCB-Is serve to help fellow co-workers, which as a result helps boost the organization.

For the current study, only the OCB-I dimension was examined, as the focus of this study is on assessing the negative effects of stereotypes among individuals in the workplace, versus looking at the specific dimensions of OCBs. Additionally, an example of an OCB-I was chosen for the vignettes because the sample for the current study (college students) was most likely able to relate to behaviors performed to benefit fellow co-workers versus the organization itself. College students typically have experience with temporary retail positions (as opposed to more permanent occupations) where the expectation to engage in OCBs to benefit the organization isn't as clear or encouraged. The retail industry's demographics are similar to the workforce as a whole, with the retail industry employing a younger population of workers; 23% of retail workers are between the ages of 16 and 24 (U. S. Bureau of Labor Statistics, 2012).

OCBs, gender, and age. A study by Heilman and Chen (2005) helps illustrate the function of altruistic OCBs by revealing the positive reactions to employees who engage in such behaviors. The study results show that for the most part the reactions are positive; however, the level of these reactions change with the gender of the employee. The results of the study revealed that men were viewed more favorably after performing OCBs than women. Specifically, men were more likely to be rewarded for performing OCBs than women and men received higher ratings for performance evaluation than women (Heilman & Chen, 2005). In terms of research on OCBs and age, studies have shown that older employees actually engage in more OCBs than younger employees (Ng & Feldman,

2008). However, research that directly assesses the relationship between OCBs, age, and measures of performance evaluation and reward recommendation is limited.

For the current study, we were interested in the way participants rate target employees on scales of performance evaluation, competence, and reward recommendation. Specifically, we were interested to see how scenario employees performing OCBs are rated differently based on age and gender. Previous research has provided well-documented evidence to show that age stereotyping occurs, but the relationship between OCBs and age stereotypes has not specifically been investigated.

Performance evaluation and OCB. According to Muchinsky (2012), performance evaluation is a method by which the job performance of an individual is documented and evaluated. Job performance in this instance represents whether or not the employee performs their job well, and takes into account only the expectations of the organization, not personal characteristics. Positive performance evaluations are important to employees because the likelihood of promotion and recommendation for pay increase depends upon it. Therefore, maintaining a strict merit system is crucial.

Typically, performance evaluation ratings are based on job-related variables. However, personal characteristics (age, gender, etc.) are often taken into account when performance evaluations are conducted (Gregory, 2001). Employers frequently make assessments that affect older workers due to the assumption that these workers are no longer capable of performing adequately (Gregory, 2001). Also, research shows that the gender stereotype that accompanies a certain occupation will also sway managers' ratings of employees. For example, for occupations that are typically deemed as male dominated (managerial positions), females were rated significantly lower on job performance

(Landy & Farr, 1980). Therefore, managers who are committed to creating a positive work environment responsible for eliciting citizenship behaviors must strive to improve and increase perceived fairness of their communication and evaluation of employees.

Reward recommendation and OCB. Another area that can negatively affect employees because of stereotyping is the concept of organizational rewards. Engaging in citizenship behaviors not only helps the organization, but the employee as well. Some of the benefits that directly affect workers include the amount and type of reward given for their behavior. Individuals who engage in OCBs are typically altruistic, so their motivation to engage in OCBs isn't for the purpose of a reward; however, their behavior does not go unnoticed and is usually rewarded as a result. Although we might assume that every good behavior is rewarded equally, this might not be the case when taking into account the role of age and gender stereotypes. Heilman & Chen (2005) found that men were more likely to be rewarded for performing OCBs than women. Additionally, in a study assessing the relationship between OCBs and organizational rewards (promotion), Allen (2006) stated that gender served as a moderator revealing that this relationship was stronger for males than for females. Little is known about age and rewards with regard to OCBs—the relationships among these three variables have yet to be studied. However, a study on age and organizational rewards looked at how participants recommended target candidates for promotion. Vignettes contained the same qualifications for both younger and older candidates, yet results revealed that 54% of participants recommended promotion for the younger candidate, while only 24% of participants recommended promotion for the older candidate (Rosen & Jerdee, 1976). Consequently, it is important to further research workplace stereotyping and reward allocation because, according to

Williams, Pitre, & Zainuba (2002), the likelihood of employees engaging in citizenship behaviors may increase as employee's perception of fair reward distribution is recognized.

Counterproductive Work Behaviors

On the other end of the contextual job performance spectrum is the construct of counterproductive work behaviors (CWB). This second dimension of job performance is defined as deviant behaviors in the workplace that specifically go against the organization (Hafidz, Hoesni, & Fatimah, 2012). Some of the main examples of CWBs include theft, absenteeism, misuse of time and resources, inappropriate behavior, and ineffective job performance (Sackett, 2002). In general, counterproductive work behaviors are often divided into two groups known as production deviance—interpersonal deviant behavior that negatively affects productivity, and property deviance—deviant behavior that negatively affects organizational property (Hafidz, Hoesni, & Fatimah, 2012; Sackett 2002; Robinson & Bennett, 1995). This two-part division is probably the simplest way to explain the type of behaviors that signify engaging in CWBs.

Previous research has focused on OCBs for the most part, so directing research on the relationship between CWBs, age, and gender stereotypes in the workplace is crucial. Studies that examine CWBs typically look at specific types of behaviors and assess the concept of CWBs overall in terms of antecedents and frequency. However, the current study will instead serve as a starting point for future research to build knowledge of the relationships among CWBs, age, and gender stereotypes. Moreover, understanding CWBs has the potential to help prevent engaging in these behaviors. This is useful because it is estimated that companies lose on average between 6 to 200 billion dollars

due to CWBs (Murphy, 1993). When examining CWBs in the workplace, research has shown a clear bias in workplace deviance evaluation. Specifically, many employers often base punishment for CWBs on age and gender stereotypes instead of realistic causes of ineffective behavior like inadequate training (Bowles & Gelfand, 2010). This is problematic because research has also shown that disgruntled employees often engage in CWBs due to the unfair treatment they receive by managers (Neff, 2009).

For the current study, a CWB is defined as a voluntary behavior that violates significant organizational norms, otherwise known as production deviance (Robison & Bennett, 1995). We will be using an example of production deviance because this dimension of CWB aligns more closely with the OCB-I example, focusing on individual, or interpersonal deviance. Research on CWBs and age has shown that age is negatively correlated with counterproductive behaviors (Ng & Feldman, 2008). However, a meta-analysis examining age and CWBs revealed that age tends to have a negative effect on performance when performance is conveyed in terms of supervisor ratings (Ng & Feldman, 2008). These results indicate that despite the negative correlation between age and CWBs, supervisors are still susceptible to age stereotypes.

Unfortunately, little attention has been paid to gender differences when examining CWBs. Typically, gender is included as a control variable or assessed through demographics instead of being the focus of the study (Fox & Lituchy, 2012). This limits our understanding of the possible role of gender with CWBs. Fortunately, this study went beyond previous studies that focused only on the general examination of CWBs.

Performance evaluation and CWB. In general, performance is predicted across a variety of job responsibilities mainly based on cognitive ability, conscientiousness,

prior experience, and motivation (O'Reilly III & Chatman, 1994). Common stereotypes may evolve based on these predictors and instead of evaluating individuals case by case, stereotyping may create pre-determined categories of job performance. Workplace employees, especially women and older workers, suffer as a result of this. The outcome of this stereotyping then turns into discrimination against older female workers when they are not hired for a promising job and aren't properly trained based on the idea that they are less able to learn and that they are more costly (Postuma & Campion, 2008). This is unfortunate because a meta-analysis conducted by Waldman and Avolio (1986) showed that although the idea of chronological age predicting performance decline seems convenient, an increase in age actually predicted increases in performance. In terms of deviant work behaviors, the current study was interested in assessing how performance evaluation ratings suffer as a result of such behaviors and how these ratings differ based on personal characteristics.

Reward recommendation and CWB. Although organizational rewards are typically assessed in response to engaging in citizenship behaviors, it was of interest to the current study to assess how the likelihood of promotion and similar rewards diminishes for individuals when performing CWBs. More specifically, how ratings of organizational rewards decrease for certain target employees based on their age and gender. The current study explored the common stereotype that young males dominate the workforce and because of this a great deal is expected of them in terms of job performance. Therefore, the current study predicted that because of this mindset, younger males would be less likely to be rewarded than younger females due to their deviant behavior. In a study conducted by Heilman and Chen (2005), female target employees

who withheld OCBs were rated lower on performance evaluation and less likely to be rewarded by participants. Although this study focused on OCBs, this suggests that female workers who perform CWBs are less likely to be rewarded than males. Therefore, the current study ultimately served as a starting point for future research based on CWBs, age, and gender stereotypes.

Punishment severity and CWB. In regards to CWBs, the level of punishment handed down to employees can drastically change depending on many characteristics, including the age and gender of the individual. Determining the level of punishment for deviant behavior in the workplace by managers should be carried out without the inclusion of age and gender characteristics. Nevertheless, these characteristics are often a major part of the decision making. Research assessing how the level of punishment of CWBs changes based on age and gender is not extensively examined. However, in one study, results indicated that the propensity to punish the target employee was significantly higher for females than males when the evaluator was a male (Bowles & Gelfand, 2010). Although the relationship between age stereotypes, CWBs, and punishment has not been extensively examined, the current study expected to mirror the findings of the Bowles and Gelfand study for both age and gender.

Gender and Age Interaction

Previous studies that examine workplace stereotypes typically focus on gender, or they focus on one type of stereotype at a time. The current study not only sheds light on gender and age stereotypes as individual predictors, but also assessed their relative strength as a combination in affecting ratings of performance evaluation, competence, reward recommendation, and punishment severity.

In a research study conducted by DeArmond et. al., (2006), the authors were interested in assessing age and gender stereotypes and how they related to six dimensions of adaptive performance. After recruiting 496 undergraduate students, they were randomly assigned to evaluate one of seven targets based on six dimensions of adaptive performance. Each target employee scenario differed based on the gender of the employee (male, female) and the age of the target employee (25, 40, and 55). The last and seventh group was gender and age neutral and served as the comparison group for the previous six (DeArmond, 2006).

Results of the study showed that across most of the dimensions of adaptive performance, older targets were perceived as less adaptable. Additionally, men and women were perceived differently in terms of adaptive performance, and the differences were consistent with common gender stereotypes. Specifically, male targets were perceived as being better prepared to handle stressful situations and to better adapt physically than were female targets. Conversely, female targets were perceived by raters as being better at learning and at adapting interpersonally and culturally. Overall, men were rated more favorably in terms of the adaptive performance dimensions and the adaptive characteristics were associated with younger targets more than older targets. The study also predicted an age by gender interaction, specifically hypothesizing that older female targets will be rated less adaptive than a younger male target. This was slightly supported on the dimension of solving problems creatively where 55-year old males were significantly rated higher on this dimension than the 55-year old female target (DeArmond, 2006).

Previous research has predominantly focused on age and gender stereotypes as separate predictors of discrimination in the workforce. However, the current study was interested in examining the interaction of age and gender stereotypes as predictors of discrimination. Specifically, we predicted an age by gender stereotype interaction with older female workers facing the most negative stereotypes, also known as a double-jeopardy discrimination scenario.

This is important because stereotyping in the workforce can discourage individuals from remaining in the organization, and ultimately discourages economic growth and leads to a loss of skilled workers (Posthuma & Campion, 2009). Therefore, it is essential to continue to conduct research assessing age and gender stereotypes in the workplace. The current study modeled the design of the previously mentioned study with a few innovative additions. Specifically, we created vignettes using OCBs and CWBs as workplace behaviors and used performance evaluation, competence, reward recommendation, and punishment severity as the dependent variables. The main goal for the purpose of the current research was to use the study results as evidence to provide suggestions for future research in the area of age, gender, and workplace behaviors. The results of this study have implications for organizations to base employment decisions exclusively on job related information in order to increase employee well-being and overall organizational effectiveness.

Primary Hypotheses

Based on the literature on gender and age stereotypes in the workplace, the following hypotheses were developed:

Organizational Citizenship Behaviors.

Hypothesis 1. Significant main effects for age and gender on performance evaluation, competence, and reward recommendation for performing OCBs were expected. Specifically, it was expected that younger males would be rated significantly higher on performance evaluation, competence, and reward recommendation compared to older males, younger females, and older females, respectively.

Supporting research: Heilman & Chen, 2005; Heilman, 2001; Kite, Deaux & Miele, 1991; DeArmond et. al., 2006; Henkens 2005; Kunze, Boehm & Bruch, 2013; Landy & Farr, 1980; and Rosen & Jerdee, 1976.

Counterproductive Citizenship Behaviors.

Hypothesis 2. Significant main effects for age and gender on performance evaluation and competence for performing CWBs were expected. Specifically, it was expected that older females would be rated significantly lower on performance evaluation and competence compared to older males, younger females, and younger males, respectively.

Supporting research: Heilman & Chen, 2005; Heilman, 2001; Kite, Deaux & Miele, 1991; DeArmond, 2006; Henkens 2005; Bowles & Gelfand, 2010; Neff, 2009; Ng & Feldman, 2008; and Posthuma & Campion, 2008.

Additionally, we expected all experimental group means to be significantly different from the control group means for these measures when performing OCBs and CWBs.

Exploratory Hypotheses

Hypothesis 3. A significant interaction between age and gender on reward recommendation and punishment severity for performing CWBs was expected.

Specifically, it was expected that older females would be rated significantly lower for reward recommendation and significantly higher on punishment severity compared to older males, younger females, and younger males.

Hypothesis 4. It was expected that younger males would be rated significantly lower on reward recommendation and significantly higher on punishment severity as compared to younger females for performing CWBs.

Rationale. It was hypothesized that when performing a CWB, older women would be rated highest on the punishment scale (and lowest on the rewards scale) because of the stereotype that men perform better than women and the perception that older individuals are incapable of completing tasks correctly, often making mistakes and therefore punishment is justified. Also, even though the common stereotype is that younger men outperform younger women, it was hypothesized that younger men would be rated higher on the punishment scale as compared to younger women because if they partake in a counterproductive behavior they have failed to live up to the assertive, independent, productive stereotype of men.

Additionally, we expected all experimental group means to be significantly different from the control group means for these measures when performing CWBs.

Chapter 2: Method

Participants

The study included a sample of 245 participants, with approximately 20-30 participants in each of the ten conditions (there are 10 pairs of scenarios; 20 scenarios total). Sample size was calculated using G*Power based on a medium effect size (.25), an alpha level of .05, and power equal to .90. Participants were undergraduate students recruited from Radford University (RU) across all demographic domains. They were mainly white females (61%) aged 17 and older, with an average age of 19.49 ($SD= 2.46$) (Tables 1-3). Participants recruited from RU were excluded from this study if they didn't have work experience (at least six months of experience was required). Participant age, race/ethnicity, and years of work experience were collected through a demographic questionnaire (Appendix C) at the beginning of the survey. Ultimately, we had ten conditions that participants were randomly assigned to with the following pairings: OCB1MY and CWB2MY (30 participants), OCB2FY and CWB1FY (17 participants), CWB2NO and OCB1NO (31 participants), CWB2FO and OCB1FO (31 participants), CWB1MO and OCB2MO (21 participants), CWB1MY and OCB2MY (18 participants), CWB1FO and OCB2FO (30 participants), CWB1NO and OCB2NO (23 participants), OCB1MO and CWB2MO (21 participants), and lastly, OCB1FY and CWB2FY (23 participants), with a total of 245 participants for all ten conditions/pairings. The numbers 1 and 2 indicate which set of scenarios were used, M stands for male, F stands for female, O stands for old, Y stands for young, and finally, NO stands for no information.

Study Design

The current study was a 2 x 2 x 2 between and within-subjects factorial design with three independent variables. The manipulated variables were age of the scenario employee (younger=25/older=60), gender of the scenario employee (male/female), and workplace behavior (performing OCB/performing CWB). The between-subjects variables were age and gender, while the within-subjects variable was workplace behaviors. All participants were randomly assigned one OCB and one CWB scenario pair to rate (the age and gender remained the same in both scenarios, but the names of the target employees were different). There were a total of 20 scenarios composed of 16 experimental groups and four control groups. The controls groups entail a scenario depicting one OCB and one CWB behavior, but without any age or gender identifying information. The dependent variables were performance evaluation, reward recommendation, competence, and punishment severity.

Measures

Workplace scenarios. Two different types of workplace behaviors were used in randomly assigned scenarios: organizational citizenship behaviors (OCB) and counterproductive work behaviors (CWB). Two scenarios were formulated for both types of workplace behaviors and the scenarios focused on behaviors related to helping supervisors (Appendix A). Both scenario examples were chosen based on their ability to easily convey the behavior and described in a way to which most individuals could relate. Students met together to write the vignettes, carefully choosing appropriate wording and grammar and making sure to edit and restructure the vignettes as necessary. A study assessing altruistic OCBs was used as a guide when constructing the scenarios for the current study (Conde, 2010). For the current study, two levels of age were selected for the

experimental scenarios: 25 and 60. The age 25 was chosen because 25 is the age by which most adults have entered the workforce, and 60 is the age at which some people might first consider retiring (DeArmond et. al., 2006). The four names for the vignettes were selected based on common names from the year the particular person was born according to US Census. For the target employees aged 60, two common male and female names were chosen from 1954 and for target employees aged 25, two common male and female names were chosen from 1989. In the end, four different names were chosen to represent males and females for both age groups: Jack, Anna, John, and Amy. Additionally, we decide to include photos to represent each of the target employees in the experimental groups to reinforce the age and gender of the target employee (Appendix A). These stock photos were previously validated for this purpose (Thesis Project: Mogan & Caughron, 2013), so we decided to include them in order to help guarantee that participants were rating the same target employee as opposed to creating an image in their minds, which we were unable to control for. Specific stock photos were chosen to keep all target employee images as similar as possible. All images include Caucasian individuals, heads and shoulders are visible, but no arms, mouths are closed, and all photos contain persons dressed in professional attire to represent the workforce.

Performance evaluation. In order to evaluate age and gender stereotypes in the workplace, age and gender were manipulated in randomly assigned scenarios and target employees were rated based on perceived performance evaluation. After reading a scenario, participants rated target employee performance based on three items: “Overall, how would you rate this employee’s performance over the past year?” “In your opinion, how likely is it that this employee will advance in the company?” and “Give your

assessment of the employee's likelihood of success." (Heilman & Chen, 2005). The three items were measured using a 7-point response scale ranging from 1 (*very unlikely*) to 7 (*very likely*). Internal consistency reliability for this measure can be found in Table 5.

To further evaluate perceived job performance, a shortened version of a 21-item measure developed by Williams and Anderson (1991), was used to measure employee behavior. The first seven items measure in-role behaviors (IRB), while the second set of seven questions addresses organizational citizenship behaviors that target or affect a specific individual in the workplace (OCB-I). The final set of seven questions measures organizational citizenship behaviors that affect the organization itself (OCB-O). However, only the seven items referring to OCB-Is was used to measure performance evaluation for the current study. After reading a scenario, participants rated perceived target employee job performance using items related to helping others who have been absent or going out of their way to help new employees (Appendix D).

The seven items were measured using a 7-point response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Internal consistency reliability for this measure can be found in Table 5.

This second measure of performance evaluation was added to serve as a potential predictive model for performance evaluation using the scenarios—the idea that performance evaluations differ solely based on the type of behavior performed (good vs. bad). This would especially be useful if no main effects were found for age or gender.

Competence. In order to evaluate age and gender stereotypes in the workplace, age and gender were manipulated in randomly assigned scenarios. After reading a scenario, participants rated the target employee on competence using an attribute scale

with 4 adjectives to form an overall measure (competent, productive, effective, and decisive). A 7-point response scale was used for these adjectives, ranging from 1 (*very little*) to 7 (*very much*) (Heilman & Chen, 2005). Internal consistency reliability for this measure can be found in Table 5.

Reward recommendation. In order to evaluate age and gender stereotypes in the workplace, age and gender were manipulated in randomly assigned scenarios. After reading a scenario, participants recommended rewards for the target employee using four common organizational rewards (salary increase, promotion, high-profile project, and bonus pay) based on a 7-point reward recommendation scale ranging from 1 (*would definitely not recommend*) to 7 (*would definitely recommend*) (Heilman & Chen, 2005). Internal consistency reliability for this measure can be found in Table 5 and specific items for this measure can be found in Appendix E.

Propensity to punish. In order to evaluate age and gender stereotypes in the workplace, age and gender were manipulated in randomly assigned scenarios and target employees were rated based on perceived punishment severity. After reading a scenario, participants rated the target employee based on five items describing how they would potentially respond to the target's behavior. Using the punishment severity measure by Bowles & Gelfand, 2010, the five items were as follows: "take some kind of formal action against him (e.g., formal reprimand, punishment)", "give him the benefit of the doubt" (reverse-coded), "deal with the situation privately and informally" (reverse-coded), "this behavior should be punished", and "this behavior would not worry me personally" (reverse-coded). A 7-point response scale was used to rate the five items ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Internal consistency reliability

for this measure can be found in Table 5. This measure was used only for the CWB vignettes.

Demographics & manipulation check. A questionnaire (Appendix C) was used to assess participant demographics, including: gender, age range, age in exact years, ethnicity, and an additional question referring to students' overall work experience in years. To assess whether the manipulated variables were correctly interpreted, participants were given a questionnaire asking the gender and age of the employee in the scenario (2 questions) immediately after reading the randomly assigned scenarios (Appendix B).

Procedure

Participants for the study were recruited using Radford University Psychology Department's SONA system where they signed up for a half hour study session. The SONA system is most often used to recruit volunteers from undergraduate instructor-approved psychology courses. Participants were asked to complete the study in a research lab with Radford University computers. All of the data collected (survey responses) were recorded using the Qualtrics online survey system. Surveys were kept anonymous to ensure participant names were not linked with Qualtrics. A research team member logged into all computers and the Qualtrics system upon arriving to the reserved study rooms. Each researcher was present to administer the surveys and up to 15 participants completed the study at once. There was a written script for researchers to read to participants that emphasized the importance of reading directions carefully and answering questions honestly as the survey was anonymous. Participants read an informed consent form and electronically agreed to participate before they began the survey. They were

provided researcher contact information in case they had any questions or issues with the study.

Participants completing survey sessions randomly received two of 20 workplace scenarios to evaluate. The first 16 scenarios were based on age (younger or older) and gender (female or male) and based on performing OCB or performing CWB. Participants were also potentially randomly assigned to evaluate an employee based on performing OCB or performing CWB without any age or gender identifying variables (4 control scenarios). The control groups served as a reference point for discrimination; the experimental groups were compared to the controls. The experimental scenarios were written using two different types of workplace behaviors for four different types of individuals: older female, younger female, older male, and younger male (2 x 4).

Participants rated two of 20 employee workplace scenarios using five measures based on performance evaluation, reward recommendation, competence, and punishment severity. Participants had access to the randomly assigned scenarios throughout the study in case they needed to refer back for clarification. Additionally, instructions stated to read the scenario carefully to make sure participants were paying attention. Participants then completed a quick demographic survey and a manipulation check questionnaire to assess whether the manipulated variables were correctly interpreted.

The whole survey session took around 20 minutes to complete on average, but 30 minutes was allotted for the session. Points for participation were awarded through the SONA system and given to participants at the discretion of the instructor for his or her respective courses. Radford University's Institutional Review Board (IRB) approved the study.

Chapter 3: Results

Descriptive Statistics

Demographic analysis was performed specifically on age, gender, ethnicity, and work experience and revealed that most participants were Caucasian women between the ages of 18 and 20 with an average 1-5 years of work experience. Specifically, participants consisted of 60.6% female (Table 1), 82.5% were aged 18-20, 13% aged 21-23 and the remaining 5.5% were 24 and above (Table 2). Of all participants, 61.4% were White/Caucasian, 23.2% were African American, 6.9% were Hispanic, 2.0% were Asian/Pacific Islander, and 6.5% Other (Table 3). In terms of work experience, 21.5% of people had 1 year or less work experience, 69.5% had 2-5 years' experience, 6.5% had 6-10 years' work experience, and the remaining 2.5% had 11 years or more work experience (Table 4).

Descriptive information for all study measures can be found in the following information (Table 5). The first performance evaluation measure with a mean of 6.27 ($SD = .83$) was analyzed with scores ranging from a minimum of 2.0 to a maximum of 7.0 for performing OCBs and a mean of 1.77 ($SD = .83$) for performing CWBs. The second performance evaluation measure with a mean of 5.86 ($SD = .75$) was analyzed with scores ranging from 2.0 to 7.0 for performing OCBs and a mean of 2.17 ($SD = .96$) for performing CWBs. Third, the reward recommendation measure with a mean of 6.06 ($SD = 1.08$) was analyzed with scores ranging from 1.0 to 7.0 for performing OCBs and a mean of 1.57 ($SD = .86$) for performing CWBs. Next, the competence measure with a mean of 6.10 ($SD = .89$) was analyzed with scores ranging from 1.50 to 7 for performing OCBs and a mean of 2.69 ($SD = 1.20$) for performing CWBs. And finally, the

punishment severity measure with a mean of 5.24 ($SD = .88$) was analyzed with scores ranging from a minimum of 2.0 to a maximum of 7.0 for performing CWBs.

Reliability analyses were run for each dependent variable ($N = 245$). Chronbach's alpha for the first performance evaluation measure when performing an OCB was low at $\alpha = .086$ so we decided to throw out item 3 in order to increase the alpha level to $\alpha = .70$. In terms of performing CWBs, the alpha level for the same measure was $\alpha = .805$. This indicates that participants interpreted the measure differently for performing OCBs versus performing CWBs, especially when concerning item 3. Chronbach's alpha for all measures, including both performing OCB and performing CWB, can be found in Table 5.

Table 1. *Frequency distribution for gender*

| | <i>Frequency</i> | <i>Percent</i> | <i>Valid Percent</i> | <i>Cumulative Percent</i> |
|---------------|------------------|----------------|----------------------|---------------------------|
| Male | 96 | 39.0 | 39.2 | 39.2 |
| Female | 149 | 60.8 | 60.8 | 100.00 |
| Total | 245 | 100.0 | 100.0 | |

Table 2. *Frequency distribution for age range*

| | <i>Frequency</i> | <i>Percent</i> | <i>Valid Percent</i> | <i>Cumulative Percent</i> |
|--------------|------------------|----------------|----------------------|---------------------------|
| -99 | 2 | 0.8 | 0.8 | 0.8 |
| 18-20 | 203 | 82.9 | 82.9 | 83.7 |
| 21-23 | 32 | 13.1 | 13.1 | 96.7 |
| 24-26 | 5 | 2.0 | 2.0 | 98.8 |
| 27-29 | 2 | 0.8 | 0.8 | 99.6 |
| 33+ | 1 | 0.4 | 0.4 | 100.0 |
| Total | 245 | 100.0 | 100.0 | |

Table 3. *Frequency distribution for ethnicity*

| | <i>Frequency</i> | <i>Percent</i> | <i>Valid Percent</i> | <i>Cumulative Percent</i> |
|---|------------------|----------------|----------------------|---------------------------|
| Caucasian | 151 | 61.6 | 61.6 | 61.6 |
| African American | 57 | 23.3 | 23.3 | 84.9 |
| Asian/ Pacific Islander | 5 | 2.0 | 2.0 | 86.9 |
| Hispanic/ Latino | 17 | 6.9 | 6.9 | 93.9 |
| American Indian/ Native American | 2 | 0.8 | 0.8 | 94.7 |
| Other | 13 | 5.3 | 5.3 | 100.0 |
| Total | 245 | 100.0 | 100.0 | |

Table 4. *Frequency distribution for work experience*

| | <i>Frequency</i> | <i>Percent</i> | <i>Valid Percent</i> | <i>Cumulative Percent</i> |
|-----------------------|------------------|----------------|----------------------|---------------------------|
| None, N/A | 1 | 0.4 | 0.4 | 0.4 |
| 1 year or less | 53 | 21.6 | 21.6 | 22.0 |
| 2-5 years | 171 | 69.8 | 69.8 | 91.8 |
| 6-10 years | 16 | 6.5 | 6.5 | 98.4 |
| 11-14 years | 2 | 0.8 | 0.8 | 99.2 |
| 15+ | 2 | 0.8 | 0.8 | 100.0 |
| Total | 245 | 100.0 | 100.0 | |

Table 5. *Descriptive Information for Dependent Variables*

| Measure | <i>N</i> | <i>M</i> | <i>SD</i> | <i>R</i> | <i>Chronbach's α</i> |
|---------------------|----------|----------|-----------|----------|--|
| Perf1OCBNew* | 245 | 6.27 | .83 | 5.00 | .700 |
| Perf1CWB | 245 | 1.77 | .83 | 5.00 | .805 |
| Perf2OCB | 245 | 5.86 | .75 | 5.00 | .831 |
| Perf2CWB | 245 | 2.17 | .96 | 5.00 | .858 |
| RewardOCB | 245 | 6.06 | 1.08 | 6.00 | .935 |
| RewardCWB | 245 | 1.57 | .86 | 4.25 | .939 |
| CompOCB | 245 | 6.10 | .89 | 5.50 | .801 |
| CompCWB | 245 | 2.69 | 1.20 | 5.75 | .757 |
| PunishCWB | 245 | 5.24 | .88 | 5.00 | .588 |

Note. *Item three was removed from measure

Preliminary Analyses

A manipulation check was included in the survey to ensure that participants were paying attention to the age and gender of the target employee and four individuals failed the manipulation check. However, the means and standard deviations for these individuals on our dependent variables were similar to the descriptive information for all

measures, leading us to believe that although the participants might have failed the manipulation check, they didn't complete the survey carelessly. Therefore, we decided to keep these participants in the study for data analysis.

We ran analyses to test for order effects regarding both workplace behaviors and scenario sets using all of our measures. Please refer to Appendix F for additional information on counter-balanced effects.

A series of preliminary analyses were conducted to identify associations between demographic variables (age, ethnicity, work experience, and gender) and main variables of interest (performance evaluation, competence, reward recommendation, and punishment severity) for performing both OCBs and CWBs. No differences for age, ethnicity, and work experience were found on any outcome variable.

An independent samples t-test revealed a significant participant gender mean difference for performance evaluation ratings when performing a CWB, whereby male participants rated target employees ($N = 72, M = 1.92, SD = .76$) significantly higher on performance evaluation than female participants ($N = 119, M = 1.68, SD = 0.73$), $t(189) = 2.100, p = .037$ (Table 6). However, further independent samples t-tests did not reveal significant gender differences for any of the other dependent variables.

Table 6. *Independent Samples T-Test for Performance Evaluation for Performing CWB and Participant Gender*

| | <i>F</i> | <i>Sig.</i> | <i>t</i> | <i>df</i> | <i>Sig. (2-tailed)</i> |
|-----------------|----------|-------------|----------|-----------|------------------------|
| Perf1CWB | .316 | .575 | 2.100 | 189 | .037 |

Note. N= 191

Primary Analysis

Significant main effects for age and gender on performance evaluation, competence, and reward recommendation for performing OCBs were expected. Specifically, it was expected that younger males would be rated significantly higher on performance evaluation, competence, and reward recommendation compared to older males, younger females, and older females, respectively.

To analyze hypothesis 1, we performed a separate two-way ANOVA for each dependent variable. When conducting a two-way ANOVA, the sample size for all groups must be roughly equal so we excluded the control group and ran the analysis with 2 levels of the independent variable (the control group merely serves as a reference point to compare experimental group means to). The first two-way ANOVA using the new version of the first performance evaluation measure revealed a main effect for age, $F(1, 187) = 4.083, p = .045, \eta^2 = .021$ (Table 7). Specifically, an independent samples t-test revealed that participants rated older target employees ($M = 6.14, SD = .91$) significantly lower on performance evaluation than younger target employees ($M = 6.40, SD = 0.71$), $t(189) = 4.190, p = .030$. No main effect for age was found for all other dependent variables: second performance evaluation measure, $F(1, 187) = 1.67, p = .198, \eta^2 = .009$, reward recommendation, $F(1, 187) = .632, p = .428, \eta^2 = .003$, and competence, $F(1, 187) = .000, p = .992, \eta^2 = .000$. Also, no main effect for gender was found for the first performance evaluation measure, $F(1, 187) = .295, p = .588, \eta^2 = .002$. Furthermore, no main effect for gender was found for the second performance evaluation measure, $F(1, 187) = .406, p = .525, \eta^2 = .002$, competence, $F(1, 187) = .542, p = .463, \eta^2 = .003$, or reward recommendation, $F(1, 187) = .442, p = .507, \eta^2 = .002$. However, supporting

prior research, a two-way age by gender interaction was found for reward recommendation, $F(1, 187) = 4.114, p = .044, \eta^2 = .022$ (Table 7). To determine where the significant interaction was, a series of simple effects tests were conducted indicating that participants rated older women ($M = 5.861, SD = 1.178$) significantly lower on reward recommendation as compared to younger women ($M = 6.281, SD = .721$) and participants rated older women ($M = 5.861, SD = 1.178$) significantly lower on reward recommendation as compared to older men ($M = 6.262, SD = 1.087$) (Table 8 & 9). Additionally, there was a marginally significant two-way age by gender interaction for the first performance evaluation measure, $F(1, 187) = 2.241, p = .070, \eta^2 = .017$ (Table 7). After running pairwise comparisons, we found a similar pattern between the performance evaluation measure and the reward recommendation measure. Participants rated older females ($M = 6.025, SD = .878$) significantly lower on performance evaluation when performing an OCB as compared to younger females ($M = 6.488, SD = .625, p = .006$). Also, participants rated older females ($M = 6.025, SD = .878$) lower on performance evaluation as compared to older men ($M = 6.310, SD = .950, p = .085$).

Table 7. *Two-Way ANOVA for Performance Evaluation and Reward Recommendation for Performing OCB*

| Source | DV | SS | df | MS | F | P-value |
|------------------------|-------------|-------|----|-------|-------|---------|
| Age Condition | Reward OCB | .652 | 1 | .652 | .632 | .428 |
| | Perf1OCBnew | 2.753 | 1 | 2.753 | 4.083 | .045* |
| Gender Condition | Reward OCB | .456 | 1 | .456 | .442 | .507 |
| | Perf1OCBnew | .199 | 1 | .199 | .295 | .588 |
| AgeCond* GenderCond | Reward OCB | 4.246 | 1 | 4.246 | 4.114 | .044* |
| | Perf1OCBnew | 2.241 | 1 | 2.241 | 3.323 | .070 |

Note. N= 191

Note. *Significant at the .05 level

Table 8. *Simple effects for Gender on Levels of Age; Reward Recommendation for Performing OCB*

| Gender Cond. | Age Cond. | Age Cond. | MD | SE | P-value |
|--------------|-----------|-----------|-------|------|---------|
| Male | Young | Old | -.184 | .215 | .393 |
| Female | Young | Old | .421 | .207 | .043* |

Note. *Significant at the .05 level

Note. $\eta^2 = .022$

Table 9. *Simple effects for Age on Levels of Gender; Reward Recommendation for Performing OCB*

| Age Cond. | Gender Cond. | Gender Cond. | MD | SE | P-value |
|-----------|--------------|--------------|-------|------|---------|
| Young | Male | Female | -.203 | .217 | .352 |
| Old | Male | Female | .401 | .204 | .050* |

Note. *Significant at the .05 level

Note. $\eta^2 = .020$

Moreover, significant main effects for age and gender on performance evaluation and competence for performing CWBs were expected. Specifically, it was expected that older females would be rated significantly lower on performance evaluation and

competence as compared to older males, younger females, and younger males, respectively.

To analyze hypothesis 2, we also performed a separate two-way ANOVA for each dependent variable mentioned. After running all three two-way ANOVAs, analyses did not reveal a significant main effect for age for any dependent variable, first performance evaluation measure, $F(1, 187) = .000, p = .996, \eta^2 = .000$, second performance evaluation, $F(1, 187) = 1.381, p = .241, \eta^2 = .007$, and competence, $F(1, 187) = .653, p = .420, \eta^2 = .003$. Additionally, the ANOVA did not reveal a significant main effect for gender for any measure, first performance evaluation measure, $F(1, 187) = .352, p = .553, \eta^2 = .002$, second performance evaluation, $F(1, 187) = .375, p = .541, \eta^2 = .002$, and competence, $F(1, 187) = .837, p = .361, \eta^2 = .004$. However, a marginally significant two-way age by gender interaction was revealed when performing a CWB (first performance evaluation measure), whereby participants rated older male target employees ($M = 1.63, SD = .63$) the lowest on performance evaluation and older female target employees the highest ($M = 1.88, SD = 0.81$), $F(1, 187) = 3.085, p = .081, \eta^2 = .016$ (Table 10).

Additionally, we expected all experimental group means to be significantly different from the control group means. We ran two-way ANOVAs for all dependent variables again, but this time we included the control group to see where it would show up on a graph as compared to the manipulated groups. For a graphical representation of group means, see Figures 1-7. Although these group differences weren't statistically different when we ran multiple independent samples t-tests, the control group remains relatively centered for many of the dependent variables.

Table 10. Two-way ANOVA for Performance Evaluation for Performing CWB

| Source | DV | SS | df | MS | F | Sig. |
|------------------------|----------|-------|----|-------|-------|------|
| AgeCond* GenderCond | Perf1CWB | 1.732 | 1 | 1.732 | 3.085 | .081 |

Note. N= 191

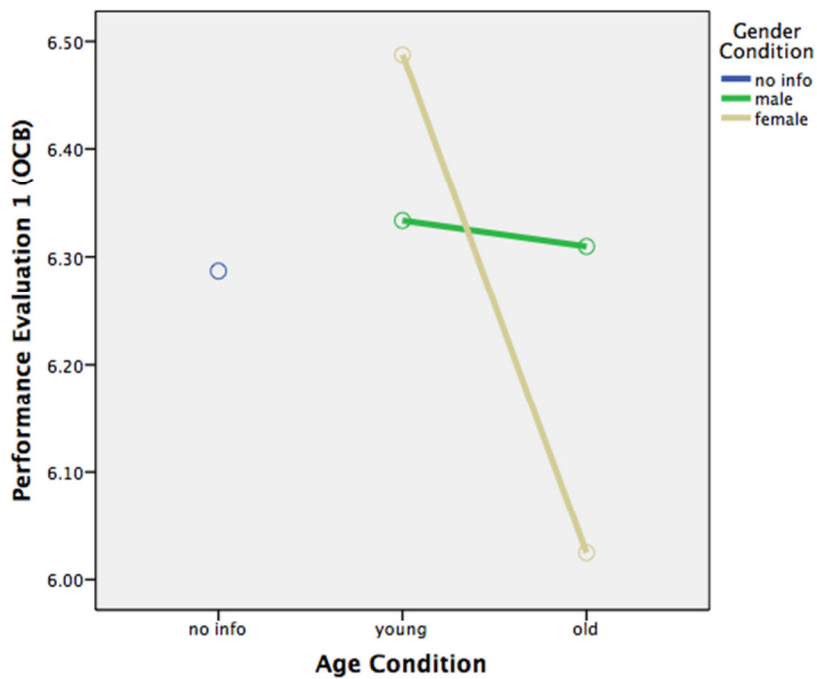


Figure 1. Mean differences for experimental and control groups for Performance Evaluation for Performing OCB

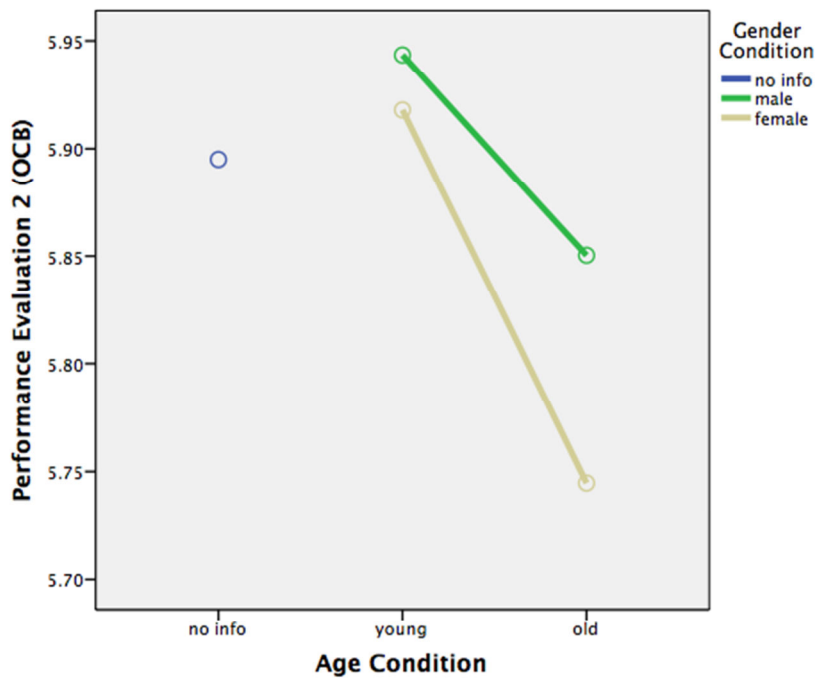


Figure 2. Mean differences for experimental and control groups for Performance Evaluation 2 for Performing OCB

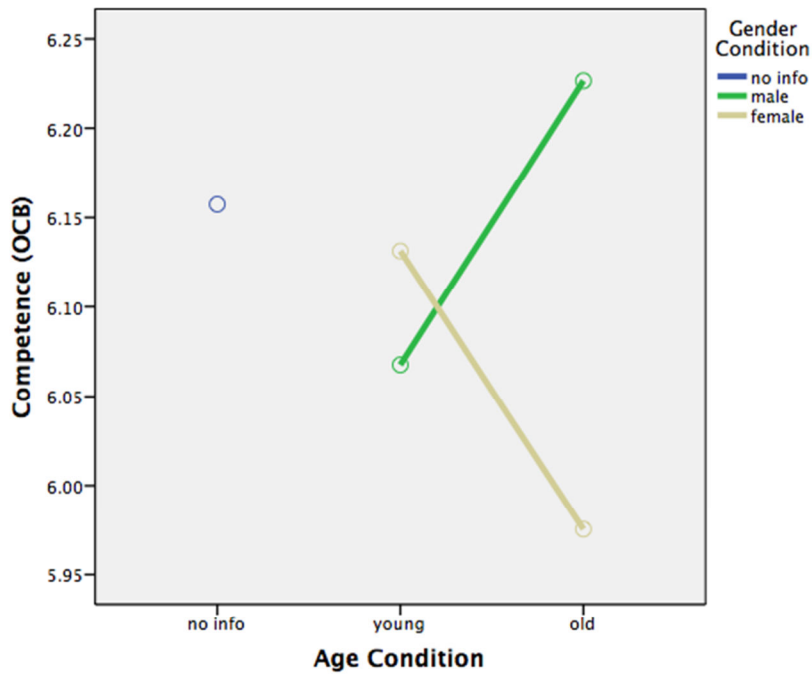


Figure 3. Mean differences for experimental and control groups for Competence for Performing OCB

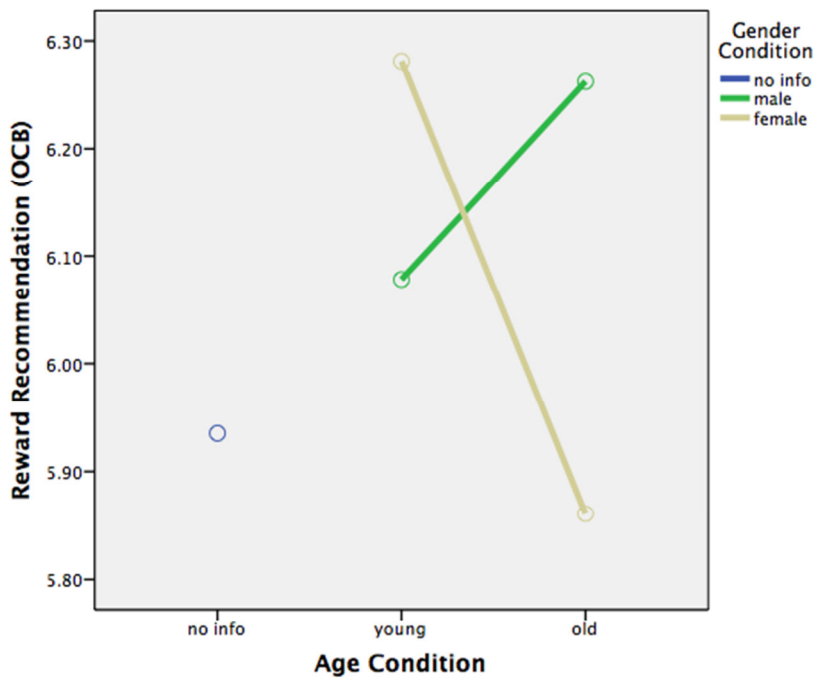


Figure 4. Mean differences for experimental and control groups for Reward Recommendation for Performing OCB

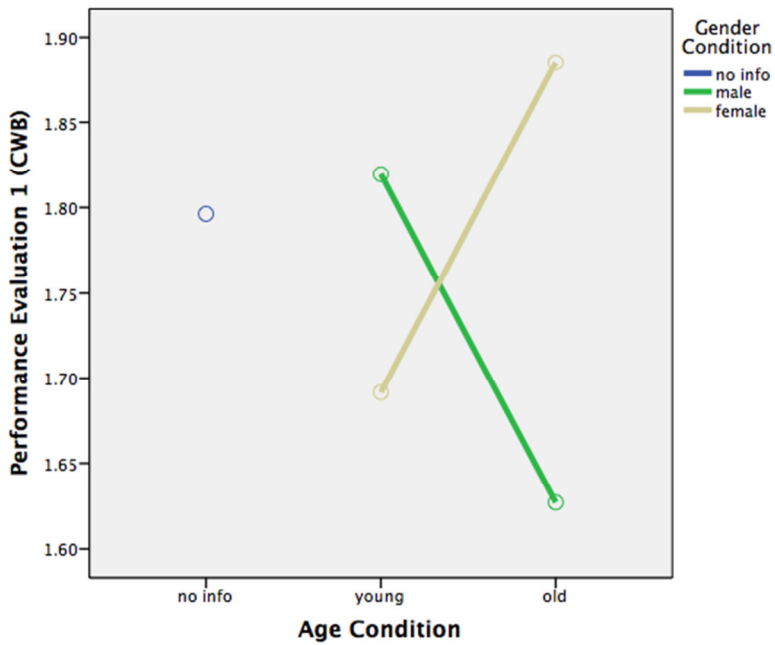


Figure 5. Mean differences for experimental and control groups for Performance Evaluation for Performing CWB

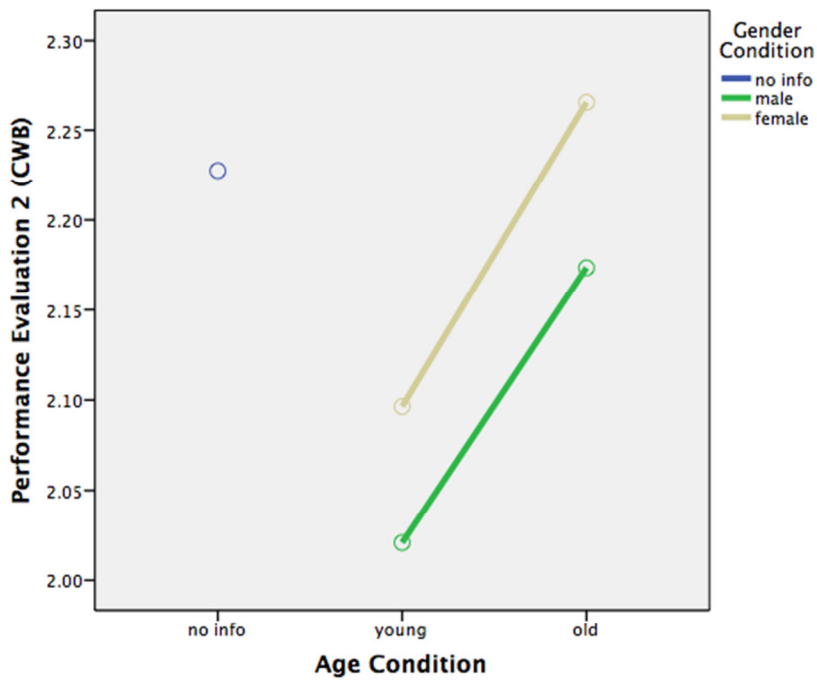


Figure 6. Mean differences for experimental and control groups for Performance Evaluation 2 for Performing CWB

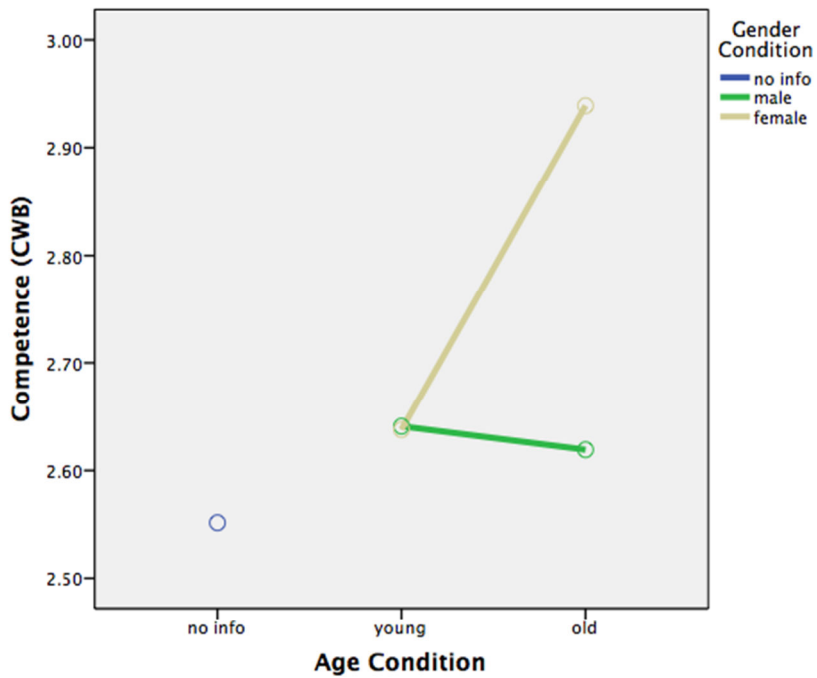


Figure 7. Mean differences for experimental and control groups for Competence for Performing CWB

Exploratory Hypotheses

A significant interaction between age and gender on reward recommendation and punishment severity for performing CWBs was expected. Specifically, it was hypothesized that older females would be rated significantly lower for reward recommendation and significantly higher on punishment severity compared to older males, younger females, and younger males. Also, it was expected that younger males would be rated significantly lower on reward recommendation and significantly higher on punishment severity as compared to younger females when for performing CWBs.

To analyze hypotheses 3 and 4, we performed a two-way ANOVA for both measures separately. However, our analysis did not reveal a significant interaction between age and gender for reward recommendation, $F(1, 187) = .380, p = .538, \eta^2 = .002$, or punishment severity $F(1, 187) = .049, p = .825, \eta^2 = .000$, when performing a CWB (Table 11). Although there were no statistically significant differences between experimental group means, group means indicated that participants rated younger males lowest on reward recommendation followed by older females. In terms of punishment severity, although participants rated older females lowest, they rated younger males highest and overall higher than younger females.

Additionally, we explored group mean differences between the experimental groups and control groups. We re-ran the two-way ANOVAs for the two dependent variables of interest (reward recommendation and punishment severity), and included the control group to see where it would show up on a graph as compared to the manipulated variables. For a graphical representation of group means, see Figures 8-9. As mentioned before, these group differences weren't statistically different when we ran independent

samples t-tests, but the control group remains relatively centered, especially for punishment severity.

Table 11. *Two-way ANOVA for Reward Recommendation and Punishment Severity for Performing CWB*

| Source | DV | SS | df | MS | F | Sig. |
|-------------------|------------------|-------------|----------|-------------|-------------|-------------|
| AgeCond* | RewardCWB | .265 | 1 | .265 | .380 | .538 |
| GenderCond | PunishCWB | .038 | 1 | .038 | .049 | .825 |

Note. N= 191

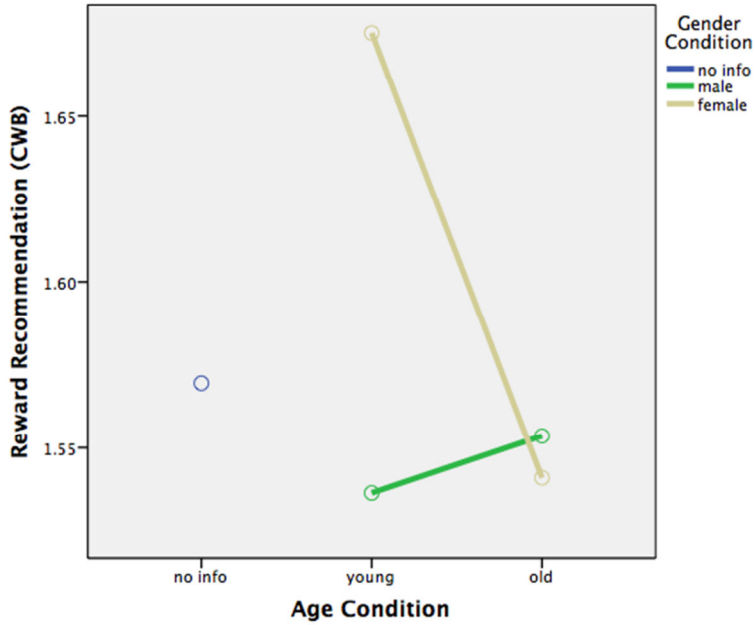


Figure 8. *Mean differences for experimental and control groups for Reward Recommendation for Performing CWB*

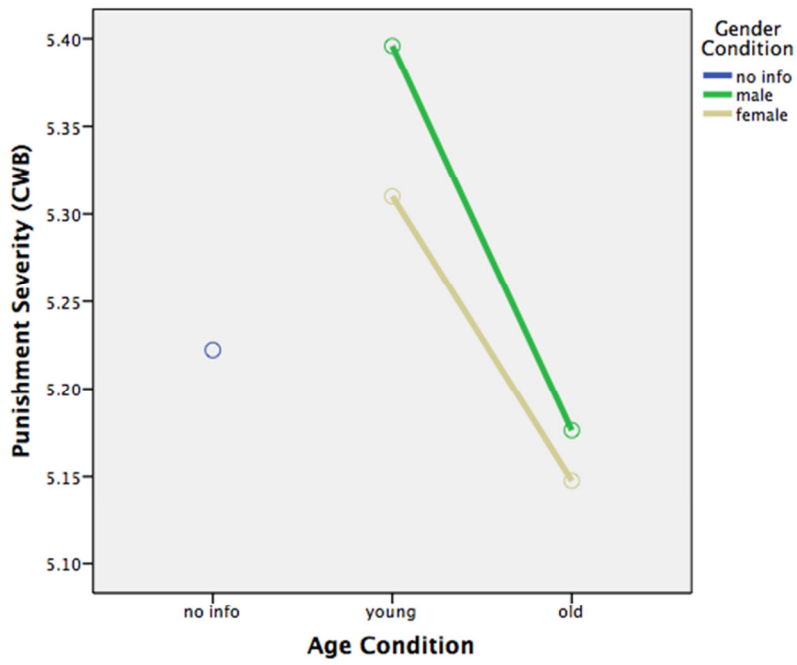


Figure 9. Mean differences for experimental and control groups for Punishment Severity for Performing CWB

Chapter 4: Discussion

The aim of this study was to add to already existing research that outlines the threat of age and gender stereotypes in determining ratings of employee performance, likelihood of reward and promotion, and punishment severity levels. In relation to our first hypothesis, Heilman & Chen (2005) indicated that men were more likely to be rewarded for performing OCBs than women and they also received higher ratings for performance evaluation than women. This finding was not supported in the current study; however, data analysis revealed a significant main effect regarding age and a two-way interaction for one of our dependent variables. Specifically, a significant main effect for age on performance evaluation ratings when performing an OCB was found, whereby participants rated older scenario employees significantly lower on performance evaluation than younger scenario employees. This is unfortunate because studies have shown that older employees actually engage in more OCBs than younger employees (Ng & Feldman, 2008) and organizations frequently try to increase the number of employees who engage in OCBs. Nevertheless, our findings imply that older employees are typically rated lower on measures of performance evaluation and are less likely to be rewarded for their behavior, indicating the activation of an age stereotype. This supports our hypothesis that older women are rated lowest on measures of performance evaluation.

A research study on the relationship between age and organizational rewards revealed that 54% of participants recommended promotion for the younger candidate, while only 24% of participants recommended promotion for the older candidate (Rosen & Jerdee, 1976). Additionally, a study assessing both age and gender stereotypes

predicted an age by gender interaction on one dimension of adaptive performance, revealing that older female targets were rated less adaptive on this dimension than older male targets. Specifically, 55-year older females were rated significantly lower on this dimension than the 55-year old male target (DeArmond, 2006). These findings were supported for the current study, indicating a significant two-way interaction for reward recommendation ratings when performing an OCB. This interaction exposed the presence of age and gender stereotype activation by revealing that participants rewarded older women significantly lower as compared to younger women. Moreover, participants rewarded older women significantly lower than older men.

It is worthy of note that the effect sizes for our significant p-values were considered small, so even though our data tells us that a real effect is likely present, the effect size tells us that the magnitude of this effect is small. Moreover, observed power for our analyses remained below medium power (.6), but there was enough power to reveal significant results due to our large sample size.

Overall, the young male target employee was not rated highest for any measure except for the second performance evaluation measure when performing an OCB. This does not fall in line with previous research. A possible explanation for this could be that our study consisted of mostly young female participants so future studies should recruit older individuals as well to see if the ratings change as a result of that. Also, the photos associated with the younger female target employee could have played a role where both younger males and females saw the young female target in a positive light as compared to the other photos. With regard to the competence measure, participants rated older males highest when performing an OCB; possibly because participants did not comprehend the

measure the way we anticipated them to. The results regarding this measure were not expected. Perhaps future studies could use an alternate measure or a more varied participant pool in order to provide different or significant results.

As compared to our first hypothesis, the second hypothesis did not reveal any significant main effects for age or gender for any of the dependent variables. However, a marginally significant two-way age by gender interaction was revealed for performance evaluation when performing a CWB, whereby participants rated older male target employees the lowest on performance evaluation and older female target employees the highest. This finding was not consistent with existing research, which shows that due to age stereotyping, many older workers (especially females) are not hired for a promising job, and aren't properly trained based on the stereotype that they are less able to learn and that they are more costly as a result (Postuma & Campion, 2008). However, research on the relationship between CWBs and performance evaluation ratings is considered quite new to the field. And as previously mentioned, due to small effect sizes and medium power, it is possible our study did not have enough power to detect any effects regarding this hypothesis.

In terms of performing CWBs, older females were rated the highest on both measures of performance evaluation and competence. Again, this was not consistent with common stereotypes and prior research assessing performance evaluation ratings. Although research investigating the relationship between CWBs, age, and gender stereotypes is lacking, one study showed that female target employees who withheld OCBs were rated lower on performance evaluation and were less likely to be rewarded by participants (Heilman & Chen, 2005). Though this study examined OCBs, this suggests

that female workers who perform CWBs are more likely to be rated lower on performance evaluation than males because females are expected to be helpful, whereas men are not. A possible explanation could be that this stereotype was not activated in the younger generation when concerning deviant behaviors. Perhaps the nurturing and sweet stereotype associated with older women is activated instead, leading participants to rate older women higher on the measures. Therefore, a more varied sample size is crucial for future studies. Additionally, it is possible that the scenario manipulation was not strong enough to produce the effect predicted.

With respect to our exploratory hypotheses, we predicted a significant interaction between age and gender on reward recommendation and punishment severity for performing CWBs. Particularly, it was expected that older females would be rated significantly lower for reward recommendation and significantly higher on punishment severity and that younger males would be rated significantly lower on reward recommendation and significantly higher on punishment severity as compared to the other experimental groups. These hypotheses were not supported; a significant interaction was not found for either measure. When examining group means, participants rated younger males lowest on reward recommendation followed by older females, and although not statistically significant, the trend is somewhat consistent with our hypothesis. In terms of punishment severity, although participants were least likely to punish older females, they were most likely to punish younger males as compared to younger females. With the use of prior research outlining age and gender stereotypes, we predicted a possible direction regarding these two measures. However, because these hypotheses were exploratory, our analyses were two-tailed in nature and we merely

wanted to analyze the results regarding the relationship between these two measures and performing CWBs. Therefore, future studies should continue to assess the relationship between those variables.

Participants rated younger target employees performing a CWB lower on performance evaluation and higher on the punishment scale. Regarding the punishment severity measure and its relationship to performing CWBs, although a main effect for age was not significant, the trend illuminates the possible role of age in the way performance evaluations are carried out and how punishment is determined for employees. Consequently, with multiple replications of the study, a significant main effect for age might be revealed.

In terms of gender, a previous study on deviant workplace behaviors indicated that the propensity to punish the target employee was significantly higher for female than male employees when the evaluator was a male (Bowles & Gelfand, 2010). Although the current study did not mirror these findings, an explanation for this could be the significantly young age of participants in the current study. Typically those in managerial positions are in power to punish or reward employees so it would be relevant to use participants of all ages to evaluate how age differences between participants could play a role in activating stereotypes. Perhaps younger participants are unable to visualize being in the role of a manager as opposed to older participants already familiar with the role.

And lastly, we hypothesized that control group means would be significantly different from all experimental group means. However, we did not find any significant differences between group means, but we did see some clear trends.

For performing OCBs, control group means landed somewhere in the middle for the most part, indicating that participants' stereotypes were not as activated during these measures. When performing a CWB, the control group means were not situated in the center of the graph as compared to performing OCBs, but examining the location of the control group means is still important because it shows that ratings for control groups were not in the extremes, except for the competence measure. This suggests a potential issue with our dependent variable and, therefore, choosing an appropriate measure that participants can accurately use when rating a control target employee is necessary for future studies.

Limitations

Previous research has largely focused on age and gender stereotypes as separate predictors for discrimination in the workforce. Additionally, prior studies typically focus on assessing organizational citizenship behaviors and deviant behaviors separately or in terms of antecedents, frequency, and consequences. However, the current study was interested in examining the interaction of age and gender stereotypes as predictors of discrimination using both types of workplace behaviors.

There are several limitations that need to be addressed for this study. When considering external validity, it is important to note that the present study had little access to employees in the real world, so undergraduate students at Radford University were recruited as participants instead. This group of individuals mainly consisted of 18-20 year old females, which limited the variability and generalizability of our sample. For future studies I recommend a diverse sample size with a participant pool that includes individuals of all ages to account for generational differences on study measures.

Furthermore, the ecological validity of our study was slightly threatened with the use of vignettes as opposed to video recordings or witnessing real-life behaviors.

Although the use of vignettes is simpler than viewing real-life workplace behaviors, taking into account the lack of approximating the feel and process of witnessing such workplace behaviors is essential. However, despite these limitations, our study revealed significant findings supported by prior research, which indicates a good equilibrium between internal validity and external validity for the current study. Additionally, there are existing studies that recruited undergraduate students as their participants and their study resulted in significant findings (Heilman & Chen, 2005; DeArmond, 2006).

Although not completely generalizable, it is clear that the use of undergraduate students as our sample was an adequate alternative to represent the general population.

A third limitation is the possibility that the scenarios representing workplace behaviors weren't salient enough or different enough for participants to accurately rate target employees. Future research should focus on the formulation and validation of new vignettes with pilot studies in order to increase effect sizes. Additionally, future studies could benefit from adding a question in their survey that asks participants to describe the level of severity they deem the scenarios to be.

Our final limitation can be attributed to our survey system Qualtrics. This software is commonly used and typically without fault, but the randomization process failed in some areas. For the current study, Qualtrics was unable to ensure that all control group scenarios were properly assigned in a random fashion. Participants who were assigned to rate a target employee in a control group were always given a performing CWB scenario first. Therefore, it is of utmost importance that future studies remain

aware and observant of this issue to ensure all randomization is completed. After issues with Qualtrics and randomization are fixed, the study should produce more salient results.

Future Research and Conclusion

As previously mentioned, this study was exploratory in nature and assessed many relationships between variables that prior studies have not. Therefore, the current study serves as a starting point for future research. Specifically, it is crucial for future research to directly assess the relationship between OCBs, age, and potential dependent variables like performance evaluation and reward recommendation. Existing studies focus more on the relationship between OCBs and gender, limiting the knowledge associated with the negative effects of age stereotyping. Additionally, little attention has been paid to age and gender differences regarding CWBs and measures of performance evaluation, reward recommendation, and punishment severity. Although a few studies assess the propensity to punish in response to deviant workplace behaviors (Bowles & Gelfand, 2010), research on CWBs is fairly limited. Therefore, understanding the relationship between CWBs, age, and gender stereotypes in the workplace is crucial because research often shows that dissatisfied employees often engage in CWBs due to the discriminatory treatment they receive by managers (Neff, 2009).

Another avenue for future research is the inclusion of photos in workplace scenarios. For the current study, we decided to use photos to represent each target employee within all experimental scenarios. From one point of view, the use of photos helped ensure that participants were seeing a clear representation of the target employee we wanted to portray. However, from a different perspective, this could be an issue because the race and attractiveness level of each photo might have influenced

participants. This ultimately could have skewed our data, so while the inclusion of pictures may be an advantageous tool, further studies assessing its value are necessary. Precisely examining a wide variety of photos, including multiple ages, races, and postures, is recommended.

Additionally, in order to increase external validity, we included both between and within subjects variables. Our within-subjects variable was workplace behaviors to ensure that each participant rated a scenario depicting both types of behaviors, as this is likely to occur in real life. However, our between-subjects variables were age and gender, which remained the same for both scenarios. Therefore, for future studies, I recommend randomly assigning scenarios in a manner in which participants evaluate both male and female target employees, and both younger and older target employees.

And lastly, financial constraints reduced our ability to recruit participants as managers or within the workforce outside of retail businesses. With suitable resources, future studies should certainly focus on maintaining a diverse sample size that includes participants from multiple organizations. Adequate resources will allow researchers to recruit participants from larger organizations and also permit researchers to properly compensate participants for their involvement in the study.

The goal of the present study was to incorporate research on age and gender stereotypes into the literature regarding OCBs and CWBs by examining whether cultural stereotypes of women and men would influence the perceptions of workplace behaviors performed by target employees on measures of performance evaluation, reward recommendation, competence, and punishment severity. Therefore, the results reported here have implications for organizations to apply a better and discrimination-free

employee hiring and review process. However, if future studies could focus on how or why these stereotypes are activated, it could provide valuable insight into how we can reduce these stereotypes and ultimately increase the well-being of employees in the workforce.

References

- Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83*, 247-260.
- Allen, T. D. (2006). Rewarding good citizens: The relationship between citizenship behavior, gender, and organizational rewards. *Journal of Applied Social Psychology, 36*: 120–143. doi: 10.1111/j.0021-9029.2006.00006.x
- Billett, S., Dymock, D., Johnson, G., & Martin, G. (2011). Last resort employees: Older workers' perceptions of workplace discrimination. *Human Resource Development International, 14*(4), 375-389. doi: 10.1080/13678868.2011.601571
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel Selection in Organizations* (pp. 71-98). San Francisco: Jossey-Bass.
- Bowles, H. R., & Gelfand, M. (2010). Status and the evaluation of workplace deviance. *Psychological Science, 21*(1), 49–54. doi:10.1177/0956797609356509
- Conde, Elizabeth, "Who's The Boss: The Influence Of Gender Stereotypes On Perceptions Of Leaders And The Likelihood Of Engaging In Organizational Citizenship Behaviors" (2010). *All Theses*. Paper 867. Retrieved from http://tigerprints.clemson.edu/all_theses/867
- DeArmond, S., Tye, M., Chen, P. Y., Krauss, A., Rogers, D. A., & Sintek, E. (2006). Age and gender stereotypes: New challenges in a changing workplace and workforce. *Journal of Applied Psychology, 36*(9), 2184-2214.

- Dennis, B. H., & Thomas, K. (2007). Ageism in the workplace. *Generations*, 31(1), 84-89.
- Fox, Suzy, and Terri R. Lituchy. *Gender and the Dysfunctional Workplace*. Glos, United Kingdom: Edward Elgar Publishing Limited, 2012.
- Freedman, J. (2010). *Women in the workplace: wages, respect, and equal rights*. (1st ed.). New York, NY: The Rosen Publishing Group, Inc.
- Gallup Inc., (2013). *The State of the American Workplace: Employee Engagement Insights for U.S. Business Leaders*. Retrieved September 14, 2014, from <http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx>.
- Gregory, Raymond F. *Age discrimination in the American workplace: Old at a young age*. 1st Ed. Rutgers University Press: Piscataway, New Jersey , 2001.
- Hafidz, S. W. M., Hoesni, S. M., & Fatimah, O. (2012). The relationship between organizational citizenship behavior and counterproductive work behavior. *Asian Social Science*, 8, 32–37. doi:10.5539/ass.v8n9p32
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657–674.
- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology*, 89(3), 416–27. doi:10.1037/0021-9010.89.3.416

- Heilman, M. E., & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology, 90*(3), 431-441. doi: 10.1037/0021-9010.90.3.431
- Heilman, M. E., & Eagly, A. H. (2008). Gender stereotypes are alive, well, and busy producing workplace discrimination. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 1*(4), 393–398. doi:10.1111/j.1754-9434.2008.00072.x
- Henkens, K. (2014). Stereotyping older workers and retirement: The managers' point of view. *Canadian Journal on Aging, 24*(4), 353–366.
- Henry, O., & Evans, A. J. (2007). Critical review of literature on workforce diversity. *African Journal of Business Management, 72–76.*
- Iweins, C., Desmette, D., & Yzerbyt, V. (2012). Ageism at work: what happens to older workers who benefit from preferential treatment? *Psychologica Belgica, 327–349.*
- Kite, M. E., Deaux, K., & Miele, M. (1991). Stereotypes of young and old: Does age outweigh gender? *Psychology and Aging, 6*(1), 19-27.
- Koch, A. J., D'Mello, S. D., & Sackett, P. R. (2014). A meta-analysis of gender stereotypes and bias in experimental simulations of employment decision making. *Journal of Applied Psychology*. Advance online publication. <http://dx.doi.org/10.1037/a0036734>
- Kunze, F., Boehm, S. A., & Bruch, H. (2010). Age diversity, age discrimination climate and performance consequences—a cross organizational study. *Journal of Organizational Behavior, 32*, 264-290. doi: 10.1002/job.698

- Kunze, F., Boehm, S., & Bruch, H. (2013). Organizational performance consequences of age diversity: Inspecting the role of diversity-friendly HR policies and top managers' negative age stereotypes. *Journal of Management Studies*, 50(3), 413–442. doi:10.1111/joms.12016
- Landy, F. J., & Farr, J. L. (1980). Performance rating. *Psychological Bulletin*, 87(1), 72–107. doi:10.1037//0033-2909.87.1.72
- Malinen, S., & Johnston, L. (2013). Workplace ageism: discovering hidden bias. *Experimental Aging Research*, 39(4), 445–65. doi:10.1080/0361073X.2013.808111
- Muchinsky, P. M. (2012). *Psychology Applied to Work* (10th ed.). Summerfield, NC: Hypergraphic Press.
- Murphy, K. R. (1993). *Honesty in the workplace*. Belmont, CA: Brooks/Cole.
- Neff N. L. (2009). Peer reactions to counterproductive work behavior. Ph.D. thesis, Pennsylvania State University.
- Newman, C. (2014). Time to address gender discrimination and inequality in the health workforce. *Human Resources for Health*, 12, 25. doi:10.1186/1478-4491-12-25
- Ng, T. W. H. & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93(2), 392-423.
- O'Reilly III, C. A., & Chatman, J. A. (1994). Working smarter and harder : A longitudinal study of managerial success. *Administrative Science Quarterly*, 39, 603-627.

- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome. issues in organization and management series*. (Vol. xiii, p. 132). Lexington, MA, England: Lexington Books/D. C. Heath and Com.
- Podsakoff, P. M., Mackenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors : A critical review of the theoretical and future research, *Journal of Management*, 26(3), 513–563.
- Posthuma, R. A., & Campion, M. A. (2008). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions? *Journal of Management*, 35(1), 158-188. doi: 10.1177/0149206308318617
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26, 269–281.
- Robinson, S. L., & Bennett R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555–572.
- Rosen, B., & Jerdee, T. H. (1976). The influence of age stereotypes on managerial decisions, *Journal of Applied Psychology*, 61(4).
- Rosen, B., & Jerdee, T. H. (1976). The nature of job-related age stereotypes, *Journal of Applied Psychology*, 61(2), 180–183.
- Rosen, B., & Jerdee, T. H. (1977). Too old or not too old. *Harvard Business Review*, 55(6), 97-106.

- Rosen, B., Jerdee, T. H., & Lunn, R. O. (1981). Effects of performance appraisal format, age, and performance level on retirement decisions, *Journal of Applied Psychology*, 66(4), 515–519.
- Sackett, P. R. (2002). The structure of counterproductive work behaviors: Dimensionality and relationships with facets of job performance. *International Journal of Selection and Assessment*, 10, 5–11. doi:10.1111/1468-2389.00189
- Schein, V. E. (1989). The relationship between sex role stereotypes and requisite management characteristics. *The Journal of Applied Psychology*, 57(2), 95–100. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/4784761>
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*. doi:10.1037/0021-9010.68.4.653
- Turek, K., & Perek-Bialas, J. (2013). The role of employers' opinions about skills and productivity of older workers: Example of Poland. *Emerald Insight*, 35(6), 648-664. doi: 10.1108/ER-04-2013-0039
- U. S. Bureau of Labor Statistics. (2012). *Current Employment Statistics- CES (National)*. Retrieved September 14, 2014, from <http://www.bls.gov/ces/>.
- U. S. Bureau of Labor Statistics. (2014). *Current Employment Statistics- CES (National)*. Retrieved September 14, 2014, from <http://www.bls.gov/ces/>.
- Waldman, D. a., & Avolio, B. J. (1986). A meta-analysis of age differences in job performance. *Journal of Applied Psychology*, 71(1), 33–38. doi:10.1037//0021-9010.71.1.33

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management* , 17(3), 601-617.

Williams, S., Pitre, R., & Zainuba, M. (2002). Justice and organizational citizenship behavior intentions: Fair rewards versus fair treatment. *The Journal of Social Psychology*, 142(1), 33–44. doi:10.1080/00224540209603883

Zhu, Y. (2013). Individual Behavior: In-role and Extra-role. *International Journal of Business Administration*, 4(1), 23–27. doi:10.5430/ijba.v4n1p23

Appendix A: Workplace Scenarios

Set One:

OCB Young Male:

Jack, a young **25-year-old male**, is a business analyst at a company that has several new hires. Jack's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of Jack's job description. Not helping train the new hires will not affect Jack's job in any way. To help out his supervisor, Jack decides to stay late at work and take on the role of helping train the new hires. This way, his supervisor will not be as overwhelmed.



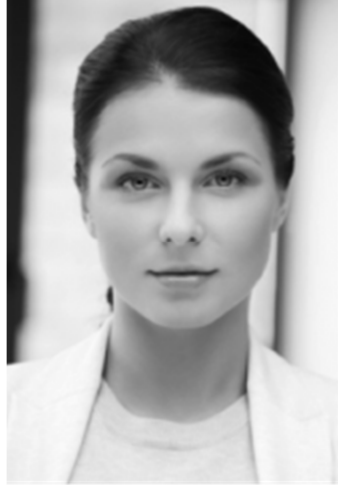
OCB Older Male:

Jack, an older **60-year-old male**, is a business analyst at a company that has several new hires. Jack's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of Jack's job description. Not helping train the new hires will not affect Jack's job in any way. To help out his supervisor, Jack decides to stay late at work and take on the role of helping train the new hires. This way, his supervisor will not be as overwhelmed.



OCB Younger Female:

Anna, a young **25-year-old female**, is a business analyst at a company that has several new hires. Anna's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of Anna's job description. Not helping train the new hires will not affect Anna's job in any way. To help out her supervisor, Anna decides to stay late at work and take on the role of helping train the new hires. This way, her supervisor will not be as overwhelmed.



OCB Older Female:

Anna, an older **60-year-old female**, is a business analyst at a company that has several new hires. Anna's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of Anna's job description. Not helping train the new hires will not affect Anna's job in any way. To help out her supervisor, Anna decides to stay late at work and take on the role of helping train the new hires. This way, her supervisor will not be as overwhelmed.



OCB No Info:

An employee is a business analyst at a company that has several new hires. The employee's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of the employee's job description. Not helping train the new hires will not affect the employee's job in any way. To help out their supervisor, the employee decides to stay late at work and take on the role of helping train the new hires. This way, their supervisor will not be as overwhelmed.

CWB Young Male:

John, a young **25-year-old male**, is a business analyst at a company that has several new hires. John's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of John's job description. Not helping train the new hires will not affect John's job in any way. John decides to make things harder for his manager by confusing the new hires when they come to him with questions. He lies and tells them the wrong information in hopes that they will not succeed and put his supervisor at a disadvantage.



CWB Older Male:

Jack, an older **60-year-old male**, is a business analyst at a company that has several new hires. John's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of John's job description. Not helping train the new hires will not affect John's job in any way. John decides to make things harder for his manager by confusing the new hires when they come to him with questions. He lies and tells them the wrong information in hopes that they will not succeed and put his supervisor at a disadvantage.



CWB Younger Female:

Amy, a young **25-year-old female**, is a business analyst at a company that has several new hires. Amy's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of Amy's job description. Not helping train the new hires will not affect Amy's job in any way. Amy decides to make things harder for her manager by confusing the new hires when they come to her with questions. She lies and tells them the wrong information in hopes that they will not succeed and put her supervisor at a disadvantage.



CWB Older Female:

Anna, an older **60-year-old female**, is a business analyst at a company that has several new hires. Amy's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of Amy's job description. Not helping train the new hires will not affect Amy's job in any way. Amy decides to make things harder for her manager by confusing the new hires when they come to her with questions. She lies and tells them the wrong information in hopes that they will not succeed and put her supervisor at a disadvantage.



CWB No Info:

An employee is a business analyst at a company that has several new hires. The employee's supervisor is trying to train all 5 of the new hires at once, but is getting overwhelmed by the amount of information and attention needed for doing this job. Helping train the new hires is a task that is typically left to the managers and is not part of the employee's job description. Not helping train the new hires will not affect the employee's job in any way. The employee decides to make things harder for their manager by confusing the new hires when they come to them with questions. The employee lies and tells them the wrong information in hopes that they will not succeed and put their supervisor at a disadvantage.

Set Two:

OCB Young Male:

The company that Jack, a young **25-year-old male**, works for is approaching their annual audit. Jack's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under Jack's direct duties and do not affect him in any way. However, Jack decides to stay late at work and take on these tasks in order to help his supervisor prepare for the audit.



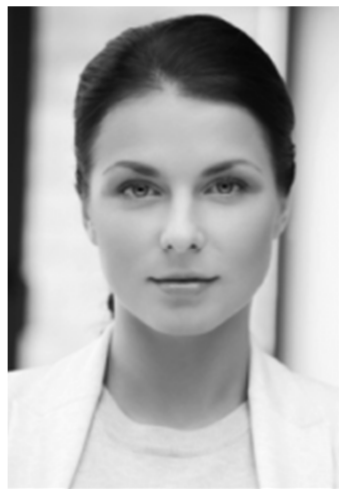
OCB Older Male:

The company that Jack, an older **60-year-old male**, works for is approaching their annual audit. Jack's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under Jack's direct duties and do not affect him in any way. However, Jack decides to stay late at work and take on these tasks in order to help his supervisor prepare for the audit.



OCB Younger Female:

The company that Anna, a young **25-year-old female**, works for is approaching their annual audit. Anna's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under Anna's direct duties and do not affect her in any way. However, Anna decides to stay late at work and take on these tasks in order to help her supervisor prepare for the audit.



OCB Older Female:

The company that Anna, an older **60-year-old female**, works for is approaching their annual audit. Anna's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under Anna's direct duties and do not affect her in any way. However, Anna decides to stay late at work and take on these tasks in order to help her supervisor prepare for the audit.



OCB No Info:

The company that an employee works for is approaching their annual audit. The employee's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under the employee's direct duties and do not affect them in any way. However, the employee decides to stay late at work and take on these tasks in order to help their supervisor prepare for the audit.

CWB Young Male:

The company that John, a young **25-year-old male**, works for is approaching their annual audit. John's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under John's direct duties and do not affect them in any way. Instead of helping with these tasks, John decides to secretly trash some valuable files that need to be inspected during the audit in order to make things difficult for his supervisor.



CWB Older Male:

The company that John, an older **60-year-old male**, works for is approaching their annual audit. John's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under John's direct duties and do not affect them in any way. Instead of helping with these tasks, John decides to secretly trash some valuable files that need to be inspected during the audit in order to make things difficult for his supervisor.



CWB Younger Female:

The company that Amy, a young **25-year-old female**, works for is approaching their annual audit. Amy's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under Amy's direct duties and do not affect them in any way. Instead of helping with these tasks, Amy decides to secretly trash some valuable files that

need to be inspected during the audit in order to make things difficult for her supervisor.



CWB Older Female:

The company that Amy, an older **60-year-old female**, works for is approaching their annual audit. Amy's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under Amy's direct duties and do not affect them in any way. Instead of helping with these tasks, Amy decides to secretly trash some valuable files that need to be inspected during the audit in order to make things difficult for her supervisor.



CWB No Info:

The company that an employee works for is approaching their annual audit. The employee's boss is getting more stressed as the audit nears the 3-day deadline, and the supervisor has a lot to do. Some of the tasks left include filing certain paperwork, looking over how long certain items have been retained, and going over protocol. None of these tasks are listed under the employee's direct duties and do not affect them in any way. Instead of helping with these tasks, the employee decides to secretly trash some valuable files that need to be inspected during the audit in order to make things difficult for their supervisor.

Appendix B: Manipulation Check

In the scenario you just read, what was the age of the employee?

25

60

In the scenario you just read, what was the gender of the employee?

Male

Female

Appendix C: Demographics

Please identify your gender.

- Male
- Female

Please indicate the age range which best describes you.

- 18-20
- 21-23
- 24-26
- 27-29
- 30-32
- 33+

Please type in your exact age in years.

Please indicate your ethnicity.

- Caucasian
- African American
- Asian/ Pacific Islander
- Hispanic/ Latino
- American Indian/ Native American
- Other (Please type in specification)

What is your overall work experience? (Please include all part-time and full-time job experiences, past and present)

- None, N/A
- 1 year or less
- 2-5 years
- 6-10 years
- 11-14 years
- 15 years or more

Appendix D: Williams & Anderson Performance Evaluation Scale

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LARRY J. WILLIAMS AND STELLA E. ANDERSON

Table 1
Results of Factor Analysis of Performance Items – Oblique Rotation ($n = 127$)

| Scale Items | IRB | OCBI | OCBO |
|--|-------------|-------------|-------------|
| 1. Adequately completes assigned duties. | <u>.83*</u> | -.09 | .20 |
| 2. Fulfills responsibilities specified in job description. | <u>.88*</u> | .05 | -.00 |
| 3. Performs tasks that are expected of him/her. | <u>.87*</u> | .01 | .06 |
| 4. Meets formal performance requirements of the job. | <u>.83*</u> | .04 | -.09 |
| 5. Engages in activities that will directly affect his/her performance evaluation. | <u>.52*</u> | .12 | -.11 |
| 6. Neglects aspects of the job he/she is obligated to perform. (R) | <u>.64*</u> | -.04 | .22 |
| 7. Fails to perform essential duties. (R) | <u>.72*</u> | -.05 | .04 |
| 8. Helps others who have been absent. | -.11 | <u>.75*</u> | .17 |
| 9. Helps others who have heavy work loads. | .07 | <u>.73*</u> | .14 |
| 10. Assists supervisor with his/her work (when not asked). | .21 | <u>.42*</u> | .17 |
| 11. Takes time to listen to co-workers' problems and worries. | -.10 | <u>.75*</u> | .01 |
| 12. Goes out of way to help new employees. | .08 | <u>.82*</u> | -.17 |
| 13. Takes a personal interest in other employees. | .00 | <u>.77*</u> | .01 |
| 14. Passes along information to co-workers. | .24 | <u>.57*</u> | .01 |
| 15. Attendance at work is above the norm. | .00 | .17 | <u>.58*</u> |
| 16. Gives advance notice when unable to come to work. | -.12 | -.04 | <u>.80*</u> |
| 17. Takes undeserved work breaks. (R) | .20 | .02 | <u>.57*</u> |
| 18. Great deal of time spent with personal phone conversations. (R) | .18 | .01 | <u>.36*</u> |
| 19. Complains about insignificant things at work. (R) | .10 | .13 | <u>.35*</u> |
| 20. Conserves and protects organizational property. | .21 | .10 | .12* |
| 21. Adheres to informal rules devised to maintain order. | .18 | .20 | <u>.36*</u> |
| Eigenvalue (Unrotated solution) | 8.37 | 2.29 | 1.57 |
| Percent variance explained | 39.9% | 10.9% | 7.5% |
| Cumulative percent variance explained | 39.9% | 50.8% | 58.3% |

Note. *Indicates the loading that should be the highest for each item. Underlined items were included in IRB, OCBI, and OCBO scales.

Note. *For the current study, we are only assessing the OCB-I items (8 through 14).

Appendix E: Reward Recommendation

Would you recommend this employee to be rewarded an increase in salary?

1. Would definitely recommend
2. Would most likely recommend
3. Would possibly recommend
4. Undecided
5. Would possibly not recommend
6. Would most likely not recommend
7. Would definitely not recommend

Would you recommend this employee to be rewarded a job promotion?

1. Would definitely recommend
2. Would most likely recommend
3. Would possibly recommend
4. Undecided
5. Would possibly not recommend
6. Would most likely not recommend
7. Would definitely not recommend

Would you recommend this employee to be rewarded with being the leader of a high profile project?

1. Would definitely recommend
2. Would most likely recommend
3. Would possibly recommend
4. Undecided
5. Would possibly not recommend
6. Would most likely not recommend
7. Would definitely not recommend

Would you recommend this employee to be rewarded bonus pay?

1. Would definitely recommend
2. Would most likely recommend
3. Would possibly recommend
4. Undecided
5. Would possibly not recommend
6. Would most likely not recommend
7. Would definitely not recommend

Appendix F: Order Effects for Workplace Behavior and Scenario Set

We created a new variable to test for order effects regarding workplace behaviors and after selecting for OCBs first, multiple two-way ANOVAs revealed two significant main effects for age. The first significant main effect was for the first performance evaluation measure when performing a CWB, $F(1, 88) = 4.526, p = .036, \eta^2 = .049$. The second significant main effect was for reward recommendation when performing an OCB, $F(1, 88) = 4.062, p = .047, \eta^2 = .044$. When we selected for CWB scenarios first, there was one significant main effect for age. The significant main effect was for the second performance evaluation measure when performing a CWB, $F(1, 88) = 3.976, p = .049, \eta^2 = .039$. When order effects were not taken into account, the first performance evaluation measure and reward recommendation for performing OCBs resulted in statistically significant results. However, when order effects are controlled for, the *p*-value for reward recommendation when performing an OCB was actually a little bit lower. Therefore, we can conclude that the order in which scenarios were presented did not make a significant difference in our dependent variables.

We also created a new variable to test the order effects regarding the scenarios: the effect of viewing one type of scenario first versus the other on all measures. After selecting for cases where scenario two was presented first, our two-way ANOVA analyses revealed three significant main effects for age. The first significant main effect was for the first performance evaluation measure when performing an OCB, $F(1, 46) = 8.942, p = .004, \eta^2 = .163$. The second significant main effect was for reward recommendation when performing an OCB, $F(1, 46) = 5.480, p = .024, \eta^2 = .106$. And lastly, the third significant main effect was for the second performance evaluation

measure when performing a CWB, $F(1, 46) = 4.249, p = .045, \eta^2 = .085$. These results are worth noting because when scenario effects are not taken into account, the first performance evaluation measure and reward recommendation for performing OCBs resulted in statistically significant results. Additionally, when selecting for scenario 2, the ANOVA results in lower p-values (we gain significance and power). Please note however, that after selecting for cases where scenario two was presented first, all scenarios had female target employees so we are unable to test for gender main effects (the comparison was between younger females and older females). Next, we selected for scenario 1 and our statistical tests revealed a significant main effect for age for punishment severity, $F(1, 139) = 5.117, p = .025, \eta^2 = .036$ and a marginally significant two-way interaction for the first performance evaluation measure when performing a CWB, $F(1, 139) = 3.784, p = .054, \eta^2 = .027$. Although not significant, analyzing simple effects revealed a difference between ratings for older women and younger women, $p = .122$, and older women and older men, $p = .054$. Due to the fact that only female target employees were within scenario 2 when it was presented first, it is obvious that our survey system, Qualtrics was unable to randomly assign every aspect of our variables. Regardless, findings regarding scenario order effects should be taken seriously and addressed in future studies.

*The control group was not included in these analyses to reflect the original ANOVA analyses that also did not include control groups.