California State University, San Bernardino

CSUSB ScholarWorks

Electronic Theses, Projects, and Dissertations

Office of Graduate Studies

6-2019

THE RELATIONSHIP BETWEEN JUSTICE PERCEPTIONS, CONSCIENTIOUSNESS AND WORKPLACE BEHAVIORS AMONG OLD AND YOUNG EMPLOYEES

Martha P. Blanco Villarreal
California State University - San Bernardino, 006124556@coyote.csusb.edu

Follow this and additional works at: https://scholarworks.lib.csusb.edu/etd

🌀 Part of the Applied Behavior Analysis Commons, Cognition and Perception Commons, Developmental Psychology Commons, Industrial and Organizational Psychology Commons, Personality and Social Contexts Commons, and the Social Psychology Commons

Recommended Citation

THE RELATIONSHIP BETWEEN JUSTICE PERCEPTIONS,

CONSCIENTIOUSNESS AND WORKPLACE BEHAVIORS AMONG OLD AND

YOUNG EMPLOYEES

_____

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

_____

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

in

Psychology:

Industrial and Organizational

_____

by

Martha Patricia Blanco Villarreal

June 2019

THE RELATIONSHIP BETWEEN JUSTICE PERCEPTIONS,

CONSCIENTIOUSNESS AND WORKPLACE BEHAVIORS AMONG OLD AND

YOUNG EMPLOYEES

_____

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

_____

by

Martha Patricia Blanco Villarreal

June 2019

Approved by:

Kenneth Shultz, Committee Chair, Psychology

Janet Kottke, Committee Member

Ismael Diaz, Committee Member

ABSTRACT

This research addressed the influence employee age has on organizational justice perceptions (OJPs) and organizational citizenship behaviors (OCBs) through conscientiousness. Given the valuable contributions of older employees in the workforce, the aim of this study was to investigate the processes by which age affects justice perceptions, the expression of conscientiousness traits, and workplace behaviors. Additionally, a theoretical framework was provided where the conservation of resource, equity, fairness, socioemotional selectivity, and conscientiousness at work theories help explain the linkages from the integrative model. A total of 179 MTurk workers participated in this study, which required participants to answer questions about their workplace perceptions and behaviors. The primary scales used in this study measuring OJPs, conscientiousness, and OCBs were obtained from previous studies that found these measures to be reliable and valid. Using those scales, three main hypotheses were tested: Hypothesis 1 predicted age would moderate the relationship between OJPs and OCBs; Hypotheses 2 predicted conscientiousness would mediate the relationship between OJPs and OCBs; and Hypothesis 3 predicted employee age (moderating variable) would interact with justice perceptions (independent variable) and predict organizational citizenship behaviors (dependent variable), through conscientiousness (mediating variable). Results suggested that age does not moderate the relationship between OJPs and OCBs; however, conscientiousness mediates the relationship between OJPs

and OCBs; and employee age only moderates the mediating effects of conscientiousness in the relationship between distributive justice perceptions and OCBs. Overall, this research provides preliminary findings to a model that had never been researched before, provides theoretical and practical implications, as well as directions for future research.

ACKNOWLEDGEMENTS

I would like to thank my Advisor Dr. Shultz, who guided me every step of the way in completing this thesis; I would not have been able to do it without your feedback and support. Even though you would not give me a break, I am very thankful you worked with me throughout summer, fall, winter, and spring, and that you got my drafts back to me within hours of submission. Your timeliness and dedication played a key role in my success. I truly admire you, with your many roles as the Coordinator of the Master' of Science Program in Industrial and Organizational Psychology, Professor, Author, Advisor, Mentor, Colleague, Husband, Father, Friend, and who knows what else is in your treasure's chest, I am perplexed with your ability to successfully fulfill those roles. Ever since I took my first class with you, Performance Assessment, I admired your unique qualities and commitment to teaching and guiding students towards success. Although I knew you held your students to high standards, I also knew you were the person that would help me accomplish my goal. Thank you for believing in me, keeping me on track, and being such as great role model.

Thanks to my committee members, Dr. Kottke and Dr. Diaz, for accepting me as their student and providing feedback whenever possible. Thanks to all of my professors for such an amazing two years of learning experiences, challenges and growth opportunities. Words cannot describe how grateful I am for such an amazing opportunity.

I also want to thank my supportive friends/cohort whom I met two years ago and changed my life. Thank you for the meaningful conversations that helped me grow as a human being and develop new perspectives. Thank you for challenging the status quo and being open to talk about conversations that matter in life and that can help make our world a better place.

Last but not least, I want to thank my family, boyfriend and close friends for always supporting my goals and understanding my commitments and roles. God has grant me a lot of blessing, but you are my biggest and most important one. Thank you for being my backbone throughout this arduous process, for always being patient, carrying, loving, and supportive. Your love inspires me to be better every day, and undoubtedly, helped me get through my hardest days of graduate school.

TABLE OF CONTENTS

LIST OF TABLES

x

LIST OF FIGURES

CHAPTER ONE

LITERATURE REVIEW

The Relationship Between Justice Perceptions, Conscientiousness and
Workplace Behaviors Among Old and Young Employees

Organizational justice perceptions are important cognitive processes to

consider in the workplace because of their influence in workplace behaviors.

Employee behaviors that help organizations meet their needs through profit,

productivity, innovative measures, and by promoting competitiveness. The

technique organizations/managers use to maintain/increase employee

productivity determine employees' perceptions of fairness. Employees'

perceptions are mostly based on the intended rationale of those practices,

whether they are to enhance "service quality" and employee well-being, designed

to reduce cost and exploit employees, or designed to comply with union

requirements (Berry, 1999; Nishii, Lepak, & Schneider, 2008). However,

employees' expectations and experiences also contribute to the interpretation of

organizational practices. Even, personal characteristics can subjectively alter

employees' behaviors and their attitudes towards the organization.

Organizational practices and employee factors influence employees' justice

perceptions and directly affect their performance and organizational success.

Employees' justice perceptions could be influenced by situational factors,

life experiences/lessons, and personality traits. Situational factors are situations

that happen outside the employee's control, such as organizational practices,

management styles, and job opportunities (Tittle, Ward, and Grasmick, 2003). As such, a research study found that "fair treatment, supervisor support, rewards, and favorable job conditions" had a strong relationship with perceived organizational support, which also increased affective organizational commitment (Rhoades & Eisenberger, 2002, p. 698). However, personality traits are stronger influences of an employee's perceptions, because ultimately, justice perceptions are formulated through the individual's cognitive processes. These traits and coping mechanisms are aspects of personality that develop throughout life and help individuals cope with daily life situations, including those occurring in the workplace. This paper focused on the personality factor of conscientiousness because it has been found to be one of the personality traits that continually increase over a life span, varies increasingly with age, and promotes organizational citizenship behaviors (Borman, Penner, Allen & Motowidlo, 2001; Roberts, Walton & Viechtbauer, 2006).

Employee justice perceptions have been repeatedly studied and have shown to influence employees' attitudes and behaviors in the workplace. Much of the research conducted has focused on understanding the effect justice perceptions have on employee behaviors, but very few studies have researched the effect employee age has on workplace behaviors. Employee age is important, because age discrimination continues to occur in the workplace, despite older employees' contribution to the workplace, "70% of older people still indicate that they experience everyday discrimination" (Han & Richardson, 2015,

p. 748). Even age stereotypes can indirectly hinder older employees' performance when they influence line managers' organizational decisions to favor younger employees; and directly, when they target employees' self-confidence or self-efficacy (Innocenti, Profili, & Sammarra, 2012).

In 2016, researchers investigated the effects that stereotype threat (e.g., being less productive, lacking initiative, disinterest in learning/developing and being resistant to change) have on employees' workplace engagement. After surveying 666 Australian employees over a three-year period, researchers found that "mature workers [over 45 years of age or older] who experienced stereotype threat in the workplace reported lower levels of engagement 11-12 months later" (Kulik, Perera, & Cregan, 2016, p. 2144). Kulik and colleagues argued that experiencing stereotype threat can lead to psychological stress and resource-depletion, which causes older employees to lose interest/motivation in work-related tasks and cause health-related problems. To lessen these negative stereotypes, Kulik et al. (2016) believe that organizations should support mature-age practices: provide meaningful tasks, offer social support, access to tangible resources, and affirm mature-age group identity. Although, discrimination might be due to the socially constructed stereotypes about aging, older employees have a hard time keeping their jobs and/or getting rehired (Chiu, Chan, Snape, & Redman, 2001; Kunze, Boehm & Brunch, 2011). This means that older employees may be affected by ageist stereotypes, which in turn affect their work performance.

Research suggests that older workers are more prone than younger workers to engage in work practices that drive organizational success, such as Organizational Citizenship Behaviors (OCBs). OCBs are related to higher levels of job satisfaction, commitment, and prosocial behaviors, and are more frequently experienced among older employees, compared to their younger counterparts (Barnes-Farrell, Petery, Cleveland, & Matthews, 2019; Gutman, Koppes & Vodanovich, 2011; Hedge & Borman, 2019; Rhoades et al., 2002; Rhodes, 1983). As such, these attitudinal and behavioral differences among age groups might be explained by the personality trait of conscientiousness, because conscientiousness strongly relates to OCBs and Counterproductive Work Behaviors (CWBs). Therefore, this proposed research study will focus on the effect employee age has on justice perceptions and performance outcomes (e.g., OCBs) when mediated by conscientiousness.

Definitions

Organizational justice perceptions are a set of beliefs an individual has about organizational practices. Perceptions of justice derive from three types of organizational justice: procedural, distributive, and interactional, which consists of interpersonal- and informational-justice (Colquitt, Colon, Wesson, Porter, & Ng, 2001). According to Moorman (1991), *procedural justice* relates to an organization's procedure consistency, suppression of biases, accuracy of information, fairness of decisions, and implementation of moral and ethical

values. *Distributive justice* is described as the perceived fairness in pay, promotion, and work/resource distribution. *Interpersonal justice*, on the other hand, was described as the human interaction in the organization that is tied to communication, politeness, honesty and respect. Lastly, *informational justice* deals with the type and amount of information organizations/managers share with the employee (Colquitt et al., 2001, p. 427).

Workplace behaviors are the behaviors employees engage in that affect organizational practices. Although there are various factors that could explain employee performance/workplace behaviors, this study solely focused on explaining how justice perceptions affect employees' attitudes and behaviors. Organizations want their employees to engage in behaviors that will benefit others, themselves, and the organization. OCBs include attitudinal (e.g., altruism, courtesy, sportsmanship, conscientiousness, and civic virtue) and behavioral (e.g., contextual performance, extra-role behaviors, prosocial organizational behaviors, and compliance) outcomes. OCBs are defined as "extra-role, discretionary behavior[s] that [help] other organization members perform their jobs or shows support for conscientiousness toward the organization" (Borman, et al., 2001, p. 53; Organ, 1997). Thus, it is more likely that conscientious employees will engage in OCBs when they experience positive attitudes about the organization. Researchers have suggested that younger employees are more likely to engage in CWBs than older employees (Brienza & Bobocel, 2017). This

might be due to their higher levels of conscientiousness which may be explained by age.

To match the Equal Employment Opportunity Act of 1967, in this paper, older workers are considered to be over forty years old, and younger workers to be below the age of forty (Gutman et al., 2011). There is often a distinction made between chronological age and psychological age (Barnes-Farrell et al., 2019). Although the focus was on the effect chronological age plays on performance outcomes, because previous research has operationalized it as such (Gutman et al., 2011; Hedge et al., 2019; Ng & Feldman, 2010), psychological age was briefly tested. Psychological age is difficult to accurately and objectively assess, because there is no obvious cut-off for every individual (Ng et al., 2010). Additionally, using chronological age concords with current laws protecting older employees from being discriminated against in the workplace. Chronological age refers to an individual's objective age, along with the experiences, roles, knowledge, abilities, and skills gained throughout their lifetime. As researchers interested in age-related issues, it is important to determine who falls under the older employee category because only then the attitudinal and behavioral effects that ageism brings about, and the role organizations play in dealing with any legal issues related to age discrimination can be studied.

Conscientiousness is a personality trait that describes individuals who are highly meticulous, knowledge seekers, autonomous, persistent, overachievers, and avoid counterproductive behaviors (Ones & Viswesvaran, 1996). According

to Huan, Ryan, Zabel, and Palmer (2004), the trait of conscientiousness relates to long-term planning, being achievement oriented, and goal striving. Even Huan et al. (2004) argue that individuals high in conscientiousness do better in environments where they are provided feedback, given new opportunities, and are provided routine and structure.

Theoretical Framework

Past research studies have used several theories to explain the relationship between employee age, OJPs, OCBs, and conscientiousness. According to Constanza, Badger, Fraser, Severt, and Gade (2012), there is no reason to suggest there are differences among generations in work-related outcomes. However, the authors found that older generations are more satisfied with their jobs and less likely to leave their jobs. According to the conservation of resource theory, cognitive resources that help individuals cope with psychological needs (e.g., control, belonging, and self-esteem) are limited; therefore, negative justice perceptions are more likely to lead to a depletion of resources which decrease employees' ability to cope with the demands of their jobs (Whiteside & Barclay, 2013). Prior researchers have argued that older employees are more focused on creating stronger social bonds and dwell less on negative situations/experiences, which suggest that positive organizational interactions could influence older generations to have more positive OJPs and OCBs than younger generations (Brienza et al., 2017).

7

Changes in OJPs happen over time because employees have career expectations to fulfill. Therefore, individuals engage in proactive behaviors now so that they can achieve their own expectations in the future (Frenkel & Bednall, 2016). Equity theory posits that employee performance may increase or decrease depending on how fair they perceive organizational practices (Horvath & Andrews, 2007; Moorman, 1991). The fairness theory states that employees judge their inputs to the outcomes through subjective measures (perceptions of justice), thus, negative situations could prompt employees to question organizational practices in search for explanations (Garcia-Izquierdo, Moscoso & Ramos-Villagrasa, 2012; Horvath et al., 2007). When employees question organizational practices, the collection of negative emotions can deplete the cognitive resources individuals need to maintain ethical/moral standards. For these reasons, OJPs may directly influence the extent to which employees are willing to engage in OCBs.

The socioemotional selectivity theory of human aging has been used to describe the changes in values individuals experience over the course of their life, including their perspectives, emotion regulation, and preferences for social contact (Brienza & Bobocel, 2017). These authors argue that as people age, they are more likely to value the quality of their social interactions, become more empathetic towards social dilemmas and antisocial behaviors that help suppress negative OJPs. Brienza and Bobocel (2017) state that "when instrumental and relational needs are satisfied, as when people experience fair treatment, negative

emotional states that increase emotional exhaustion are alleviated, leaving intact the self-regulatory resources required to maintain appropriate job behavior and suppress inappropriate job behavior" (p. 2). These authors further state that employees become more empathetic, improve in reasoning about social dilemmas, engage in less antisocial behaviors, increase positive workplace relationships, and engage in more civic virtue behaviors as they age. Having these positive attitudes and relationships improves employees' ability to regulate their emotions which influence workplace behaviors.

As researchers have suggested, the trait of conscientiousness is not static, it changes throughout life due to social interactions, experiences, responsibilities, and maturity (Roberts et al., 2006). Despite most studies stating that personality traits are consistent throughout life, more recent studies have found that personality traits such as conscientiousness continue to develop in middle and old age (Baltes, 1997; Roberts & Caspi, 2003). Additionally, researchers have found that certain life situations activate some personality traits more than others. For example, according to Kim, del Carmen Triana, Chung, and Oh (2016), conscientiousness is the strongest predictor of job performance, and organizational practices strongly influence employees' conscientiousness levels via trait activation theory. For instance, this theory supports the idea that just organizational practices will lead to fewer CWBs (opposite of organizational citizenship behaviors) because individuals are more motivated to follow rules and fulfill their job duties/responsibilities.

Lastly, Kim et al. (2016) believe that "personality traits are linked to job performance via motivational and self-regulation processes (i.e., cognitive and emotional control)" (p. 1054). As such, motivation and self-regulation are characteristics of personality and they are highly related to conscientiousness because conscientious individuals tend to strive for achievement (Kim et al., 2016). According to the conscientiousness at work theory, individuals with higher levels of conscientiousness have been shown to engage in higher levels of productivity when compared to their counterparts (Ones & Viswesvaran, 1996), supporting the linkage between conscientiousness and organizational citizenship behaviors, as such, older employees are expected to be more conscientious, and engage in more OCBs than younger and less conscientious employees.

Justice Perceptions and Citizenship Behaviors

According to Nishii et al. (2008), "in order for [organizational] practices to exert their desired effect on employee attitudes and behaviors, they first have to be perceived and interpreted subjectively by employees in ways that will engender such attitudinal and behavioral reactions" (p. 504). However, organizations that view employees differently, as important organizational assets or as replaceable ones; when these views are reflected on their practices, they add on to the already formulated employee perceptions. Previous research has suggested that employees' OJPs arise from perceived organizational support, accountability attributions and personal evaluations, as such perceptions may be

influenced by varying factors (Horvath et al., 2007; Moorman, 1991; Rhoades et al., 2002).

Rhoades et al. (2002), reviewed 70 published and unpublished studies dealing with "fairness, supervisor support, organizational rewards and favorable job conditions", and person characteristics to test whether those affected individuals' perceived organizational support (POS) (p. 698). Rhoades et al. (2002) hypothesized that interactional justice influences employees' organizational commitment, general affective reactions to their job, job involvement, performance, strains, desire to remain with the organization, and withdrawal behaviors. Results of their study indicated a large effect size for organizational commitment, job-related affect, and desire to remain with the organization; a small effect size for job involvement and strains; a medium effect size for performance; and a moderate negative relationship with withdrawal behavior. Rhoades' review suggests that basic antecedents of POS include "fair organizational procedures, supervisor support, favorable rewards and job conditions, and that consequences include, increased affective commitment to the organization, increased performance and reduced withdrawal behaviors" (Rhoades et al., 2002, p. 701). This explains how organizational support and procedural/distributive justice perceptions could affect employee attitudes and behaviors toward the organization.

Accountability attributions affect how employees react to work-related situations. Perceptions of accountability can be directed towards the

11

organization, the supervisor, or external factors. Horvath et al. (2007) studied

how accountability attributions perceptions help predict whether the employee

will react against a specific individual (e.g., the supervisor) or against the

organization itself. They "hypothesized that perceptions of an organizational

agent's fairness would be related to employee reactions to that agent, but the

relationship would be stronger if the employee also blamed that agent for the

unfair event" (Horvath et al., 2007, p. 204). The authors surveyed 48 employees

who believed there were inaccuracies in their performance appraisals, and they

attributed blame to the supervisor, the organization or both, and rated how

committed they were to each; four measures were used: supervisor interpersonal

justice, supervisor procedural justice, organization interpersonal justice, and

organization procedural justice. They found that accountability attributions and

fairness perceptions may interact to determine reactions to organizational

agents; blame procedural justice perceptions, and blame and interpersonal

justice perceptions, significantly added to the prediction of OCBs, both

interactions were significant when ran separately. However, since older

employees engage in more objective reasoning, they will be less likely to

disagree with performance evaluations and more likely to maintain positive

workplace relationships with their supervisors.

Moorman (1991) was "concerned with the ways in which employees

determine if they have been treated fairly in their jobs" and how that influences

their behaviors (p. 845). Based on the equity theory and the social exchange

theory, Moorman (1991) studied organizational justice and fairness perceptions and how they influence employee behaviors, particularly OCBs. The data for his study was drawn from two medium size firms in the Midwestern United States. For Company A, data was collected through meetings with groups of employees and questionnaires containing justice and satisfaction scales, whereas the data for Company B was collected through surveys sent using the company mail system (surveys were sent directly to the researcher). They found that when job satisfaction is measured separately from fairness perceptions, job satisfaction tends to be unrelated to organizational citizenship; a causal relationship between perceptions of organizational justice and OCB was found; employees with positive interpersonal relationship with management appeared to engage in more citizenship behaviors; and interactional justice appears to influence perceptions of supervisor's trust, because it focuses on the actions of the supervisor. The results of this study indicate that engaging in OCBs is the result of a personal evaluation about work-related context rather than the evaluation of specific outcomes (Moorman, 1991). Thus, such personal evaluations resulting in OCBs can be explained by the age-related factor, conscientiousness.

As initially stated, there are multiple factors that affect workplace behaviors (distributive justice, procedural justice, and interactional justice). Now, some consequences related to organizational justice perceptions will be reviewed. Enhanced fairness perceptions are important because they can help improve performance in the market place, in productivity, profits, and satisfaction

13

(Colquitt et al., 2001; Nishii et al., 2008). Even perceptions of fairness often lead to supervisor/organizational commitment, supervisor/organization-directed OCBs, employee well-being, reduced stress, and reduced CWBs (Heffernan & Dundon, 2016; Horvath et al., 2007; Riaz, Riaz & Batool, 2014). These performance outcomes are categorized into two main dimensions: attitudinal outcomes and behavioral outcomes (Colquitt et al., 2001; Rhoades et al., 2002). Therefore, next a description of attitudinal and behavioral outcomes, followed by a summary of previous research studies provides some evidence on the effect OJPs have on performance outcomes.

<u>Attitudinal Outcomes</u>

Attitudinal outcomes are emotions internal to an employee that affect their reactions to work situations/practices. For instance, perceived organizational support (POS) influences how people feel about their jobs; where those who perceive high organizational support are more likely to experience job satisfaction and positive moods, while also experiencing less fatigue, burnout, anxiety, and headaches (Rhoades et al., 2002). Employees experiencing positive attitudinal reactions also experience higher commitment to the organization, which prompts them to engage in OCBs rather than CWBs (Colquitt et al., 2001). In the context of work, personality, career opportunities, and managerial decision-making styles are some of the areas previously researched that influence attitudinal outcomes. Next is a review of the research covering these areas to better understand their impact on workplace behaviors.

In the workplace, personality traits greatly impact how people react to uncertain situations. Sasaki and Hayashi (2013), state "that individual differences in various personality traits and cognitive styles come into a play in the way justice and the framing effect arise" (p. 128). To test this, the authors surveyed 363 undergraduate students in a university and a college in Japan to examine how social justice and personality have moderating effects on justice and framing. They found that personality traits moderated the interaction between justice and framing. However, they did not find significant effects in framing. Sasaki and colleagues suggest that the lack of significance in framing effects could be due to individual differences attributing framing effects (Sasaki et al., 2013).

Chan (2006), proposed the idea of proactive personality, where he stated that it will not always lead to positive job outcomes; he believed that individuals differ in their ability to react effectively to situations, which in turn affects work perceptions and work behaviors. After collecting data from 139 employees from a large rehabilitation agency, Chan found support in that proactive personality and situational judgment effectiveness (SJE) predicted positive workplace perceptions and outcomes among individuals who possessed both traits, but the opposing effects were found among individuals with low SJE. Self-perceptions about age can further influence employee attitudes towards work, career choices, and organizational practices. For instance, Akkermans, De Lange, van der Heijden, Kooij, Jansen, and Dikkers (2016) examined the effects chronological

15

and subjective age play on work motivation. Overall, their results lead to the idea that having a future time perspective (FTP) (i.e., many of remaining time and job opportunities) will prompt employees to plan future goals, remain motivated, and engaged. Whereas, those with a limited time perspective (LTP) are more likely to view their life span approaching an end, leaving less time to engage in the tasks that they consider meaningful and fulfilling their emotional needs.

Similarly, Kooij, Bal, and Kanfer (2014), studied over a 3-year period, variables related to future time perspective (e.g., growth, motivation, and promotion focus) to test age-related changes. In general, they argued that employees with future time perspectives are more optimistic about life and work-related opportunities and found that future time perspective mediated the impact age has on promotion focus. Kooij et al.'s (2014) findings "support the notion that age-related declines in growth work motives are not simply a matter of calendar age, but rather a consequence of how older workers construe future time and the effects of this perspective on regulatory goal focus" (p. 325). This means that the organization's role in providing job and development opportunities to older employees is essential in fostering future time perspectives among all employees, which will motivate older employees to continue working.

Employees' perceptions of fairness can fluctuate over time influencing at the same time employee attitudes and intentions. For example, Hausknecht, Sturman and Robertson (2011) conducted a series of confirmatory factor analyses to study a sample of 523 working adults from many occupations. The

respondents completed surveys about their work experiences to explore the change in justice perceptions of distributive, procedural, interpersonal, and informational justice. The authors tested whether justice perceptions predicted future job satisfaction, organizational commitment, and turnover intentions. After tracking employees' perceptions over a year, Hausknecht and colleagues found that employees' justice perceptions do fluctuate overtime as a result of how they have been treated in the past. These results help explain the variance in satisfaction, commitment, and turnover intentions. In summary, employees who hold negative justice perceptions about the organization are more likely to lack trust, participate in CWBs, and detach from the organization, whereas employees experiencing positive OJPs are more likely to experience job satisfaction and higher organizational commitment.

Another set of researchers also looked at procedural and distributive justice over time. They conducted a longitudinal analysis studying untenured management professors in a business program in the US where justice perceptions of tenure and promotion opportunities were assessed three times (the pre-allocation phase, the short-term post-allocation phase, and the long-term post-allocation phase) over a two-year span (Ambrose & Cropanzano, 2003). The authors argue that first-hand experiences are prone to increase the strength of fairness evaluations, particularly before an allocation decision and soon after the allocation decision. For instance, if an employee is told he/she will receive an incentive for completing a task, he/she will have positive attitudes about

procedural and distributive justice. However, once the task is complete,

depending on whether the incentive was given or not, the employee is more likely

to experience stronger attitudes towards those practices. If they received the

incentive, they will most likely experience positive attitudes, but if they completed

the task and were not given the incentive, they are most likely to experience

negative attitudes. The results of these two studies indicate that perceptions of

procedural and distributive justice change employees' attitudes over time

depending on whether the outcomes meet their initial expectations or not.

Because older employees have more experience participating in work related

tasks, it is most likely that past experiences will aid them in determining which

tasks are worth pursuing and which are not. Even older employees may be more

likely to create realistic expectations.

Organizational commitment and job satisfaction also fluctuate overtime

based on the influence of procedural justice practices. When organizations are

transparent in their methods, employees are more likely to perceive promotions

and tenure as fair procedures. Garcia et al. (2012) suggests that managers

should consider and clearly state the criteria they used to make promotion

decisions because those are important sources of information for the formulation

of employees' perceptions of procedural justice. Garcia et al. (2012) studied 213

workers in Spain from 31 private sector companies by having them complete

surveys reporting retrospective information. They found that the methods of

selection and transparency predicted perceptions of procedural justice. In

addition, they found that gender and organizational rank act as moderators in predicting procedural justice regarding promotions, where employees are more satisfied with methods that assess competence.

Career opportunities are another form of distributive justice that influences attitudinal outcomes. Frenkel et al. (2016) believed that positive career expectations strengthen feelings of obligation to the company, altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. They "propose that holding positive expectations will generate feelings of obligation to the work group, thereby motivating discretionary effort; [a] new approach [that] emphasizes anticipation of future rewards as the primary motivator of discretionary effort, rather than appreciation for past beneficial treatment" (Frenkel et al., 2016, p. 17). To test this, they sent a two-wave online survey to 201 bank employees and 16 supervisors, where the bank employees rated their supervisors at the branch level, and the supervisors rated their subordinates. Multi-item scales were used to test organizational justice on discretionary work effort. Their results supported an integrative model where distal work expectation arises from employees' perceiving obligations and favorable management treatment (Frenkel et al., 2016). Frenkel et al. (2016) promote the idea that organizations can create positive career expectations and future internal prospects by enhancing fair organizational practices and favorable treatment.

As previously stated, managers play an important role in influencing employees' justice perceptions. Management decision-making style and

practices should be implemented in a transparent, fair, and impartial way for employees to experience positive attitudes. Based on Riaz et al.'s (2014) article, managerial decision-making styles affect an employee's personal and organizational outcomes. To test this, they designed a cross-sectional survey and asked 300 employees to rate their managers' decision-making style and their own outcomes. The multiple regression analysis results indicated that management's "rational style positively predicted self-efficacy, job satisfaction, and procedural justice perceptions" (p. 100); intuitive style positively predicted life satisfaction, self-esteem, job satisfaction, job performance, innovative work behavior, and negatively predicted stress; dependent style and avoidant positively predicted stress; and spontaneous style positively predicted stress and innovative work behavior (Riaz et al., 2014). Therefore, if management practices are ageist, it is expected that they will provide more favorable treatment to younger employees, hindering older workers chances of growing.

Behavioral Outcomes

Behavioral outcomes, as previously stated, are strongly related to personal attitudes. According to Colquitt et al. (2001), behavioral outcomes result after a thorough and reasoned evaluation of the organizational system, as a response to unsatisfactory outcomes or unfair treatment by an authority. Perceptions of unfair treatment/processes often lead to withdrawal behaviors, such as absenteeism, turnover, neglect, theft, sabotage, and productivity loss (Colquitt et al. 2001; Horvath et al., 2007; Ybema, Meer & Leijten, 2016).

20

However, positive organizational support motivates employees to reciprocate this support through high attendance, punctuality, and affective organizational commitment, thereby lessening withdrawal behavior (Rhoades et al., 2002). Behavioral outcomes are studied because they strongly dictate the success of the employees' performance.

According to the socioeconomic exchange theory, work systems are primarily designed to promote high performance, however, high levels of work pressure can greatly affect an employee's behavioral outcomes. High performance work systems (HPWS) are work practices and work design processes that encompass five areas (that influence employee's happiness and well-being): sophisticated selection and training, behavior-based appraisal, contingent pay, job security, and employee involvement (Hefferman et al., 2016). Hefferman et al. (2016) administered a survey to managers, they asked them information about HR policies, and asked employees about their perceptions and attitudes towards HR practices. After employees rated their perceptions of distributive, procedural, and interactional justice on HR practices, a two-factor model was used to analyze the effects. They found that employees were more likely to experience lower levels of job satisfaction and affective commitment, and strong perceptions of work pressure, when they experience high incidence of HPWS; thus, employee OJPs should be considered when assessing employee's attitudes and well-being. Then, ageism can result in a HPWS, particularly when it

directly affects employees' happiness, involvement and development opportunities, and job security.

Employees tend to have different types of relationships with their organizations based on the strength of the relationship, type of relationship, but most importantly, length of their relationship. Some of these relationships are shaped through time because time is a strong predictor of consistency, so individuals who have worked longer periods of time in an organization might have stronger attitudes and more consistent behaviors. A study conducted by Ybema et al. (2016), studied 7011 employees between 45-64 years old for two years to test whether productivity loss and sickness can be reduced through OJPs. They distributed an online questionnaire that included topics, such as demographics, lifestyle, occupation, working conditions, sickness absence, psychological well-being, work satisfaction, and organizational culture. Through a structural equation model in LISREL, they assessed the relationship between distribution of salary, appreciation, procedural justice, productivity loss, and sickness absence. Their findings show that distributive justice of salary was unrelated to lower productivity loss or sickness absence, but when paired with procedural justice it did contribute to productivity loss and lower sickness absence a year later; productivity loss increased distributive justice of appreciation; and sickness absence reduced distributive justice and procedural justice of appreciation. This means that improving organizational practices can lower the risk of productivity loss and sickness absence among older employees.

Employee Age and Justice Perceptions

A few research studies have investigated the relationship between employee age and OJPs. One study proposed the idea that older workers have more positive OJPs because of their seniority status, higher paying positions, and higher benefits (Lorence, 1987). However, they found that the results vary depending on the variable; the cross-sectional data from this study indicated that the link between employee age and job involvement might be lessening, because although "older individuals tend to be more involved with their jobs [they are] less committed to work in general than younger individuals" (p. 552). Another literature review including 60 research studies related to age and employee attitudes, found age to positively relate to job satisfaction, job involvement, internal work motivation, organizational commitment, and generally consistent with effective organizational functioning (Rhodes, 1983).

Ng and Feldman (2010) found a moderate link between employee age and justice perceptions. Through a comprehensive analysis of the literature, the authors concluded that age relates to positive job attitudes. Their reasoning is explained by the socioemotional selectivity theory which "suggests that older workers are more likely to attend to and to recall positive information" particularly when compared with younger workers" (p. 686). Specifically, "age was significantly related to task-based attitudes such as overall job satisfaction, satisfaction with work, intrinsic work motivation, job involvement, job control, role conflict, and role overload" (Ng et al., 2010, p. 696).

A year later, Kooij, De Lange, Jansen, Kanfer, and Dikkers (2011) analyzed the literature on age and work-related motives from 1961 to 2009 and hypothesized that strength of security and social motives would increase with age, while the strength of growth motives would decrease. Kooij and her colleagues found that the need for affiliation, collaboration, and job security increases with age, while the need for competition, growth, and learning decreased. Another meta-analysis was conducted to study the effects of generational differences on work-related attitudes included studies conducted between 1995 and 2009 (Constanza et al., 2012). In this analysis, the results suggest that there is no systematic change among generations, however older generations experience higher levels of job satisfaction than younger generations.

Other research studies have investigated the role of age as moderating variable. For example, Elias, Smith, and Barney (2012) studied age as a moderating variable between attitudes, and intrinsic/extrinsic motivation and overall job satisfaction. Elias et al.'s (2012) research study explored how attitudes towards technology affect intrinsic motivation, extrinsic motivation, and job satisfaction. These researchers believed that attitudes would be mostly influenced by the age group these individuals belong to (e.g., the young group or the old group), because each age group has conceptualized and adapted differently to technology. The results suggest that having negative attitudes (e.g., lacking motivation and possessing outdated skills) affected the implementation of

24

technological systems in the workplace because the self-fulfilling prophecy is likely to be more pronounced among older employees. These results add to the justice perceptions' literature because they support the idea that negative age-related stereotypes directly affect employee behaviors.

Bertolino, Truxillo, and Fraccaroli (2011) also investigated age a moderating effect of the relationship of proactive personality and three training-related variables: training motivation, perceived career development from training, and training behavioral intentions. In their research study, Bertolino and colleagues surveyed 252 municipal government employees, although they did not find a relationship between age and proactive personality, they did find that "age moderated the relationships of proactive personality with training motivation, perceived career development from training, and behavioral intentions" (p. 257). Subsequently, Innocenti et al. (2012), studied age as a moderator variable between Human Resources development practices and employees' positive attitudes. Even though they argue that employees' needs change with age, and therefore, their perceptions about organizational practices differ, they also state that these can be mitigated if organizations invest in activities that eradicate stereotype threats, such as including older workers in development practices, implementing diversity initiatives, adapting the teaching methods used in training program, and promoting later retirement.

Employee Age and Citizenship Behaviors

Tittle et al. (2003) studied the effects employee age has on performance outcomes. These authors believed that "self-control does not appear to predict misbehavior equally well among various subcategories of individuals, particularly not for age groups, even failing to predict misbehavior at all for some groupings" (p. 426). According to Tittle et al. (2003), behavioral differences can be due to individual differences, such as socialization, self-control, and situational factors. Overall, their results suggest that age can be negatively associated with crime/deviant behaviors, which was partially explained by levels of self-control found among gender and age groups. Another study suggested that older employees' motivation for training declines, as does cognitive ability due to the live course changes that alter individual's personal characteristics, such as loss, growth, reorganization, and exchange (Kanfer & Ackerman, 2004).

According to the Hedge and Borman (2019), most literature associated with employee age and organizational citizenship behaviors supports the idea that older employees engage in more organizational citizenship behaviors and less counterproductive work behaviors than their younger counterparts. The authors report a moderately positive correlation between age and citizenship behaviors. Hedge and Borman state that the relationship between age and OCBs might be due to three personality traits most commonly found among older employees, such as conscientiousness, agreeableness, and emotional stability. Although this summary is consistent with most research studies on the topic, this

area needs to be further studied, as the few studies found under this section were published between the years 2001 and 2016, which is fairly recent.

Employee Age, Justice Perceptions and Citizenship Behaviors

A great number of research studies have looked at the relationship between organizational justice perceptions and workplace behaviors. However, only a few studies have researched the effect employee age has on this relationship. In 2010, a meta-analysis was conducted to examine how high commitment HR practices influence affective commitment and job satisfaction. Kooij, Janse, Dikkers, and De Lange (2010), "hypothesized that the association between maintenance HR practices and work-related attitudes strengthens with age, and that the association between development HR practices and work-related attitudes weakens with age," and expected those associations to change with age (p. 1111). The results of their meta-analysis support the idea that HR practices influence job attitudes, and that older workers value more high commitment HR practices geared towards their development than their current functioning.

Tenhiälä, Linna, Monika, Pentti, Vahtera, Kivimaki and Elovainio (2013) studied age-related differences in organizational justice perceptions and their impact on employee well-being. They specifically researched the effects justice perceptions have on sickness because taking days off from work to recover from health-related conditions can affect organizational practices. Overall, they found

that older employees were 12% less likely to miss work from health-related issues or avoidable causes when they experienced high levels of procedural justice (e.g., being treated with dignity and respect) (Tenhiälä et al., 2013). Another study conducted by Profili, Sammarra, and Innocenti (2016) focused on the antecedents of OCBs and found that having fun at work influenced altruistic behaviors (e.g., helping others) among young employees only and work-life balance among old employees.

The most closely related research on this topic looked at the relationship between organizational justice practices and employee deviance were employee age was the mediating variable (Brienza et al., 2017). In this research, they found that the relationship between distributive justice and deviance behavior was significant for younger employees, but not for older employees. They also found that informational and interpersonal justice was more significantly related to older employees than younger employees. Although most studies related to this topic found congruent results, justice perceptions and citizenship behaviors do appear to vary with age. These results support to the idea that young and old employees differ in values, perceptions, and motives.

Conscientiousness and Citizenship Behaviors

Conscientiousness, as previously defined, is a personality trait associated with achievement striving, long-term planning, opportunity seeking behaviors, orderliness, dutifulness, autonomy, and less impulsivity (Hedge et al., 2019;

Huang et al., 2004; Ones et al., 1996). For this reason, individuals who score

high in conscientiousness may be more prone to engage in behaviors that will

help them succeed in the workplace. Employees will engage in citizenship

behaviors now so that they can achieve their projected goals. As claimed by

Borman, Penner, Allen, and Motowidlo (2001), these OCBs include activities

such as: helping others with their jobs; supporting the organization; volunteering

for additional work/responsibilities; persisting with enthusiasm and extra effort;

following organizational rules/procedures; supporting organizational objectives;

and greater productivity. Behaviors that help organizations perform at their most

optimal levels. They are so important to organizations that even when they are

not explicitly stated in the official list of duties and responsibilities for a job,

organizations sometimes consider these behaviors for selection, promotions,

and/or performance appraisals. Borman et al. (2001) believe that

conscientiousness should be a central antecedent of OCBs because these two

variables significantly correlate with each other.

Employee Age and Conscientiousness

As individuals age, they are more likely to have encountered experiences

throughout their lives that have taught them self-control, autonomy, responsibility,

or that inspire them to engage in helping behaviors. Some researchers have

argued that as people age they tend to focus their energy on personal relations,

instead of dwelling on circumstantial factors. Contrasting most research on

personality stating that personality traits are relatively stable over the life-span of humans, recent research has suggested that a personality trait, such as conscientiousness, increases over time (Roberts et al., 2006). Some possible explanations stated in this meta-analysis include: normative commitments, role expectations, life experiences/lessons, and psychological maturity. Roberts et al. (2006) "found little or no change in measures of conscientiousness in adolescence and the college period," however, they found that conscientiousness continuously increases every decade from age 20 to age 70 (p. 11). Although these results had a small effect size, they were statistically significant.

Employee Age, Justice Perceptions, Conscientiousness and Citizenship Behaviors

Now that these variables and their relationship to one another were reviewed, some articles that integrate these constructs will be analyzed: employee age, conscientiousness, justice perceptions, and citizenship behaviors. Most research studies have been able to link two of these constructs, but few have focused on at least three of these variables in a single study. Sasaki and Hayashi (2013) investigated the effects of self-efficacy and low trait anxiety and found that personality moderates justice perceptions. Chan (2006), on the other hand, studied the interaction between situational judgement, proactive personality, work perceptions, and work outcomes. By looking at the relationship between justice perceptions of tenure and promotion practices over a 2-year

span, he found that both procedural justice and distributive justice impact situational reactions differently. When looking at proactive personality, he found that it varies across individuals because "the information individuals have about procedures and outcomes change over time and that this change affects the relative impact of justice judgments on attitudes" (Ambrose et al., 2003, p. 274). Therefore, the authors warn us about making careful inferences about personal characteristics.

In a research study conducted in 2016 by Kim et al. investigated conscientiousness as a predictor of job performance, specifically cyber-loafing. More specifically, if high levels of conscientiousness predict citizenship behaviors, then someone who engages in cyber-loafing may score low in conscientiousness. In their research study, Kim et al. (2016) hypothesized that personality traits, along with OJPs, impact workplace behaviors, such as cyber-loafing. Unjust perceptions of organizational practices, such as distributive, procedural, and interactional justice, are more likely to influence employees to engage in counterproductive work behaviors. However, their study demonstrated that highly conscientious individuals are more organized, reliable, hardworking, self-disciplined, and more likely to follow organizational rules when employees have positive organizational justice perceptions (Kim et al., 2016). Even Roberts et al. (2006) found that conscientiousness increases with age, along with self-discipline, altruism, and compliance. Since these four variables seem to be related to one another, a model where employee age, justice perceptions,

conscientiousness, and organizational citizenship behaviors share a relationship with one another is proposed.

Present Study

This study is different from the previously mentioned studies because overall justice perceptions was examined, rather than organizational justice practices; organizational citizenship behaviors, as opposed to deviant behaviors; and studied employee age as a moderating variable; and conscientiousness as a mediating variable. Organizational practices matter because they influence justice perceptions, and OJPs influence workplace behaviors. An interest was placed in the role age plays in fostering OCBs, because prior research found that older employees have higher levels of job involvement than younger employees, and that younger employees engaged in deviance behaviors more frequently than older employees (Berry, Ones, & Sackett, 2007; Hedge et al., 2019; Ng et al., 2010). The present study was used to examine the relationship that exists between organizational justice perceptions, organizational citizenship behaviors, conscientiousness, and age.

More specifically, this study was used to investigate if a moderated mediation relationship existed as depicted by the model (see Figure 1). As employees age they become more conscientious, and higher levels of conscientiousness would lead to more positive organizational justice perceptions,

and more organizational citizenship behaviors. Next, a brief justification for each hypothesis is presented.
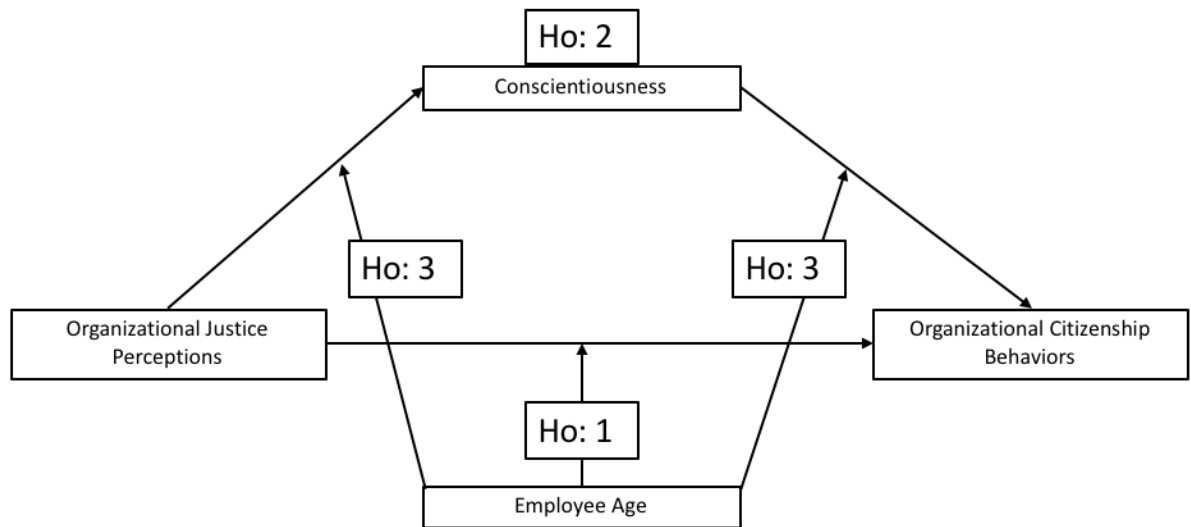
Figure 1: The Proposed Framework Illustrating Hypotheses 1-3.

The moderating effects age had on the direct relationship between organizational justice perceptions and organizational citizenship behaviors were also investigated. Researchers have found that as people age, they become more selective about where they invest their resources, which in turn influence the type of organizational justice they care about, and subsequently, their workplace behaviors (Tenhiälä et al., 2013). In addition, Brienza et al. (2017) studied the moderating effect of age on justice facets and deviance, and they found that "employees are differentially sensitive to different forms of justice as a function of their age" (p. 9). In addition, they found that as employees age, they

become more empathetic, reasoned about social dilemmas, and engage in less

counterproductive work behaviors. Another study found that work conditions

related to organizational justice influence "the extent to which [employees] are

likely to voluntarily help others to manage or prevent work-related problems"

(Profili et al., 2016, p. 27). Therefore, age was believed to influence employees'

justice perceptions, as well as their workplace behaviors, and the following

hypothesis was proposed:

Hypothesis 1: Employee age will moderate the relationship between

organizational justice perceptions and organizational citizenship behaviors as

depicted in Figure 1 above and Figure 2 below.

Figure 2. The Hypothesized Moderating Effect of Age on the Relationship Between Organizational Justice Perceptions and Organizational Citizenship Behaviors.

Although only a few studies have investigated the relationship between consientiousness, OJPs and OCBs, there are plenty of research studies suggesting that conscientious employees are more responsible, goal-oriented, helpful to others, self-determined, and dutiful (Huang et al., 2014; Ones et al., 1996). Additionally, conscientious employees are more likely to attribute negative experiences to the organization, instead of the supervisors; help others; support the organization; engage in extra-role behaviors; follow rules and procedures; show more affective commitment; and increase productivity (Borman et al., 2001; Rhoades et al., 2002; Ybema et al., 2016). Others argued that highly conscientious people are more objective, agreeable, and emotionally stable, which allows them to engage in more objective reasoning than those scoring lower in conscientiousness (Hedge et al., 2019). Therefore, the following hypothesis was proposed:

Hypothesis 2: Conscientiousness will mediate the relationship between organizational justice perceptions and organizational citizenship behaviors as depicted in Figure 1.

Even though it was believed that personality traits remain consistent through time, recent research suggested that the relationship between employee age and conscientiousness becomes stronger with age (Barnes-Farrell et al., 2019; Roberts et al., 2006). Roberts and colleagues also suggested that life experiences, normative roles, life lessons, and maturity promote their autonomy, a sense of responsibility, foment helping behaviors, and improve self-control. A

35

longitudinal study by Specht, Egloff, and Schmukle (2011) found that the trait conscientiousness changed throughout the life course up to 70 years old and was a good predictor of success. The authors also argued that "social roles force individuals to be more conscientious in times when they are integrated into the job market," however, "this change is due not only to intrinsic maturation but also to social demands and experiences" (pg. 879-880). Other researchers had proposed the idea that older employees focus on positive emotions/situations and dwell less on negative ones, and had more positive justice perceptions because their stability, status, higher pay and benefits are commodities gained with aging (Barnes-Farrell et al., 2019; Lorence, 1987; Ng et al., 2010). This study was used to investigate the relationship between age and conscientiousness, and how these variables affect employees' organizational justice perceptions and organizational citizenship behaviors. The purpose of this research study, in addition to testing the validity and strength of this relationship, was to integrate these variables into one model. A model which predicted that older employees would score higher in the conscientiousness trait, and therefore, experience more positive organizational perceptions and engage in more organizational citizenship behaviors than their younger counterparts. Thus, the following hypothesis was proposed:

Hypothesis 3: Employee age will moderate the mediating effect of conscientiousness in the relationship between organizational justice perceptions and organizational citizenship behaviors, such that older employees will score higher in conscientiousness and engage in more organizational citizenship

behaviors when positive justice perceptions are experienced as depicted in

Figure 1 above and Figures 3 and 4 below.

Figure 3: The Proposed Model Framework Illustrating the Moderating Effect of Employee Age in the Relationship Between Organizational Justice Perceptions and Conscientiousness.
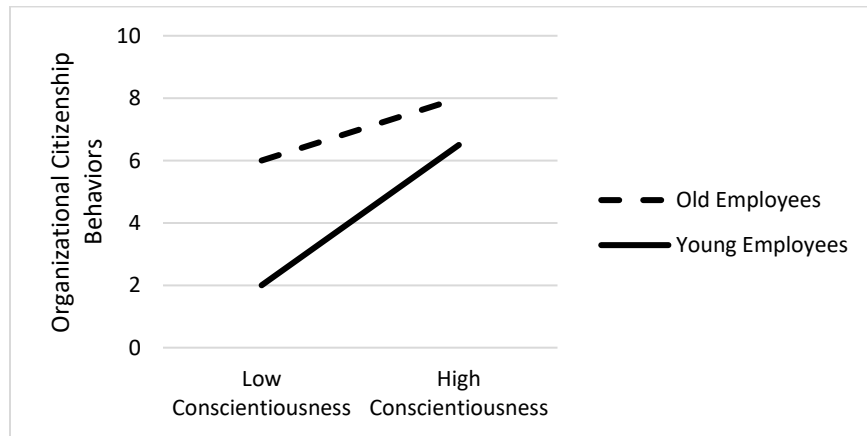
Figure 4: The Proposed Model Framework Illustrating the Moderating Effect of Employee Age in the Relationship Between Conscientiousness and Organizational Citizenship Behaviors.

CHAPTER TWO

METHOD

Participants

One hundred and eighty-two adults were recruited via Amazon's

Mechanical Turk (MTurk) survey system to complete an online questionnaire

using Qualtrics survey software. The survey was opened three times; the first

wave was opened to 10 participants, to test the system, and everything ran

smoothly; the last two waves were opened to 82 participants and then 90

participants, respectively, to ensure there was a good ratio of older to younger

participants completing the survey and assess whether different recruitment

measures were needed. Given that the young to old employee ratio was almost

balanced, the recruitment procedure was kept intact. Only participants who

spoke English and worked full-time or part-time were included. Of the initial 182

participants, 179 were used for the analyses (men= 97; women= 81, non-binary=

1). All participants were asked demographic information related to age, gender,

education, marital status, employment, work hours, work industry, income,

number of dependents, race, work benefits, employment history and perceptions

about their own age. Participants' ages ranged from 18 to 79 (M= 39.01, SD=

1.13); ethnic background included: 135 Whites (75.40%), 16 Asians (8.90%), 14

African Americans (7.80%), 8 Latinos/Hispanics (4.50%), and 6 identified as

mixed (3.40%) (See Table 1 for the complete breakdown on demographic

characteristics of the sample). Participants were compensated $2.00 for

completing this survey. The survey was supposed to take about 30 minutes to

complete, but the majority of the participants finished within 15 minutes. In

addition to answering demographic questions, participants were asked to

complete questions regarding their current job, work experience, personal

perceptions, and work behaviors. The participants pool was expected to come

from a diverse group of ethnic backgrounds, work occupations, job rankings,

income, overall benefits, and job demands. All participants were treated with

respect and in accordance with the American Psychological Association's code

of Ethics (Ethical Principles of Psychologists and Code of Conduct, 2013).

Table 1. Demographic Characteristics of the Participants

Variable	*Mean% (SD)*
Age	39.01 (10.13)
21-29	15.64%
30-39	41.34%
40-49	24.02%
50-59	13.41%
60-69	3.35%
70-72	.56%
Missing	1.68%
Gender	
Male	54.20%
Female	45.20%
Non-binary	.60%
School Grade	
Completed High School	6.10%
Additional non-college training	3.40%
Some college	19.60%
Completed 2-year college degree (e.g., A.A., A.S)	11.10%
Completed 4-year college degree (e.g., B.A., B.S.)	48.60%
Completed college with advanced degree (e.g., M.S., M.A., Ph.D., M.D.)	11.20%
Marital Status	
Single, never married	38.00%
Married	47.50%
Living together	8.40%
Divorced	5.00%
Widowed	1.10%
Employment Status	
Full-time	91.60%
Part-time	8.40%
Hours per week (Including overtime)	
Less than 10 hours	8.9%
10-20 hours per week	3.90%
21-30 hours per week	1.70%
31-40 hours per week	41.90%
More than 40 hours per week	43.60%
Type of Industry	
Public	33.50%
Private	63.70%
Other	2.80%

Table 1. Demographics Characteristics of the Participants

Variable	
Household Income	
Under $20,000	6.70%
$20,000 - $34,999	15.60%
$35,000 - $44,999	16.80%
$45,000 - $54,999	15.60%
$55,000 - $64,999	9.50%
$65,000 - $74,999	7.30%
$75,000 or more	28.5%
Number of Dependents	
Less than two	69.30%
3-5 dependents	30.70%
Race	
White	75.40%
Asian	8.90%
African American	7.80%
Latino/Hispanic	4.50%
Mixed	3.40%
Number of Benefits Offered	
None	15.10%
1-3 Benefits	16.20%
4-6 Benefits	25.10%
7-9 Benefits	25.70%
9-12 Benefits	17.90%
Years Employed	
Less than 5 years	7.26%
6-10 years	16.20%
11-15 years	19.55%
16-20 years	19.55%
21-25 years	14.53%
26-30 years	11.17%
More than 31 years	11.17%
Missing	0.56%
Years Working in Current Organization	
Less than 5 years	54.50%
6-10 years	28.10%
11-15 years	10.70%
16-20 years	3.30%
More than 20 years	3.40%

Demographic and personal characteristics (N= 179)

Materials

All materials were presented in an online format using the Qualtrics survey software. Participants were presented with an informed consent page, a set of questions regarding their demographic information, organizational justice perceptions, conscientiousness level, and organizational citizenship behaviors. For demographic information, participants were asked to answer questions about their current job positions, years of experience, tenure, income, gender, age, education level, and employment information (see APPENDIX A for the complete scale).

To assess organizational justice perceptions, participants answered Colquitt's (2001) 20-item scale in which they were asked about their current workplace over the past year. The items on this measure were rated on a 5-point scale (1= Never; 5= Always) and asked questions about their perceptions on distributive, procedural, informational and interpersonal justice (see APPENDIX B for the complete scale). Colquitt (2001) conducted a confirmatory factor analysis to test the validity of the scale items. He divided the scale items into four different factors and the fourth, which consisted of procedural, distributive, informational, and interpersonal subscales, and the results suggests that the scale has strong factorial validity evidence, IFI = .94 and CFI = .94, p < .001 (for the field sample). In addition, the scale shows that the constructs were reliable, Cronbach's alpha: Procedural Justice = .78; Interpersonal Justice = .79; Information Justice = .79; and Distributive Justice = .92. In the current study, the alpha reliabilities were .90

for procedural justice, .97 for distributive justice, .92 for interpersonal justice, .91 for information justice, and .96 for the overall organizational justice perceptions.

To measure organizational citizenship behaviors, participants answered the Moorman and Blakely (1995) 19-item scale which measures interpersonal helping behaviors, individual initiative, personal industry and loyal boosterism on a rating scale of 1 = strongly disagree; 7 = strongly agree (see APPENDIX C for the complete scale). Moorman et al. (1995), conducted confirmatory factor analyses to assess the fit of the scale items to the proposed factor structure, they used two fit indices, and both were significant, CFI = .91 and TLI = .90, p < .05. The reliability measures for this scale's dimensions were Cronbach's alpha scores: Beliefs = .84; Values = .67; Norms = .80. For the current study, the alpha reliabilities were .80 for helping behaviors, .74 for initiative behaviors, .78 for industry behaviors, .94 for boosterism behaviors, and .88 for the overall organizational citizenship behaviors.

Lastly, to measure conscientiousness, participants answered Ashton and Lee's (2009) 10-item measure of the trait conscientiousness derived from the HEXACO-60 scale, which contains questions regarding organization, diligence, perfectionism and prudence on a rating scale of 1 = strongly disagree; 5 = strongly agree (see APPENDIX D for the complete scale). Ashton and Lee (2009) conducted a confirmatory factor analysis of the conscientiousness items within the HEXACO-60 item scale. The scale had evidence of reliability with a

Cronbach's alpha level of .79. For the present study, the alpha reliability was .81 for conscientiousness at work.

Procedure

All participants were recruited through the Amazon Mechanical Turk surveying system. Only "MTurk workers" were able to access this study, which appeared on the list of available assignments. Various screening methods were set-up using the Qualtrics and the Mechanical Turk system to ensure participants met the following qualifications before completing the survey: full-time or part-time employee; 18 years old or older; located in the US; HIT (Human Intelligence Test) approval rate greater than 98; and number of HITs approved greater than 5000. Participants only needed a computer and internet access to be able to take this survey, however, they were able take it anywhere (e.g., their home, office, library, coffee shop). In addition, they were presented with the informed consent and they had the opportunity to read their rights and withdraw from this study at any time. As long as they meet these requirements and voluntarily agreed to participate, they were able to access the questionnaire immediately after reading the consent form. Using the Mechanical Turk settings, participants were allotted 1 hour to complete the survey; survey was available 7 days during each administration; and auto-approved was set-up to pay workers in 3 days after each assignment was submitted, however, this feature was not utilized as assignments were reviewed and rejected/approved within 24 hours after

submission. First, participants were provided with instructions regarding the questionnaire: number of questions, approximate completion time, rating factors, and rating scales. Then, they answered the four questionnaires, in the following order: demographics, organizational justice perceptions, organizational citizenship behavior, conscientiousness, and a few other scales related to belongingness, affectivity, role salience, life orientation and the future. The main scales were placed at the beginning of the survey to ensure responses were not affected by respondents' fatigue. Lastly, participants were asked to read a debriefing statement at the end of the questionnaire, which stated the main purpose of this study; and submit a survey code that ensured that only the participants who completed the survey were paid. The survey concluded with a statement thanking participants for their participation and this last page included the primary investigator's contact information for participants to contact the investigator directly to voice any concerns.

Study Design

Since it is impossible to measure justice perceptions by manipulating organizational procedures (e.g., being unfair to one group of individuals while being fair to another group), data was gathered through survey questionnaires and conducted through a non-experimental, correlational design. Conducting a correlational study helped us determine whether a relationship existed between the justice perceptions, employee age, conscientiousness, and organizational

citizenship behaviors; if there was a relationship between these variables,

directions, magnitudes, and forms of the observed relationship could be

established. A main disadvantage to using this type of design was the lack of

internal validity. None of the variables were manipulated nor were any

extraneous variables included, as such data was simply collected by using

established measures to analyze the results. Additionally, because this was not

an experimental design, causal relationships were not inferred. Instead, this

study was used to analyze whether a correlation exists or not. In other words, it

could only state the possibility that changes in one variable corresponded to

changes in another variable.

CHAPTER THREE

RESULTS

Screening

SPSS version 24 was used to examine missing data and descriptive statistics for all variables in the Workplace Perceptions and Behaviors dataset. The analysis included a total of 202 cases of which 18 cases were deleted because they did not complete the survey; 2 cases were deleted because participants were not employed outside the home; 1 case was deleted because the participant did not pass 3 or more of the 7 attention checks; 1 case was deleted because the participant did not pass one attention check and had the lowest completion time of 2.85 minutes. These respondents were not compensated because they did not meet at least one of the requirements listed on the consent form. All the remaining applicants received compensation ($n =$ 180), however, one of those cases was deleted because the participant entered 2 in the age field. Ultimately, 179 cases were used to test the three hypotheses.

All continuous variables were converted into the z-score standardized measure, and the following basic assumptions were tested: outliers, skewness and kurtosis, normality of residuals; multivariate outliers, and missing data analysis. Using the z-score criteria of ±3.3, 5 outliers were found on 4 of the variables: years worked in current organization had 1 outlier ($z = 3.47$, raw value = 25.25); interpersonal justice perceptions had 1 outlier ($z = -3.48$, raw value =

1.75); helping citizenship behaviors had 1 outlier (z = -3.61, raw value = 2.40);

and industry citizenship behaviors had 2 outliers (z = -4.16, raw value = 2.00; and

z = -3.61, raw value = 2.50). Except for the outliers found in years worked in

current organization, the remaining outliers were found on the organizational

justice perceptions and organizational citizenship behaviors subscales, so none

of them were removed, as they were within a reasonable range. Also, using the

z-score criteria of ±3.3, there were various variables that were skewed and

kurtotic (see Table 2), however, these results could be representative of the

population, so no transformations were performed.

Table 2. Descriptive Statistics.

Variable	N	M	SD	Skewness	Z Skewness	Kurtosis	Z Kurtosis
Procedural Justice	179	3.57	0.86	-0.53	-2.91	0.41	1.14
Distributive Justice	179	4.00	1.04	-0.88	-4.84	0.40	1.12
Interpersonal Justice	178	4.75	0.76	-1.29	-7.07	1.14	3.14
Informational Justice	179	4.00	0.80	-0.57	-3.12	-0.15	-0.42
Justice Perceptions	179	3.95	0.74	-0.65	-3.59	0.11	0.31
Helping Behaviors	179	5.60	0.87	-0.62	-3.40	0.73	2.01
Initiative Behaviors	179	5.20	0.98	-0.44	-2.43	-0.09	-0.26
Industry Behaviors	179	6.00	0.91	-0.97	-5.32	1.71	4.73
Boosterism Behaviors	179	5.20	1.35	-0.63	-3.43	-0.24	-0.66
Citizenship Behaviors	179	5.42	0.83	-0.27	-1.49	-0.29	-0.81
Conscientiousness at Work	179	4.10	0.55	-0.47	-2.58	0.20	0.57
Conscientiousness at Home	179	4.00	0.63	-0.43	-2.36	-0.04	-0.12
Need to Belong	179	2.70	0.76	0.12	0.66	-0.23	-0.63
Positive Affectivity	179	3.50	0.81	-0.39	-2.13	-0.20	-0.55
Negative Affectivity	179	1.30	0.61	2.07	11.37	5.78	16.01
Overall Affectivity	179	4.05	0.57	-0.84	-4.59	1.70	4.71
Role Reward	179	3.40	0.75	-0.35	-1.93	-0.30	-0.83
Role Commitment	179	3.60	0.72	-0.25	-1.36	-0.17	-0.46
Role Salience	179	3.50	0.67	-0.45	-2.49	-0.13	-0.37
Life Orientation	179	3.58	1.05	-0.56	-3.08	-0.52	-1.44
Agency	179	6.50	1.26	-0.96	-5.25	1.26	3.48
Pathway	179	6.25	1.18	-0.72	-3.93	0.31	0.85
Hope	179	6.38	1.14	-0.71	-3.92	0.40	1.12
Future	179	5.92	1.13	-0.36	-1.69	-0.37	-1.01

Notes: N= Total number of responses. M= Mean. SD= Standard Deviation.

When testing normality of residuals, both the predictors and the outcome were approximately normally distributed. Organizational justice perceptions, conscientiousness at work, and age had a minimum z-score of -2.47 and a maximum z-score of 1.97; and conscientiousness had a minimum z-score of -3.05 and a maximum z-score of 2.66. The Mahalanobis distance analysis was also conducted to test for multivariate outliers, using the $p < .001$ criteria. The Mahalanobis distance analysis had a minimum p-value of .009 and a maximum p-value of .998, so there were no cases identified as multivariate outliers. The missing value analysis program (MVA) was used to compute t-tests about the missing data. However, there were no variables with more than 1% of the data missing, so no t-tests were produced. Lastly, the following analyses were performed while controlling for years of experience, tenure, income, gender, age, education level, and employment information, but the results did not significantly differ from the analyses were those variables were not controlled for, so the later were interpreted.

The Pearson Product Moment bivariate correlations for the main OJP, conscientiousness and OCB scales and subscales along with the variable age are found in Table 3. The procedural, distributive, interpersonal and informational justice perceptions subscales were highly correlated with the main organizational justice perceptions scale ($r > .79$, $p < .01$). The subscales for helping behaviors, initiative behaviors, industry behaviors, and boosterism behaviors were moderately to highly correlated to the main organizational citizenship behaviors

scale ($r > .64$, $p < .01$). The main conscientiousness scale was moderately

correlated to industry behaviors and organizational citizenship behaviors ($r = .50$,

$p < .01$). The variable age was only significantly correlated to conscientiousness,

but had a low correlation ($r = .22$, $p < .01$). Lastly, both the main and subscales of

citizenship behaviors were low to moderately correlated to all organizational

justice perceptions scales ($r > .56$, $p < .01$); conscientiousness was low to

moderately correlated to the organizational justice perception subscales and

main scale ($r > .27$, $p < .01$); and the conscientiousness scale was moderately

correlated to the main organizational citizenship behaviors scale and subscales ($r

> .31$, $p < .01$). Overall, these correlations show that among all subscales and

main scales there is some level of correlation, with the exception of the age

variable. However, it is important to highlight the small, but significant correlation

between age and conscientious, which means that as age increases

conscientiousness also increases.

Table 3. Bivariate Pearson Product Moment Correlations for Main Scales and Subscales.

	1	2	3	4	5	6	7	8	9	10	11	12
1. Procedural Perceptions	1	--	--	--	--	--	--	--	--	--	--	--
2. Distributive Perceptions	.74**	1	--	--	--	--	--	--	--	--	--	--
3. Interpersonal Perceptions	.54**	.56**	1	--	--	--	--	--	--	--	--	--
4. Informational Perceptions	.62**	.61**	.74**	1	--	--	--	--	--	--	--	--
5. Organizational Justice Perceptions	.90**	.87**	.79**	.85**	1	--	--	--	--	--	--	--
6. Helping Behaviors	.39**	.36**	.37**	.40**	.44**	1	--	--	--	--	--	--
7. Initiative Behaviors	.55**	.47**	.38**	.46**	.56**	.60**	1	--	--	--	--	--
8. Industry Behaviors	.43**	.38**	.44**	.36**	.47**	.42**	.43 **	1	--	--	--	--
9. Boosterism Behaviors	.56**	.56**	.35**	.45**	.58**	.50**	.70**	.38**	1	--	--	--
10. Organizational Citizenship Behaviors	.61**	.57**	.47**	53**	.65**	.77**	.87**	.64**	.87**	1	--	--
11. Conscientiousness	.36**	.27**	.40**	.31**	.39**	.40**	.45**	.50**	.31**	.50**	1	--
12. Age in years	-.02	.02	.00	-.05	-.02	.00	-.01	.04	.01	.01	.22**	1

Note: Correlation is significant at **p<.01 (2-tailed).

Results: Hypothesis 1

A moderation analysis was conducted utilizing PROCESS module 1 in the SPSS 24 Software (Hayes, 2012) to test Hypothesis 1. The analysis tested whether age as a continuous variable moderated the relationship between organizational justice perceptions and organizational citizenship behaviors; *Multiple R* = .65, *Multiple R²* = .42, *F* (3, 172) = 41.43, *p* < .001. Results indicated that organizational justice perceptions can significantly predict organizational citizenship behaviors, *b* = .725, *t* (172) = 11.08, 95% CI [.60, .86], *p* < .001; however, age and the interaction between organizational justice perceptions and age were not significant predictors of organizational citizenship behaviors, *p* > .05. The interaction between the individual organizational justice perceptions subscales (e.g., procedural, distributive, interpersonal, and informational) and age was also tested, but none of the interactions were significant predictors of organizational citizenship behaviors (See Figure 5 and 6).

Additionally, this analysis was used to test whether age perceptions, how old one feels, how old one looks, or how old others think one is, moderated the relationship between organizational justice perceptions and organizational citizenship behaviors, but age perceptions did not significantly predict organizational citizenship behaviors. As a result, Hypothesis 1 was not supported.
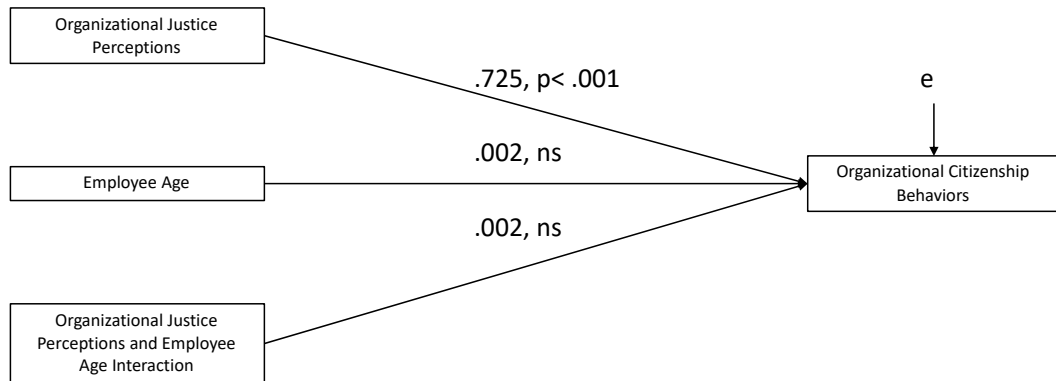
Figure 5. Path Analysis of the Interaction Effect of Organizational Justice Perceptions and Employee Age on Organizational Citizenship Behaviors.
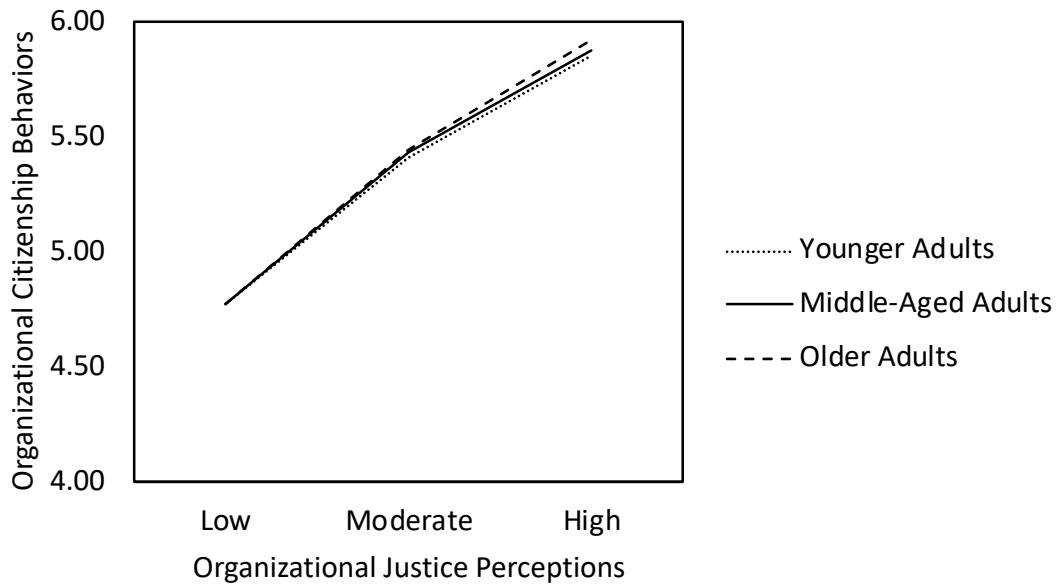

Figure 6. Interaction Effect of Age in the Relationship Between Organizational Justice Perceptions and Organizational Citizenship Behaviors.

Results: Hypothesis 2

A mediation analysis was conducted utilizing PROCESS module 4 in the SPSS 24 Software (Hayes, 2012) to test Hypothesis 2. The analysis tested whether conscientiousness mediated the relationship between organizational justice perceptions and organizational citizenship behaviors. The bootstrapping technique of 5000 samples to estimate the standard errors was used.

The first analysis was used to test whether justice perceptions alone could directly predict conscientiousness, *Multiple R* = .39, *Multiple R²* = .15, F (1, 177) = 31.39, *p* < .001. Results indicated that justice perceptions directly predicted conscientiousness, *unstandardized slope* = .287, t (177) = 5.60, 95% CI [.19, .39], *p* < .001. Then, another analysis was conducted to test whether organizational justice perceptions and conscientiousness could directly predict citizenship behaviors, *Multiple R* = .70, *Multiple R²* = .49, F (2, 176) = 85.50, *p* < .001. Results indicated that justice perceptions directly predicted organizational citizenship behaviors, *unstandardized slope* = .607, t (176) = 9.25, 95% CI [.48, .74], *p* < .001; and conscientiousness directly predicted citizenship behaviors, *unstandardized slope* = .438, t (176) = 4.93, 95% CI [.26, .61], *p* < .001. Subsequently, another analysis was conducted to test whether justice perceptions alone could directly predict citizenship behaviors, *Multiple R* = .65, *Multiple R²* = .42, F (1, 177) = 129.61, *p* < .001. Results indicated that justice perceptions directly predicted citizenship behaviors, *unstandardized slope* = .732, t (177) = 11.38, 95% CI [.61, .86], *p* < .001. A tested was conducted to determine

whether there was an indirect effect between justice perceptions and citizenship

behaviors through conscientiousness, *Multiple R²* = .13, *SE* = .03, 95% CI [.07,

.19], *p* < .05, and found that the indirect effect of conscientiousness significantly

accounted for 13% of the variance in the relationship between justice perceptions

and citizenship behaviors. As a result, Hypothesis 2 was supported. See Figure

7 below.
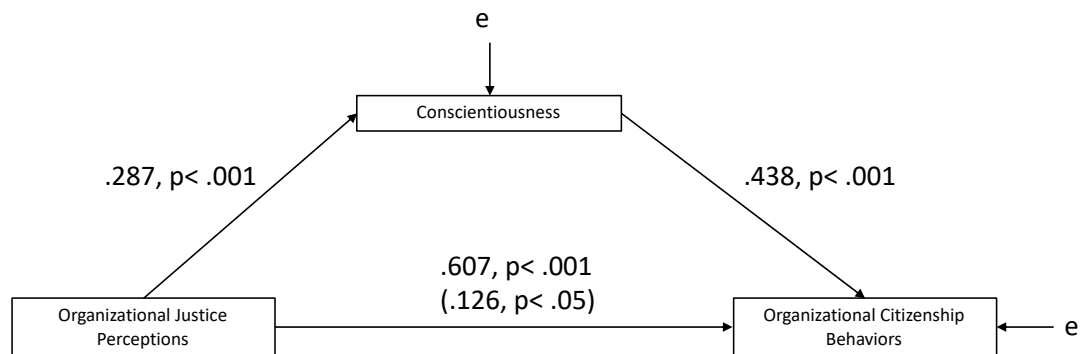
Figure 7. Path Analysis for the Relationship Between Organizational Justice
Perceptions and Organizational Citizenship Behaviors as Mediated by
Conscientiousness. The Indirect Effect of this Relationship is in Parentheses.

Results: Hypothesis 3

A mediated moderation analysis was conducted utilizing PROCESS

module 59 in the SPSS 24 Software (Hayes, 2012) to test Hypothesis 3. The

analysis tested whether employee age as a dichotomous variable (e.g.,

employees 39 years-old or younger, and employees 40 years-old or older) would

moderate the mediating effect of conscientiousness in the relationship between

organizational justice perceptions and organizational citizenship behaviors. This tested whether older employees would score higher in conscientiousness and engage in more organizational citizenship behaviors than younger employees when positive justice perceptions were experienced. The bootstrapping technique of 5000 samples to estimate the standard errors was used.

A mediated moderation analysis was conducted to test whether justice perceptions, age, and their interaction could predict conscientiousness, *Multiple R* = .41, *Multiple R²* = .17, *F* (3, 172) = 11.91, *p* < .001. Results indicated that justice perceptions directly predicted conscientiousness, *unstandardized slope* = .309, *t* (172) = 4.27, 95% CI [.17, .45], *p* < .001; age directly predicted conscientiousness, *unstandardized slope* = .159, *t* (172) = 2.07, 95% CI [.01, .31], *p* < .05; however, the interaction between organizational justice perceptions and age did not predict conscientiousness, *p* > .05. Next, another test was conducted to determine whether employees' age group (young or old) would predict the relationship between organizational justice perceptions and organizational citizenship behaviors through the mediating effect of conscientiousness, *Multiple R* = .71, *Multiple R²* = .50, *F* (5, 170) = 33.81, *p* < .001. Results indicated that justice perceptions directly predicted citizenship behaviors, *unstandardized slope* = .527, *t* (170) = 5.66, 95% CI [.34, .71], *p* < .001; conscientiousness directly predicted citizenship behaviors, *unstandardized slope* = .487, *t* (170) = 4.06, 95% CI [.25, .72], *p* < .001; however, age alone, the interaction between justice perceptions and age, and the interaction between

conscientiousness and age, did not predict citizenship behaviors, *p*> .05. Lastly,

there was an indirect effect that was statistically significant. Conscientiousness

was a significant mediator in the relationship between organizational justice

perceptions and organizational citizenship behaviors among young employees,

Multiple R² = .15, *SE* = .04, 95% CI [.07, .25], *p* < .05; and conscientiousness

was a significant mediator in the relationship between organizational justice

perceptions and organizational citizenship behaviors among older employees,

Multiple R² = .12, *SE* = .05, 95% CI [.03, .24], *p* < .05. See Figure 8 below.

Figure 8. Path Analysis of the Final Model Tested Whether Employee Age Would Moderate the Mediating Effect of Conscientiousness in the Relationship Between Organizational Justice Perceptions and Organizational Citizenship Behaviors.

Another analysis was also conducted to test whether employees' age group (young versus old) would predict the relationship between any of the four types of justice perceptions (e.g., procedural, distributive, interpersonal, and informational) and organizational citizenship behaviors through the mediating effect of conscientiousness. Employees' age only predicted the relationship between distributed justice perceptions and citizenship behaviors through conscientiousness, *Multiple R* = .69, *Multiple R²* = .48, *F* (5, 170) = 31.60, *p* < .001. The interaction between conscientiousness and age was not significant, *p* > .05, but the interaction between distributive justice perceptions and age was a significant predictor of citizenship behaviors through conscientiousness, *unstandardized slope* = .205, *t* (170) = 2.21, 95% CI [.02, .39], *p* < .05 (See Figure 9 below). More specifically, the indirect relationship between distributive justice perceptions and citizenship behaviors through conscientiousness was relatively the same for young *Multiple R²* = .08, *SE* = .04, 95% CI [.01, .17], *p* < .05, and old employees *Multiple R²* = .08, *SE* = .04, 95% CI [.03, .17], *p* < .05. However, the direct relationship between distributive justice perceptions and citizenship behaviors through conscientiousness was higher for old employees *Multiple R²* = .49, *SE* = .07, *t* (5, 170) = 6.97, 95% CI [.35, .63], *p* < .001, than their younger counterparts *Multiple R²* = .29, *SE* = .06, *t* (5, 170) = 4.75, 95% CI [.17, .42], *p* < .001. As a result, Hypothesis 3 was only partially supported.
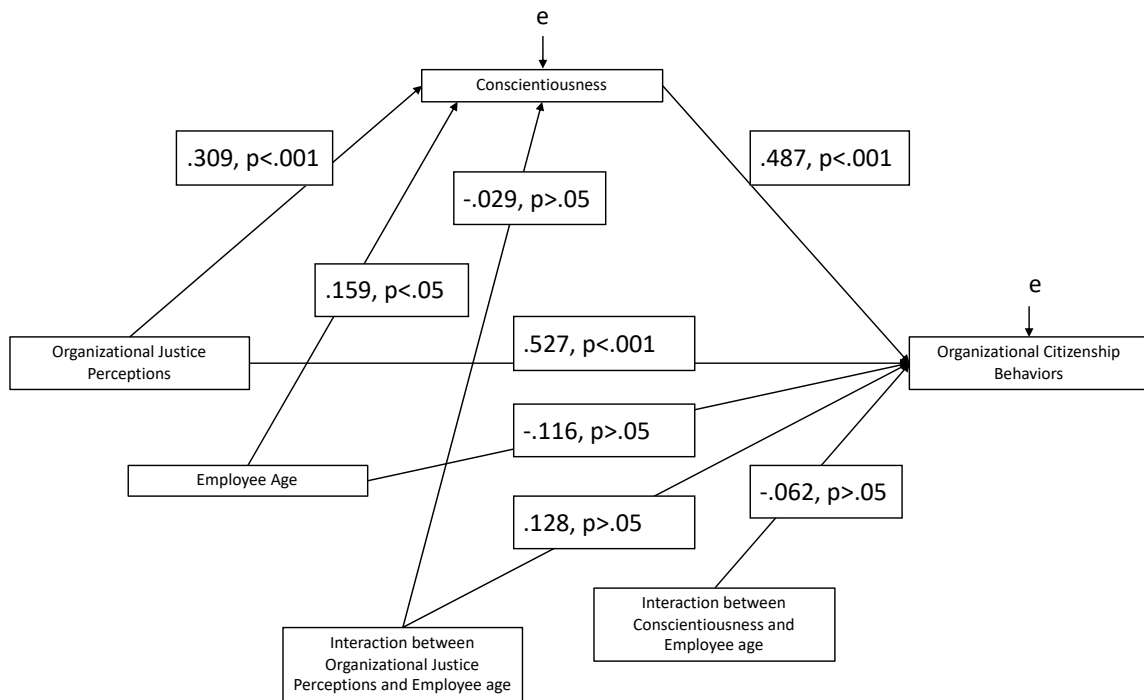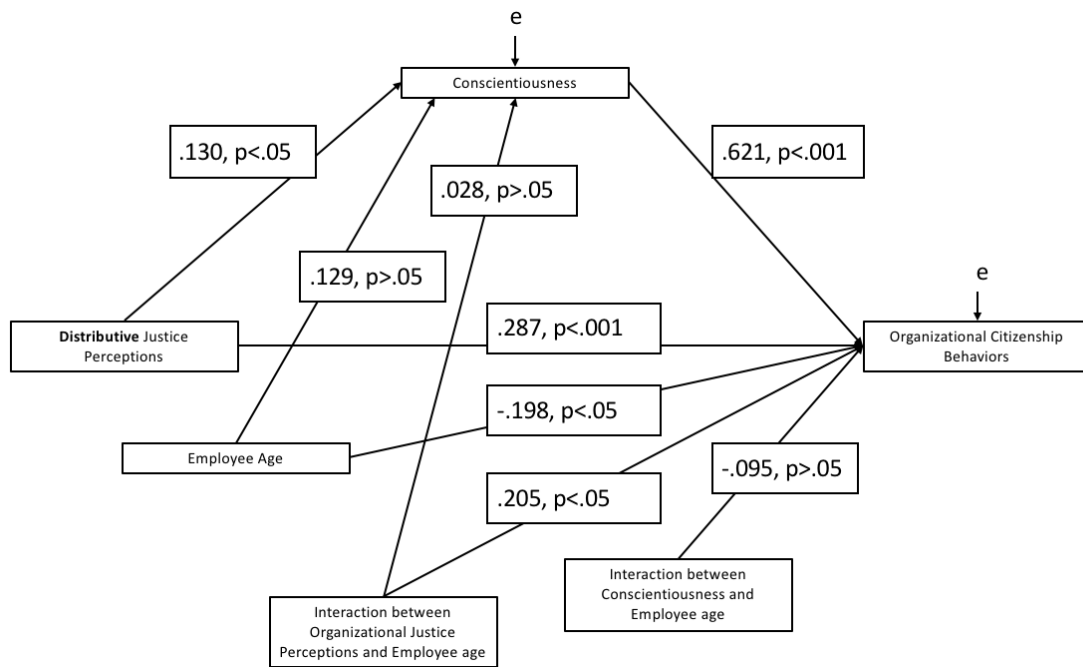
Figure 9. Path Analysis of the Final Model Tested Whether Employee Age Would Moderate the Mediating Effect of Conscientiousness in the Relationship Between Distributive Justice Perceptions and Organizational Citizenship Behaviors.

Structural Equation Model

A confirmatory factor analysis was estimated through EQS structure equation software to explore Hypothesis 3. The analysis was conducted on 13 items, 4 items from the Organizational Justice Scales, 4 items from the Organizational Citizenship Behaviors Scale, and 4 items from the HEXACO-60 measure of trait Conscientiousness Scale on 3 factors: organizational justice (Factor 1), conscientiousness (Factor 2), and citizenship behaviors (Factor 3). First, several assumptions were tested, including multivariate normality, multicollinearity, singularity, and factorability of R normality. A total of 179 cases

60

were used to confirm a factor structure of the partial scales when these scales are combined.

Mardia's Coefficient test was conducted, using the z-score criteria of ±3.3 to test for multivariate normality. Mardias' normalized coefficient = 62.48, $p <$ .001, indicated violation of multivariate normality, suggesting that the measured variables were not normally distributed. Therefore, the models were estimated with maximum likelihood estimation and tested with the Satorra-Bentler scaled chi-square (Satorra & Bentler, 1988).

Multicollinearity and singularity were tested through a bivariate correlation analysis and no variables appeared to be highly correlated with each other. The highest correlation found in this analysis was between the variables "distributive justice" and "procedural justice"; and "informational justice" and "interpersonal justice"; both correlated at $r = .74$, $p < .01$. Factorability assumption was achieved, the correlation scores were close to or above .30 (see Table 2).

The hypothesized model is in Figure 10. Circles represent latent variables, and rectangles represent measured variables. The hypothesized model examined the predictors: age (as a continuous variable), justice perceptions, conscientiousness, and citizenship behaviors. It was hypothesized that employees' age would directly predict justice perceptions; that justice perceptions and conscientiousness would directly predict citizenship behaviors; and that conscientiousness would directly predict citizenship behaviors. Justice perceptions served as an intervening variable between employees' age and

conscientiousness; and conscientiousness served as an intervening variable

between justice perceptions and citizenship behaviors.
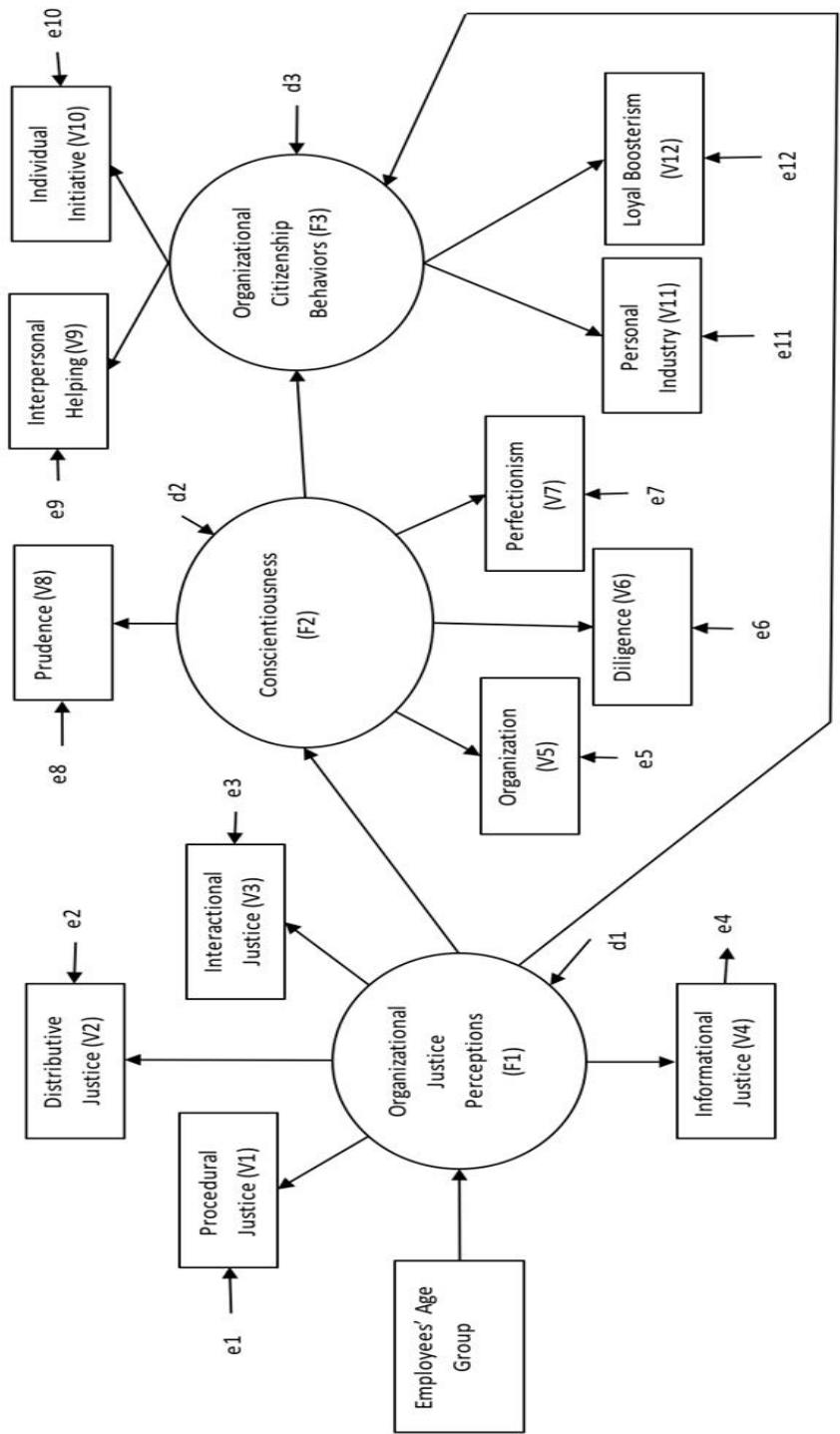
Figure 10. Structural Equation Model Tested Whether Employees' Age Group Will Predict the Relationship Between Organizational Justice Perceptions and Organizational Citizenship Behaviors Through the Mediating Effect of Conscientiousness.

63

Maximum likelihood estimation was employed to estimate all models. The independence model that tests the hypothesis that all the measured variables are independent of one another was easily rejected, $X^2 = 905.75$, $p < .001$. Therefore, the hypothesized model was tested using the Robust Satorra-Bentler model $X^2 = 111.22$, $p < .001$, Robust CFI = .94, Robust RMSEA = .067, 90% CI (.046, .086), which indicated a good model fit. The final goodness-of-fit model with significant parameter estimates is presented in standardized form in Figure 10. The model includes parameter estimates, and in parentheses the robust statistics.

Specific parameters are now examined. All the path coefficients between measured variables and factors in the model are significant, $p < .05$, except three path coefficients: the path between employees' age and justice perceptions; the path between justice perceptions and interactional justice; and the path between interactional justice and its parameter estimate. Overall, organizational justice perceptions increased as conscientiousness increased (unstandardized coefficient = .45); citizenship behaviors increased as conscientiousness increased (unstandardized coefficient = .68); and citizenship behaviors increased as justice perceptions increased (unstandardized coefficient = .75) (See Figure 10). As a result, Hypothesis 3 was only partially supported.
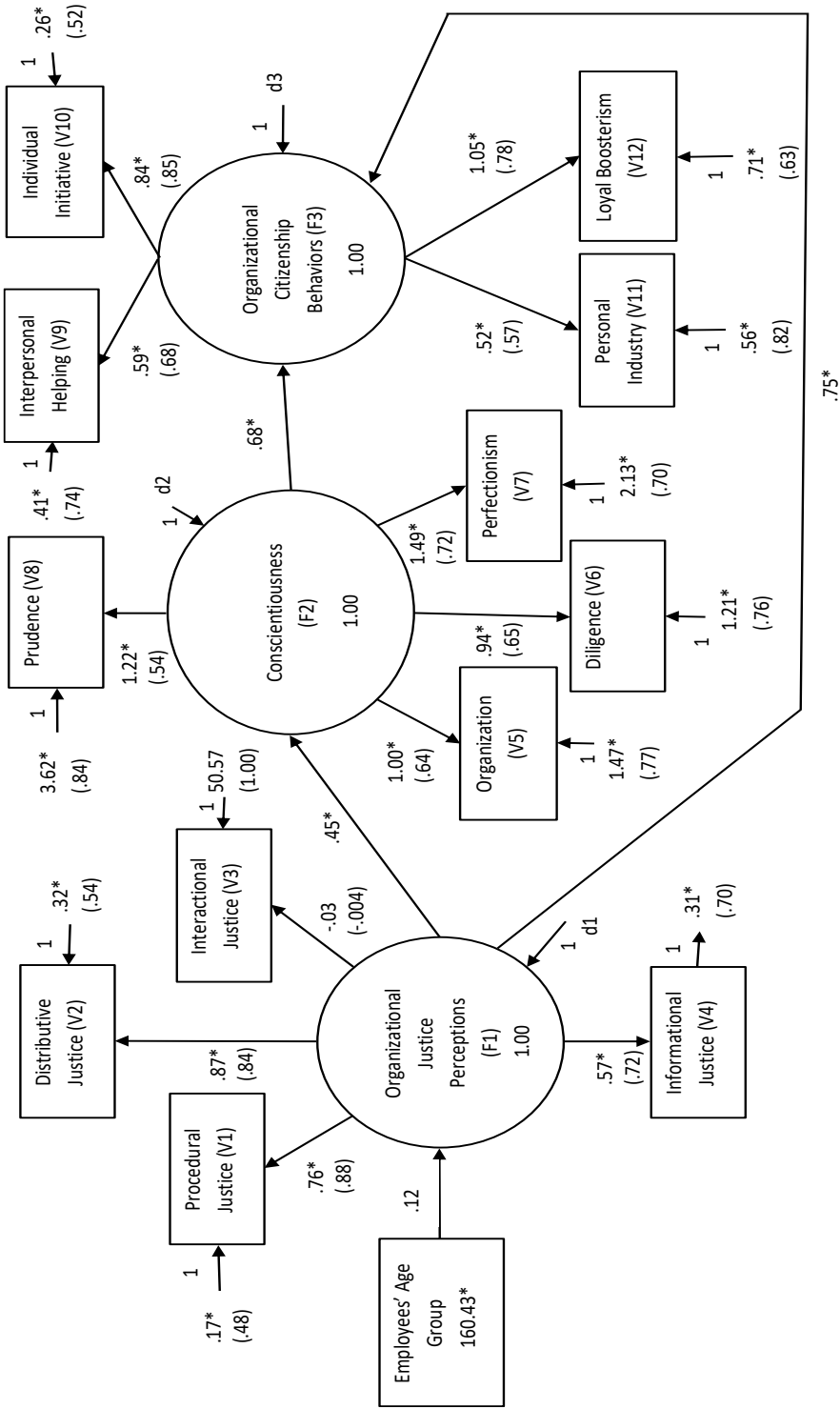
Figure 11. The Final Goodness-of-Fit Model with Significant Parameter Estimates are Presented in Standardized Form, with Robust Statistic Parameter Estimates in Parentheses. Note: Test Statistics Significant at *p<.05.

65

Ancillary Results

Even though for the purpose of this research, the confirmatory factor

analysis was sufficient to test Hypothesis 3, to help aid future research, an

exploratory factor analysis was also conducted. These results can help future

research determine whether the measures used in this study to test justice

perceptions, conscientiousness and citizenship behaviors are the most

appropriate measures to be used, or if other more clearly defined measures

should be used instead.

Exploratory Factor Analysis

A principle axis factor analysis was conducted on the twelve items with an

oblique rotation (direct oblimin) in SPSS. Small coefficients below 0.3 were

suppressed, and the Kaiser-Meyer-Olkin measure indicated that the sample size

was adequate for this analysis, KMO = .87. The maximum number of iterations

for convergence was set to 25. The factor analysis was conducted with three

fixed number of factors to extract.

The factor analysis was set to extract three factors, which explained

44.24%, 13.60%, and 9.53% of variance, respectively. There were double

loadings on factors two and three, conscientiousness and citizenship behaviors.

The items that clustered on the same factor suggest that there is an overlap

among conscientiousness and citizenship behaviors, which was expected (See

Table 4). Factor 1 represents a respondent's overall justice perceptions towards

the organization. Factor 2 appears to represent employees' conscientiousness

levels at work. Factor 3 appears to represent organizational citizenship

behaviors. Although some of the items loaded onto two factors, overall, there are

three distinctive categories (See Table 5).

Table 4. Factor Analysis Table for Pattern Matrix Loadings.

Item	Factor 1	Factor 2	Factor 3	h^2
Procedural Justice	0.77			0.73
Distributive Justice	0.82			0.74
Interpersonal Justice	0.83			0.74
Informational Justice	0.85			0.74
Helping Behaviors			-0.76	0.65
Initiative Behaviors			-0.79	0.78
Industry Behaviors		0.41		0.49
Boosterism Behaviors			-0.71	0.72
Organizational Conscientiousness		0.77		0.63
Diligence Conscientiousness		0.61	-0.34	0.56
Perfectionism Conscientiousness		0.48	-0.53	0.61
Prudence Conscientiousness		0.83		0.70
Eigenvalue of Factor	5.31	1.63	1.14	
% of Total Variance	44.24	13.60	9.53	

Note. Extracted using Principle Axis Factoring. Rotated using Oblimin with Kaiser Normalization.

Table 5. Factor Correlation Matrix

Factor	Factor 1	Factor 2	Factor 3
Organizational Justice	1	--	--
Citizenship Behaviors	26	1	--
Conscientiousness	-0.43	-0.28	1

*Note*s. Extracted using Principle Axis Factoring. Rotated using Oblimin with Kaiser Normalization.

The Pearson Product Moment bivariate correlations for the main OCB scale and the positive-negative affectivity (PANAS), life-role salience (LRS), life-orientation (LOT-R), hope and future scales are found in Table 6. These correlations indicate that the need to belong does not correlate to OCBs; and that as positive affectivity, life role salience, life orientation, hope increases, and future perceptions increase, OCBs also increase. Overall, hope seemed to be the highest scale correlating to OCBs and need to belong did not significantly correlate.

Table 6. Bivariate Pearson Product Moment Correlations for Ancillary Scales.

	1	2	3	4	5	6	7
1. Organizational Citizenship Behaviors	1	--	--	--	--	--	--
2. Need to Belong	-.02	1	--	--	--	--	--
3. PANAS	.59**	-.16*	1	--	--	--	--
4. LRS	.51**	.11	.39**	1	--	--	--
5. LOT-R	.51**	-.25**	.67**	.25**	1	--	--
6. Hope	.62**	-.15*	.65**	.32**	.67**	1	--
7. Future	.58**	-.29**	.73**	.25**	.76**	.92**	1

Note: Correlation is significant at **$p<.01$ (2-tailed).

CHAPTER FOUR

DISCUSSION

Discussion: Introduction

Given the valuable contributions of older employees in the workforce, the aim of this study was to investigate the processes by which age affects Organizational Justice Perceptions (OJPs), the expression of conscientiousness traits, and Organizational Citizenship Behaviors (OCBs). Results confirmed that conscientiousness serves as an intervening variable between OJPs and OCBs. However, results indicated that age did not serve as a moderator in the relationship between OJPs and OCBs. Lastly, results from Hypothesis 3 further confirmed the results obtain on Hypothesis 1 and 2. The integrative model was only partially supported, when further testing age as a continuous predictor of the relationship between OJPs and OCBs through conscientiousness, the results showed that conscientiousness affects the relationship between OJPs and OCBs, but employee age was only predictive of this relationship when the interaction included distributive justice perceptions, conscientiousness and OCBs.

Overview of the Results

The results for Hypothesis 2 provided support to the initial idea that the indirect effect of conscientiousness in the relationship between OJPs and OCBs

is more significant than the direct effect between OJPs and OCBs. OJPs derive from procedural consistency and/or biases, fair work/resource distribution, human interactions, and accuracy of information (Colquitt et al., 2001), and have been found to directly predict OCBs given their influence on the individual's organizational commitment, job-related affect, and desire to remain with the organization (Rhoades et al., 2002). However, conscientiousness can account for the individual differences that are not accounted for with OJPs alone. Personality and internal cognitive processes affect how employees react to work situations and organizational practices, as such, OCBs are the result of a personal evaluation about work-related context rather than the evaluation of specific outcomes (Moorman, 1991; Rhoades et al., 2002; Sasaki et al., 2013). In addition, researchers have found that higher levels of conscientious-related traits, such as self-regulation, self-efficacy, and self-discipline, promote more OCBs; and traits such as persistence, psychological maturity, and emotional regulation, promote more positive OJPs (Borman et al., 2001; Kim et al., 2016; Lachman, 2004; Sasaki et al., 2013). Therefore, previous research provides supporting evidence that personality factors related to conscientiousness, affect more strongly employees' OJPs and their behaviors in the workplace than justice perceptions alone. This means that conscientiousness is a key personality trait that accounts for those individual differences that influence how employees think about their organizations and act as a consequence of those thoughts.

The findings with regard to Hypothesis 2 are consistent with other studies that have found that conscientiousness and OCBs significantly correlate (Borman et al., 2001), and that personality alters OJPs (Sasaki et al., 2013). As has been found in similar studies, these results indicate that OCBs increase as conscientiousness increases (Borman, et al., 2001; Roberts, Walton, & Viechtbauer, 2006), and organizational practices strongly influence conscientiousness levels via the trait activation theory (Kim et al. 2016). The main difference found between this study and previous studies is the consideration of employee age, conscientiousness, OJPs and OCBs. Previous studies had examined the effects of conscientiousness and job performance in relation to counterproductive work behaviors, but not citizenship behaviors (Kim et al., 2016); the direct effect of OJPs and OCBs (Colquitt et al., 2001); and the effects of personality and OJPs, not including OCBs (Sasaki et al., 2013). A similar study analyzed the effects of conscientiousness on the relationship between OJPs and workplace behaviors, and the outcome being analyzed was Counter-productive Work Behaviors (CWBs) (Kim et al., 2016), which is the opposing construct of OCBs.

Hypothesis 1 predicted that employee's age would moderate the relationship between OJPs and OCBs, however, results did not support this relationship. After analyzing the results, OJPs directly predicted OCBs, but neither age nor the interaction between age and OJPs predicted OCBs. This result is in line with research studies suggesting that age is difficult to assess

72

because aging perceptions are affected by individual differences experienced throughout the life span, such as socialization, self-control, and situational factors (Bohlmann, Rudolph, & Zacher, 2017; Ng et al., 2010; Tittle et al., 2003). Brienza et al. (2017) also argued that instrumental and relational needs, which change throughout life, must be satisfied for people to utilize their self-regulatory resources so as to maintain appropriate behaviors. In addition, other studies have suggested that individuals' perceptions about their chronological and subjective age, and their time perspectives, change employees' motivation, engagement, and goal commitment (Akkermans et al., 2016; Kooij et al., 2014). To further test hypothesis 1, employees' perceptions of how old they felt, how old they thought they looked, and how old others thought they were, were tested, and no significant relationship to support this hypothesis was found. Lastly, the OJP scale was broken into the procedural, distributive, interpersonal and informational subscales to test the individual effects of each subscale and found no significant relationships.

The lack of results with perception of age contradict what Bohlmann et al. (2017) had suggested, in that they believed age could be better assessed if subjective age perceptions were accounted for along with chronological age. Along the same lines, other studies had found that OJPs and OCBs vary with age (Brienza et al., 2017), and that as people age they seek stronger social roles (Brienza et al., 2017), which inspires them to engage in more helping behaviors (Roberts et al., 2006). These findings are important because they suggest that, at

least for this population, regardless of the employees' age, organizational

practices and behaviors were not affected, which means that all employees have

an increase in OCBs when experiencing positive OJPs, and a decrease in OCBs

when experiencing negative OJPs. Despite the results found in previous

research studies suggesting that employees differ in justice perceptions as a

function of their age (e.g., Brienza et al., 2017); a moderate link exists between

age and OJPs; age is significantly related to job involvement (Ng & Feldman,

2010); and OJPs change with age (Innocenti et al., 2012); hypothesis 1 was not

supported. The main difference found between this study and previous studies is

that OCBs was the outcome studied, whereas CBWs is the variable that has

been previously studied (Brienza et al., 2017). However, both studies relate in

that they both looked at the effects of age as a moderating variable in the

relationship between OJPs and work performance. Although Brienza et al.

(2017), studied CWBs as their outcome variable, both studies are highly related,

because again, CWBs represent the opposing construct of OCBs.

Hypothesis 3 tested the integrative model through a moderated mediation

analysis, which included employee age, conscientiousness, OJPs, and OCBs as

the main variables, and found only partial support. The first analysis tested

whether age affected the relationship between OJPs, conscientiousness, and

OCBs. Results indicated a significant relationship between OJPs and

conscientiousness; OJPs and OCBs; employee age and conscientiousness; and

conscientiousness and OCBs, which further support results obtain in Hypotheses

74

1 and 2. In addition, the significant findings obtained from this model suggest that there is a direct relationship between employee age and conscientiousness, which aligns with previous research suggesting that conscientiousness increases as people age (Roberts et al., 2006). However, no relationship was found between employee age and OCBs; the interaction between OJPs and employee age and conscientiousness; nor the interaction between conscientiousness and employee age and OCBs. This means that neither employee age nor its interaction with OJPs or conscientiousness are predictive of OCBs. These results are in contradiction to the idea that including age as a moderator would help predict the work behaviors that explain the variation in job performance (Bohlmann et al., 2017). The second analysis testing Hypothesis 3 through a structural equation model, tested whether employee age would predict the relationship between OJPs, conscientiousness, and OCBs. The results from this analysis also support the results obtained from Hypothesis 1 and 2, where Hypothesis 2 was supported, but Hypothesis 1 was not.

Lastly, an additional moderated mediation analyses were conducted to test whether the employees' age group would predict the relationship between any subtype of justice perceptions and OCBs while conscientiousness served as an intervening variable. Results indicated that the interaction between employees' age group and distributive justice was predictive of OCBs when conscientiousness served as an intervening variable. This means that employees' age helps moderate the mediating variable conscientiousness, but

only in the relationship between distributive justice and OCBs. These results are in line with research suggesting that fair distributive practices motivate discretionary effort (Frenkel et al., 2016), and support the idea that employees are sensitive to different forms of justice perceptions as they age (Brienza et al., 2017). Since employees' age had no predictive power in the relationship between OJPs, conscientiousness, and OCBs in the first two analyses testing hypothesis 3, these results only partially support the integrative model, and indicate that the effect of age group varies depending on the type of organizational justice perception (e.g., procedural, distributive, interpersonal, and informational) individuals care most about (Brienza et al., 2017). This would lend support to the equity and fairness theories that posit that employees' performance and inputs vary depending on their perceptions of fairness towards the organization and their own subjective measures about organizational practices (Garcia-Izquierdo et al., 2012; Horvath et al., 2007; Moorman, 1991).

Since conscientiousness was found to increase with age and promote OCBs, and conscientiousness was found to affect the relationship between older employees and OCBs (Borman et al., 2001; Hedge et al., 2019; Roberts et al., 2006; Specht et al., 2011), these findings provided support to hypothesis 3. The results from the first two analyses testing Hypothesis 3 may support the idea that employees' justice perceptions change overtime as a result of experienced treatment (Hausknecht et al., 2011), which would mean that regardless of their age group, justice perceptions are more a result of experiences than age per se.

This model is unique in that no other research study has used employee age, OJPs, conscientiousness, and OCBs in the same model. This is important because it looks at a new possible relationship among the aforementioned variables and significantly extends previous work of employee age altering the effects on emotions and workplace behaviors (Brienza et al., 2017). Additionally, this research extends methodological approaches to work and aging in the workplace (Bohlmann et al., 2017).

<center>Limitations</center>

This research study had several key limitations that hindered the generalizability of these results. First, the sample was drawn from an online survey system that required people to be familiar with computer systems, technology, and on-line surveys. This means that older participants from this sample may not be good representatives of the general population, as being part of this survey platform requires skills and abilities not possessed by much of the older population. Thus, individuals who form part of this survey platform may not necessarily experience the challenges older individuals face in the workplace and may not be exposed the same workplace opportunities (Finkelstein, Hanrahan & Thomas, 2019).

Second, for this surveying system, participants are being paid to take the survey, as such, it could be that they are in a rush to complete the survey to optimize their chances of earning more money or improving their effective pay

<center>77</center>

rate. Obal (2014) argued that Mturk workers "have an innate desire to complete studies quickly" to increase their hourly payed rate (p. 2). This is a limitation because there could be more careless responding and no repercussions to people who answer the surveys quickly or respond with false information (Obal, 2014). Although attention checks were used to target any potential issues with careless responding, this study was composed of expert survey takers who may know ways to pass the checks without answering the survey carefully.

Third, a pilot test was conducted to estimate how long it would take participants to complete this survey and it was estimated that it would take near 30 minutes to complete. However, most of the participants were able to complete the survey in about 10 to 15 minutes, which might be concerning given the estimate. However, according to Obal (2014), when testing the legitimacy of survey responses from Mturk workers when compared to responses from students, they found non-response error rates to be 92% for MTurk workers, as compared to 95% for students.

Fourth, the sample consisted mostly of white individuals. Ethnic background might itself be a factor influencing varying justice perceptions, given that white individuals may experience different "unearned advantages and benefits" than people of other ethnic backgrounds (Case, 2007). In addition, almost half of the participants had completed a 4-year college degree (48%). Because employees with higher levels of education have been found to have more skilled jobs, flexible schedules, benefits, access to resources, higher-

wages, bigger social networks, higher opportunities for upward social mobility, and more chances to maintain a work-life balance (Haley-Lock, Berman & Timberlake, 2013), education level may have influenced participants' job-related experiences and opportunities, future time perspectives, and work-related motives.

Lastly, surveys were used to collect data that only allow us to conduct correlation analysis and prevent us from making causal inferences about the results. Nevertheless, conscientiousness was found to mediate the relationship between OJPs and OCBs (Hypothesis 2) and found that age moderates the mediating effects that conscientiousness has on distributive justice perceptions and OCBs (Hypothesis 3). Since Hypothesis 1 was not supported, future research should be conducted with a more representative sample of the population to replicate this study and further support the validity of these findings.

Theoretical Implications

Since the hypothesis that age has a moderating effect between organizational justice perceptions (OJPs) and organizational citizenship behaviors (OCBs) was not supported, future research should consider studying other individual differences associated with age and change over time to include in this integrative model. For instance, factors that correlate to age, such as workers' abilities, motives, experiences, behaviors over time, physical health and job performance, and non-age-related factors, such as physiological capabilities, self-regulatory abilities, social roles and career stage (Bohlmann et al., 2017)

could help better explain the link between OJPs and OCBs. Also, since conscientiousness mediated the relationship between organizational justice perceptions and organizational citizenship behaviors, future research should study conscientious-related traits to determine what aspects of conscientiousness lead to higher OCBs. For example, this study did not seek to analyze traits such as orderliness, dutifulness, autonomy, impulsivity, self-discipline, altruism, and compliance (Hedge et al., 2019; Huang, et al., 2004; Ones et al., 1996; Roberts et al., 2006), which are some traits associated with conscientiousness. Furthermore, since only partial support was found for the moderating effect of age on the relationship between justice perceptions and OCBs through conscientiousness, future research should use other measures that target OCBs to further assess these results. Observational measures might be more nuanced in measuring OCBs overtime and provide more definitive results to assess this hypothesis (Bohlmann et al., 2017). Lastly, future research should integrate chronological age and subjective age into one model and measure it using polynomial regression and response-surface analyses (Bohlmann et al., 2017) to more accurately measure aging; doing so may provide support for new relationships within this model.

Practical Implications

The results from this integrative model can help advance the knowledge about age group differences in key organizational relationships. For example, past research has shown that organizations can benefit from retaining older

employees in the organization as they are valuable assets to organizations (Barnes-Farrell et al., 2019). The mediation model in this research, highlights the important influence of conscientiousness in relation to justice perception and citizenship behaviors. As such, high levels of conscientiousness may save organizations money through lower engagement of counterproductive work behaviors and increase profit through higher engagement of organizational citizenship behaviors. Helping behaviors can also help create a helping culture within the organization that teachers new incoming employees to mimic their coworkers' behaviors. When entering the organizations, incoming employees could be more prone to help, engage in ethical practices, socialize, be more satisfied, experience less stress, and higher levels of organizational commitment. Additionally, if management recognizes the valuable contributions of older employees, it can help decrease age discrimination and motivate older employees to remain in the organization past traditional retirement ages. The longer older employees remain in organizations should allow a more thorough knowledge transfer between experts and novices (Feldman & Shultz, 2019). Also, younger employees can become more committed to the organization if they see potential for a lasting career. As such, some of the practical implications that could result from retaining older and more conscientious employees in an organization.

Future researchers should also study how older employees impact younger generations in the workplace. First, future studies would analyze the role

older employees' play in training and transferring skills to novices and how they help inspire organizational citizenship behaviors among younger employees. It is known that organizational climate and culture affect employees' outcomes in an organization, so older employees may play a key role in establishing good organizational practices (Hedge et al., 2019). Therefore, future researchers should focus on learning how older employees' knowledge/expertise, conscientious practices, and organizational citizenship behaviors can be seamlessly transferred to incoming employees.

Conclusion

Integrating various research areas that had been previously studied in simpler models, provides a new path to drive future aging research. In this thesis, a more complex understanding of the relationship between employees' age, organizational justice perceptions, conscientiousness, and organizational citizenship behaviors, was presented. Although these findings suggested that age is only predictive of relationship between distributive justice perceptions and organizational citizenship behaviors when conscientiousness serves as an intervening variable, it supports the beliefs that there are differences in justice perceptions, levels of conscientiousness, and citizenship behaviors, as a function of age. Ultimately, the present research adds to the literature most importantly with regard to the effects of aging by providing a more complex conceptual

model, several theoretical and practical implications, and new directions for

future research.

APPENDIX A

DEMOGRAPHICS QUESTIONNAIRE

Please answer the following questions: (select one of each response)

DEMOGRAPHICS

Please answer the following demographic questions. For questions with multiple choices, please choose the one response that best applies to you.

1. What is your gender?
   - ❏ Male
   - ❏ Female
   - ❏ Transgender
   - ❏ Non-binary
   - ❏ Other (please Specify) _____

2. What is your age? _____ years

3. What is your marital status?
   - ❏ Single, never married
   - ❏ Married
   - ❏ Living together
   - ❏ Divorced
   - ❏ Widowed

4. How many people live in your household? (Enter a number and count yourself)____

5. How many dependents (e.g., children, parents) do you have? (Enter a number and count yourself) _____

6. What is your ethnicity?
   - ❏ Native American
   - ❏ White
   - ❏ Asian
   - ❏ African American
   - ❏ Latino/Hispanic
   - ❏ Other _____

7. What is your education level?
   - ❏ Less than 8th grade
   - ❏ Grade 9–11
   - ❏ Completed high school or GED
   - ❏ Additional non-college training (e.g., technical or trade school)
   - ❏ Some college
   - ❏ Completed 2-year college degree (A.A., A.S.)
   - ❏ Completed 4-year college degree (B.A., B.S.)
   - ❏ Completed college with advanced degree (M.S., M.A., Ph.D., M.D., etc.)

8. Which of the following best describes your employment status? (Check the box)
   ❑ Full time (35 hours a week or more)
   ❑ Part time (1-34 hours a week)
   ❑ Unemployed

9. How many years have you been employed? _____

10. How many jobs have you had since you turn 18 years old? _____

11. How long have you worked for your current organization?

    _____ years _____ months

12. What is your household income?
    ❑ Under $20,000
    ❑ $20,000 - $34,000
    ❑ $35,000 - $74,999
    ❑ $75,000 or more

13. On average, how many hours (including overtime) do you work each week?
    ❑ Less than 10 hours per week
    ❑ 10 to 20 hours per week
    ❑ 20 to 30 hours per week
    ❑ 30 to 40 hours per week
    ❑ More than 40 hours per week

14. What industry do you work in?
    ❑ Public
    ❑ Private
    ❑ Other (Please Specify) _____

15. If any, what type employment benefits do you receive? (Check all that apply)
    ❑ Health insurance
    ❑ Dental Insurance
    ❑ Vision Insurance
    ❑ Life Insurance
    ❑ Disability Insurance
    ❑ Paid Sick days
    ❑ Paid Vacation (2 or more weeks/year)
    ❑ Paid Parental leave
    ❑ Paid Holidays
    ❑ Paid Bereavement days
    ❑ Flexible Spending Account

❏ Free Transportation
❏ 401K or 403(b) Retirement Plans

AGE PERCEPTIONS

16. How old do you feel?
❏ Much younger than I am
❏ A little younger than I am
❏ I feel my age
❏ A little older than I am
❏ Much older than I am

17. How old do you think you look?
❏ Much younger than I am
❏ A little younger than I am
❏ I feel my age
❏ A little older than I am
❏ Much older than I am

18. How old do others think you look? (e.g., the answer can be based on comments you hear from others)
❏ Much younger than I am
❏ A little younger than I am
❏ I feel my age
❏ A little older than I am
❏ Much older than I am

Cameron, L. D., Durazo, A., Corona, R., Ultreras, M., & Blanco, M. (2016). NCI-UC Merced mHealth project: Translation and adaptation of the HealthyYouTXT Physical Activity program into Spanish. Report prepared for the National Cancer Institute's HealthyYouTXT group.

Cameron, Durazo, Ultreras and Blanco's (2016) socio-demographic characteristics scale was expanded and modified by Martha Blanco. The author of this Thesis created all of the work-related items to better capture work-related demographics and created the three-item Age Perceptions scale.

APPENDIX B

ORGANIZATIONAL JUSTICE SCALE

Procedural Justice

The questions below refer to the procedures your supervisor uses to make decisions about pay, rewards, evaluations, promotions, assignments, etc. To what extent:

1. Have you been able to express your views and feelings during those procedures?
2. Have you had influence over the decisions arrived at by those procedures?
3. Have those procedures been applied consistently?
4. Have those procedures been free of bias?
5. Have those procedures been based on accurate information?
6. Have you been able to appeal the decisions arrived at by those procedures?
7. Have those procedures upheld ethical and moral standards?

Distributive Justice

The questions below refer to the outcomes you receive from your supervisor, such as pay, rewards, evaluations, promotions, assignments, etc. To what extent:

1. Does your outcomes reflect the effort you have put into your work?
2. Is your outcome appropriate for the work you have completed?
3. Does your outcome reflect what you have contributed to the organization?
4. Is your outcome justified, given your performance?

Interpersonal Justice

The questions below refer to the interactions you have with your supervisor as decision-making procedures (about pay, rewards, evaluations, promotions, assignments, etc.) are implemented. To what extent:

1. Has your supervisor treated you in a polite manner?
2. Has your supervisor treated you with dignity?
3. Has your supervisor treated you with respect?
4. Has your supervisor refrained from improper remarks or comments?

Informational Justice

The questions below refer to the explanations your supervisor offers as decision-making procedures (about pay, rewards, evaluation, promotions, assignments, etc.) are implemented. To what extent:

1. Has your supervisor been candid in (his/her) communications with you?
2. Has your supervisor explained the procedures thoroughly?
3. Were your supervisor's explanations regarding the procedures reasonable?
4. Has your supervisor communicated details in a timely manner?
5. Has your supervisor seemed to tailor (his/her) communications to individuals' specific needs?

5-point scale:
1 = to a small extent and 5 = to a large extent.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386 – 400.

APPENDIX C

ORGANIZATIONAL CITIZENSHIP BEHAVIORS SCALE

Using the scale below, please indicate the extent to which you agree or disagree with each statement

1 = Strongly Disagree 5 = Somewhat Agree
2 = Disagree 6 = Agree
3 = Somewhat Disagree 7 = Strongly Agree
4 = Neither Disagree or Agree

Interpersonal Helping
1. I go out of my way to help co-workers with work related problems.
2. I voluntarily help new employees settle into their job.
3. I frequently adjust my work schedule to accommodate other employees' request for time off.
4. I always go out of my way to make newer employees feel welcome in the work group.
5. For this item, please select "agree" if you are answering this survey carefully.
6. I show genuine concern and courtesy toward co-workers, even under the most trying business or personal situation.

Individual Initiative
1. For issues that may have serious consequences, I express opinions honestly even when others may disagree.
2. For this item, please select "disagree" if you are answering this survey carefully.
3. I often motivate others to express their ideas and opinions.
4. I encourage hesitant or quiet co-workers to voice their opinions when they otherwise might not speak up.
5. I do not feel "emotionally attached" to this organization.
6. I frequently communicate to co-workers suggestions on how the group can improve.

Personal Industry
1. I rarely miss work even when I have a legitimate reason for doing so.
2. I perform my duties with unusually few errors.
3. I perform my duties with extra-special care.
4. I always meet or beat deadlines for completing work.

Loyal Boosterism
1. I defend the organization when other employees criticize it.
2. I encourage friends and family to utilize the organization's products.
3. I defend the organization when outsiders criticize it.
4. I show pride when representing the organization in public.
5. I actively promote the organization's products and services to potential users.

Moorman, R. H. & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior, 16*, 127-142.

APPENDIX D

10-ITEM HEXACO-60 MEASURE OF TRAIT CONSCIENTIOUSNESS

On the following questions, you will find a series of statements about you. Please read each statement and decide how much you agree or disagree with that statement. Then indicate your response using the scale:

5= Strongly agree
4= agree
3= neutral (neither agree nor disagree)
2= disagree
1= strongly disagree

Please answer every statement, even if you are not completely sure of your response.

Conscientiousness
Organization:
    1. I plan ahead and organize things, to avoid scrambling at the last minute. ___
    2. When working, I sometimes have difficulties due to being disorganized. ___ (R)

Diligence:
    3. I often push myself very hard when trying to achieve a goal. ___
    4. I do only the minimum amount of work needed to get by. ___ (R)

Perfectionism:
    5. When working on something, I don't pay much attention to small details. ___ (R)
    6. I always try to be accurate in my work, even at the expense of time. ___
    7. People often call me a perfectionist. ___

Prudence:
    8. I make decisions based on the feeling of the moment rather than on careful thought. ___ (R)
    9. I make a lot of mistakes because I don't think before I act. ___ (R)
    10. I prefer to do whatever comes to mind, rather than stick to a plan. ___ (R)

Ashton, M. & Lee, K. (2009). The HEXACO-60: A Short Measure of the Major Dimensions of Personality. *Journal of Personality Assessment, 91*(4), 340-345. doi:10. 1080/00223890902935878

APPENDIX E

NEED TO BELONG SCALE

Using the scale below, please indicate the extent to which each statement is true or characteristic of them on a 5-point scale

1= not at all
2= slightly
3=moderately
4= very
5=extremely.

(R) indicates that the item is reverse-scored.

1. If other people don't seem to accept me, I don't let it bother me. (R)

2. I try hard not to do things that will make other people avoid or reject me.

3. I seldom worry about whether other people care about me. (R)

4. I need to feel that there are people I can turn to in times of need.

5. I want other people to accept me.

6. I do not like being alone.

7. Being apart from my friends for long periods of time does not bother me.

8. I have a strong "need to belong".

9. It bothers me a great deal when I am not included in other people's plans.

10. My feelings are easily hurt when I feel that others do not accept me.

Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct Validity of the Need to Belong Scale: Mapping the Nomological Network. *Journal of Personality Assessment, 95*(6), 610-624. https://doi.org/10.1080/00223891.2013.819511

APPENDIX F

POSITIVE AFFECTIVITY NEGATIVE AFFECTIVITY SCHEDULE

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you generally felt this way in the last 6 months. Use the following scale to record your answers.

1- Very slightly or not at all
2- A little
3- Moderately
4- Quite a bit
5- Extremely

Interested	PA01
Distressed	NA02
Excited	PA03
Upset	NA04
Strong	PA05
Guilty	NA06
Scared	NA07
Hostile	NA08
Enthusiastic	PA009
Proud	PA010
Irritable	NA11
Alert	PA012
Ashamed	NA13
Inspired	PA14
Nervous	NA15
Determined	PA16
Attentive	PA17
Jittery	NA18
Active	PA19
Afraid	NA20

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54(6),* 1063-1070. https://doi.org/10.1037/0022-3514.54.6.1063

APPENDIX G

LIFE ROLE SALIENCE SCALE

Please indicate the extent to which you agree with each of the following statements:

1- Strongly Disagree
2- Disagree
3- Neither Agree nor Disagree
4- Agree
5- Strongly Agree

Occupation Role Reward Value

1. Having a job that is interesting and exciting to me is my most important life goal.
2. I expect my job to give me more real satisfaction than anything else I do.
3. Building a name and reputation for myself through a job is not one of my life goals. R
4. It is important to me that I have a job in which I can achieve something of importance.
5. It is important to me to feel successful in my job.
6. For this item, please select "strongly disagree" if you are answering this survey carefully.

Occupation Role Commitment

7. I want to work, but I do not want a demanding job. R
8. I expect to make as many sacrifices as are necessary in order to advance in my job.
9. I value being involved in a job and expect to devote the time and effort needed to develop it.
10. I expect to devote a significant amount of time to building my career and developing the skills necessary to advance in my career.
11. I expect to devote whatever time and energy it takes to move up in my job.

Amatea, E., Cross, E., Clark, J., & Bobby, C. (1986). Assessing the Work and Family Role Expectations of Career-Oriented Men and Women: The Life Role Salience Scales. *Journal of Marriage and Family, 48*(4), 831-838. doi:10.2307/352576

APPENDIX H

LIFE ORIENTATION TEST- REVISED

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

A = I agree a lot
B = I agree a little
C = I neither agree nor disagree
D = I Disagree a little
E = I Disagree a lot

1. In uncertain times, I usually expect the best.
2. It's easy for me to relax
3. If something can go wrong for me, it will. R
4. I'm always optimistic about my future.
5. I enjoy my friends a lot.
6. It's important for me to keep busy.
7. I hardly ever expect things to go my way. R
8. I don't get upset too easily.
9. I rarely count on good things happening to me. R
10. Overall, I expect more good things to happen to me than bad.

Note:
Items 2, 5, 6, and 8 are fillers. Responses to "scored" items are to be coded so that high values imply optimism. Researchers who are interested in testing the potential difference between affirmation of optimism and disaffirmation of pessimism should compute separate subtotals of the relevant items.

http://www.midss.org/sites/default/files/lot-r.pdf

Carver, C. S. (2013). Life Orientation Test-Revised (LOT-R). Measurement
        Instrument Database for the Social Science. Retrieved from www.midss.ie

APPENDIX I

THE FUTURE SCALE

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.

1. = Definitely False
2. = Mostly False
3. = Somewhat False
4. = Slightly False
5. = Slightly True
6. = Somewhat True
7. = Mostly True
8. = Definitely True

___ 1. I can think of many ways to get out of a jam.
___ 2. I energetically pursue my goals.
___ 3. I feel tired most of the time. R
___ 4. There are lots of ways around any problem.
___ 5. I am easily downed (overwhelmed) in an argument. R
___ 6. I can think of many ways to get the things in life that are important to me.
___ 7. I worry about my health. R
___ 8. Even when others get discouraged, I know I can find a way to solve the problem.
___ 9. My past experiences have prepared me well for my future.
___10. I've been pretty successful in life.
___11. I usually find myself worrying about something. R
___12. I meet the goals that I set for myself.

Note. When administering the scale, it is called The Future Scale. The agency subscale score is derived by summing items 2, 9, 10, and 12; the pathway subscale score is derived by adding items 1, 4, 6, and 8. The total Hope Scale score is derived by summing the four agency and the four pathway items.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al.(1991). The will and the ways: Development and validation of an individual-differences measure of hope. Journal of Personality and Social Psychology, 60, 570-585.

APPENDIX J

INSTITUTIONAL REVIEW BOARD APPROVAL

IRB-FY2019-117 - Initial: Psych Reviewers Admin/Exempt Approval Letter

mgillesp@csusb.edu <mgillesp@csusb.edu>   Fri, Jan 25, 2019 at 9:26 AM
To: 006124556@coyote.csusb.edu, kshultz@csusb.edu

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

January 25, 2019

CSUSB INSTITUTIONAL REVIEW BOARD
Administrative/Exempt Review Determination
Status: Determined Exempt
IRB-FY2019-117

Martha Blanco Villarreal and Kenneth Shultz
Department of CSBS - Psychology, Users loaded with unmatched Organization affiliation.
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

DearMartha Blanco Villarreal Kenneth Shultz :

Your application to use human subjects, titled "Workplace Perceptions and Behaviors" has been reviewed and approved by the Chair of the Institutional Review Board (IRB) of California State University, San Bernardino has determined that your application meets the requirements for exemption from IRB review Federal requirements under 45 CFR 46. As the researcher under the exempt category you do not have to follow the requirements under 45 CFR 46 which requires annual renewal and documentation of written informed consent which are not required for the exempt category. However, exempt status still requires you to attain consent from participants before conducting your research as needed. Please ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.

Your IRB proposal (**IRB-FY2019-117 - Workplace Perceptions and Behaviors**) is approved. You are permitted to collect information from **[300]** participants for$5.50 from **MTurk**. This approval is valid from **1-25-19** to **1-24-20**.

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval notice does not replace any departmental or additional approvals which may be required.

Your responsibilities as the researcher/investigator include reporting to the IRB Committee the following three

requirements highlighted below. Please note failure of the investigator to notify the IRB of the below requirements may result in disciplinary action.

- Submit a protocol modification (change) form if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before implemented in your study to ensure the risk level to participants has not increased,
- If any unanticipated/adverse events are experienced by subjects during your research, and
- Submit a study closure through the Cayuse IRB submission system when your study has ended.

The protocol modification, adverse/unanticipated event, and closure forms are located in the Cayuse IRB System. If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval identification number (listed at the top) in all correspondence.

If you have any questions regarding the IRB decision, please contact Dr. Joseph Wellman, Assistant Professor of Psychology.Dr. Joseph Wellman can be reached by email at Jwellman@csusb.edu. Please include your application approval identification number (listed at the top) in all correspondence.
Best of luck with your research.

Sincerely,

Donna Garcia

Donna Garcia, Ph.D., IRB Chair
CSUSB Institutional Review Board

DG/MG

:tps://mail.google.com/mail/u/0?ik=e7d90d770f&view=pt&search=...msg-f%3A1623654080887219345&simpl=msg-f%3A1623654080887219345   Page 2 of 2

107

APPENDIX K

INSTITUTIONAL REVIEW BOARD MODIFICATION

IRB-FY2019-117 - Modification: IRB Approval Protocol Change/Modification Letter

mgillesp@csusb.edu <mgillesp@csusb.edu>   Thu, Feb 7, 2019 at 9:35 AM
To: 006124556@coyote.csusb.edu, kshultz@csusb.edu

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

February 7, 2019

CSUSB INSTITUTIONAL REVIEW BOARD
Protocol Change/Modification
IRB-FY2019-117
Status: Approved

Martha Blanco VillarrealKenneth Shultz
CSBS - Psychology, Users loaded with unmatched Organization affiliation.
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Martha Blanco Villarreal Kenneth Shultz:

The protocol change/modification to your application to use human subjects, titled "Workplace Perceptions and Behaviors" has been reviewed and approved by the Chair of the Institutional Review Board (IRB). A change in your informed consent requires resubmission of your protocol as amended. Please ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.

You are required to notify the IRB of the following by submitting the appropriate form (modification, unanticipated/adverse event, renewal, study closure) through the online Cayuse IRB Submission System.

1. If you need to make any changes/modifications to your protocol submit a modification form as the IRB must review all changes before implementing in your study to ensure the degree of risk has not changed.
2. If any unanticipated adverse events are experienced by subjects during your research study or project.
3. If your study has not been completed submit a renewal to the IRB.
4. If you are no longer conducting the study or project submit a study closure.

You are required to keep copies of the informed consent forms and data for at least three years.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, Research Compliance Officer. Mr. Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application identification number (above) in all correspondence.

Best of luck with your research.

Sincerely,

Donna Garcia

Donna Garcia, Ph.D, IRB Chair
CSUSB Institutional Review Board

DG/MG

tps://mail.google.com/mail/u/0?ik=e7d90d770f&view=pt&search=…msg-f%3A1624832403219269150&simpl=msg-f%3A1624832403219269150   Page 2 of 2

110

REFERENCES

Akkermans, J., De Lange, A. H., van der Heijden, B. I. J. M., Kooij, D. T. A. M.,

Jansen, P. G. W., & Dikkers, J. S. E. (2016). What About Time?

Examining Chronological and Subjective Age and their Relation to Work

Motivation. *Career Development International, 21,* 419–439. doi:

10.1108/CDI-04-2016-0063.

Ambrose, M. L., & Cropanzano, R. (2003). A Longitudinal Analysis of

Organizational Fairness: An Examination of Reactions to Tenure and

Promotion Decisions. *Journal of Applied Psychology*, *88,* 266-275.

doi:10.1037/0021-9010.88.2.266

Amatea, E., Cross, E., Clark, J., & Bobby, C. (1986). Assessing the Work and

Family Role Expectations of Career-Oriented Men and Women: The Life

Role Salience Scales. *Journal of Marriage and Family, 48*(4), 831-838.

doi:10.2307/352576

American Psychological Association. (2002). Ethical Principles of Psychologists

and Code of Conduct. *American Psychologist*, 57(12). doi: 10.1037//0003-

066X.57.12.1060

Ashton, M., & Lee, K. (2009). The HEXACO-60: A Short Measure of the Major

Dimensions of Personality. *Journal of Personality Assessment, 91*(4), 340-

345. doi:10. 1080/00223890902935878

Baltes, P. B. (1997). On the Incomplete Architecture of Human Ontogeny.

American Psychologist, 52, 366–380.

Barnes-Farrell, J.L., Petery, G.A., Cleveland, J.N, & Matthews, R.A. (2019).

    Age(ing) and Work Attitudes. In K.S. Shultz, & G.A. Adams (Eds), *Aging*

    and Work in the 21st Century (2nd ed., pp. 146-170). New York: Routledge.

Berry, L. (1999). Discovering the soul of service: The nine drivers of sustainable

    business success. New York: The Free Press.

Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal Deviance,

    Organizational Deviance, and their Common Correlates: A Review and

    Meta-Analysis. *Journal of Applied Psychology, 92*, 410-425. doi:

    10.1037/0021-9010.92.2.410

Bertolino, M., Truxillo, D. M., & Fraccaroli, F. (2011). Age as Moderator of the

    Relationship of Proactive Personality with Training Motivation, Perceived

    Career Development from Training and Training Behavioral Intentions.

    Journal of Organizational Behavior, 32, 248–263. doi: 10.1002/job.670.

Bohlmann, C., Rudolph, C. W., & Zacher, H. (2017). Methodological

    Recommendations to Move Research on Work and Aging Forward. *Work,*

    Aging and Retirement, 00, 1-13. doi: 10.1093/worker/wax023

Borman, W. C. Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality

    Predictors of Citizenship Performance. *International Journal of Selection*

    and Assessment, 9, 52-69.

Brienza, J. P., & Bobocel, D. R. (2017). Employee Age Alters the Effects of

    Justice on Emotional Exhaustion and Organizational Deviance. *Frontiers*

    in Psychology, *8*. Retrieved from

http://search.ebscohost.com.libproxy.lib.csusb.edu/login.aspx?direct=true
&db=psyh&AN=2017-16107-001&site=ehost-liveCarver, C. S. (2013). Life
Orientation Test-Revised (LOT-R). Measurement
Instrument Database for the Social Science. Retrieved from www.midss.ie

Case, K. A. (2007). Raising White Privilege Awareness and Reducing Racial
Prejudice: Assessing Diversity Course Effectiveness. *Teaching of
Psychology*, *34*(4), 231–235. https://doi.org/10.1080/00986280701700250

Cameron, L. D., Durazo, A., Corona, R., Ultreras, M., & Blanco, M. (2016). NCI-
UC Merced mHealth project: Translation and Adaptation of the
HealthyYouTXT Physical Activity Program into Spanish. Report prepared
for the National Cancer Institute's HealthyYouTXT group.

Chan, D. (2006). Interactive Effects of Situational Judgment Effectiveness and
Proactive Personality on Work Perceptions and Work Outcomes. *Journal
of Applied Psychology, 91*, 475-481. doi:10.1037/0021-9010.91.2.475

Chiu, C. K., Chan A.W., Snape E, & Redman T. (2001). Age Stereotypes and
Discriminatory Attitudes Towards Older Workers: An East-West
Comparison. *Human Relations, 54*, 629-661.

Colquitt, J. A. (2001). On the Dimensionality of Organizational Justice: A
Construct Validation of a Measure. *Journal of Applied Psychology, 86*(3),
386 – 400.

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. H., & Ng, K. Y. (2001).
Justice at the Millennium: A Meta-Analytic Review of 25 years of

Organizational Justice Research. *Journal of Applied Psychology, 86*, 425-445. doi:10.1037/0021-9010.86.3.425

Costanza, D. P., Badger, J. M., Fraser, R. L., Severt, J. B., & Gade, P. A. (2012). Generational Differences in Work-Related Attitudes: A Meta-Analysis. *Journal of Business Psychology*, *27*, 375-394. doi: 10.1007/s10869-012-9259-4

Elias, S. M., Smith, W. L., & Barney, C. E. (2012). Age as a Moderator of Attitude Toward Technology in the Workplace: Work Motivation and Overall Job Satisfaction. *Behaviour & Information Technology, 31*, 453–467. doi: 10.1080/014492X.2010.513419.

Feldman, D.C., & Shultz, K.S. (2019). Career Embeddedness and Career Crafting Among Older Workers. In K.S. Shultz, & G.A. Adams (Eds), *Aging and Work in the 21st Century, 2nd ed.*, 191-212. New York: Routledge.

Finkelstein, L.M., Hanrahan, E.A., Thomas, C.L. (2019). An Expanded View of Age Bias in the Workplace. In K.S. Shultz, & G.A. Adams (Eds), *Aging and Work in the 21st Century, 2nd ed.*, 59-82. New York: Routledge.

Frenkel, S. J., & Bednall, T. (2016). How Training and Promotion Opportunities, Career Expectations, and Two Dimensions of Organizational Justice Explain Discretionary Work Effort. *Human Performance, 29*, 16-32. doi:10.1080/08959285.2015.1120306

García-Izquierdo, A. L., Moscoso, S., & Ramos-Villagrasa, P. J. (2012). Reactions to the Fairness of Promotion Methods: Procedural Justice and

Job Satisfaction. *International Journal of Selection and Assessment, 20*, 394-403. doi:10.1111/ijsa.12002

Gutman, A., Koppes, L.L., & Vodanovich, S.J. (2011). EEO Law and Personnel Practices (3rd ed.). *New York: Routledge.* ISBN: 9780805864748 - COMPANION WEB SITE: http://pages.uwf.edu/svodanov/eeolaw/

Han, J., & Richardson, V. E. (2015). The Relationships Among Perceived Discrimination, Self-Perceptions of Aging, and Depressive Symptoms: A Longitudinal Examination of Age Discrimination. *Aging & Mental Health, 19*(8), 747–755. https://doi.org/10.1080/13607863.2014.962007

Hausknecht, J. P., Sturman, M. C., & Roberson, Q. M. (2011). Justice as a Dynamic Construct: Effects of Individual Trajectories on Distal Work Outcomes. *Journal of Applied Psychology, 96*, 872-880. doi:10.1037/a0022991

Haley-Lock, A., Berman, D., & Timberlake, J. M. (2013). Employment Opportunity for Workers Without a College Degree Across the Public, Nonprofit, and For-Profit Sectors. *Work and Occupations, 40*(3), 281–311. https://doi.org/10.1177/0730888412475070

Hedge, J.W., & Borman, W.C. (2019). Employee Age and Performance in Organizations. In K.S. Shultz, & G.A. Adams (Eds), *Aging and Work in the 21st Century* (2nd ed), 123-145. New York: Routledge.

Heffernan, M., & Dundon, T. (2016). Cross-Level Effects of High-Performance

Work Systems (HPWS) and Employee Well-Being: The Mediating Effect of Organisational Justice. *Human Resource Management Journal, 26*, 211-231. doi:10.1111/1748-8583.12095

Horvath, M., & Andrews, S. B. (2007). The Role of Fairness Perceptions and Accountability Attributions in Predicting Reactions to Organizational Events. *The Journal of Psychology: Interdisciplinary and Applied, 141*, 203-222.

doi:10.3200/JRLP.141.2.203-223

Huang, J. L., Ryan, A. M., Zabel, K. L., & Palmer, A. (2004). Personality and Adaptive Performance at Work. *Journal of Applied Psychology, 99,* 162-179.

Innocenti, L., Profili, S., & Sammarra, A. (2012). Age as Moderator in the Relationship Between HR Development Practices and Employees' Positive Attitudes. *Personnel Review, 42*, 724–744. doi: 10.1108/PR-Jan-2012-2009.

Kanfer, R., & Ackerman, R. L. (2004). Aging, Adult Development, and Work Motivation. *Academy of Management Review*, *29*, 440–458.

Kim, K., del Carmen Triana, M., Chung, K., & Oh, N. (2016). When Do Employees Cyberloaf? An Interactionist Perspective Examining Personality, Justice, and Empowerment. *Human Resource Management*, *55*, 1041-1058. doi:10.1002/hrm.21699

Kooij, D. T. A. M., Bal, P. M., & Kanfer, R. (2014). Future Time Perspective and

Promotion Focus as Determinants of Intraindividual Change in Work Motivation. *Psychology and Aging, 29*, 319–328. doi: 10.1037/a0036768.

Kooij, D. T. A. M., De Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dikkers, J. S. E. (2011). Age and Work-Related Motives: Results of a Meta-Analysis. *Journal of Organizational Behavior, 32*, 197–225. doi: 10.1002/job.665.

Kooij, D. T. A. M., Jansen, P. G. W., Dikkers, J. S. E., & De Lange, A. H. (2010). The Influence of Age on the Associations Between HR Practices and Both Affective Commitment and Job Satisfaction: A meta-analysis. *Journal of Organizational Behavior, 31*, 1111–1136. doi: 10.1002/job.666.

Kulik, C. T., Perera, S., & Cregan, C. (2016). Engage Me: The Mature-Age Worker and Stereotype Threat. *Academy of Management Journal, 59*, 2132–2156. doi: 10.5465/ amj.2015.0564.

Kunze, F., Boehm, S.A. & Bruch H. (2011). Age Diversity, Age Discrimination Climate and Performance Consequence. A Cross Organizational Study, *Journal of Organizational Behavior, 32*, 264-290.

Lachman, M. E. (2004). Development in Midlife. *Annual Review of Psychology, 55*, 305–331. https://doi.org/10.1146/annurev.psych.55.090902.141521

Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct Validity of the Need to Belong Scale: Mapping the Nomological Network. *Journal of Personality Assessment*, *95*(6), 610-624. https://doi.org/10.1080/00223891.2013.819511

Lorence, J. (1987). Age Differences in Work Involvement: Analyses of Three

Explanations. *Work and Occupations, 14*, 533–557.

Moorman, R. H. (1991). Relationship Between Organizational Justice and

Organizational Citizenship Behaviors: Do Fairness Perceptions Influence

Employee Citizenship? *Journal of Applied Psychology, 76*, 845-855.

doi:10.1037/0021-9010.76.6.845

Moorman, R. H. & Blakely, G. L. (1995). Individualism-Collectivism as an

Individual Difference Predictor of Organizational Citizenship Behavior.

Journal of Organizational Behavior, 16, 127-142.

Ng, T. W. H., & Feldman, D. C. (2010). The Relationship of Age with Job

Attitudes: A Meta-Analysis. *Personnel Psychology, 63*, 677-718.

Nishii, L. H., Lepak, D. P., & Schneider, B. (2008). Employee Attributions of the

'Why' of HR Practices: Their Effects on Employee Attitudes and

Behaviors, and Customer Satisfaction. *Personnel Psychology, 61*, 503-

545. doi:10.1111/j.1744-6570.2008.00121.x

Obal, M. (2014). Utilizing Amazon Mechanical Turk to Gather Data: Pros and

Cons. Retrieved from

http://library.constantcontact.com/download/get/file/1102707681626-

131/Utilizing+Amazon+Mechanical+Turk+to+Gather+Data.pdf

Ones, D.S., & Viswesvaran, C. (1996). A Theory of Conscientiousness at Work.

Paper presented at the 11th annual conference of the Society for

Industrial and Organizational Psychology, San Diego, CA.

Organ, D. W. (1997). Organizational Citizenship Behavior: It's Construct Clean-

Up Time. *Human Performance, 10*, 85-97.

Profili, S., Sammarra, A., & Innocenti, L. (2016). Can Age Make a Difference? A Moderated Model of Altruistic Organizational Counterproductive Behavior Antecedent. *International Journal of Business Science and Applied Management, 11*, 18-31.

Rhodes, S. R. (1983). Age-Related Differences in Work Attitudes and Behavior: A Review and Conceptual Analysis. *Psychological Bulletin, 93*, 328–367.

Rhoades, L., & Eisenberger, R. (2002). Perceived Organizational Support: A Review of the Literature. *Journal of Applied Psychology, 87*, 698-714. doi:10.1037/0021-9010.87.4.698

Riaz, M. N., Riaz, M. A., & Batool, N. (2014). Managerial Decision-Making Styles as Predictors of Personal and Organizational Outcomes of In-Service Employees. *Journal of Behavioral Sciences, 24*, 100-116.

Roberts, B. W., & Caspi, A. (2003). The Cumulative Continuity Model of Personality Development: Striking a Balance Between Continuity and Change in Personality Traits Across the Life Course. In U. Staudinger & U. Lindenberger (Eds.), *Understanding Human Development: Lifespan Psychology in Exchange with other Disciplines*, 183–214. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of Mean-Level Change in Personality Traits Across the Life Course: A Meta-Analysis of Longitudinal Studies. *Psychological Bulletin, 132*, 1–25.

Satorra, A. & Bentler, P.M. Psychometrika (2001) 66: 507.

    https://doi.org/10.1007/BF02296192

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon,

    S. T., Yoshinobu, L., Gibb, J., Langelle, C. Harney, P. (1991). The Will and

    the Ways: Development and Validation of an Individual-Differences

    Measure of Hope. Journal of Personality and Social Psychology, 60(4),

    570–585. https://doi.org/10.1037/0022-3514.60.4.570

Sasaki, H., & Hayashi, Y. (2013). Moderating the Interaction Between Procedural

    Justice and Decision frame: The Counterbalancing Effect of Personality

    Traits. *The Journal of Psychology: Interdisciplinary and Applied, 147*, 125-

    151. doi:10.1080/00223980.2012.678412

Specht, J., Egloff, B., & Schmukle, S. C. (2011). Stability and change of

    Personality Across the Life Course: The Impact of Age and Major Life

    Events on Mean-Level and Rank-Order Stability of the Big Five. *Journal of*

    Personality and Social Psychology, *101*(4), 862–882.

    https://doiorg.libproxy.lib.csusb.edu/10.1037/a0024950

Tenhiälä, A., Linna, A., Monika, v. B., Pentti, J., Vahtera, J., Kivimäki, M., &

    Elovainio, M. (2013). Organizational Justice, Sickness Absence and

    Employee Age. *Journal of Managerial Psychology, 28*, 805-825.

Tittle, C. R., Ward, D. A., & Grasmick, H. G. (2003). Gender, Age, and Crime

    Deviance: A Challenge to Self-Control Theory. *J. Res. Crime Delinquen.*

    40, 426–453. doi: 10.1177/0022427803256074

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and Validation of

Brief Measures of Positive and Negative Affect: The PANAS Scales. *Journal

of Personality and Social Psychology, 54*(6), 1063-1070.

https://doi.org/10.1037/0022-3514.54.6.1063

Whiteside, D. B., & Barclay, L. J. (2013). Echoes of Silence: Employee Silence

as a Mediator Between Overall Justice and Employee Outcomes. *Journal

of Business Ethics, 116*, 251-266. doi:10.1007/s10551-012-1467-3

Ybema, J. F., Meer, L., & Leijten, F. M. (2016). Longitudinal Relationships

Between Organizational Justice, Productivity Loss, and Sickness Absence

Among Older Employees. *International Journal of Behavioral Medicine,

23*, 645-654. doi:10.1007/s12529-016-9546-y