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# THE MODERATING ROLE OF INTERACTIONAL JUSTICE ON THE RELATIONSHIP BETWEEN JUSTICE AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR

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THE MODERATING ROLE OF INTERACTIONAL JUSTICE ON THE  
RELATIONSHIP BETWEEN JUSTICE AND ORGANIZATIONAL CITIZENSHIP  
BEHAVIOR

by  
Arlene Ramkissoon

A DISSERTATION

Submitted to  
H. Wayne Huizenga College of Business & Entrepreneurship  
Nova Southeastern University

in partial fulfillment of the requirements  
for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

2016

A Dissertation  
entitled

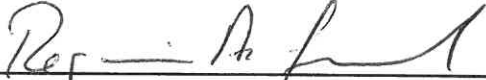
THE MODERATING ROLE OF INTERACTIONAL JUSTICE ON THE  
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BEHAVIOR

By

Arlene Ramkissoon

We hereby certify that this Dissertation submitted by Arlene Ramkissoon conforms to acceptable standards, and as such is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Doctor of Business Administration.


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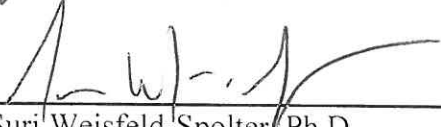
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## ABSTRACT

### THE MODERATING ROLE OF INTERACTIONAL JUSTICE ON THE RELATIONSHIP BETWEEN JUSTICE AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR

By

Arlene Ramkissoon

This research was designed to examine the moderating effect of interactional justice on the relationship between justice constructs and organizational citizenship behavior (OCB) with organizational identification as a mediator of the influence of justice perceptions on OCB. This study was based heavily on social exchange, the norm of reciprocity, and psychological contracts between individuals and their supervisors. The study sample was comprised of respondents drawn from a crowd sourcing internet website ( $N = 250$ ). Niehoff and Moorman's Organizational Justice Scale was used to measure justice perceptions. Mael and Ashforth's Organizational Identification Scale was used to measure the degree of the respondents' identification with their organization; and Podsakoff, MacKenzie, Moorman, and Fetter's OCB Scale was used to measure extra-role behaviors. Linear regression in IBM's SPSS statistical package was used to test the proposed relationships. The results showed no support for the moderating effect of interactional justice on the relationships between justice dimensions and OCB. However, support was found for organizational identification as a mediator of the effect of interactional justice on OCB. Theoretical and managerial implications and suggestions for future research are discussed.

## ACKNOWLEDGEMENTS

Finally, the time has come for me to express my sincere gratitude and thanks to the numerous individuals who played an instrumental role in helping me accomplish this lifelong dream of mine. My journey over the last few years has been both challenging and fulfilling. I emerged from this program much wiser and stronger thanks to the support, help, and encouragement I received from my family and the wonderful faculty at Nova Southeastern University.

I would like to thank my parents who taught me, from a very young age, the value of hard work and discipline. To my mother, Parbatie, the countless hours you spent tutoring me in my formative years has undoubtedly contributed to the strong academic foundation upon which all my later accomplishments stand. To my father, Lenny, you always urged me to aim for the highest ideals in academia. Your work ethic and ideals have inspired me to always do my best, and for that I thank you.

To my sister and best friend, Allison, you have been my biggest fan and supporter, especially when it seemed that there was no end in sight. I am forever grateful for the time you spent explaining the intricacies of various statistical methods to me. Your patience and understanding did not go unnoticed.

I would like to thank my dissertation committee without whom none of this would be possible. To my chair, Dr. Greenwood, thank you for your guidance and words of counsel, which extended way beyond the boundaries of your role as my chair. I couldn't have asked for a better mentor and friend.

To my methodologist, Dr. Gong, thank you for going above and beyond to help me with more than the methodology of my research. I have learned so much from you, especially from my role as your research assistant.

To the third member of my committee, Dr. Jones, thank you for graciously accepting my invitation to be a member of my committee despite your busy schedule. Your generosity and willingness to help is greatly appreciated. It was certainly an honor having you on my committee.

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# CHAPTER I

## INTRODUCTION

One of the main objectives of organizations is to produce increasingly high-quality output for the least amount of input. In the challenging economic environment facing organizations today, achieving the highest output at the least cost is imperative if organizations are to not only survive but thrive. How can this be achieved? One of the ways this can be attained is through the performance of organizational citizenship behavior (OCB), in which “good soldiers” or employees go above and beyond the call of duty to perform actions that result in the greater good for the organization (Organ, 1988).

OCB refers to “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization” (Organ, Podsakoff, & MacKenzie, 2006, p. 3). Ideally, when organizations increase their output they want to do it in the most effective and efficient way (Ehigie & Otukoya, 2005; Farh, Zhong, & Organ, 2004). One of the most significant outcomes of OCB is organizational effectiveness (Williams & Anderson, 1991). OCB has been shown to have a significant impact at the organizational level with organizational effectiveness ranging from 18% to 38% across various measurement dimensions (Ehrhart, 2004; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). OCB was found to account for the following variances in increased organizational effectiveness: 18% performance quality, 19% performance quantity, 25% financial efficiency, and 38% customer service (Podsakoff et al., 2000). Ehrhart (2004) performed a study in grocery stores and found that approximately 20% of the variance in profitability was due to OCB.

Organizations benefit from the performance of OCBs by enjoying greater productivity, efficiency, improved customer satisfaction, and decreased turnover and absenteeism rates, which translate to lower costs (Podsakoff, Whiting, Podsakoff, & Blume, 2009). Since organizations stand to gain greatly by the performance of OCBs, all types of OCB should be encouraged; employees should be motivated to actively support their organization through improving their own performance and well-being as well as that of their coworkers. This will ultimately lead to lower costs and improved profitability at the organizational level.

“The extent to which employees exhibit OCB is a function of ability, motivation and opportunity” (Organ et al., 2006, p. 93). Organizations can manipulate employees to become or remain good soldiers by giving them the tools, the motivation, and the opportunity needed to do so. By understanding the factors that affect OCB, management can create an environment which encourages that behavior and, by extension, organizations will become more efficient and productive.

While there has been a plethora of studies about OCB, organizational identification, and distributive and procedural justice, there has been very little research on the effect of interactional justice on the previously mentioned concepts. In fact, there have been no studies that investigated the predictive power of interactional justice on OCB (Abu Elanain, 2010). In a meta-analysis by Cohen-Charash and Spector (2001), 201 studies that collectively contained 64,757 participants were analyzed to examine the correlates of distributive, procedural, and interactional justice with OCB. Of the 201 studies, only 26 were related to interactional justice. Results revealed that OCB levels were significantly and similarly influenced by both distributive and procedural justice

with a weighted mean of  $r = .25$  and  $.23$ , respectively. However, Cohen-Charash and Spector (2001) found an inadequate number of studies on interactional justice to effectively examine the influence of interactional justice on OCB.

The previous findings strengthen the call for more research in the area of interactional justice and OCB. In order to bridge the gap in the research previously outlined, this study placed focus on how interactional justice perceptions affect OCB, how organizational identification mediates the interactive effect of distributive justice and interactional justice on OCB, and how organizational identification mediates the interactive effect of procedural justice and interactional justice on OCB. The aim of this study was to examine the relationships between organizational justice, organizational identification, and OCB to determine how organizations can create opportunities to better foster OCB behaviors.

### **Problem**

This research concerns how organizational citizenship behavior is influenced by organizational justice. Specifically, this researcher examined how interactional justice influences the relationships between employee justice perceptions and OCB and whether the effects of justice perception are transferred to OCB through organizational identification.

As mentioned previously, research supports a direct relationship between distributive justice and OCB and between procedural justice and OCB. Interactional justice was not widely studied in the literature, especially in a moderating capacity, between distributive justice and OCB and between procedural justice and OCB (Cohen-Charash & Spector, 2001). This study addressed this gap in the research by answering the

question of how interactional justice perceptions impact the relationship between distributive justice and OCB and how interactional justice perceptions impact the relationship between procedural justice and OCB.

### **Subproblems**

1. What role does interactional justice play in the relationships between employee justice perceptions and OCB?
2. What role does organizational identification play in the relationships between employee justice perceptions and OCB?

### **Background and Justification**

The concept of OCB is not new; one of the earliest formal references to this concept was made in the 1930s by Barnard (1938). Since then, a steady stream of research has flowed, and another milestone was reached when the term *organizational citizenship behavior* was coined by Bateman and Organ in 1983. The continued interest in this field attests to its relevance to organizational success throughout the decades to this present day (Colquitt et al., 2013). Early research proposed that OCBs were necessary for organizational success (Katz, 1964). This success is achieved when organizations retain their best workers and allocate fewer resources to firm maintenance, since they are taken care of by OCBs (Organ, 1988; Podsakoff, Ahearne, & MacKenzie, 1997). Over the years, several studies have confirmed the effect of OCB on organizational productivity and performance.

In 1994, Podsakoff and MacKenzie researched the effects of OCBs on organizational performance, and their results indicated that there is a direct correlation between OCBs and objective unit performance. In a subsequent study, Podsakoff et al.



(1997) also found support for OCBs positively affecting organizational performance. OCB also has been shown to decrease voluntary turnover in organizations, which is a direct cost reduction of one aspect of organizational overhead (MacKenzie, Podsakoff, & Ahearne, 1998). Widespread OCB in an organization increases group cohesiveness, which leads to an improved work environment and therefore increases employee intention to stay with the organization (MacKenzie et al., 1998).

As was discussed, organizations are well aware of the benefits of OCB, but they are often at a loss as to how to cultivate these behaviors in their employees. A meta-analysis also showed that OCBs are predicted by perceived fairness, leader supportiveness, job satisfaction, and organizational commitment (Organ & Ryan, 1995). In addition to the aforementioned predictors, employee OCB has been found to be predicted by leadership style, leader fairness, loyalty to and trust in the leader, and transformational leadership (Deluga, 1995).

Some evidence exists showing that organizational identification influences OCB (Bellou & Thanopoulos, 2006; Van Dick, Wagner, Stellmacher, & Christ, 2005). Organizational identification is a relatively new concept that stems from social identity theory (Tajfel, 1979). It can be described as a person's perception of oneness with his or her organization that results in the blending of the person's identity with that of the organization (Mael & Ashforth, 1992). Since this form of identification is largely psychological (Ge, Su, & Zhou, 2010), there has been a shift in the way organizations try to keep their employees satisfied and motivated from focusing on formal to informal work compensation and benefits. This result is desirable since this may lead to greater OCB. Two major studies on organizational identification were conducted by Van Dick et

al. (2005) and by Bellou and Thenopoulos (2006). Both studies produced results that support organizational identification as a predictor of OCB.

The direct correlation between OCB and productivity has been established (Lin, Lyau, Tsai, Chen, & Chiu, 2010; MacKenzie et al., 1998; Organ, 1988; Podsakoff et al., 2009). The relevance of studying OCB at present is high, since more research is needed to better understand how to increase productivity in today's business economy.

According to the U.S. Bureau of Labor Statistics (2014), employees in the U.S. spent approximately equal numbers of hours working in both 1998 and 2013 (Sprague, 2014).

This equated to roughly 194 billion work hours. What is interesting is the population in the U.S. increased by over 40 million over that 15-year timeframe (Sprague, 2014).

Despite the stagnancy in work hours, businesses were able to still increase their output by 42% from 1998 to 2013. How did they manage this? One thing that can be said with certainty is the increase in output or productivity did not emanate from an increase in labor hours.

If one can understand all the factors that cause OCB, then one will know better how to increase productivity in the workplace. Some of the well-known antecedents of OCB are role perception, individual disposition, fairness perceptions, motivation, leadership, job satisfaction, and job commitment (Chahal & Mehta, 2011). Of these antecedents, this study further examined how fairness perceptions affect OCB. It investigated how perceptions of interactional justice affect the relationship between distributive justice and OCB and how perceptions of interactional justice affect the relationship between procedural justice and OCB.

Greenberg (1993) conducted a study on the moderating effect of interactional justice on the relationship between distributive injustice and stealing. He found that the interpersonal and informational components of interactional justice work alone or with each other to help employees accept perceived unfairness in the organization by moderating the attempts of employees to address the perceived inequalities (Caldwell, 2014). This study further extended this stream of research and added to the existing body of knowledge on justice and OCB.

Even though organizational justice was conceptualized from the time of the ancient Greeks, it was only in the 1950s that research on this topic took on renewed vigor. The first dimension of organizational justice—distributive justice—was given major attention from the 1950s to the 1970s; procedural justice then came into focus from the mid-1970s to the mid-1990s, while interactional justice came to the forefront from the mid-1980s to today (Greenberg & Colquitt, 2005).

As the concept and dimensions of justice evolved in specialization and complexity, so did organizational research. Of the three justice dimensions, interactional justice is the least studied (Cohen-Charash & Spector, 2001). This is due, in part, to the fact that this dimension is newer, and also because its subjective interpretation makes it more difficult to quantify with certainty than its two predecessors. Theory, as well as research, suggests that instead of identifying which dimensions of justice influence OCB, it is more important to investigate how these justice dimensions interact with each other to result in such behaviors (Colquitt, Conlon, Wesson, Porter, & Yee Ng, 2001).

Colquitt et al. (2001) stated that more outcome variance can be explained by the use of multiple organizational justice dimensions. In addition to this benefit, multiple

justice dimensions will make the examination of moderating effects possible. The most commonly investigated moderation relationships in the justice literature include distributive and procedural justice but not interactional justice (Brockner & Weisenfeld, 1996). One of the implications of the findings in the meta-analysis by Colquitt et al. (2001) is that more research ought to be done on interactional justice.

In a more recent meta-analysis that used 493 independent samples, it was revealed that there are significant correlations between justice dimensions and OCB and that this relationship is mediated by several constructs of social exchange quality (e.g., trust, perceived organizational support, LMX, and organizational commitment; Colquitt et al., 2013). None of these studies examined organizational identification as a mediator between the dimensions of justice and OCB, even though the construct of organizational identification does have a social exchange quality. Social exchange has the qualities to be a good facilitator of the mediation effect between justice dimensions and OCB since social exchange theory (Blau, 1964) is based on the premise that employees who are the benefactors of favorable outcomes often reciprocate as a form of repayment for the benefits received. This is especially relevant if employees perceive their relationship with their organization as one of a social contract. In this case, social exchanges are not limited within the stipulation of a formal contract, and a certain amount of discretion can be used when choosing a method of reciprocation.

Organizational identification embodies the social exchange perspective in that it is based on the employee-employer relationship (Blau, 1964; Rhoades & Eisenberger, 2002; Rousseau, 1995). How the employee evaluates this social exchange influences their attitudes and behaviors (Van Knippenberg, Van Dick, & Tavares, 2007). Logically, a

positive evaluation of this social exchange may increase reciprocated discretionary OCB behaviors in the organization. Based on the gaps in the justice literature, it was justified that there is a need to study whether organizational identification mediates the interactive effect of distributive justice and interactional justice on OCB and whether organizational identification mediates the interactive effect of procedural justice and interactional justice on OCB.

### **Definitions of Terms**

This section will state the precise meaning of terms used throughout this research. The meanings are in accordance with the context within which the terms were used. The definitions are placed in roughly the same order in which the constructs appear throughout the research document.

Organizational citizenship behavior is defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization” (Organ et al., 2006, p. 3).

Organizational justice is defined as “the term used to describe the role of fairness as it directly relates to the workplace” (Moorman, 1991, p. 845). It is used to describe “people’s perceptions of fairness in organizations” (Greenberg & Colquitt, 2005, p. 5). Components of organizational justice are distributive justice, procedural justice, and interactional justice (Greenberg & Colquitt, 2005).

Distributive justice is defined as “the distribution of benefits and harms, rewards and costs, and other things that affect the well-being of the individual members of a group or community” (Luo, 2007, p. 646). It refers to the “fairness of resource

distributions, such as pay, rewards, promotions and the outcome of dispute resolutions” (Greenberg & Colquitt, 2005, p. 5).

Procedural justice is defined as “the fairness of the decision-making procedures,” which leads to distributive outcomes (Greenberg & Colquitt, 2005, p. 5).

Interactional justice is defined as “the nature of the interpersonal treatment received from others, especially key organizational authorities” (Greenberg & Colquitt, 2005, p. 5).

Organizational identification is “a specific form of social identification where the individual defines himself or herself in terms of their membership in a particular organization” (Ashforth & Mael, 1989, p. 105). It is a “perceived oneness with an organization and the experience of the organization’s successes and failure as one’s own” (Mael & Ashforth, 1992, p. 103). Organizational identification is also defined as “the perception of oneness with or belongingness to an organization, where the individual defines him or herself in terms of the organization(s) in which he or she is a member” (Mael & Ashforth, 1992, p. 104).

Social identity refers to “that part of an individual’s self-concept which derives from knowledge of his membership of a social group together with the value and emotional significance attached to that membership” (Tajfel, 1981, p. 255).

Social exchange theory is a concept developed by Blau (1964). It refers to exchanges that occur between individuals due to reciprocation of prior inter (actions). These exchanges may be economic or social in nature (Blau, 1964).

### **Delimitations**

This study only examined the impact of the dimensions of organizational justice

and organizational identification on OCB and did not look at any other factors that influence OCB except for the factors that were tested for suitability as control variables (gender, age, ethnicity, highest level of education attained, organizational tenure, and job position). This study did not investigate any dependent variables beyond OCB. The participants in this research were limited to employees at all levels of organization. The terms OCB and extra-role behavior were also used interchangeably throughout this study. The sample was non-representative, which limited the generalizability of results.

### **Assumptions**

This research assumed that the fairness perceptions of employees were accurate. Perception is described as a state of awareness through using one's senses (Stevenson, 2010). The word perception itself conveys a meaning of subjectiveness. It was expected that employees used all available information to make an informed decision on how fairly they are treated. This study also assumed that all employees are equally equipped to have the same fairness perceptions when placed in the same situation.

Another assumption was that organizations are performance-oriented. In essence, organizational performance is "the desired results which the organization seeks to achieve efficiently and effectively" (Nafei, 2015, p. 56). It is an unspoken understanding that every organization is constantly striving to increase or at least maintain performance. Performance is often noted as a measure of success, which is the desired outcome of every organization.

This research also assumed that employees are motivated by cognitive variables (e.g., perceived justice and organizational identification) and that there is a correlation between cognitive variables (e.g., perceived justice and organizational identification) and

behavioral variables (e.g., OCB). The theory of planned behavior (Ajzen, 1991) suggests that cognitive self-regulation is instrumental in influencing a person's intention to perform a certain behavior. Cognitive self-regulation involves attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). It was therefore logical to assume that employees will perform OCBs when they cognitively assess that they are treated fairly and/or they are valuable members of their organization.

### **Summary**

Organizations today are challenged on a daily basis to increase production using more effective methods and fewer resources. Gone are the days when the focus was on mechanical processes that focused on production. The scope has now widened to include the human or the social aspect of the organization. Justice perceptions in the workplace can be a major indicator of what types of behavior employees are likely to display. This study looked at the independent effect of each dimension of justice (distributive justice, procedural justice, and interactional justice) on OCB. In the not-so-distant past, interactional justice was viewed as a subsidiary of procedural justice until empirical evidence showed that it was, in fact, a distinct construct from procedural justice (Greenberg & Colquitt, 2005). For the first time, interactional justice was studied as a moderator on the relationship between distributive justice and OCB and on the relationship between procedural justice and OCB. In keeping with improving the social aspect of work, the construct of organizational identification was investigated as a mediator of the interactive effect of distributive justice and interactional justice on OCB and of the interactive effect of procedural justice and interactional justice on OCB. This



relationship has not been studied before, and therefore it will be a contribution to both academia and the corporate world.

This was necessary to determine if social interactions do, in fact, play a major role in diminishing or eliminating perceptions of distributive or procedural unfairness in the workplace. If social interactions have the effect mentioned previously, organizations can use this to their advantage by hiring managers who have high interactional skills (both interpersonal and informational). Organizations can also conduct trainings for managers on how to develop social skills and effectively use social interactions in the workplace. This research showed how employee-supervisor communication can be used to motivate employees to perform extra-role behavior.

With the economic downturn, many companies are forced by their tightening budgets to decrease compensation and/or have a tightening of company policies. This often results in negative feelings by employees who feel that their hard work and loyalty are not being appreciated or valued by their organization. If organizations can learn to assuage these feelings of malcontent, the results can be manifold. Employees can feel more valued, and they will deal with perceptions of distributive and procedural injustice in ways that would not have significant negative effects on their loyalty to the organization, their group cohesiveness, their attitudes, their behavior, and their productivity.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Introduction**

This chapter covers an extensive review of the literature concerning the constructs of organizational citizenship behavior (OCB), organizational justice dimensions, and organizational identification. All the concepts mentioned previously play a pertinent role in this study. The literature review explores all of the aforementioned constructs and their dimensions and the relationships between them all. Hypotheses are generated where applicable.

Theory, as well as research, suggests that instead of identifying which dimensions of organizational justice influence OCB, it is more important to investigate how these justice dimensions interact with each other to result in such behaviors (Colquitt et al., 2001). Research on the moderating effect of interactional justice on the relationships between justice dimensions and OCB and on the interactive effect of distributive and procedural justice with interactional justice on OCB has not been done before. Therefore, it was deemed appropriate to delve into the intricacies of the relationships between the constructs mentioned.

#### **Organizational Citizenship Behavior**

One of the main goals of organizations is to increase their effectiveness and efficiency at the least cost to themselves (Ehigie & Otukoya, 2005; Farh et al., 2004). This can be enhanced through the performance of OCB by its employees (Williams & Anderson, 1991). OCB is “individual behavior that is discretionary, not directly or

explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization” (Organ et al., 2006, p. 3).

The origins of OCB can be traced to Barnard’s (1938) *Functions of the Executive* in which he pinpointed the necessity for behaviors that transcend the requirements of the job. He was of the opinion that it is well known that organizations could not thrive or even survive if their employees were unwilling to at least occasionally engage in such behaviors (Barnard, 1938).

Katz (1964) furthered this stream of research by proposing that voluntary spontaneous actions were necessary for organizational success. Katz outlined three requirements for a fully functional organization. First, the organization must persuade members to join and stay. Second, members must perform work tasks in a dependable way. Third, the organization must encourage two types of production: that which is required by the organization, and that which is innovative and spontaneous and which is extra-role in nature. Innovation, creative behavior, and spontaneous cooperation all are essential to organizational success and effectiveness, without which the organization will be an unstable social system (Katz, 1964). Katz summed up his thoughts on extra-role behavior by saying, “an organization which depends solely upon its blueprints of prescribed behavior is a very fragile social system” (p. 132).

Katz’s (1964) ideas on the requirements for a fully functional organization reflected the ideals of Roethlisberger and Dickson in their 1939 book, *Management and the Worker*. They wrote at length on the concept of cooperation in the workplace and were careful to delineate the difference between cooperation and productivity. Cooperation was described as an outcome of an informal organization that included the

daily prosocial actions of individuals who accommodate the needs of others in the workplace (Roethlisberger & Dickson, 1964).

However, *OCB* had yet to be coined. Not until 1983 did Bateman and Organ formally introduce the concept of OCB in their paper, “A Good Soldier Syndrome.” The popularity of studies on OCB steadily grew from this point. The primary motivation behind learning more about OCB grew from the widespread belief that these extra-role behaviors improve organizational effectiveness (Podsakoff & MacKenzie, 1997). Williams and Anderson (1991) claim that the most important OCB benefit is organizational effectiveness.

OCB serves practical importance by contributing to organizational efficiency and effectiveness through innovative behavior, transformation of workplace resources, and adaptability (Organ, 1988; Organ et al., 2006). One of the ways organizations orchestrate the transformation of resources and adaptability is by retaining their best workers and allocating less resources to firm maintenance which are taken care of by OCBs (Organ, 1988; Podsakoff et al., 1997).

Smith, Organ, and Near (1983) stated that OCBs “lubricate the social machinery of the organization” (p. 653) by supplying accommodations and productivity, which are not included in formal job descriptions. OCBs make available the flexibility necessary to deal with many unforeseen situations for which there are no clear-cut solutions. This area is of interest since OCB behaviors cannot be caused by the same motivations that induce people to join, stay, and operate within the confines of contractual obligations. Due to the fact that citizenship behavior transcends formal role requirements, it is not easily enforced or controlled by sanctions (Smith et al., 1983). However, not all OCBs further

organizational goals. Instead, OCBs may promote goals other than prescribed organizational goals. Bowler (2006) opined that extra-role behaviors are the main means of accomplishing informal goals.

Essential for attaining the desired level of organizational effectiveness is the willingness of subordinates to surpass the formal job requirements by performing extra-role behaviors (Ehigie & Otukoya, 2005; Podsakoff & MacKenzie, 1997). Extra-role behaviors involve employees who surpass general expectations to further the effective functioning of the organization or to benefit their coworkers (Podsakoff & MacKenzie, 1997). Of these behaviors, OCB has been most widely studied (Podsakoff & MacKenzie, 1997).

Examples of extra-role behaviors include helping coworkers with task-related issues, conducting duties without complaining, preserving and protecting resources in the workplace, enduring temporary inconveniences without a fuss, and helping to minimize disturbances caused by interpersonal disagreements (Bateman & Organ, 1983).

Organizations aspire to generate extra-role or OCB behaviors in their employees not only to create a dynamic workplace culture but also to maintain sustainability and increase productivity (Lin et al., 2010). For organizations to function effectively, employees must be open to contribute that which exceeds their formal job requirements (Katz, 1964).

**Dimensions of organizational citizenship behavior.** Organ (1988) categorized OCB into 5 groups: altruism, conscientiousness, courtesy, civic virtue, and sportsmanship. Altruism refers to voluntary behavior directed toward providing face-to-face help for a specific individual with a work problem (Smith et al., 1983). This behavior includes actions such as helping a new hire with orientation, instructing

someone on how to use office equipment, assisting a coworker with catching up on a backlog of work, and providing a coworker with materials he or she is unable to procure on his or her own (Organ 1988,1990).

The dimension of conscientiousness involves individual initiative that surpasses the minimal requirements of reporting to work regularly, being punctual, using resources sparingly, and other factors related to the general maintenance of the work environment (Organ, 1988, 1990). The OCB dimension of courtesy describes insightful behaviors that work to help prevent a problem for a coworker. Examples of gestures based on foresight to prevent problems include checking with a coworker before making commitments that may affect them, checking with someone before making work schedules that may involve them, and checking the level of skill needed to complete a specific task before assigning it to an individual (Organ, 1988, 1990).

Civic virtue encompasses responsible involvement in the politics of the organization by performing actions such as attending town hall meetings, keeping abreast of happenings in the organization, reading and responding to e-mails, and providing constructive opinions on organizational issues (Organ, 1988, 1990). Sportsmanship is the citizen-like disposition of enduring the nuisances and impositions of the job without complaining and airing grievances (Organ, 1988, 1990).

The five aforementioned dimensions were then further expanded by Organ et al. (2006) to a multi-dimensional model of OCB that includes the following behaviors: helping, sportsmanship, organizational loyalty, organizational compliance, individual initiative, civic virtue, and self-development.

Helping behavior involves volunteering to help with existing problems or to help work-related problems from occurring (Podsakoff et al., 2000). Helping others with work issues consists of Organ's (1988) altruism, peacekeeping, and cheerleading dimensions (Podsakoff et al., 2000), while helping others to prevent work-related problems includes Organ's (1988) dimension of courtesy. Peacekeeping is comprised of actions that reduce negative interpersonal disagreements, while cheerleading is comprised of encouraging attitudes and behaviors towards coworkers achievement and career development (Podsakoff & Mackenzie, 1994). Sportsmanship is the form of citizenship behavior that has been less frequently researched as compared to the other dimensions of OCB (Podsakoff et al., 2000).

Organizational loyalty concerns the "promotion of the organizational image to outsiders" (Moorman & Blakeley, 1995, p. 130). It refers to presenting a positive image of the organization to outsiders, working to minimize external threats, and displaying commitment to the organization even when conditions are unfavorable (Podsakoff et al., 2000). Organizational compliance is one of the more popularly researched constructs in OCB research (Podsakoff et al., 2000). This is also called OCB-O by Williams and Anderson (1991), and it refers to an individual's acceptance and internalization of "the rules, regulations and procedures, which results in a scrupulous adherence to them, even when no one observes or monitors compliance" (Podsakoff et al., 2000, p. 517).

Individual initiative is extra-role when it involves employees performing tasks that far exceed formal requirements so that it becomes voluntary in nature (Podsakoff et al., 2000). These acts include creativity or innovation, offering to undertake extra work,

putting in extra effort to ensure that the job is completed, motivating coworkers to do the same, and doing all of the above with high enthusiasm (Podsakoff et al., 2000).

Civic virtue refers to a commitment to the organization. This is revealed as a readiness or willingness to take part in its governance, to be on the lookout for industry opportunities and threats, and to always seek the organization's best interest even if it incurs a personal cost (Podsakoff et al., 2000). Overall, these behaviors stem from employees recognizing and feeling that they are a valued part of the organization (Podsakoff et al., 2000).

The last dimension to be discussed is self-development, which encompasses behaviors that employees undertake for self-improvement in the areas of "knowledge, skills, and abilities" (Podsakoff, et al., 2000, p. 525). These behaviors might include employees voluntarily taking training courses, staying up-to-date with advances in one's field, or learning new skill sets to improve individual performance. It should be noted that this discretionary form of OCB has not received any empirical attention in past research; however, it should improve organizational effectiveness through mechanisms that are distinct from other forms of OCB.

In 1991, Williams and Anderson categorized OCBs into behaviors directed toward the benefit of the individual (OCB-I) and behaviors directed toward the organization (OCB-O). Examples of OCB-I behaviors include helping coworkers catch up with their work if they were absent and being interested in the well-being of coworkers. Some OCB-O behaviors involve informing managers in advance when planning to miss work and following informal rules (Williams & Anderson, 1991). The behaviors directed toward the benefit of the individual are courtesy, peacekeeping, and



cheerleading, while the behaviors directed toward the benefit of the organization are compliance, civic virtue, and sportsmanship (Williams & Anderson, 1991).

**Antecedents and consequences of organizational citizenship behavior.** Studies of the determinants of citizenship behavior have their roots in research on the antecedents of altruism and prosocial behavior. A number of studies concluded that mood state plays a major influencing role on the performance of prosocial acts (Berkowitz & Connor, 1966; Isen, 1970; Isen & Levin, 1972). Subjects who had positive mood affect were more likely to behave prosocially, while subjects in whom a negative mood was induced were less likely to act in a prosocial manner. Smith et al. (1983) determined that job satisfaction directly influenced prosocial behavior.

Organ (1977) reasoned that the extra-role portion of performance is a consequence of employee job satisfaction. He reasoned that employees who have job satisfaction reciprocate their feelings by performing OCBs as a form of gratitude (Organ, 1977). Numerous studies have confirmed that job satisfaction is indeed an antecedent of OCB (MacKenzie et al., 1998; O'Reilly & Chatman, 1986; Williams & Anderson, 1991).

Another antecedent of OCB, which has been given significant support, is organizational commitment. Employees who are committed to the organization are prepared and willing to perform acts that serve the well-being of the organization (Brief & Motowildo, 1986). Both job satisfaction and organizational commitment serve as precursors of OCB in the forms of civic virtue, sportsmanship, and helping (MacKenzie et al., 1998; Organ, 1988, 1990; Organ & Ryan, 1995). Job satisfaction often acts as a mediator between fairness and OCB and person-organization fit and OCB (Netemeyer,

Bowles, MacKee, & McMurrian, 1997). Netemeyer et al. (1997) also report that fairness has a significant direct influence on OCB.

Group cohesiveness was found to be related to several OCB dimensions, specifically altruism, civic virtue, conscientiousness, courtesy, and sportsmanship (Podsakoff, MacKenzie, & Bommer, 1996). Organizational identification contributes to an employee's positive or negative relationship with his or her work organization. This, in turn, affects his or her work-related behaviors, one of which is OCB (Lin et al., 2010).

From the perspective of the social network, highly identified group members are more likely to display OCB toward fellow group members. Group members perform OCBs based on social exchange behaviors. Their relationship with out-group members are weaker and are based on economic exchange, which does not contribute to OCB performance (Bowler, 2001). Based on analysis by Jain (2010), it was concluded that employees who perform high levels of OCB are more likely to belong to an informal structure or social network in their organization. It is even more imperative to not only attract but to keep good employees who are intrinsically driven to make sacrifices for the greater good of the organization (Lin et al., 2010).

Leadership behaviors, specifically transformational, transactional, path-goal leadership, and leader-member exchange, are related to OCB (Podsakoff et al., 2000). Transformational leadership was found to be related to every dimension of OCB (Podsakoff et al., 2000). A meta-analysis by Organ and Ryan (1995) showed that OCBs are correlated with job satisfaction, organizational commitment, perceived fairness, and leader supportiveness.

A major consequence of OCB is performance (Koys, 2001; Podsakoff & MacKenzie, 1997). One of the first studies on OCB and performance was conducted by Karambayya (1989). She found that employees who were identified as performing more OCBs were reported to have higher performance levels than those who performed less OCBs (Karambaya, 1989). In a subsequent study by Podsakoff and MacKenzie (1994), OCBs were found to account for about 17% of variance in performance in a sample of 839 workers who belonged to 16 insurance sales units.

The effect of OCB on performance can be explained through the use of social exchange theory (Blau, 1964). Organizations are partially sustained by symbiotic social exchange relationships in which each party is the benefactor and the recipient of several benefits that include socio-emotional benefits. When employees receive socio-emotional benefits, they reciprocate the generosity of their supervisor or their organization by performing OCBs. Aggregate OCBs boost organizational performance by enabling people to work together for the collective good of the organization (Organ, 1988; Podsakoff et al., 1997). Organ (1988) is of the opinion that OCBs increase performance by reducing the allocation of scarce resources to maintenance tasks, thus making more resources available for productive functions. A meta-analysis by Podsakoff et al. (2000) found that OCB is correlated with performance at the individual, team, and organizational level.

Also, OCBs may improve productivity because employees who perform OCBs assist their coworkers to perform their jobs better or because employee OCBs allow managers to spend more time on productivity-increasing functions (Organ, 1988). In fact, all OCBs were found to substantially influence organizational performance (Podsakoff &

MacKenzie, 1994). Not only does OCB affect organizational performance but it also affects managerial performance evaluations, which ultimately determine salary raises and promotions among other consequences (Podsakoff et al., 2000).

One other consequence of OCB, other than an increase in performance, efficiency, and productivity, is a decrease in voluntary turnover in organizations, which is a direct reduction of one aspect of organizational overhead (MacKenzie et al., 1998). It is well-known that the cost of turnover is high due to the loss of experienced employees and increasing high costs associated with the training and development of new employees. Therefore, the need to keep voluntary turnover at a minimum is evident. There is no doubt that OCBs play a critical role in the well-being and performance of an organization.

The next section discusses one of the previously mentioned antecedents of OCB in greater detail; organizational justice and OCB are the focus of the discussion, and the role of interactional justice is highlighted.

### **Organizational Justice**

The topic of justice or fairness can be traced as far back as the ancient Greeks who used the term justice to describe *righteousness* or *oughtness* in works by Herodotus and Plutarch (Colquitt et al., 2001; Cropanzano, Bowen, & Gilliland, 2007). These philosophers were interested in determining what constitutes actions as truly just. The concept of justice has long been a hotly debated issue in organizations, as evidenced by employees conversing about whether they received fair or appropriate outcomes and whether the procedures used to derive those outcomes were appropriate or fair (Deutsch, 1985; Tyler, 1989). This is accompanied by managers often confusing outcome justice

and favorability by erroneously assuming that employees are only concerned with whether their outcomes were desirable (Cropanzano et al., 2007).

Today, organizational justice is a term used in the workplace to describe both the fairness of the reward system and the employee's perception of the fairness of the actions taken to put the distribution of rewards into effect (Colquitt, 2001; Levanthal, 1980; Thibaut & Walker, 1975). In other words, it describes the instrumentality of fairness within the organization (Moorman, 1991). Greenberg (1990) refers to organizational justice as "a literature grown around attempts to describe and explain the role of fairness as a consideration in the workplace" (p. 400). For the purposes of this study, organizational justice is defined as "the term used to describe the role of fairness as it directly relates to the workplace" (Moorman, 1991, p. 845). The main dimensions of organizational justice are distributive justice, procedural justice, and interactional justice (Greenberg & Colquitt, 2005).

**Distributive justice.** Distributive justice is used to describe the distribution of outcomes; outcomes some employees obtain while others do not (Cropanzano et al., 2007). It is quite probable that the earliest study of distributive justice was theorized by Aristotle in his *Nicomachean Ethics*. Aristotle stated that fair distribution included "something proportionate" which he subsequently termed "equality of ratios." Adams (1965) continued in a similar vein of thought and presented his popular equity theory from which distributive theory was born. Prior to 1975, the majority of justice research focused on distributive justice, which was a natural outgrowth of Adams's equity theory. Blau's (1964) social exchange theory also is credited with shaping distributive justice research in organizations.

Distributive justice refers to the fairness with which rewards are allocated (Niehoff & Moorman, 1993). In other words, it describes the organization's reward system. It is defined as "the distribution of benefits and harms, rewards and costs, and other things that affect the well-being of the individual members of a group or community" (Luo, 2007, p. 646). Rewards are commonly in the form of compensation, which is based on job responsibilities, experience, and performance among other factors (Chahal & Mehta, 2011). Rewards can be monetary (shares and profits) as well as nonmonetary (reputation building and knowledge enhancement; Luo, 2007). Rewards may be individual-related or group-related. Individual-related outcomes include rewards such as salary raises, promotions, layoffs, and OCBs, while group-related outcomes include rewards such as profit sharing, partner commitment, and subsidiary performance, to name a few (Luo, 2007).

There are certain consequences of distributive justice. Adams (1965) questioned, "What are the consequences of outcomes being perceived as meeting or not meeting the norms of justice? Does a man treated unfairly express dissatisfaction ... Are there not other consequences of unfair exchanges?" (p. 268). Organ (1988) reconceptualized Adams's question using the predictor variable as fairness and the outcome variable as OCB. When employees feel that they have been treated unfairly by their company, such as inequitable payment, they are more likely to perform direct actions, such as theft or sabotage, which work against the good of the organization (Cropanzano & Folger, 1989; Hollinger & Clark, 1983). The more popular reaction to injustice is covert retaliation through the elimination or reduction of OCBs, psychological withdrawal, and various resistance actions (Jermier, Knights, & Nord, 1994).

There are three general rules that lead to distributive justice: equality (equal allocations to each), equity (allocations in proportion to contribution), and need (allocation in proportion to urgency; Cropanzano et al., 2007). Equity theory, a cognitive motivational model, was initially used to describe the fair allocation or distribution of resources (Greenberg & Colquitt, 2005). Equity has been used almost exclusively in research as a benchmark of fairness (Morand & Merriman, 2012). According to Adams (1963), individuals are motivated to attain a state of equity with a *comparison other*. This is achieved by cognitively analyzing the outcomes received by the individual and their inputs provided as compared to the inputs and outputs of a comparison other. When the two are assessed to be unequal, a state of cognitive dissonance occurs (Festinger, Pepitone, & Newcomb, 1952), and the individual will be motivated to adjust his or her behavior (either behaviorally or psychologically) to reduce the perceived inequity.

Adams (1965) claims that when the ratios are unequal, the person whose ratio is higher feels overpaid and guilty while the person whose ratio is lower feels underpaid and angry. Equal ratios are assumed to result in equitable states and feelings of fairness and satisfaction (Adams, 1963, 1965; Greenberg, 1990). One of the outcomes of the extensive research on distributive justice was that the outcomes were not always as salient as the processes used to procure those outcomes. Organizational scientists refocused their attention from what decisions were made to how those decisions were made (Greenberg, 1990). As a result of this finding, research naturally shifted to procedural justice.

**Procedural justice.** Thibaut and Walker (1975) pioneered research on procedural justice in the 1970s. Procedural justice is the fairness perception of the methods and guidelines used to implement the distribution of rewards (Folger & Konovsky, 1989;

Greenberg, 1990; Thibaut & Walker, 1975). Fair formal procedures refer to the utilization (or non-utilization) of guidelines or procedures thought to be necessary to the fair allocation of rewards (Levanthal, 1980).

Levanthal (1976) and Deutsch (1975) both proposed that procedural justice was an outgrowth of equity theory (Adams, 1965) since they both encompass the allocation of resources. There was a transition in research from how employees respond to inequitable outcomes to how they respond to procedures that were unfair.

Work on procedural justice began to quickly evolve in the mid-1970s when Thibaut and Walker (1975) published their book, *Procedural Justice: A Psychological Analysis*, based on the reactions of disputants to legal procedures. They suggested that employee reactions to dispute resolution outcomes are significantly influenced by the fairness of the procedures, regardless of the favorability or fairness of the outcomes (Tyler, 1989). Thibaut and Walker (1975) discovered that the critical element which shapes peoples' views about fairness is the sharing of control between the third party and the disputants (Tyler, 1989). They classified control into two categories: process control and decision control. Their study revealed that disputants placed more value on having control in the process stage than in the decision stage (Colquitt et al., 2001). This process control has become widely known as the "fair process effect" or the "voice effect" of procedural justice (Folger & Konovsky, 1989; Lind & Tyler, 1988).

Folger (1977) was instrumental in demonstrating that when employees are given a voice in decisions, their reactions to decision outcomes were positively enhanced. Procedures can include giving employees "voice" by taking their advice or opinions into consideration when making decisions (Moorman, 1991). Results consistently show that



voice increases employee perception of the fairness of processes regardless of the outcomes (Greenberg, 1990; Lind & Tyler, 1988; Tyler, 1989). There are two types of voice mechanisms: formal and informal. Formal voice mechanisms are built in policies that facilitate employee input into certain procedures, while informal voice mechanisms are practices initiated by employees to voice their opinions or concerns (Dulebohn & Ferris, 1999).

Even though the theory of procedural justice was introduced by Thibaut and Walker (1975), credit goes to Levanthal (1980) and colleagues for applying the concepts of procedural justice into non-legal settings, especially organizational contexts. Levanthal broadened procedural justice into a list of six criteria that must be met before a procedure can be considered as fair. Procedures should be

applied consistently across people and across time, be free from bias, ensure that accurate information is collected and used in making decisions, have some mechanism to correct flawed or inaccurate decisions, conform to personal or prevailing standards of morality, and ensure that the opinions of various groups affected by the decision have been taken into account. (Colquitt et al., 2001, p. 426)

Lind and Tyler (1988) followed this stream of research on procedural justice and developed what is now known as the group-value model. The model takes into account the psychology of procedural justice, which was not taken into consideration in prior research. The group-value model posited that people place value on their long-term relationship with the third parties and do not view their dealings with the authorities or institutions as a one-time transaction (Tyler, 1989). In essence, this model supports the

view that people are concerned about their membership in social groups and that their group identification is mentally rewarding. Group identification gives the members self-validation, giving them emotional support and a feeling of belonging. Groups can be small groups or large organizations (Tyler, 1989). One of the outcomes of fair treatment by authorities is trust and commitment to the group. If employees think that the authorities are fair in their dealings with them, they become committed to the group for the long term (Tyler, 1989).

Outcomes of procedural justice include trust in authority, turnover intention, and job satisfaction (Greenberg, 1990). Cropanzano and Ambrose (2001) summed up the main difference between distributive and procedural justice as “distributive justice has been loosely equated with economic benefits, whereas procedural justice has been loosely equated with socio-emotional benefits” (p. 125). This stream of research was followed by interactional justice by Bies and Moag (1986) and Tyler and Bies (1990).

**Interactional justice.** Interactional justice is concerned with “the nature of the interpersonal treatment received from others, especially key organizational authorities” (Greenberg & Colquitt, 2005, p. 5). Interpersonal behaviors include showing respect, truthfulness, politeness, and dignity meted out to the receiver of the justice by the originator of justice (Luo, 2007). Interpersonal treatment includes how employees are treated during the operationalization of a procedure or process; it also stresses communication and interactional facets of processes (Byrne, 2005).

Interactional justice includes two distinct components: interpersonal justice and informational justice. Interpersonal justice is the degree of respect, politeness, and dignity shown by superiors or third parties who execute procedures; informational justice

concentrates on the explanations given to people as to why certain outcomes were allocated in a certain way or why procedures were carried out in a certain fashion (Lind & Tyler, 1988).

Chances of interactional justice being attained are higher when recipients are treated with sensitivity and respect and are given ample explanations (Luo, 2007). Since interpersonal behavior affects interactional justice, it also affects behavioral, affective, and cognitive responses toward the originator of justice (Luo, 2007). Thus, when a person feels that there was interactional injustice, he or she reacts negatively toward the originator of the injustice rather than react negatively toward the specific organization as per distributive justice theory (Cohen-Charash & Spector, 2001). In a similar vein, the person will have lower levels of commitment to his or her supervisor than to the organization as a whole. A significant portion of perceived injustices in the workplace does not involve distributive or procedural justice issues but rather concerns the manner of interpersonal treatment during interactions (Mikula, Petrik, & Tanzer, 1990).

**Antecedents and consequences of organizational justice.** There are a few antecedents of organizational justice that have been outlined in the literature, including but not limited to justice expectations (Bell, Wiechmann, & Ryan, 2006), state affect (moods and emotions), and trait affect (affectivity; Barsky & Kaplan, 2007; Barsky, Kaplan, & Beal, 2011). Justice expectations, which concern anticipated fairness in future outcomes, processes, and interpersonal communication, may influence individuals' reactions to organizational events. Anticipation of future treatment is a method of handling uncertain or unpredictable events; these expectations form employees' justice perceptions (Bell et al., 2006; Shapiro & Kirkman, 2001).

State and trait affect are related to perceptions of distributive, procedural, and interactional justice dimensions (Barsky & Kaplan, 2007). When Van den Bos (2003) manipulated state affect, individuals rated processes or procedures as fair when the individual had a positive mood. On the other hand, the same individuals rated processes or procedures as less fair when their mood was negative. This was true even when individuals were unaware of the procedures (Van den Bos, 2003). Trait affect is more or less consistent across time and it influences justice through perception formation. For example, individuals high in trait negative affect perceive work situations as unfair and react negatively to the situations. Those who are high in trait positive affect may view those same situations as positive and fair and will react in a favorable manner to the situations (Barsky & Kaplan, 2007).

One closely related concept that affects justice perceptions is the justice climate of a work unit or organization (Naumann & Bennett, 2000, 2002). The justice climate is a “distinct group-level cognition” with respect to fair treatment by authority (Naumann & Bennett, 2000, p. 881). People who are similar in thought and interact within a similar environment will tend to perceive work-related events in a similar fashion (Whitman, Caleo, Carpenter, Horner, & Bernerth, 2012).

The reactions to fairness can be categorized into attitudinal, behavioral, and affective responses. Responses can affect particular outcome(s): the job itself, the authorities, and/or the organization (Cohen-Charash & Spector, 2001). Since this study was focused on the effect of justice on OCB, particular attention was given to how reactions to fairness affect the organization in the form of OCB. Distributive justice influences behavioral, affective, and cognitive responses (Cohen-Charash & Spector,

2001). Distributive justice is linked to organizational outcomes, such as customer satisfaction and productivity, while interactional justice is linked to OCB and cohesion (Whitman et al., 2012).

Several outcomes of justice have been documented in past studies, some of which include unit-level effectiveness, evaluations of authority, acceptance of organizational rules and policies, performance, OCB, work effort, counterproductive work behavior (increased turnover, absenteeism, and theft), and attitudes and emotions (commitment and satisfaction; Byrne, 2005; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Whitman et al., 2012). Justice has grown from how fairness impacts lower-order attitudes, such as team spirit and social identity, to how it impacts higher-order attitudes, such as “commitment, trust, and social harmony in groups, subunits, and institutions” (Luo, 2007, p. 646). In the following section, the relationship between organizational justice and OCB is elaborated upon in greater detail.

### **Organizational Justice and Organizational Citizenship Behavior**

Past work on organizational justice has suggested that all three dimensions of justice positively affect OCB to varying degrees. Organ (1988) stated that “organizational citizenship behavior varies positively with the extent to which a person believes that fairness has been obtained in his or her relationship with the organization” (p. 61). In other words, the greater the perceived fairness by an employee, the greater his or her performance of OCB. This is confirmed by Netemeyer et al. (1997) who found that fairness is directly related to extra-role performance.

When fairness and satisfaction were both tested as predictors of OCB, fairness resulted in being the stronger predictor of the two (Moorman, 1991). In a subsequent

study by Konovsky and Organ (1996), fairness was found to significantly predict all five dimensions of OCB (altruism, courtesy, conscientiousness, civic virtue, and sportsmanship; Konovsky & Organ, 1996).

Early research on the predictors of OCB concentrated on fairness and justice as antecedents of OCB. A strong relationship between perceptions of fairness or justice and OCB was discovered (Blakely, Andrews, & Moorman, 2005). More recent research has corroborated the finding that if employees perceive the organization as fair, they would be more probable to perform OCBs (Bynum, Bentley, Holmes, & Bouldin, 2012).

The significant relationship between organizational justice and OCB has been supported in many studies (Cohen-Charash & Spector, 2001; Farh, Podsakoff, & Organ, 1990; Moorman, 1991; Niehoff & Moorman, 1993; Wayne & Green, 1993; Williams, Pitre, & Zainuba, 2002). This wealth of support for the relationship between organizational justice and OCB has left little doubt as to whether such a relationship exists. Furthermore, it paved the way for further research to determine which of the three forms of justice are related to specific OCB dimensions. Next, the effect of organizational identification on OCB is discussed.

### **Organizational Identification and Organizational Citizenship Behavior**

Organizational identification stems from the construct of social identity theory. It was originally developed by Tajfel (1979) to aid in the understanding of the psychological basis of discrimination between groups. According to social identity theory, individuals are motivated to create a well-defined self-concept, which impacts their behaviors and attitudes at work (Dukerich, Golden, & Shortell, 2002; Tajfel, 1979). Social identity theory posits that employees have two types of identity: personal and

social. Personal identity includes characteristics unique to a person (physical attributes, capabilities, hobbies, and psychological traits), while social identity includes the connection between a person and his or her group or organization (e.g. nationality, political membership; Kane, Magnusen, & Perrewé, 2012; Tajfel & Turner, 1986; Turner, 1984). In a later study by Tajfel and Turner (1985), it was found that people are apt to classify themselves as well as others into certain groups or social categories based on religious affiliation, age, gender, and organizational membership.

Based on the framework developed by Tajfel and Turner (1985), Ashforth and Mael (1989) developed the concept of organizational identification, defined as “a specific form of social identification where the individual defines him or herself in terms of their membership in a particular organization” (p. 105). Later, they updated this definition of organizational identification to “perceived oneness with an organization and the experience of the organization’s success or failure as one’s own” (Mael & Ashforth, 1992, p. 103). Another applicable definition of organizational identification is “the degree to which a person defines him or herself as having the same attributes that he or she believes define the organization” (Dutton, Dukerich, & Harquail, 1994, p. 239). Organizational identification is a self-perception that is cognitively grounded on connections between the identities of the individual and that of the organization (Chang, Kuo, Su, & Taylor, 2013).

Organizational identification is a psychological attachment that arises when the distinguishing qualities of the organization become the same as the distinguishing qualities for the individuals themselves (Ge et al., 2010). In order to identify with the organization, an individual only needs to view himself or herself as psychologically

connected to the fate of the organization; the behavior and affect are likely antecedents and/or consequences (Mael & Ashforth, 1992). It is probable that if a highly identified individual were to leave the organization he or she will experience some degree of psychic loss (Mael & Ashforth, 1992).

Identification is operationalized through socialization in which an employee adopts the values, customs, and procedures of the organization (Katz & Kahn, 1978). In other words, individuals personify the organization through their identification with the organization.

Organizational identification contains two fundamental requirements: (a) the necessity to self-categorize (the extent to which one sees himself or herself as being a part of the organization) and (b) the necessity to self-enhance (sense of pride in being a part of the organization or feeling acknowledged in the organization; Smidts, Pruyn, & Van Riel, 2001). This results in the reification of the organization, which evokes feelings of loyalty and commitment; it also provides an avenue for which socialization may improve the internalization of the values and customs of the organization (Ashforth & Mael, 1989).

Individuals may identify with a specific profession with organizational subunits, such as work teams or departments, or with the entire organization (Van Dick et al., 2005). The extent of the identification depends on the level of internalization of the role, the team, or the organization (Ashforth & Mael, 1989). This identification has been found to be a key motivator of extra effort in the workplace (Van Dick et al., 2005). It also predicts employee behaviors and attitudes (Van Dick & Wagner, 2002). It can be reasoned that employees who place the group goals above their own, and who behave in



ways that exceed formal requirements, do so as a reflection of the degree of identification they feel for the group (Bynum et al., 2012). Person-organization fit significantly impacts organizational identification. When person-organization fit increases, employees experience an increase in organizational identification (Chang et al., 2013).

Since organizational identification is the process by which employees incorporate central organizational features into their individual identity (Johnson, Johnson, & Heimberg, 1999), a person is said to be identified with his or her organization if he or she shares similar goals and values with the organization (Angle & Perry, 1981; Kelman, 1958). When this occurs, the employee fosters an emotional bond with the organization, and the person then identifies himself or herself in terms of the organization. In other words, employees who identify with the organization often visualize themselves as a personification of the organization (Mael & Ashforth, 1995).

When individuals have a strong identification with a group, they see their personal goals as interchangeable with those of other members of the group and will work to promote the group goals as their individual goals (Bynum et al., 2012). Employees who strongly identify with their organization may be more motivated to tackle work issues from the angle of the group interest (Dick, Wagner, Stellmacher, & Christ, 2004).

Organizational identification can be identified as one of the fundamental variables that stress the salience of the organization to employees' self-definition and goals (De Cremer, 2005). High identifiers interpret the organizational well-being as their own, and they further the improvement of the organization's reputation as well as its financial state since these represent the personal values of the employees as well (De Cremer, 2005).

Furthermore, it has substantial influence on organizational outcomes or performance, which directly affects the welfare of the organization (De Cremer, 2005). Therefore, it is logical to assume that individuals who strongly identify with an organization that promotes prosocial values will perform more prosocial or extra-role actions that will benefit others and, by extension, the organization.

**Antecedents and consequences of organizational identification.** The antecedents of organizational identification include distinct organizational values, distinct organizational practices, organizational prestige, and the causes of group formation (Ashforth & Mael, 1989). Research suggests that organizational identification influences OCB. In the words of Jain (2010),

Individuals who possess high levels of OCB are more likely to be part of an informal structure, and have their own social network within organizations. Their colleagues may perceive them as key members of the organization, due to their persistent belief in strengthening and empowering others. (p. 407)

Overall, evidence substantiating that organizational identification influences OCB has been moderately robust across various operationalizations of both concepts (Bellou & Thanopoulos, 2006; Van Dick et al., 2005). For example, organizational identification was found to have an impact on interpersonal behaviors such as cooperative behaviors and OCBs (Bergami & Bagozzi, 2000; Dukerich et al., 2002; Dutton, Dukerich, & Harquail, 1994). It has also been linked to a desire to better the reputation of the organization (Ashforth & Mael, 1989), and highly identified individuals will act in ways to live up to the organizational values, increase successes, and decrease failures (Kane et

al., 2012). Past studies have found positive relationships between organizational identification and employee outcomes such as organizational effectiveness, performance, employee retention, and OCB (Mael & Ashforth, 1995; Scott & Lane, 2000; Smith & Gardner, 2007). Organizational identification also enhances satisfaction, commitment, loyalty, and self-esteem; improves group cohesion; promotes esprit de corps (Vadera & Pratt, 2013; Van Vugt & Hart, 2004); and contributes toward the development of long-term organizational commitment and support (Ashforth & Mael, 1989; He & Baruch, 2010; Ikegami & Ishida, 2007). It also affects cooperation, altruistic behaviors, and favorable group evaluations (Ashforth & Mael, 1989).

The higher the degree of an employee's identification with an organization, the greater the probability he or she would be aligned with the organization's perspective and, hence, will act in the organization's best interest (Jiang & Law, 2013; Scott & Lane, 2000). In addition, it was found that one of the consequences of group identification was helpful and supportive behaviors (Scott & Lane, 2000). Organizational identification acts as an antecedent to OCB-O where employees with high identification will consider how their OCB benefits the organization when helping their fellow employees (Jiang & Law, 2013). Ashforth and Mael's (1989) study produced results that show alumni with high identification with their alma mater were more prone to donate funds to their alma mater, to enroll their children in that school, and to express higher satisfaction with their experience at that institution (Ashforth & Mael, 1989).

Van Dick et al. (2005) conducted an experiment with schoolteachers that measured the effects of various identification levels in extra-role behaviors. They found that the manipulation of salience of school identification resulted in greater extra-role

behaviors (Van Dick et al., 2005). In another study, Bellou and Thenopoulos (2006) surveyed nurses and doctors in public hospitals; they found there was a significant correlation between organizational identification and OCB. The next section discusses how interactional justice acts as a moderator to produce underlying effects in the relationships between justice dimensions and OCB.

### **Interactional Justice as a Moderator**

As was previously mentioned, social exchanges overlay economic exchanges after some time in an organization. Interactions between supervisors and subordinates constitute a significant part of social exchange in an organization. How employees interpret these interactions is subjective and makes it challenging for supervisors to understand the best means of interacting with employees (Rousseau, 1995, 2001). When employees perceive that their supervisors view them favorably, they take this as an indication of the organization's support, since the supervisor is an agent of the organization (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). In addition, employees are aware that supervisors often communicate employee evaluations to upper management, and this further strengthens the association between supervisor support and organizational support (Rhoades & Eisenberger, 2002).

High-quality employee-supervisor interaction affords employees with both social and emotional support in the form of desirable work schedules, advice on how to deal with challenging work issues, or providing supportive words in situations of conflict or stress (Van Dyne, Jehn, & Cummings, 2002). The increased level of support provided by high-quality interactions with supervisors acts as alleviators of uncertain or ambiguous feelings experienced by employees (Harris & Kacmar, 2006). It can be said that high-

quality employee-supervisor exchanges provide valuable intangible resources such as increased value and self-worth to employees (Sluss, Klimchak, & Holmes, 2008).

Another outcome of high-quality employee-supervisor interaction is a strengthened psychological contract with the organization. The psychological contract between the employees and their supervisor manifests itself in the sentiment that their supervisors are supportive, their jobs are secure, they have trust in their supervisor and organizational decisions, they are more committed to their supervisor and their organization, and they have a more positive attitude toward their supervisor and, by extension, the organization (Zagenczyk, Gibney, Few, & Scott, 2011). Research has corroborated that favorable treatment in the workplace (fairness, good working conditions, high-quality employee-supervisor interaction) results in perceived organizational support, which influences the attitudes of the employees (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002; Riggle, Edmondson, & Hansen, 2009).

By default, due to their position, supervisors play a crucial role in helping employees deal with various forms of workplace stress through the provision of emotional support (Rego, Sousa, Cunha, Correia, & Saur-Amaral, 2007). Not only is supportive supervision associated with a caring work environment but one that is secure and positive as well (Shore & Shore, 1995). Perceived organizational support plays a major role in meeting the socio-emotional needs of employees, such as caring for individuals, esteem building, and approval in the workplace (Eisenberger et al., 1986).

When employees feel that their socio-emotional needs are met, the perceived organizational support diminishes adverse psychological and emotional tension to

stressors by making the employees feel that emotional support is available when needed (Rhoades & Eisenberger, 2002). The following two sections will discuss first the role of interactional justice in diminishing stressors in the form of distributive injustice, and second, the role of interactional justice in diminishing stressors in the form of procedural injustice. How the diminished stressors affect OCB will then be discussed.

**Interactional justice as moderator in the relationship between distributive justice and OCB.** The predictive effect of distributive justice on OCB is supported by a plethora of evidence in the literature (Dittrich & Carroll, 1979; Scholl et al., 1987; Cohen-Charash & Spector, 2001). However, there is no record of interactional justice indirectly affecting the relationship between the two constructs. This research seeks to have a more complete understanding of the relationship between distributive justice and OCB by studying the indirect effect of interactional justice on the relationship.

Distributive injustice is perceived when actual outcomes are not aligned with employee expectations or expected outcomes (Colquitt, 2001). Employees often reconcile distributive injustice by thinking they are paid less, not because they are not valuable stakeholders of the organization or that they are less important but because the organization is simply unable to compensate them due to inadequate resources, a downturn in the economy, or poor organizational performance (Riketta, 2005; Van Knippenberg & Sleebos, 2006). This can be supported by examining the symbolic aspect of social exchange where the fulfillment of promises made by authority to subordinates reinforces the value of that employee to the collective.

This further reinforces the idea that high interactional justice over time can result in social exchanges between employees and their supervisors, which nurture a

psychological contract between the employees and the organization. This can have a positive impact on the relationship between distributive justice and OCB such that even in times of distributive injustice the impact of distributive injustice on OCB may be partially diminished by interactional justice. The socio-emotional benefits associated with a high quality of employee-supervisor communication enhance the relationship between distributive justice and OCB such that the strength of the relationship between distributive justice and organizational OCB is increased as the quality of the interaction increases.

As the strength of this relationship is increased, employees may feel inclined to perform OCBs as a reciprocating outcome of their social exchange relationship with the organization. Conversely, when the socio-emotional needs are not met through social exchange, the effect of feelings of distributive injustice on OCB may be amplified. In addition to being undercompensated, employees may feel that their supervisor or the organization does not care about them or their well-being; they may feel that their job is not stable and that their work environment is one which is not nurturing or positive. A low-quality employee-supervisor interaction may act as an additional stressor in an employee's work life and can weaken the effect of distributive justice on OCB (Erdogan & Liden, 2002).

Low-quality interactions may precipitate or reinforce a breach of psychological contract between the employee and his or her supervisor and, by extension, with the organization. This breach may act to further jeopardize trust in the supervisor and the organization. This research proposed that interactional justice moderates the relationship between distributive justice and OCB such that the relationship is stronger for employees

who have a higher perception of interactional justice than for employees with a lower perception of interactional justice.

Hypothesis 1: Interactional justice will moderate the relationship between distributive justice and OCB such that the relationship is stronger for employees with high interactional justice than for employees with low interactional justice.

**Interactional justice as a moderator in the relationship between procedural justice and OCB.** The relationship between procedural justice and OCB is also well-documented in the justice literature (Cohen-Charash & Spector, 2001; Jiang & Law, 2013; Konovsky & Pugh, 1994; Lind & Earley, 1991; Lipponen et al., 2004; Menguc, 2000; Moorman, 1991; Moorman & Byrne, 2005; Moorman et al., 1998; Organ, 1988). Similar to the relationship between distributive justice and OCB, there is no evidence that interactional justice was ever examined as a moderator of this relationship. This research tested the role of interactional justice as a moderator in the relationship between procedural justice and OCB.

As outlined in the previous section, employee-supervisor interactions play a major role in providing organizational support of a socio-emotional nature (Van Dyne et al., 2002). It can be assumed that a high-quality employee-supervisor interaction may affect the relationship between procedural justice and OCB in a similar way to the relationship between distributive justice and OCB. A high-quality interaction with supervisors enhances the relationship between procedural justice and OCB. For example, when employees feel that they have been given a high level of socio-emotional support, their feelings of procedural injustice due to unfair procedures or not given voice will be



diminished. To take it further, when employees who enjoy a high-quality interaction with their supervisor feel that they are the victim of procedural injustice in the workplace, they are also able to reconcile this by thinking that they are not afforded fair procedures or not given voice, not because they are not important resources to the organization but because government or organizational regulation may not allow much room for taking the opinions of employees into consideration.

For example, in organizational processes in which there is little room for error, the procedures are strict and there is minimal allowance for employee input, such as in military operations or in the processes of the Internal Revenue Service (Diener, King, & Lyubomirsky, 2005). They can also rationalize the procedural injustice by thinking that their supervisors are not responsible for creating company rules but are merely executioners of the rules and processes. This will make it easier to look at the positive aspects of the job. Over time, interactional justice can strengthen the psychological contract between employees and the organization. This can positively impact the relationship between procedural justice and OCB.

Conversely, a low-quality employee-supervisor interaction will indirectly weaken the relationship between procedural justice and OCB by acting as a stressor. This lack of support by the supervisor and, by extension, the organization results in unmet socio-emotional needs, which lead to the employee feeling that the organization does not value him or her. The employee may have decreased trust in both the supervisor and the organization, and this may weaken the psychological contract between the employee and the supervisor. Thus, it was hypothesized that interactional justice moderates the relationship between procedural justice and OCB such that the relationship is stronger for

employees with perceptions of high interactional justice than for employees with perceptions of low interactional justice.

Hypothesis 2: Interactional justice will moderate the relationship between procedural justice and OCB such that the relationship is stronger for employees with high interactional justice than for employees with low interactional justice.

### **The Mediating Effect of Organizational Identification**

**Organizational identification as a mediator of the effect of the interaction of distributive justice and interactional justice on OCB.** The relationship between distributive justice and the performance of OCBs by employees may be operationalized through equity theory (Adams, 1965) and social exchange theory (Blau, 1964). Equity theory states that the perception of unfair allocation of work rewards relative to work inputs leads to tension, which causes the individual to work to remove or reduce the tension. In this case, the input is OCB and inequities such as underpayment or reduced bonus lead to reduced OCB (Niehoff & Moorman, 1993). It is interesting to note that OCB, by definition, is behavior that is not formally rewarded by an organization (Organ, 1988). Thus, the question arises as to how it may be possible that perceptions of distributive justice influence OCB?

Organ (1988) answered this question by using social exchange theory, which is a concept developed by Blau (1964). Social exchange theory suggests that employees who receive valuable outcomes from the organization tend to reciprocate as a means of sustaining a healthy, mutually beneficial relationship (Organ, 1990). Blau (1964) outlined several conditions for social exchange. Social exchange relationships must include

unspecified future reciprocated behavior, the time or type of behavior must not be pre-determined, and the benefactors of the exchange must use their discretion to informally repay the provider with some form of long-term benefit. The exchanges that occur between individuals can be due to reciprocation of prior interactions. These exchanges may be economic or social in nature (Blau, 1964). Economic exchanges are based on behavior that is carried out in order to fulfill the formal obligations of employment (also known as a transactional contract). Social exchanges, on the other hand, motivate behavior that is based on a psychological contract, leaving reciprocation up to the employees (Niehoff & Moorman, 1993).

Organ (1988) suggested that imperative to understanding the effect of distributive justice on OCB is the realization employees frequently overlay their economic exchanges with social exchanges in the organization. Since social exchanges are not included within the realm of a contract, the exchanges lend themselves to ambiguity, facilitating extra-role acts by employees. Organ (1988) stated, “the inherent ambiguity in such a system frees the individual to contribute in a discretionary fashion without thinking that this will be acquiescence to exploitation” (p. 553). It follows that if employees view their relationship with the organization as being social in nature, they will be more prone to exhibit OCBs.

If employees reciprocate fair distributive justice in an economic exchange, the reciprocated behavior will be confined to in-role behavior that is within the guidelines of the employment contract. However, if employees consider their relationship with the organization as one of a social contract, then their reciprocated behavior will be in the form of voluntary acts of OCB. Likewise, when employees perceive that they have been

subjected to unfair treatment, they reciprocate via social exchange by decreasing their performance or decreasing their OCB. Since employees who feel they may have been treated unfairly may find it difficult to alter their performance, they may respond to unfair treatment by reducing their citizenship behavior (Organ, 1988).

Empirical support for the influence of distributive fairness on OCB has been well documented. Dittrich and Carroll (1979) and Scholl, Cooper, and McKenna (1987) determined that perceptions of pay equity were strongly related to OCB. For employees to view their relationship with their organization as one of social exchange, they must view their relationship with their organization as a long-term relationship. Since it is only possible for distributive justice to affect OCB if the conditions of social exchange are met, it stands to reason that the relationship between the two variables may be facilitated by organizational identification that embodies a social exchange nature. In fact, the perception of distributive justice can affect an employee's organizational identification (Lavelle, Rupp, & Brockner, 2007; Walumbwa, Cropanzano, & Hartnell, 2009) since they may want to sustain membership with their organization (Choi, Moon, Ko, & Kim, 2014).

Conceptually, the perceptions of distributive justice that influence an employee's OCB is exercised through organizational identification. Organizational identification is one of the outcomes of social exchange that is psychological in nature (Niehoff & Moorman, 1993). Individuals enter this psychological contract of their own free will, and it stands to reason that, after time, they harbor feelings of identification with their organization (Walumbwa et al., 2009). After being a party to a prolonged social exchange

with the organization, individuals tend to put the well-being of the organization more to the forefront and will do things to advance the good of the organization.

The literature provides support for the logic that when employees are fairly rewarded by their organization, they will view their relationship with the organization as one of high quality (Walumbwa et al., 2009), they will be willing to put the interest of the organization before their own (Lind & Tyler, 1988), and therefore they will be more likely to perform OCB. This research suggested that employees may not enjoy distributive justice but still feel they are valued members of their workgroup and/or they may still feel a sense of group cohesiveness or any combination of the components of organizational identification. Therefore, it was said that the relationship between distributive justice and OCB is indirectly influenced by the factors that comprise organizational identification. The more importance individuals place on their social psychological contract with their organization, the higher their level of identification with their organization (Niehoff & Moorman, 1993). As a result, the inclination of social exchange is enhanced, and employees are more prone to reciprocate by performing acts of OCB.

This research not only acknowledged support for the mediating role of organizational identification on the relationship between distributive justice and OCB but it also proposed that the way the interaction of distributive justice and interactional justice affects OCB is operationalized through organizational identification. This mediated moderation model is necessary to provide further support for the direct relationships between the main constructs (Edwards & Lambert, 2007; Hayes, 2013).

Mediated moderation models may be instrumental in clarifying the interactions that indirectly affect the effect of predictor variables on outcome variables.

Social exchange theory was used to explain the mediating effect of organizational identification on the interactive effect of distributive justice and interactional justice on OCB. Employees who feel their socio-emotional needs are met will have a sense of social belonging in the organization (Eisenberger & Stinglhamber; Rhoades & Eisenberger, 2002) and will be more likely to perform OCBs. This research proposed that organizational identification transmits the effect of distributive justice perceptions of employees who have differing quality perceptions of their employee-supervisor interactions to OCB. Due to the lack of research on this mediated moderation relationship, the following was hypothesized:

Hypothesis 3: Organizational identification mediates the interactive effect of distributive justice and interactional justice on OCB.

**Organizational identification as a mediator of the effect of the interaction of procedural justice and interactional justice on OCB.** There is a strong correlation between procedural justice and OCB (Moorman, Blakely, & Niehoff, 1998). Lind and Earley (1991) suggest that fair procedures signal to employees that their organization values them, and this creates an environment conducive to employees demonstrating OCBs.

When perceived procedural justice is high but outcomes are low, employees are more likely to have positive feelings toward the organization and, as a result, they are more likely to accept and support organizational decisions if they have a long-term commitment to the organization (Carr, Gregory, & Harris, 2010; Tyler, 1989). This may

be because procedural justice signifies to the employees that, even though outcomes are not optimal at present, they will be amply compensated in another way through fair dealings and procedures in the future. They will be more motivated to display OCBs in order to improve the work environment with the thinking that the better the organization does, the greater will be their benefits.

One of the main arguments used to justify the relationship between procedural justice and OCB is the norm of reciprocity, which allows people to maintain relationships. When procedural justice is viewed as a benefit afforded to employees by the organization, the employees will be intrinsically motivated to reciprocate this behavior by contributing to the organization by means of OCB (Jiang & Law, 2013). Another supporting reason is that procedural justice gives employees the assurance that their contributions will be amply compensated for in the future. This feeling of knowing that their efforts are recognized and will be rewarded in the future can motivate employees to perform OCBs (Moorman & Byrne, 2005). Formal procedures that allow employees to participate by having input (via voice) in their evaluations are perceived as fair, not only because this may affect the fairness of the allocation of rewards but because it allows the employees to feel that their contributions are valued (Moorman et al., 1998).

Organ (1990) implied that perceived procedural unfairness alters the employee-organizational relationship from one of social exchange to one of economic exchange (Williams et al., 2002). Employees who perceive their relationship with the organization to be one of social exchange may be more inclined to perform OCBs since a social contract lends more ambiguity than an economic contract and because OCBs are less likely to be seen as manipulation or submission (Williams et al., 2002). Social exchanges

may be between individuals, groups of individuals, or entire organizations (Coyle-Shapiro & Conway, 2005). Procedural justice may increase OCBs if employees view procedural justice as a benefit from their employer. Employees are more likely to reciprocate by increasing their extra-role actions toward the organization and/or individuals (Jiang & Law, 2013).

Support for Organ's (1988) view that perceived procedural justice acts as an antecedent to OCB was found by Menguc (2000), who concluded that OCB may be a function of the extent to which sales employees perceive that they are receiving fair treatment by the organization. Procedural justice has been found to have a stronger influence on OCB than distributive justice (Konovsky & Pugh, 1994; Moorman, 1991; Moorman et al., 1998). The mean correlation between procedural justice and OCB was determined to be .23 by Cohen-Charash et al. (2001), where the weighted mean correlation between perceived procedural justice and altruism and conscientiousness were found to be .11 and .20, in that order.

Greenberg (1993) explained that the time it takes to determine procedural or distributive justice may explain why procedural justice is a better predictor of OCB. Procedural justice evaluations may span a long time while distributive justice comprises particular reward allocation decisions (Greenberg, 1993). As a result, individuals will more likely change their citizenship behavior if they think that the system is intrinsically fair rather than when they think a resource allocation outcome is favorable (Greenberg, 1993).

In addition, the level of perceived justice influences the extent to which employees think their organization values them (Lind & Earley, 1991). Recent economic



instability has resulted in loss of pay, pensions, and other types of work-related compensation. This prompts organizations to motivate employee performance through nonmonetary means, which can be achieved by having set procedures that can be seen as fair by all and by allowing employees to have input in certain decision-making processes where necessary. Of course, this is dependent on the level of skill of the employee.

Informal voice is also an effective way for employees to voice their concerns or to suggest new ideas. Employees then feel they are making significant contributions to their organization, which adds to their self-esteem. When employees feel they are a part of the decision-making activities, they may be more self-motivated to demonstrate OCBs. Not only is this good for the employee's well-being but it is also good for the bottom line of the company. Therefore, fair procedures can be said to influence procedural justice judgments (Konovsky & Pugh, 1994) that can have a significant impact on OCB.

Organizational identification may act as an important mechanism through which the effects of procedural justice may be transferred to OCB (Moorman & Byrne, 2005). In other words, the relationship between procedural justice and OCB may be mediated by organizational identification. Lipponen, Olkkonen, and Moilanen (2004) conducted research on the mediating effects of organizational identification on the relationship between perceived organizational justice and OCB. The study revealed that employees who perceived procedural justice displayed higher levels of organizational identification and also reported higher levels of volunteerism and altruism (Lipponen et al., 2004). The relationship between procedural justice and OCB was studied by comparing the mediating effects of both social exchange and organizational identification (Jiang & Law, 2013). It was revealed that the relationship between procedural justice and OCB-I was

mediated mainly by social exchange, while the relationship between procedural justice and OCB-O was mediated mainly by organizational identification (Jiang & Law, 2013).

Procedural justice also increases organizational identification (De Cremer, Van Dijke, & Bos, 2006; Walumbwa et al., 2009), and organizational identification is positively related to OCB (Riketta, 2005). Procedures can positively affect employees' identification with the organization (Tyler & Smith, 1999). This can be explained by a relational argument that employees care about what their treatment by the organization (via procedures) reflects about the quality of their group membership, and this gives rise to feelings of belonging to the organization or psychological inclusion (Tyler & Smith, 1999; Walumbwa et al., 2009).

A possible explanation for this mediated relationship can be derived from the group-value model (Lind & Tyler, 1988), which was developed to illustrate how people see procedures as fair even when they have no control over the outcomes (Lind & Tyler, 1988; Tyler & Lind, 1992). One aspect of the group-value model is giving employees voice in order to make procedures fairer.

When procedures are interpreted as fair, employees feel valued and respected by their superiors and the organization (Tyler, 1989), and they also feel a sense of pride in their membership (Tyler & Lind, 1992). This leads to greater affect toward the organization and, hence, feelings of organizational identification. As a result, they will exhibit greater work-related motivation, which can benefit the organization in the form of OCB (Tyler, 1989; Tyler & Blader, 2001; Tyler, DeGoey, & Smith, 1996) and may be motivated to perform altruistically toward the organization in return for continued high-quality treatment (Skarlicki & Latham, 1996). This may occur even when distributive

justice is low due to the employee rationale that organizations can control procedures even though they cannot always have discretion over the outcomes (Shore & Shore, 1995).

The interesting aspect of the group-value model is that if employees receive negative outcomes, and they perceive the procedures used as fair, they will still demonstrate organizational commitment and will work toward the greater good of the organization. This is because they already see themselves as being in a long-term committed relationship with the organization. However, if unfair procedures were the means to procure the negative outcomes, trust will be low, organizational identification will be lower, and OCB will be low.

This research took the mediated relationship between procedural justice and OCB and further extended it to explore organizational identification as a mediator of the interactional effect of procedural justice and interactional justice on OCB.

The proposed mediated moderation model seeks to explore the underlying interactions of the main variables to have a more comprehensive understanding of the effect of procedural justice on OCB. To date, the effect of the interaction of procedural justice and interactional justice on OCB has not been studied, and this justified the benefit of addressing this gap in the literature. As a result, the following was hypothesized:

Hypothesis 4: Organizational identification mediates the interactive effect of procedural justice and interactional justice on OCB.

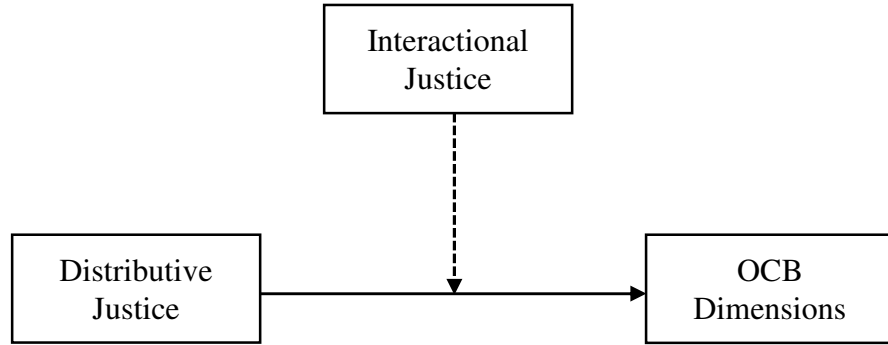


Figure 1. Theoretical model for H1.

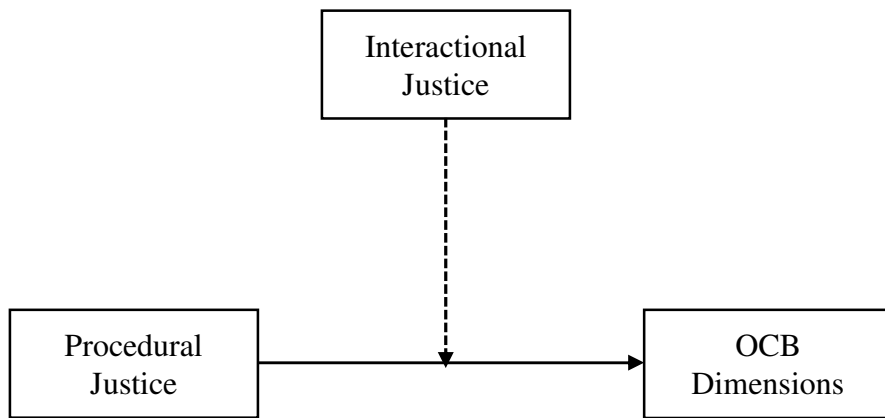


Figure 2. Theoretical model for H2.

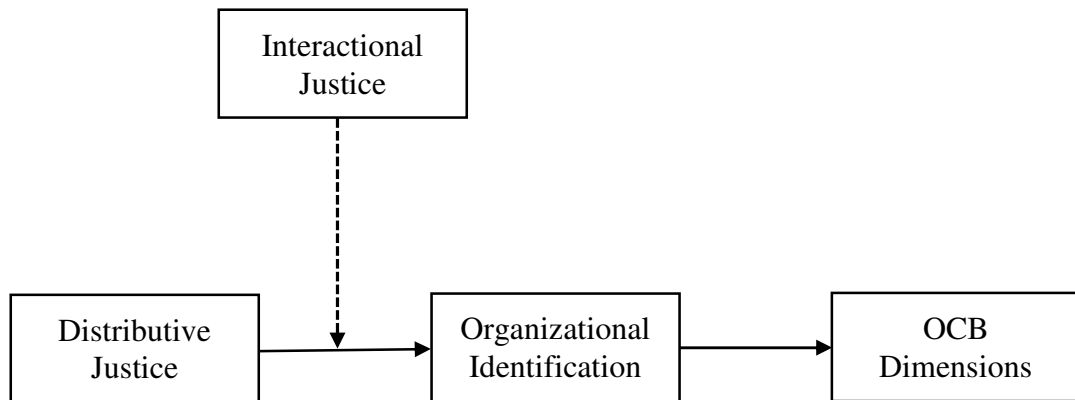
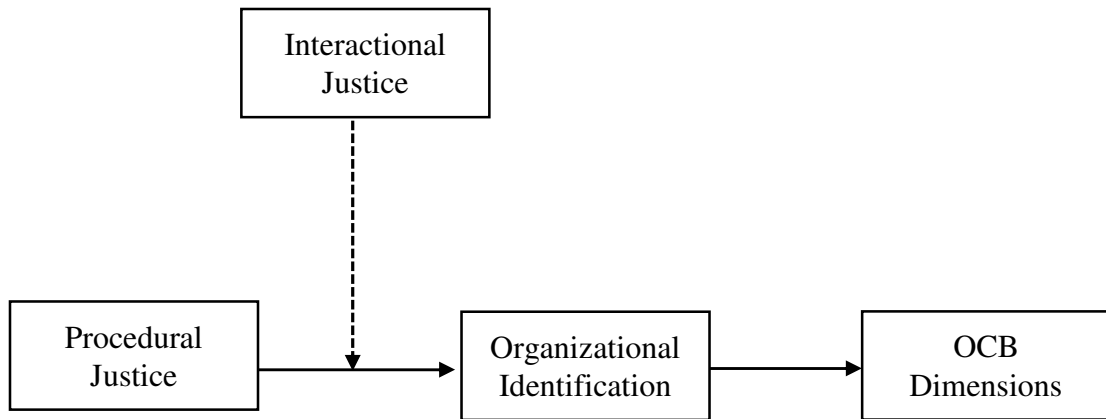


Figure 3. Theoretical model for H3.



*Figure 4.* Theoretical model for H4.

## **CHAPTER III**

### **METHODOLOGY**

#### **Organization of the Chapter**

This chapter is the third part of this manuscript. The first part provided the research questions as well as the background and justification for studying (a) how interactional justice moderates the relationship between distributive justice and OCB and between procedural justice and OCB, and (b) how organizational identification mediates the effect of the interaction of distributive justice and interactional justice on OCB and how organizational identification mediates the effect of the interaction of procedural justice and interactional justice on OCB. The second part was the literature review, which covered the pertinent literature on the constructs of distributive justice, procedural justice, interactional justice, organizational identification, and OCB along with its five dimensions. The latitude of the research was outlined, and the hypotheses to be tested were also presented. The third part of this body of work resides in this chapter, which discusses the sample population and the research methodology employed by this study. The scope and the limitations are also included.

#### **Research Framework**

This chapter provides a detailed plan on how the hypothesized relationships in the previous chapter were tested. The study design and methodology utilized measures that possess solid empirical validation. This empirical research was a mediated moderation study (Baron & Kenny, 1986; Hayes, 2013). There are two main types of mediated moderation. The first is that the effect of the predictor variable on the mediating variable may vary as a function of the moderating variable or the interaction of the moderator, and

the mediating variable may influence the outcome variable. Second, it is possible that the direct effect of the predictor variable on the outcome variable may vary as a function of the moderating variable (Hayes, 2013). This study exercised the second form of mediated moderation. The unique contribution of this research involved the use of interactional justice as a moderator to enhance the existing literature on justice, OCB, social exchange, and communication in the workplace. The applied methodology answered each of the research questions stated in Chapter I by testing the following hypotheses:

Hypothesis 1: Interactional justice will moderate the relationship between distributive justice and OCB such that the relationship is stronger for employees with high interactional justice than for employees with low interactional justice.

Hypothesis 2: Interactional justice will moderate the relationship between procedural justice and OCB such that the relationship is stronger for employees with high interactional justice than for employees with low interactional justice.

Hypothesis 3: Organizational identification mediates the interactive effect of distributive justice and interactional justice on OCB.

Hypothesis 4: Organizational identification mediates the interactive effect of procedural justice and interactional justice on OCB.

### **Research Design**

This research design was cross sectional in nature and it involved the examination of the effects of the interactions of justice perceptions on OCB. This research involved the online surveying of a sample of full-time adult employees at all levels of

organization. The following sections discuss the sample population, data collection, survey instruments, the statistical method used, and reliability and validity.

### **Population**

A sample population of 250 employees was sourced from Amazon Mechanical Turk website, which is a crowd sourcing internet website. All employees were employed full-time at organizations located in the U.S., were all over 18 years of age, and were all fluent in the English language. The surveyed employees belonged to all levels of organization. The Bureau of Labor Statistics (BLS) defines full-time employees as those who work a minimum of 35 hours a week. According to the U.S. Department of Labor Bureau of Labor Statistics (BLS), there were 121.41 million full-time employees in the U.S. in January of 2016, of which 57.1% were male and 42.9% were female. While this sample was drawn from different industries across the U.S., it may still not be representative of the general U.S. population due to the sample size not being large enough.

### **Data Collection**

Data collection was done via a self-administered survey (see Appendices A–D for survey items). The survey was built in the Qualtrics website, and the link was posted on the Amazon Mechanical Turk (MTurk) website ([www.mturk.com](http://www.mturk.com)). The survey was made available to participants when they logged into their MTurk account. Participants were presented with a description of the survey and were invited to participate in the study along with the assurance that no individual identification information, such as IP addresses, would be collected. This data collection method ensured complete anonymity on the part of the participants. It was emphasized that participation in the survey was



voluntary and that participants were free to opt out of the study at any time. It was also stressed that results would be kept confidential (see Appendix E for survey description and assurance of anonymity).

In order to increase the probability that the target demographic would respond to the survey, all respondents were required to answer a question asking if they were full-time, English-speaking employees over the age of 18 in the U.S. Only participants who responded *Yes* to the question were allowed to proceed to complete the survey. At the end of the survey, the subjects received a randomly generated numerical code to paste into a box in MTurk to receive a small credit for taking the survey. This assured that their identity was kept anonymous and also that each person did not complete the survey more than once. The randomly generated number also ensured that incentives were only approved for individuals who completely filled out the survey. Thus, only completely-filled surveys were used for data analysis. Even though a small payment of 50 cents was given to the respondents, their identity was protected since MTurk administered the payments using money from the researcher's Amazon account. The survey was kept open until 250 usable responses were received.

### **Survey Instruments**

The demographic information captured in the study included gender, age, ethnicity, highest level of education attained, tenure in current organization, and job position (see Appendix A). Niehoff and Moorman's (1993) Organizational Justice Scale; Mael and Ashforth's (1992) Organizational Identification Scale; and Podsakoff, MacKenzie, Moorman, and Fetter's (1990) OCB Scale were all utilized in this study. The

independent variables in the study were two dimensions of organizational justice, which are namely distributive justice and procedural justice (Greenberg & Colquitt, 2005).

The dependent variables were the OCB dimensions of altruism, courtesy, conscientiousness, civic virtue, and sportsmanship (Organ, 1988). All employees were subject to Organizational Justice, Organizational Identification, and OCB surveys. The unit of measure was at the individual level. The survey measured the justice perceptions of employees, the organizational identification of employees, and the OCB of all participants.

The Organizational Justice Scale developed by Niehoff and Moorman (1993) was used to assess the degree of justice perception for each of the three dimensions of justice. This scale, as shown in Appendix B, is composed of 18 items that are measured on a 5-point scale that ranges from *strongly disagree* to *strongly agree*. Items 1 through 5 measured perceptions of distributive justice, items 6 through 11 measured perceptions of procedural justice, and items 12 through 18 measured perceptions of interactional justice. The Cronbach's alpha for this instrument was found to be 0.87 (Oren, Tziner, Nahshon, & Sharoni, 2013). Cronbach's alpha for the individual dimensions are .77 for distributive justice, .72 for procedural justice (Ali, Mehmud, Baloch, & Usman, 2010), and 0.91 for interactional justice (Zhao, Peng, & Chen, 2014). Examples of items from this scale are "I believe my level of pay is fair," "Our organization has procedures to collect information for making decisions accurately and thoroughly," and "My supervisor explains clearly any decision if it is related to my job."

The mediating variable was organizational identification. This variable was measured by Mael and Ashforth's (1992) Organizational Identification Scale. This scale,

as illustrated in Appendix C, contains six items that are measured on a 5-point scale. The scale items were slightly modified to be applicable to all of the organizations involved in the study. Items range from *strongly agree* to *strongly disagree*. This measure was found to have Cronbach's alphas of 0.79 (De Vellis, 1991), 0.88 (Carmeli, Atwater, & Levi, 2011), and 0.90 (Jiang & Law, 2013). Sample items include, "When someone criticizes my organization, it feels like a personal insult" and "This organization's successes are my successes."

The dependent variables were the OCB dimensions. OCB was measured using the Organizational Citizenship Behavior Scale by Podsakoff, MacKenzie, Moorman, and Fetter (1990). This measure, as illustrated in Appendix D, is comprised of 24 items on a 5-point scale that measure the five dimensions of OCB proposed by Organ (1988). The dimensions are altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. The measurement ranges from *strongly disagree* to *strongly agree*. Each dimension has five items except civic virtue, which has four items. Items include, "I help others who have heavy workloads" and "I try to avoid creating problems for coworkers." Cronbach's alpha for this scale was found to be 0.97 (Erkutlu, 2011). A review of the literature, which utilized this OCB scale, has reported internal consistency coefficients greater than 0.70 (Podsakoff et al., 2000; Royle, 2010; Spector, Bauer, & Fox, 2010). The five dimensions of OCB proposed by Organ in 1988 were used in this study as opposed to the expanded dimensions of OCB by Organ et al. (2006). This is due to the fact that the OCB scale by Podsakoff et al. (1990) that measured the five dimensions put forth by Organ (1988) was well-validated and proven to be reliable in numerous past studies.

The proposed control variables were gender, age, ethnicity, highest educational level attained, organizational tenure, and job position. Past studies have shown that gender, age, organizational tenure, and educational level may influence employee engagement and OCB (Kidder, 1998; Morrison, 1994; Podsakoff et al., 2000). Further support has been found for the influencing effect of gender on OCB (Farrell & Finkelstein, 2007; Kidder, 2002). Age and organizational tenure at that organization were measured in number of years. Gender was measured as a binary dummy variable, with females assigned a value of 0 and males assigned a value of 1.

### **Statistical Method**

Descriptive statistical analysis was initially conducted to determine means, medians, modes, and frequencies. Linear regression using IBM SPSS Statistics 22 was used as the main method of analysis of the data. The first step was to conduct an exploratory factor analysis (EFA) to determine if the items were representative of the variables in the proposed model, which is an indicator of construct validity. Factor loadings greater than 0.30 were accepted since, according to Hair, Black, Babin, and Anderson (2010), only factor loadings of 0.30 or greater should be considered significant for samples of 150 or greater; the higher the factor loading the more desirable it is. This verified that indicators measuring a particular variable were distinct from the indicators of different constructs (Anderson & Gerbing, 1988). Confirmatory factor analysis (CFA) was also conducted in SPSS to assess construct validity. Goodness of fit was assessed with Chi-square ( $X^2$ ) values and RMSEA values, which were compared with the recommended cutoff values of .08 (Hu & Bentler, 1999).

Secondly, a path analysis using SmartPLS 2.0 was performed to estimate the strength of the paths within the model. The relationships between items and factors and between exogenous and endogenous variables were tested concurrently. Path estimates were determined between independent variables (distributive and procedural justice) on the mediating variable (organizational identification) to the dependent variable (OCB dimensions) as well as between interaction terms on the mediating variable to the dependent variable. PLS was chosen for the path analysis since it is a non-parametric method that utilizes bootstrapping to determine which relationships are significant by producing t-values that are significant at values greater than 1.96 at  $p < .05$ . The correlations between variables in the path analysis were compared to those obtained in SPSS to ensure that the correlations were accurate. The possibility of multicollinearity was anticipated, and this was addressed by performing the analyses using Z scores of the variables that were compared with the results of unstandardized raw data.

### **Reliability and Validity**

As stated earlier, the scales for organizational justice, organizational identification, and OCB dimensions have been validated in past research. Each construct measure is comprised of multiple items. Reliability is achieved when the items of the latent constructs measure the same variable (Hair et al., 2010). A survey instrument is said to be reliable if it is free from measurement or random error (Vogt, 2005). Reliability was measured using Cronbach's alpha. Cronbach's alpha scores should be at least 0.70 (Hair et al., 2010). In order for each variable to be well represented, a minimum of three items must load onto each factor (Hair et al., 2010).

Validity is the extent to which a measure precisely represents a variable and is not subject to systematic or nonrandom error. Internal validity is defined as “the extent in which a scale or set of measures accurately represents the concept of interest” (Hair et al., 2010, p. 126). Content validity was determined upon review by the dissertation committee, along with utilizing scales from similar studies. As mentioned previously, EFA and CFA were conducted to assess internal validity. Each of the scales used in this study was well-validated in past studies.

### **Summary**

To summarize, the previous chapter explored the literature concerning the constructs of interest and outlined the development of the hypotheses. This chapter discussed the sample population as well as the instruments used in the hypotheses testing. Justification for each instrument’s reliability and validity was provided. Lastly, the methodology which was used to test the developed hypotheses was outlined.

Table 1

*Summary of Hypotheses, Variables, and Statistical Techniques*

Hypothesis	Independent Variable	Moderating Variable	Mediating Variable	Dependent Variables	Statistical Technique
H1	Distributive Justice	Interactional Justice		OCB Dimensions: Altruism, Courtesy, Conscientiousness, Civic Virtue, and Sportsmanship	Linear regression using Model 1 of PROCESS macro in SPSS
H2	Procedural Justice	Interactional Justice		OCB Dimensions: Altruism, Courtesy, Conscientiousness, Civic Virtue, and Sportsmanship	Linear regression using Model 1 of PROCESS macro in SPSS
H3	Distributive Justice	Interactional Justice	Organizational Identification	OCB Dimensions: Altruism, Courtesy, Conscientiousness, Civic Virtue, and Sportsmanship	Linear regression using Model 7 of PROCESS macro in SPSS
H4	Procedural Justice	Interactional Justice	Organizational Identification	OCB Dimensions: Altruism, Courtesy, Conscientiousness, Civic Virtue, and Sportsmanship	Linear regression using Model 7 of PROCESS macro in SPSS

## CHAPTER IV

### ANALYSIS AND PRESENTATION OF FINDINGS

This chapter focuses on presenting the findings gained from the data collected using the measures and processes outlined in Chapter III. The main objectives of this analysis are to test if interactional justice moderates the effect of distributive justice and procedural justice on OCB and also to test if organizational identification acts as a mediator of the interactive effect of distributive justice and interactional justice on OCB and of the interactive effect of procedural justice and interactional justice on OCB. The first section includes descriptive statistics, intercorrelation coefficients, and construct reliability. The second section includes the results of the data analysis that tested the hypotheses developed in Chapter II. This chapter ends with a summary of the results.

#### **Descriptive Statistics**

The survey elicited 250 responses, all of which were usable. The 100% response rate was because participants volunteered to participate in the study and also because a small monetary incentive was provided. The monetary incentive was contingent upon all the questions in the survey being completed. The participants were all full-time employees who were at least 18 years of age. All of the participants were also fluent in the English language. The demographic information included gender, age, ethnicity, highest level of education attained, organizational tenure, and job position. The sample population was comprised of 147 (58.8%) males and 103 (41.2%) females, as shown in Table 2. This was comparable to 57.2% full-time male and 42.9% full-time female working adults in 2015 as per the U.S. Bureau of Labor Statistics.



Table 2

*Frequency Distribution – Gender*

Gender	Frequency	Percent
Male	147	58.80%
Female	103	41.20%
Total	250	100.00%

The age of the participants ranged from 19 to 65 years old, with the mean and median age being 35 ( $\mu = 35$ ) and 32 years, respectively. A summary of the frequency of the ethnic distribution of the respondents is depicted in Table 2, which shows the majority of the survey respondents were White Caucasians who accounted for 73.6% of the responses. The frequency distribution of highest educational level attained by respondents, as shown in Table 3, shows that the majority of the respondents were college educated with 90% of them having at least some tertiary-level education. The educational level that had the highest number of respondents was that of bachelor's degree, while doctoral degree had the smallest number of respondents (1.6%).

Table 3

*Frequency Distribution – Ethnicity*

Ethnicity	Frequency	Percent	Cumulative Percent
Asian/Pacific Islander	30	12.00%	12.00%
Black/African American	18	7.20%	19.20%
Hispanic/Latino	13	5.20%	24.40%
White Caucasian	184	73.60%	98.00%
Other	5	2.00%	100.00%
Total	250	100.00%	

Table 4

*Frequency Distribution – Highest Educational Level Attained*

Educational Level	Frequency	Percent	Cumulative Percent
High School	25	10.00%	10.00%
Some College	54	21.60%	31.60%
Associate Degree	30	12.00%	43.60%
Bachelor's Degree	95	38.00%	81.60%
Some Graduate	11	4.40%	86.00%
Master's Degree	31	12.40%	98.40%
Doctorate Degree	4	1.60%	100.00%
Total	250	100.00%	

Organizational tenure in the sample population had a mean of 2.08 years with the largest category being tenure for less than four years (42%) followed by five to nine years (30.8%), as depicted in Table 4. This is in accordance with the low mean respondent age of 35, since it is likely that the majority of respondents were too young to have been at their present organization for more than nine years. Table 5 shows the frequency distribution of the job positions held by the sample population of which the majority (60.4%) held non-managerial positions in their organizations.

Table 5

*Frequency Distribution – Organizational Tenure*

Organizational Tenure	Frequency	Percent	Cumulative Percent
Less than 4 years	105	42.00%	42.00%
5 to 9 years	77	30.80%	72.80%
10 to 14 years	38	15.20%	88.00%
15 to 19 years	16	6.40%	94.40%
20 to 24 years	5	2.00%	96.40%
25 to 29 years	4	1.60%	98.00%
More than 30 years	5	2.00%	100.00%
Total	250	100.00%	

Table 6

*Frequency Distribution – Job Position*

Job Position	Frequency	Percent	Cumulative Percent
Senior executive or C-level executive	5	2.00%	2.00%
Senior manager or VP	2	0.80%	2.80%
Department manager or director	33	13.20%	16.00%
First line manager	59	23.60%	39.60%
Non-managerial	151	60.40%	100.00%
Total	250	100.00%	

**Data Analysis**

IBM SPSS was used to perform data analysis, which was both exploratory and quantitative in nature. Linear regression in SPSS using the PROCESS macro by Hayes (2013) was the main method of analysis used in this study. Linear regression was used to examine the correlations among the constructs: organizational justice dimensions, organizational identification, and OCB dimensions. The results of the linear regression showed how the variables were causally related. The PROCESS macro utilizes a methodology that takes a hypothesis-testing approach to analyze unobservable data constructs.

Model 1 in the PROCESS macro by Hayes (2013) was used to test for moderation in Hypotheses 1 and 2, while Model 7 was used to test for mediated moderation in Hypotheses 3 and 4. The PROCESS macro utilized bootstrapping when testing for indirect effects. Bootstrapping provided combined estimates from 1,000 subsamples, which provided accurate estimated coefficients and their variability. Thus, bootstrapping was one way of validating the multivariate model.

The reliability of each variable was determined using Cronbach's alpha. The reliability coefficient, which assesses the consistency of the entire scale, was calculated for each scale, and each scale had a Cronbach's alpha greater than the recommended value of 0.7 (Hair et al., 2010). Distributive justice (SD = 3.83) had a Cronbach's alpha of .85 compared to .77 found by Ali et al. (2010), and procedural justice (SD = 5.20) had a Cronbach's alpha of .90, which is higher than .72 found by Ali et al. (2010). Interactional justice (SD = 5.77) had a Cronbach's alpha of .93, which is close to .91 found by Zhao et al. (2014). Organizational identification (SD = 5.64) had a Cronbach's alpha of .90 compared to .79 (De Villes, 1991), .88 (Carmeli et al., 2011), and .90 (Jiang & Law, 2013). OCB altruism (SD = 5.51), OCB courtesy (SD = 4.65), OCB conscientiousness (SD = 4.98), OCB civic virtue (4.83), and OCB sportsmanship (SD = 6.29) had Cronbach's alphas of .89, .85, .77, .79, and .81, respectively.

Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed in SPSS to test the construct validity of the variables distributive justice, procedural justice, interactional justice, organizational identification, and the OCB dimensions. The EFA results for the items of each variable of study included inter-item correlations, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, and the Bartlett's test of sphericity. Inter-item correlations that exceed .30 suggest construct validity (Hair et al., 2010). Most of the inter-item correlations exceeded .30, which confirms construct validity of all the variables. The KMO value was .915, which Hair et al. (2010) describes as meritorious. The Bartlett's test of sphericity showed statistical significance of the inter-item correlations of each variable. The rotated component matrix

revealed a few cross loadings between items, but the validated data was maintained and therefore none of the items were dropped.

The CFA analysis was performed using a sample size of 250 at a  $p < .05$  level of significance. For distributive justice, the factor loading latent variables were at least .60 ( $df = 4$ ,  $X^2 = 103.32$ , and  $RMSEA = .00$ ). Procedural justice had factor loadings that were at least .70 ( $df = 5$ ,  $X^2 = 31.10$ , and  $RMSEA = .03$ ). For interactional justice, all factor loadings were at least .80 ( $df = 6$ ,  $X^2 = 75.97$ , and  $RMSEA = .00$ ). For organizational identification, all factor loadings were at least .70 ( $df = 5$ ,  $X^2 = 53.49$ , and  $RMSEA = .00$ ). OCB altruism had factor loadings that were at least .70 ( $df = 4$ ,  $X^2 = 32.84$ , and  $RMSEA = .00$ ).

OCB courtesy had factor loadings that were each above .7 with the exception of one loading that had a value of .6 ( $df = 4$ ,  $X^2 = 64.19$ , and  $RMSEA = .00$ ). OCB conscientiousness had factor loadings that were each above .7 with the exception of two loadings that had values of .5 and .6 ( $df = 4$ ,  $X^2 = 47.60$ , and  $RMSEA = .09$ ). OCB civic virtue had factor loadings that were each above .7 with the exception of two loadings, both of which had values of .5 ( $df = 4$ ,  $X^2 = 132.67$ , and  $RMSEA = .11$ ). OCB sportsmanship had factor loadings that were at least .70 with the exception of two factor loadings, both of which had values of .6 ( $df = 4$ ,  $X^2 = 47.06$ , and  $RMSEA = .00$ ). The Chi-square results were all significant, which supported the validity of the constructs of study. All constructs met the recommended cutoff  $RMSEA$  value of .08 with the exception of OCB conscientiousness and OCB civic virtue, which were marginally greater than the cutoff value and therefore were still retained.

Gender, age, ethnicity, highest educational level attained, organizational tenure, and job position were proposed control variables, but upon testing none of them had a main effect on OCB. As a result, they were excluded from further analyses. Correlation coefficients among the constructs included in the study are displayed in Table 7.

Distributive justice had significant positive correlation coefficients with procedural justice (.64), interactional justice (.65), organizational identification (.41), OCB altruism (.35), OCB conscientiousness (.21), OCB courtesy (.29), and OCB civic virtue (.41) at  $p < .01$ . Distributive justice was not significantly correlated with OCB sportsmanship. Procedural justice had significant positive correlation coefficients with interactional justice (.73), organizational identification (.34), OCB altruism (.34), OCB conscientiousness (.25), OCB courtesy (.25), and OCB civic virtue (.47) at  $p < .01$ . Procedural justice had a significant negative correlation coefficient with OCB sportsmanship (-.11) at  $p < .05$ .

The moderator of interactional justice had significant positive correlation coefficients with organizational identification (.37), OCB altruism (.36), OCB conscientiousness (.27), OCB courtesy (.33), and OCB civic virtue (.45) at  $p < .01$ . Interactional justice was not significantly correlated with OCB sportsmanship. The mediator organizational identification had significant positive correlation coefficients with OCB altruism (.28), OCB conscientiousness (.24), and OCB civic virtue (.29) at  $p < .01$ . Organizational identification had a significant positive correlation coefficient with OCB courtesy (.14) at  $p < .05$ . Organizational identification was not significantly correlated with OCB sportsmanship. Testing was done with raw unstandardized data and

with the Z scores of variables to check for collinearity problems. The results were the same with and without the Z scores.

Table 7

*Means, Standard Deviations, and Intercorrelations Among Variables*

	Mean	Std. Deviation	1	2	3	4	5	6	7	8
1. Distributive Justice	3.586	.765								
2. Procedural Justice	3.278	.866	.644**							
3. Interactional Justice	3.635	.825	.646**	.728**						
4. Organizational Identification	2.810	.940	.411**	.338**	.374**					
5. OCB Altruism	5.341	1.102	.353**	.335**	.355**	.275**				
6. OCB Conscientiousness	5.357	.997	.209**	.252**	.270**	.235**	.629**			
7. OCB Courtesy	5.605	.930	.285**	.247**	.326**	.140*	.709**	.684**		
8. OCB Civic Virtue	4.830	1.206	.408**	.472**	.450**	.288**	.653**	.493**	.539**	
9. OCB Sportsmanship	5.097	1.258	-.001	-.111*	.038	.042	.152**	.242**	.351**	.096

\* $p < .05$ , two-tailed. \*\*  $p < .01$ , two-tailed.

### Results of Hypothesis Testing

Hypothesis 1: Interactional justice will moderate the relationship between distributive justice and OCB such that the relationship is stronger for employees with high interactional justice than for employees with low interactional justice.

Hypothesis 1 proposed that interactional justice acts as a moderator in the relationship between distributive justice and OCB. The expectation was that employees with higher interactional justice would need less distributive justice to obtain a certain level of OCB. It was also anticipated that employees who have high interactional justice

perceptions will have a stronger relationship between distributive justice and OCB than employees with low interactional justice perceptions.

This hypothesis was tested in SPSS using the PROCESS macro by Hayes (2013, 2014). Model 1 was used to test Hypothesis 1 using each of the five dimensions of OCB (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship) as outcome variables. As previously discussed, gender, age, ethnicity, highest educational level attained, organizational tenure, and job position were tested as control variables, but none of them had a main effect on OCB; therefore, they were not included in the testing of Hypothesis 1. The results of each of these tests are described in turn as follows.

Test one of Hypothesis 1 used distributive justice as the predictor variable, interactional justice as the moderating variable, and OCB altruism as the outcome variable. The results, as illustrated in Table 8, show that the main effects of distributive justice and interactional justice on OCB altruism were both positive and significant at  $p < .05$ . Consistent with the literature, high distributive justice leads to high OCB altruism. Similarly, high interactional justice resulted in high OCB altruism. In addition to the significant correlation coefficients between distributive justice and OCB altruism and between interactional justice and OCB altruism (see Table 7), this finding provides further support to the previous literature.

The interaction between distributive justice and interactional justice had a non-significant negative correlation coefficient with OCB altruism at  $p < .05$  (see Table 8). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between distributive justice and OCB altruism.



$$\text{Model: OCB Alt} = a + b_1 \text{ DJ} + b_2 \text{ IJ} + b_3 \text{ DJ} \times \text{IJ} + e$$

Table 8

*The Moderation of Interactional Justice on the Relationship Between Distributive Justice and OCB Altruism*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
DJ	.57*	2.19	.03
IJ	.57*	2.11	.04
DJ x IJ	-.08	-1.12	.26
Intercept	2.30		
R <sup>2</sup>	.16		

*Note.* *N* = 250. DJ = distributive justice; IJ = interactional justice; OCB Alt = OCB altruism.

\**p* < .05.

Test two of Hypothesis 1 used distributive justice as the predictor variable, interactional justice as the moderating variable, and OCB courtesy as the outcome variable. The results, as shown in Table 9, illustrate that the main effect of distributive justice on OCB courtesy was positive and not significant at  $p < .05$ . This is inconsistent with the literature and shows that high distributive justice does not lead to high OCB courtesy. The effect of interactional justice on OCB courtesy was positive and significant. Consistent with the literature, high interactional justice leads to high OCB courtesy. In addition to the significant correlation coefficient between interactional justice and OCB courtesy (see Table 7), this finding provides further support to the previous literature.

The interaction between distributive justice and interactional justice had a positive non-significant correlation coefficient with OCB courtesy (see Table 9). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between distributive justice and OCB courtesy.

$$\text{Model: OCB Court} = a + b_1 \text{ DJ} + b_2 \text{ IJ} + b_3 \text{ DJ} \times \text{IJ} + e$$

Table 9

*The Moderation of Interactional Justice on the Relationship Between Distributive Justice and OCB Courtesy*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
DJ	.18	1.64	.10
IJ	.28*	2.51	.01
DJ x IJ	.07	.66	.51
Intercept	5.58		
R <sup>2</sup>	.12		

*Note.* *N* = 250. DJ = distributive justice; IJ = interactional justice; OCB Court = OCB Courtesy.

\**p* < .05.

Test three of Hypothesis 1 used distributive justice as the predictor variable, interactional justice as the moderating variable, and OCB conscientiousness as the outcome variable. The results, as shown in Table 10, illustrate that the main effect of distributive justice on OCB conscientiousness was positive and not significant at  $p < .05$ . This is inconsistent with the literature and shows that high distributive justice does not lead to high OCB conscientiousness. The effect of interactional justice on OCB conscientiousness was both positive and significant. Consistent with the literature, high interactional justice leads to high OCB conscientiousness. In addition to the significant correlation coefficient between interactional justice and OCB conscientiousness (see Table 7), this finding provides further support to the previous literature.

The interaction between distributive justice and interactional justice had a positive non-significant correlation coefficient with OCB conscientiousness (see Table 10). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between distributive justice and OCB conscientiousness.

$$\text{Model: OCB Cons} = a + b_1 \text{ DJ} + b_2 \text{ IJ} + b_3 \text{ DJ} \times \text{IJ} + e$$

Table 10

*The Moderation of Interactional Justice on the Relationship Between Distributive Justice and OCB Conscientiousness*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
DJ	.10	.94	.35
IJ	.29*	2.88	.00
DJ x IJ	.05	.82	.41
Intercept	5.34		
R <sup>2</sup>	.08		

*Note.* *N* = 250. DJ = Distributive Justice; IJ = Interactional Justice, OCB Cons = OCB Conscientiousness.  
\**p* < .05.

Test four of Hypothesis 1 used distributive justice as the predictor variable, interactional justice as the moderating variable, and OCB civic virtue as the outcome variable. The results, as illustrated in Table 11, show that the main effects of distributive justice and interactional justice on OCB altruism were both positive and significant at *p* < .05. Consistent with the literature, high distributive justice leads to high OCB civic virtue. Similarly, high interactional justice results in high OCB civic virtue. In addition to the significant correlation coefficients between distributive justice and OCB civic virtue and between interactional justice and OCB civic virtue (see Table 7), this finding provides further support to the previous literature.

The interaction between distributive justice and interactional justice had a negative non-significant negative correlation coefficient with OCB civic virtue at *p* < .05 (see Table 11). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between distributive justice and OCB civic virtue.

$$\text{Model: OCB Civ Vir} = a + b_1 \text{ DJ} + b_2 \text{ IJ} + b_3 \text{ DJ} \times \text{IJ} + e$$

Table 11

*The Moderation of Interactional Justice on the Relationship Between Distributive Justice and OCB Civic Virtue*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
DJ	.32*	2.39	.02
IJ	.47*	3.76	.00
DJ x IJ	-.004	-.04	.96
Intercept	4.83		
R <sup>2</sup>	.23		

*Note.* *N* = 250. DJ = Distributive Justice; IJ = Interactional Justice; OCB Civ Vir = OCB Civic Virtue.

\**p* < .05.

Test five of Hypothesis 1 used distributive justice as the predictor variable, interactional justice as the moderating variable, and OCB sportsmanship as the outcome variable. The results, as illustrated in Table 12, show that the main effect of distributive justice on OCB sportsmanship was negative and non-significant while the main effect of interactional justice on OCB sportsmanship was positive and non-significant at *p* < .05. Inconsistent with the literature, high distributive justice and high interactional justice does not lead to high OCB sportsmanship. The insignificant negative correlation coefficient between distributive justice and OCB sportsmanship and the positive non-significant correlation coefficient between interactional justice and OCB civic virtue (see Table 7) provides no support to the previous literature.

The interaction between distributive justice and interactional justice had a positive non-significant negative correlation coefficient with OCB sportsmanship at *p* < .05 (see Table 12). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between distributive justice and OCB sportsmanship.

$$\text{Model: OCB Sprt} = a + b_1 \text{ DJ} + b_2 \text{ IJ} + b_3 \text{ DJ} \times \text{IJ} + e$$

Table 12

*The Moderation of Interactional Justice on the Relationship Between Distributive Justice and OCB Sportsmanship*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
DJ	-.05	-.34	.73
IJ	.11	.89	.37
DJ x IJ	.06	.73	.47
Intercept	5.07		
R <sup>2</sup>	.00		

*Note.* *N* = 250. DJ = Distributive Justice; IJ = Interactional Justice; OCB Sprt = OCB Sportsmanship.  
\**p* < .05.

There was no support for Hypothesis 1, which proposed that interactional justice acts as a moderator in the relationship between distributive justice and OCB. The interaction between distributive justice and interactional justice did not influence significant increases in OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship. As a result, there was no evidence to support the expectation that employees who have high interactional justice perceptions will have a stronger relationship between distributive justice and OCB than employees with low interactional justice perceptions.

Hypothesis 2: Interactional justice will moderate the relationship between procedural justice and OCB such that the relationship is stronger for employees with high interactional justice than for employees with low interactional justice.

Hypothesis 2 proposed that interactional justice acts as a moderator in the relationship between procedural justice and OCB. The expectation was that employees

with higher interactional justice would need less procedural justice to obtain a certain level of OCB. It was also anticipated that employees who have high interactional justice perceptions will have a stronger relationship between procedural justice and OCB than employees with low interactional justice perceptions.

This hypothesis was tested in SPSS using the PROCESS macro by Hayes (2013, 2014). Model 1 was used to test this hypothesis using each of the five dimensions of OCB (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship) as outcome variables. As discussed previously, gender, age, ethnicity, highest educational level attained, organizational tenure, and job position were tested as control variables, but none of them had a main effect on OCB; therefore, they were not included in the testing of Hypothesis 2. The results of each of these tests are described in turn as follows.

Test one of Hypothesis 2 used procedural justice as the predictor variable, interactional justice as the moderating variable, and OCB altruism as the outcome variable. The results, as shown in Table 13, illustrate that the main effect of procedural justice on OCB altruism was positive and not significant at  $p < .05$ . This is inconsistent with the literature and shows that high procedural justice does not lead to high OCB altruism. The effect of interactional justice on OCB altruism was positive and significant. Consistent with the literature, high interactional justice leads to high OCB altruism. In addition to the significant correlation coefficient between interactional justice and OCB altruism (see Table 7), this finding provides further support to the previous literature.

The interaction between procedural justice and interactional justice had a negative non-significant correlation coefficient with OCB altruism (see Table 13). As a result, it

was concluded that employee perception of interactional justice does not moderate the relationship between procedural justice and OCB altruism.

$$\text{Model: OCB Alt} = a + b_1 \text{ PJ} + b_2 \text{ IJ} + b_3 \text{ PJ} \times \text{IJ} + e$$

Table 13

*The Moderation of Interactional Justice on the Relationship Between Procedural Justice and OCB Altruism*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
PJ	.21	1.42	.16
IJ	.31*	2.05	.04
PJ x IJ	-.02	-.13	.90
Intercept	5.35		
R <sup>2</sup>	.14		

*Note.* *N* = 250. PJ = Procedural Justice; IJ = Interactional Justice; OCB Alt = OCB Altruism.

\**p* < .05.

Test two of Hypothesis 2 used procedural justice as the predictor variable, interactional justice as the moderating variable, and OCB courtesy as the outcome variable. The results, as shown in Table 14, illustrate that the main effect of procedural justice on OCB courtesy was positive and not significant at *p* < .05. This is inconsistent with the literature and shows that high procedural justice does not lead to high OCB courtesy. The effect of interactional justice on OCB courtesy was positive and significant. Consistent with the literature, high interactional justice leads to high OCB courtesy. In addition to the significant correlation coefficient between interactional justice and OCB courtesy (see Table 7), this finding provides further support to the previous literature.

The interaction between procedural justice and interactional justice had a positive non-significant correlation coefficient with OCB courtesy (see Table 14). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between procedural justice and OCB courtesy.

$$\text{Model: OCB Court} = a + b_1 \text{PJ} + b_2 \text{IJ} + b_3 \text{PJ} \times \text{IJ} + e$$

Table 14

*The Moderation of Interactional Justice on the Relationship Between Procedural Justice and OCB Courtesy*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
PJ	.02	.16	.87
IJ	.40*	3.12	.00
PJ x IJ	.13	1.37	.17
Intercept	5.54		
R <sup>2</sup>	.12		

*Note.* *N* = 250. PJ = Procedural Justice; IJ = Interactional Justice; OCB Court = OCB Courtesy.

\**p* < .05.

Test three of Hypothesis 2 used procedural justice as the predictor variable, interactional justice as the moderating variable, and OCB conscientiousness as the outcome variable. The results, as shown in Table 15, illustrate that the main effect of procedural justice on OCB conscientiousness was positive and not significant at  $p < .05$ . This is inconsistent with the literature and shows that high procedural justice does not lead to high OCB conscientiousness. The effect of interactional justice on OCB conscientiousness was positive and significant. Consistent with the literature, high interactional justice leads to high OCB conscientiousness. In addition to the significant correlation coefficient between interactional justice and OCB conscientiousness (see Table 7), this finding provides further support to the previous literature.

The interaction between procedural justice and interactional justice had a positive non-significant correlation coefficient with OCB conscientiousness (see Table 15). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between procedural justice and OCB conscientiousness.



$$\text{Model: OCB Cons} = a + b_1 \text{PJ} + b_2 \text{IJ} + b_3 \text{PJ} \times \text{IJ} + e$$

Table 15

*The Moderation of Interactional Justice on the Relationship Between Procedural Justice and OCB Conscientiousness*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
PJ	.13	1.18	.24
IJ	.26*	2.13	.03
PJ x IJ	.10	1.52	.13
Intercept	5.30		
R <sup>2</sup>	.09		

*Note.* *N* = 250. PJ = Procedural Justice; IJ = Interactional Justice; OCB Cons = OCB Conscientiousness.  
\**p* < .05.

Test four of Hypothesis 2 used procedural justice as the predictor variable, interactional justice as the moderating variable, and OCB civic virtue as the outcome variable. The results, as illustrated in Table 16, show that the direct effects of procedural justice and interactional justice on OCB civic virtue were both positive and significant at *p* < .05. Consistent with the literature, high procedural justice leads to high OCB civic virtue. Similarly, high interactional justice results in high OCB civic virtue. In addition to the significant correlation coefficients between procedural justice and OCB civic virtue and between interactional justice and OCB civic virtue (see Table 7), this finding provides further support to the previous literature.

The interaction between procedural justice and interactional justice had a non-significant negative correlation coefficient with OCB civic virtue at *p* < .05 (see Table 16). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between procedural justice and OCB civic virtue.

$$\text{Model: OCB Civ Vir} = a + b_1 \text{PJ} + b_2 \text{IJ} + b_3 \text{PJ} \times \text{IJ} + e$$

Table 16

*The Moderation of Interactional Justice on the Relationship Between Procedural Justice and OCB Civic Virtue*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
PJ	.43*	3.05	.00
IJ	.36*	2.57	.01
PJ x IJ	.09	.85	.40
Intercept	4.78		
R <sup>2</sup>	.25		

*Note.* *N* = 250. PJ = Procedural Justice; IJ = Interactional Justice; OCB Civ Vir = OCB Civic Virtue.

\**p* < .05.

Test five of Hypothesis 2 used procedural justice as the predictor variable, interactional justice as the moderating variable, and OCB sportsmanship as the outcome variable. The results, as illustrated in Table 17, show that the main effect of procedural justice on OCB sportsmanship was negative and significant at *p* < .05. This is inconsistent with the literature and shows that high procedural justice leads to low OCB sportsmanship. The main effect of interactional justice on OCB sportsmanship was positive and significant. Consistent with the literature, high interactional justice leads to high OCB sportsmanship. The significant negative correlation coefficient between procedural justice and OCB sportsmanship and the positive non-significant correlation coefficient between interactional justice and OCB civic virtue (see Table 7) provides no support to the previous literature.

The interaction between procedural justice and interactional justice had a positive non-significant correlation coefficient with OCB sportsmanship at *p* < .05 (see Table 17). As a result, it was concluded that employee perception of interactional justice does not moderate the relationship between procedural justice and OCB sportsmanship.

$$\text{Model: OCB Sprt} = a + b_1 \text{PJ} + b_2 \text{IJ} + b_3 \text{PJ} \times \text{IJ} + e$$

Table 17

*The Moderation of Interactional Justice on the Relationship Between Procedural Justice and OCB Sportsmanship*

Variables	Coefficient	<i>t</i> -statistic	<i>P</i> value
PJ	-.43*	-3.37	.00
IJ	.41*	2.97	.00
PJ x IJ	.08	.84	.40
Intercept	5.06		
R <sup>2</sup>	.05		

*Note.* *N* = 250. PJ = Procedural Justice; IJ = Interactional Justice; OCB Sprt = OCB Sportsmanship.

\**p* < .05.

There was no support for Hypothesis 2, which proposed that interactional justice acts as a moderator in the relationship between procedural justice and OCB such that the relationship is stronger for high values of interactional justice than for low values of interactional justice. The interaction between procedural justice and interactional justice was not significantly related to the OCB outcome variables of OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship. As a result, it did not make sense to further test the expectation that employees who have high interactional justice perceptions will have a stronger relationship between procedural justice and OCB dimensions than employees with low interactional justice perceptions.

Hypothesis 3: Organizational identification mediates the interactive effect of distributive justice and interactional justice on OCB.

Hypothesis 3 proposed that organizational identification is the mediating variable through which the interaction between the independent variable distributive justice and the moderator interactional justice operates to influence OCB. It was expected that

employees with higher interactional justice perceptions would require less distributive justice, and the influence on OCB would be transferred indirectly through organizational identification. Employees with high interactional justice perceptions would not require as much distributive justice to increase OCB, and this interaction would be stronger at higher levels of distributive justice. Hypothesis 3 was tested in SPSS using the PROCESS macro by Hayes (2013, 2014). Model 7 was used to test this hypothesis using each of the five dimensions of OCB (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship) as outcome variables. Similar to the testing of Hypotheses 1 and 2, gender, age, ethnicity, highest educational level attained, organizational tenure, and job position, were not used as control variables in the testing of Hypothesis 3 since none of them had a main effect on OCB. The results of each of the tests for Hypothesis 3 are described in turn as follows.

Test one of Hypothesis 3 used distributive justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB altruism as the outcome variable. The results, as illustrated in Table 18, show that the main effect of distributive justice on OCB altruism was positive and significant at  $p < .05$ . Consistent with the literature, high distributive justice leads to high OCB altruism. The effect of organizational identification on OCB altruism was also positive and significant at  $p < .05$ . This is also consistent with the literature. This result shows that high organizational identification results in increased OCB altruism.

Distributive justice had a positive non-significant correlation coefficient with organizational identification. High distributive justice does not lead to high organizational identification. Interactional justice had a positive non-significant

correlation coefficient with organizational identification, which was not statistically significant at  $p < .05$ . Therefore, high interactional justice does not lead to high organizational identification.

The interaction of distributive justice and interactional justice had a negative non-significant correlation coefficient with organizational identification (see Table 18). As a result, it was concluded that organizational identification does not transfer the interactive effect of distributive justice and interactional justice to OCB altruism.

Mediated Moderation Model:  $OCB\ Alt = a + b_1 DJ + b_2 OI + b_3 IJ + b_4 DJ \times IJ + e$

Mediator:  $OI = a + b_1 DJ + b_2 IJ + b_3 DJ \times IJ + e$

Direct Effect:  $OCB\ Alt = a + b_1 DJ + b_2 OI + e$

Table 18

*Organizational Identification as a Mediator of the Interactive Effect of Distributive Justice and Interactional Justice on OCB Altruism*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	DJ	.42	.06	1.90	-.01	.85
	IJ	.28	.22	1.23	-.17	.72
Indirect Effect on OI	DJ x IJ	-.02	.76	-.31	-.14	.10
Direct Effect on OCB Alt	OI	.18*	.02	2.43	.03	.33
	DJ	.42*	.00	4.48	.23	.60

*Note.*  $N = 250$ . DJ = Distributive Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Alt = OCB Altruism.

\* $p < .05$ .

Test two of Hypothesis 3 used distributive justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB courtesy as the outcome variable. The results, as illustrated in Table 19, show that the main effect of distributive justice on OCB courtesy was positive and significant at  $p < .05$ . Consistent with the literature, high distributive justice

leads to high OCB courtesy. The effect of organizational identification on OCB courtesy was also positive but non-significant at  $p < .05$ . This is not consistent with the literature. This result shows that high organizational identification does not result in increased OCB courtesy.

Distributive justice had a positive non-significant correlation coefficient with organizational identification. This result shows that high distributive justice does not lead to high organizational identification. Interactional justice had a positive non-significant correlation coefficient with organizational identification at  $p < .05$ . Therefore, high interactional justice does not lead to high organizational identification.

The interaction of distributive justice and interactional justice had a negative non-significant correlation coefficient with organizational identification (see Table 19). As a result, it was concluded that organizational identification does not transfer the interactive effect of distributive justice and interactional justice to OCB courtesy.

Mediated Moderation Model:  $OCB\ Court = a + b_1 DJ + b_2 OI + b_3 IJ + b_4 DJ \times IJ + e$

Mediator:  $OI = a + b_1 DJ + b_2 IJ + b_3 DJ \times IJ + e$

Direct Effect:  $OCB\ Court = a + b_1 DJ + b_2 OI + e$

Table 19

*Organizational Identification as a Mediator of the Interactive Effect of Distributive Justice and Interactional Justice on OCB Courtesy*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	DJ	.42	.06	1.90	-.01	.85
	IJ	.28	.22	1.23	-.17	.72
Indirect Effect on OI	DJ x IJ	-.02	.76	-.31	-.14	.10
Direct Effect on OCB Court	OI	.03	.68	.42	-.10	.16
	DJ	.33*	.00	4.09	.17	.49

*Note.*  $N = 250$ . DJ = Distributive Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Court = OCB Courtesy.

\* $p < .05$ .

Test three of Hypothesis 3 used distributive justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB conscientiousness as the outcome variable. The results, as illustrated in Table 20, show that the effects of distributive justice and organizational identification on OCB conscientiousness were both positive and significant at  $p < .05$ . Consistent with the literature, high distributive justice leads to high OCB conscientiousness. Similarly, high organizational identification results in high OCB conscientiousness.

Distributive justice and interactional justice had positive non-significant correlation coefficients with organizational identification at  $p < .05$ . These results show that both high distributive justice and high interactional justice do not lead to high organizational identification.

The interaction of distributive justice and interactional justice had a negative non-significant correlation coefficient with organizational identification (see Table 20). As a result, it was concluded that organizational identification does not transfer the interactive effect of distributive justice and interactional justice to OCB conscientiousness.

Mediated Moderation Model:  $OCB\ Cons = a + b_1 DJ + b_2 OI + b_3 IJ + b_4 DJ \times IJ + e$

Mediator:  $OI = a + b_1 DJ + b_2 IJ + b_3 DJ \times IJ + e$

Direct Effect:  $OCB\ Cons = a + b_1 DJ + b_2 OI + e$

Table 20

*Organizational Identification as a Mediator of the Interactive Effect of Distributive Justice and Interactional Justice on OCB Conscientiousness*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	DJ	.42	.06	1.90	-.01	.85
	IJ	.28	.22	1.23	-.17	.72
Indirect Effect on OI	DJ x IJ	-.02	.76	-.31	-.14	.10
Direct Effect on OCB Cons	OI	.19*	.00	2.66	.05	.33
	DJ	.18*	.04	2.02	.00	.35

*Note.*  $N = 250$ . DJ = Distributive Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Cons = OCB Conscientiousness.

\* $p < .05$ .

Test four of Hypothesis 3 used distributive justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB civic virtue as the outcome variable. The results, as illustrated in Table 21, show that the effects of distributive justice and organizational identification on OCB civic virtue were both positive and significant at  $p < .05$ . Consistent with the literature, high distributive justice leads to high OCB civic virtue. Similarly, high organizational identification results in high OCB civic virtue.

Distributive justice and interactional justice both had positive non-significant correlation coefficients with organizational identification at  $p < .05$ . These results show that high distributive justice and high interactional justice do not lead to high organizational identification.

The interaction of distributive justice and interactional justice had a negative non-significant correlation coefficient with organizational identification (see Table 21). As a result, it was concluded that organizational identification does not transfer the interactive effect of distributive justice and interactional justice to OCB civic virtue.



Mediated Moderation Model:  $OCB\ Civ\ Vir = a + b_1 DJ + b_2 OI + b_3 IJ + b_4 DJ \times IJ + e$

Mediator:  $OI = a + b_1 DJ + b_2 IJ + b_3 DJ \times IJ + e$

Direct Effect:  $OCB\ Civ\ Vir = a + b_1 DJ + b_2 OI + e$

Table 21

*Organizational Identification as a Mediator of the Interactive Effect of Distributive Justice and Interactional Justice on OCB Civic Virtue*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	DJ	.42	.06	1.90	-.01	.85
	IJ	.28	.22	1.23	-.17	.72
Indirect Effect on OI	DJ x IJ	-.02	.76	-.31	-.14	.10
Direct Effect on OCB Civ Vir	OI	.19*	.02	2.30	.03	.35
	DJ	.55*	.00	5.52	.35	.74

*Note.*  $N = 250$ . DJ = Distributive Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Civ Vir = OCB Civic Virtue.

\* $p < .05$ .

Test five of Hypothesis 3 used distributive justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB sportsmanship as the outcome variable. The results, as illustrated in Table 22, show that the effect of distributive justice on OCB sportsmanship was negative and non-significant while the effect of organizational identification on OCB sportsmanship was positive and non-significant at  $p < .05$ . These results were inconsistent with the literature; high distributive justice and high organizational identification do not lead to high OCB sportsmanship.

Distributive justice and interactional justice had positive non-significant correlation coefficients with organizational identification at  $p < .05$ . These results show that both high distributive justice and high interactional justice do not lead to high organizational identification.

The interaction of distributive justice and interactional justice had a negative non-significant correlation coefficient with organizational identification (see Table 22). As a result, it was concluded that organizational identification does not transfer the interactive effect of distributive justice and interactional justice to OCB sportsmanship.

$$\text{Mediated Moderation Model: OCB Sprt} = a + b_1 \text{ DJ} + b_2 \text{ OI} + b_3 \text{ IJ} + b_4 \text{ DJ} \times \text{IJ} + e$$

$$\text{Mediator: OI} = a + b_1 \text{ DJ} + b_2 \text{ IJ} + b_3 \text{ DJ} \times \text{IJ} + e$$

$$\text{Direct Effect: OCB Sprt} = a + b_1 \text{ DJ} + b_2 \text{ OI} + e$$

Table 22

*Organizational Identification as a Mediator of the Interactive Effect of Distributive Justice and Interactional Justice on OCB Sportsmanship*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	DJ	.42	.06	1.90	-.01	.85
	IJ	.28	.22	1.23	-.17	.72
Indirect Effect on OI	DJ x IJ	-.02	.76	-.31	-.14	.10
Direct Effect on OCB Sprt	OI	.07	.47	.73	-.12	.25
	DJ	-.04	.76	-.31	-.26	.19

*Note.*  $N = 250$ . DJ = Distributive Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Sprt = OCB Sportsmanship.

\* $p < .05$ .

Overall, there was no support for organizational identification as a mediator of the interactive effect of distributive justice and interactional justice on the OCB dimensions.

The interaction between distributive justice and interactional justice did not have a significant effect on organizational identification; therefore, it was not possible for organizational identification to mediate the relationship between the interactive term and the OCB dimensions of OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship.

Hypothesis 4: Organizational identification mediates the interactive effect of procedural justice and interactional justice on OCB.

Hypothesis 4 proposed that organizational identification is the mediating variable through which the interaction between the independent variable procedural justice and the moderator interactional justice operates to influence OCB. It was predicted that employees with higher interactional justice perceptions would require less procedural justice, and the influence on OCB would be transferred indirectly through organizational identification. Employees with high interactional justice perceptions would not require as much procedural justice to increase OCB, and this interaction would be stronger at higher levels of procedural justice.

Hypothesis 4 was tested in SPSS using the PROCESS macro by Hayes (2013, 2014). Model 7 was used to test this hypothesis using each of the five dimensions of OCB (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship) as outcome variables. Similar to the testing of Hypotheses 1, 2, and 3, gender, age, ethnicity, highest educational level attained, organizational tenure, and job position were not used as control variables in the testing of Hypothesis 4 since none of them had a main effect on OCB. The results of each of the tests for Hypothesis 4 are described in turn as follows.

Test one of Hypothesis 4 used procedural justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB altruism as the outcome variable. The results, as illustrated in Table 23, show that the direct effects of procedural justice and organizational identification on OCB altruism were positive and significant at  $p < .05$ . Consistent with

the literature, high procedural justice results in increased OCB altruism. Similarly, high organizational identification leads to increased OCB altruism.

Procedural justice had a positive non-significant correlation coefficient with organizational identification. High procedural justice does not lead to high organizational identification. Interactional justice had a positive non-significant correlation coefficient with organizational identification. Therefore, high interactional justice does not lead to high organizational identification.

The interaction of procedural justice and interactional justice had a positive non-significant correlation coefficient with organizational identification (see Table 23). As a result, it was concluded that organizational identification does not transfer the interactive effect of procedural justice and interactional justice to OCB altruism.

Mediated Moderation Model:  $OCB\ Alt = a + b_1 PJ + b_2 OI + b_3 IJ + b_4 PJ \times IJ + e$

Mediator:  $OI = a + b_1 PJ + b_2 IJ + b_3 PJ \times IJ + e$

Direct Effect:  $OCB\ Alt = a + b_1 PJ + b_2 OI + e$

Table 23

*Organizational Identification as a Mediator of the Interactive Effect of Procedural Justice and Interactional Justice on OCB Altruism*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	PJ	.14	.57	.57	-.35	.63
	IJ	.30	.14	1.46	-.11	.71
Indirect Effect on OI	PJ x IJ	.003	.97	.04	-.12	.12
Direct Effect on OCB Alt	OI	.21*	.00	2.92	.07	.36
	PJ	.35*	.00	4.36	.19	.50

*Note.*  $N = 250$ . PJ = Procedural Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Alt – OCB Altruism.

\* $p < .05$ .

Test two of Hypothesis 4 used procedural justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB courtesy as the outcome variable. The results, as illustrated in Table 24, show that the main effects of procedural justice on OCB courtesy was positive and significant. Consistent with the literature, high procedural justice leads to high OCB courtesy. The effect of organizational identification on OCB courtesy was positive and non-significant at  $p < .05$ . The results show that high organizational identification does not lead to high OCB courtesy.

Procedural justice and interactional justice both had positive non-significant correlation coefficients with organizational identification. This was not consistent with the literature and shows that high procedural justice and interactional justice do not lead to high organizational identification.

The interaction of procedural justice and interactional justice had a positive non-significant correlation coefficient with organizational identification (see Table 24). As a result, it was concluded that organizational identification does not transfer the interactive effect of procedural justice and interactional justice to OCB courtesy.

Mediated Moderation Model:  $OCB\ Court = a + b_1 PJ + b_2 OI + b_3 IJ + b_4 PJ \times IJ + e$

Mediator:  $OI = a + b_1 PJ + b_2 IJ + b_3 PJ \times IJ + e$

Direct Effect:  $OCB\ Court = a + b_1 PJ + b_2 OI + e$

Table 24

*Organizational Identification as a Mediator of the Interactive Effect of Procedural Justice and Interactional Justice on OCB Courtesy*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	PJ	.14	.57	.57	-.35	.63
	IJ	.30	.14	1.46	-.11	.71
Indirect Effect on OI	PJ x IJ	.003	.97	.04	-.12	.12
Direct Effect on OCB Court	OI	.06	.33	.98	-.06	.19
	PJ	.24*	.00	3.44	.10	.38

*Note.*  $N = 250$ . PJ = Procedural Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Court = OCB Courtesy.

\* $p < .05$ .

Test three of Hypothesis 4 used procedural justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB conscientiousness as the outcome variable. The results, as illustrated in Table 25, show that the direct effects of procedural justice and organizational identification on OCB conscientiousness were positive and significant at  $p < .05$ . Consistent with the literature, high procedural justice results in increased OCB conscientiousness. Similarly, high organizational identification leads to increased OCB conscientiousness.

Procedural justice had a positive non-significant correlation coefficient with organizational identification. The results show that high procedural justice does not lead to high organizational identification. Interactional justice had a positive non-significant correlation coefficient with organizational identification. Therefore, high interactional justice does not lead to high organizational identification.

The interaction of procedural justice and interactional justice had a positive non-significant correlation coefficient with organizational identification (see Table 25). As a

result, it was concluded that organizational identification does not transfer the interactive effect of procedural justice and interactional justice to OCB conscientiousness.

Mediated Moderation Model:  $OCB\ Cons = a + b_1 PJ + b_2 OI + b_3 IJ + b_4 PJ \times IJ + e$

Mediator:  $OI = a + b_1 PJ + b_2 IJ + b_3 PJ \times IJ + e$

Direct Effect:  $OCB\ Cons = a + b_1 PJ + b_2 OI + e$

Table 25

*Organizational Identification as a Mediator of the Interactive Effect of Procedural Justice and Interactional Justice on OCB Conscientiousness*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	PJ	.14	.57	.57	-.35	.63
	IJ	.30	.14	1.46	-.11	.71
Indirect Effect on OI	PJ x IJ	.003	.97	.04	-.12	.13
Direct Effect on OCB Cons	OI	.18*	.01	2.61	.04	.31
	PJ	.22*	.00	3.03	.08	.37

*Note.*  $N = 250$ . PJ = Procedural Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Cons = OCB Conscientiousness.

\* $p < .05$ .

Test four of Hypothesis 4 used procedural justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB civic virtue as the outcome variable. The results, as illustrated in Table 26, show that the direct effects of procedural justice and organizational identification on OCB civic virtue were positive and significant at  $p < .05$ . Consistent with the literature, high procedural justice results in increased OCB civic virtue. Similarly, high organizational identification leads to increased OCB civic virtue.

Procedural justice had a positive non-significant correlation coefficient with organizational identification. The results show that high procedural justice does not lead to high organizational identification. Interactional justice had a positive non-significant

correlation coefficient with organizational identification. Therefore, high interactional justice does not lead to high organizational identification.

The interaction of procedural justice and interactional justice had a positive non-significant correlation coefficient with organizational identification (see Table 26). As a result, it was concluded that organizational identification does not transfer the interactive effect of procedural justice and interactional justice to OCB civic virtue.

Mediated Moderation Model:  $OCB\ Civ\ Vir = a + b_1 PJ + b_2 OI + b_3 IJ + b_4 PJ \times IJ + e$

Mediator:  $OI = a + b_1 PJ + b_2 IJ + b_3 PJ \times IJ + e$

Direct Effect:  $OCB\ Civ\ Vir = a + b_1 PJ + b_2 OI + e$

Table 26

*Organizational Identification as a Mediator of the Interactive Effect of Procedural Justice and Interactional Justice on OCB Civic Virtue*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	PJ	.14	.57	.57	-.35	.63
	IJ	.30	.14	1.46	-.11	.71
Indirect Effect on OI	PJ x IJ	.003	.97	.04	-.12	.13
Direct Effect on OCB Civ Vir	OI	.19*	.01	2.46	.04	.34
	PJ	.59*	.00	7.18	.43	.75

*Note.*  $N = 250$ . PJ = Procedural Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Civ Vir = OCB Civic Virtue.

\* $p < .05$ .

Test five of Hypothesis 4 used procedural justice as the predictor variable, interactional justice as the moderating variable, organizational identification as the mediating variable, and OCB sportsmanship as the outcome variable. The results, as illustrated in Table 27, show that the direct effect of procedural justice on OCB sportsmanship was negative and significant while the effect of organizational identification on OCB sportsmanship was positive and non-significant. This is



inconsistent with the literature and shows that high procedural justice and high organizational identification do not result in increased OCB sportsmanship.

Procedural justice had a positive non-significant correlation coefficient with organizational identification. The results show that high procedural justice does not lead to high organizational identification. Interactional justice had a positive non-significant correlation coefficient with organizational identification. Therefore, high interactional justice does not lead to high organizational identification.

The interaction of procedural justice and interactional justice had a positive non-significant correlation coefficient with organizational identification (see Table 27). As a result, it was concluded that organizational identification does not transfer the interactive effect of procedural justice and interactional justice to OCB sportsmanship.

Mediated Moderation Model:  $OCB\ Sprt = a + b_1\ PJ + b_2\ OI + b_3\ IJ + b_4\ PJ \times IJ + e$

Mediator:  $OI = a + b_1\ PJ + b_2\ IJ + b_3\ PJ \times IJ + e$

Direct Effect:  $OCB\ Sprt = a + b_1\ PJ + b_2\ OI + e$

Table 27

*Organizational Identification as a Mediator of the Interactive Effect of Procedural Justice and Interactional Justice on OCB Sportsmanship*

	Variables	Coefficient	P Value	t-statistic	LLCI	ULCI
Direct Effect on OI	PJ	.14	.57	.57	-.35	.63
	IJ	.30	.14	1.46	-.11	.71
Indirect Effect on OI	PJ x IJ	.003	.97	.04	-.12	.13
Direct Effect on OCB Sprt	OI	.12	.18	1.35	-.06	.30
	PJ	-.21*	.04	-2.12	-.40	-.01

*Note.*  $N = 250$ . PJ = Procedural Justice; OI = Organizational Identification; IJ = Interactional Justice; OCB Sprt = OCB Sportsmanship.

\* $p < .05$ .

Overall, there was no support for Hypothesis 4, which tested if organizational identification acts as a mediator of the interactive effect of procedural justice and interactional justice on OCB. The interaction between procedural justice and interactional justice did not have a significant effect on organizational identification; therefore, it was not possible for organizational identification to mediate the relationship between the interactive term and the OCB dimensions of OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship.

**Results of ad hoc analysis: Organizational identification as a mediator of interactional justice and OCB.** Upon completion of the hypotheses testing, further tests were conducted to determine if organizational identification mediates the effect of interactional justice on OCB. These tests were performed using linear regression in SPSS. The regression analysis was performed in two steps. First, the independent variable of interactional justice was regressed on to the dependent variable of OCB. This was called Model 1. Second, the mediator was introduced into Model 1 and the linear regression was performed again; this was called Model 2. These two steps were performed for each of the OCB outcome variables of OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship.

When organizational identification was tested as a mediator of the relationship between interactional justice and OCB altruism, the results showed that partial mediation occurred. Interactional justice had a positive and significant effect on OCB altruism. This shows that high interactional justice leads to high OCB altruism. When organizational identification was introduced as the mediator, the unstandardized correlation coefficient between interactional justice and OCB altruism was reduced while the significance

remained the same and the t-value was reduced (see Table 28). This shows that the strength of the relationship between interactional justice and OCB altruism was weakened when organizational identification was introduced as a mediator.

Organizational identification had a positive and significant correlation coefficient with OCB altruism. Based on these results, it was concluded that the effect of interactional justice was partially transferred to OCB altruism through organizational identification.

When organizational identification was tested as a mediator of the relationship between interactional justice and OCB courtesy, the results showed that mediation did not occur. Interactional justice had a positive and significant effect on OCB courtesy as seen in Table 28. It is seen that high interactional justice results in high OCB courtesy.

When organizational identification was introduced as mediator, the unstandardized correlation coefficient between interactional justice and OCB courtesy was marginally reduced while the significance remained the same and the t-value was reduced.

Organizational identification had a positive and non-significant correlation coefficient with OCB courtesy. Since the relationship of organizational identification with OCB courtesy was not significant, it was not possible for mediation to occur. Thus, it was concluded that the effect of interactional justice was not transferred to OCB courtesy through organizational identification.

When organizational identification was tested as a mediator of the relationship between interactional justice and OCB conscientiousness, the results showed that partial mediation occurred. Interactional justice had a positive and significant effect on OCB conscientiousness. This shows that high interactional justice results in high OCB conscientiousness. When organizational identification was introduced as mediator, the

unstandardized correlation coefficient between interactional justice and OCB conscientiousness was reduced while the significant remained the same and the t-value was reduced (see Table 28). This showed that the strength of the relationship between interactional justice and OCB conscientiousness was weakened when organizational identification was introduced as a mediator. Organizational identification had a positive and significant correlation coefficient with OCB conscientiousness. Therefore, it was concluded that the effect of interactional justice was partially transferred to OCB conscientiousness through organizational identification.

When organizational identification was tested as a mediator of the effect of interactional justice on OCB civic virtue, the results showed that partial mediation occurred. Interactional justice had a positive and significant effect on OCB civic virtue. This shows that high interactional justice results in high OCB civic virtue. When organizational identification was introduced as a mediator, the unstandardized correlation coefficient between interactional justice and OCB civic virtue was reduced while the significance remained the same and the t-value was reduced (see Table 28). This showed that the strength of the relationship between interactional justice and OCB civic virtue was weakened when organizational identification was introduced as a mediator. Organizational identification had a positive and significant correlation coefficient with OCB civic virtue. Therefore, it was concluded that the effect of interactional justice was partially transferred to OCB civic virtue through organizational identification.

When organizational identification was tested as a mediator of the relationship between interactional justice and OCB sportsmanship, the results did not support mediation. Interactional justice had a positive and non-significant effect on OCB

sportsmanship. High interactional justice did not result in a significant increase in OCB sportsmanship. When organizational identification was introduced as mediator, the unstandardized non-significant correlation coefficient between interactional justice and OCB sportsmanship was reduced (see Table 28). This showed that the strength of the relationship between interactional justice and OCB sportsmanship was not significantly reduced when organizational identification was introduced as a mediator. Organizational identification had a positive and non-significant correlation coefficient with OCB sportsmanship. Therefore, it was concluded that organizational identification did not mediate the effect of interactional justice on OCB sportsmanship.

Overall, there was support for organizational identification as a partial mediator of the effect of interactional justice on OCB altruism, OCB conscientiousness, and OCB civic virtue.

Table 28

*Results of Testing Organizational Identification as a Mediator of the Effect of Interactional Justice on OCB*

		Model 1 Predictor	Model 2 Predictors	
		Int Just	Int Just	Org ID
OCB Alt	Unstandardized Coefficients	0.47	0.39	0.19
	t-statistic	5.98	4.63	2.62
	Significance	0.00	0.00	0.01
OCB Court	Unstandardized Coefficients	0.37	0.36	0.02
	t-statistic	5.44	4.91	0.32
	Significance	0.00	0.00	0.75
OCB Cons	Unstandardized Coefficients	0.33	0.26	0.17
	t-statistic	4.42	3.25	2.38
	Significance	0.00	0.00	0.02
OCB Civ Vir	Unstandardized Coefficients	0.66	0.58	0.18
	t-statistic	7.93	6.55	2.29
	Significance	0.00	0.00	0.02

		Model 1 Predictor	Model 2 Predictors	
		Int Just	Int Just	Org ID
OCB Sprt	Unstandardized Coefficients	0.06	0.04	0.04
	t-statistic	0.60	0.37	0.48
	Significance	0.55	0.71	0.64

*Note.*  $N = 250$ . IJ = Interactional Justice; Org ID = Organizational Identification; OCB Alt = OCB Altruism; OCB Court = OCB Courtesy; OCB Cons = OCB Conscientiousness; OCB Civic Vir = OCB Civic Virtue; OCB Sprt = OCB Sportsmanship.

Table 29

*Results of Hypotheses Testing of Hypothesis 1*

Independent Variable	Moderating Variable	Dependent Variable	Hypothesis Supported
Distributive Justice	Interactional Justice	OCB Altruism	No
Distributive Justice	Interactional Justice	OCB Courtesy	No
Distributive Justice	Interactional Justice	OCB Conscientiousness	No
Distributive Justice	Interactional Justice	OCB Civic Virtue	No
Distributive Justice	Interactional Justice	OCB Sportsmanship	No

Table 30

*Results of Hypotheses Testing of Hypothesis 2*

Independent Variable	Moderating Variable	Dependent Variable	Hypothesis Supported
Procedural Justice	Interactional Justice	OCB Altruism	No
Procedural Justice	Interactional Justice	OCB Courtesy	No
Procedural Justice	Interactional Justice	OCB Conscientiousness	No
Procedural Justice	Interactional Justice	OCB Civic Virtue	No
Procedural Justice	Interactional Justice	OCB Sportsmanship	No

Table 31

*Results of Hypotheses Testing of Hypothesis 3*

Independent Variable	Moderating Variable	Mediating Variable	Dependent Variable	Hypothesis Supported
Distributive Justice	Interactional Justice	Organizational Identification	OCB Altruism	No
Distributive Justice	Interactional Justice	Organizational Identification	OCB Courtesy	No
Distributive Justice	Interactional Justice	Organizational Identification	OCB Conscientiousness	No
Distributive Justice	Interactional Justice	Organizational Identification	OCB Civic Virtue	No
Distributive Justice	Interactional Justice	Organizational Identification	OCB Sportsmanship	No

Table 32

*Results of Hypotheses Testing of Hypothesis 4*

Independent Variable	Moderating Variable	Mediating Variable	Dependent Variable	Hypothesis Supported
Procedural Justice	Interactional Justice	Organizational Identification	OCB Altruism	No
Procedural Justice	Interactional Justice	Organizational Identification	OCB Courtesy	No
Procedural Justice	Interactional Justice	Organizational Identification	OCB Conscientiousness	No
Procedural Justice	Interactional Justice	Organizational Identification	OCB Civic Virtue	No
Procedural Justice	Interactional Justice	Organizational Identification	OCB Sportsmanship	No

## **CHAPTER V**

### **SUMMARY AND CONCLUSIONS**

This study tested the relationships between justice constructs, organizational identification, and organizational citizenship behavior (OCB) dimensions. In particular, the moderating effect of interactional justice on the relationship between distributive justice and OCB and between procedural justice and OCB was tested. Organizational identification as a mediator of the interactive effect of distributive justice and interactional justice on OCB and the interactive effect of procedural justice and interactional justice on OCB was examined. Further ad hoc analysis was performed on organizational identification as a mediator of the effect of interactional justice on OCB. This chapter presents a discussion of the results of the data analysis performed in the previous chapter. Theoretical and managerial implications based on the results of the study are offered. Study limitations are also discussed. The chapter ends with suggestions for future research and a conclusion.

#### **Summary of the Research Findings**

As mentioned in Chapter 1, organizations today are continuously challenged to produce increased output with more effective methods and less resources. One of the methods that can be used to increase output at the least cost is the performance of OCB. Organizations can influence employees to perform OCBs by providing the tools, the motivation and the opportunity needed to do so. This study was concentrated on researching the influence of justice perceptions on the performance of employee behaviors in the form of OCB. In particular, the social aspect of the workplace in the



form of interactional justice was focused upon. This is a direct response to the lack of research on the effect of interactional justice on OCB.

This research was performed to determine if social interactions as measured by interactional justice are instrumental in reducing or eliminating distributive or procedural unfairness in organizations. This was done by testing interactional justice as a moderator on the relationship between distributive justice and OCB and between procedural justice and OCB. Also, in keeping with investigating the social aspect of work, organizational identification was examined as a mediator of the interactive effect of distributive justice and interactional justice on OCB and of the interactive effect of procedural justice and interactional justice on OCB. The following paragraphs discuss the findings of this study.

The results showed that when the variables gender, age, ethnicity, highest level of education attained, organizational tenure, and job position were tested as controls, none of them had a main effect. This is contrary to past studies that have determined gender, age, organizational tenure, and educational level do in fact influence employee engagement and OCB (Kidder, 1998; Morrison, 1994; Podsakoff et al., 2000). Support for the effect of gender on OCB has been especially strong in past studies (Farrell & Finkelstein, 2007; Kidder, 2002).

Hypothesis 1 tested the moderating effect of interactional justice on the relationship between distributive justice and OCB. The lack of literature on interactional justice being used as a moderator with the variables of interest in this study shows that there was a gap in this particular area that needed to be addressed. As a result, this is the first time interactional justice was tested in a moderating capacity with other justice dimensions. The five dimensions of OCB as outlined by Organ (1988) were used as

outcome variables (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship).

As evidenced by past work, there is a strong direct link between justice perceptions and OCB (Blakely et al., 2005; Bynum et al., 2012; Cohen-Charash & Spector, 2001; Farh, Podsakoff, & Organ, 1990; Moorman, 1991; Niehoff & Moorman, 1993; Wayne & Green, 1993; Williams et al., 2002), which was confirmed by the intercorrelation coefficients illustrated in Table 7. Distributive justice had significant correlation coefficients (at  $p < .01$ ) with all dimensions of OCB except with OCB sportsmanship. Procedural justice had positive significant correlation coefficients with all of the variables of study except with OCB sportsmanship. In fact, procedural justice had a significant negative correlation coefficient with OCB sportsmanship. This indicates that high procedural justice results in a significant decrease in OCB sportsmanship. Interactional justice also had significant correlation coefficients with all the variables of study except with OCB sportsmanship, which is the least studied dimension of OCB (Podsakoff et al., 2000).

However, when interactional justice was introduced as a moderator, none of the interaction terms were significantly correlated with any of the dimensions of OCB. Therefore, there was no support for Hypothesis 1. Moderators or interaction terms affect the strength and/or the direction of the relationship between the predictor and outcome variable (Baron & Kenny, 1986). This outcome was not achieved when the interactive effect of interactional justice and distributive justice on OCB was tested. It has been documented that identifying interactions can be challenging (Aiken & West, 1991; McClelland & Judd, 1993). According to Baron and Kenny (1986), "it is desirable that

the moderator variable be uncorrelated with both the predictor and the criterion (the dependent variable) to provide a clearly interpretable interaction term” (p. 1174). That was not the case in this study where the effect of interactional justice on distributive justice was significant at  $p < .01$ , and the effect of interactional justice on all of the dimensions of OCB was significant with the exception of OCB sportsmanship (see Table 7).

Hypothesis 2 tested the moderating effect of interactional justice on the relationship between procedural justice and OCB. There is no evidence in the literature that shows that this relationship has been tested before. This was tested using all five dimensions of OCB as outcome variables (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship). As mentioned in Chapter II, there is a proliferation of literature that supports the relationship between procedural justice and OCB (Cohen-Charash & Spector, 2001; Jiang & Law, 2013; Konovsky & Pugh, 1994; Lind & Earley, 1991; Lipponen et al., 2004; Menguc, 2000; Moorman, 1991; Moorman & Byrne, 2005; Moorman et al., 1998; Organ, 1988). Similar to the case of distributive justice, procedural justice had positive significant correlation coefficients with all dimensions of OCB except with OCB sportsmanship at the  $p < .01$  level (see Table 7). Interactional justice also had significant correlation coefficients with all the variables of study except with OCB sportsmanship.

Contrary to expectation, when interactional justice was tested in a moderating capacity, the interaction term of procedural justice and interactional justice did not have significant effects any of the dimensions of OCB; therefore, there was no support for Hypothesis 2. In addition to the quality of the supervisor-employee interaction, the length

of time the employee reported to that particular supervisor may have had an effect on the relationship. This was not measured. As the length of time a person reports to his or her supervisor increases, so would the strength of their psychological contract with their supervisor and their organization. Of the respondents, 42% were employed by their present organization for less than four years. It might have been helpful to also measure how long they were in their present position.

Hypothesis 3 tested if the interactive effect of distributive justice and interactional justice influences OCB. This mediated moderation model was tested using all five dimensions of OCB as outcome variables (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship). There were significant positive correlation coefficients at  $p < .01$  among the justice variables of study and the OCB dimensions, except between distributive justice and OCB sportsmanship, which was not significant, and between interactional justice and OCB sportsmanship, which showed a significant negative correlation at  $p < .05$ . Theory implies that interactional justice should act as a buffer on the effect of distributive on OCB. The literature also suggests that this relationship should be facilitated by organizational identification since it is of a social exchange quality.

The model was tested with raw data using a bootstrapping strategy. As illustrated in Table 7, the correlation coefficients of organizational identification with other main variables were positive and significant. The only exception was the correlation coefficient of organizational identification with OCB sportsmanship, which was positive but not significant. The positive correlations with OCB conforms to the literature that suggests organizational identification positively influences OCB (Bellou & Thanopoulos, 2006;

Bergami & Bagozzi, 2000; Dukerich et al., 2002; Dutton, Dukerich, & Harquail, 1994; Van Dick et al., 2005). The results indicated that high organizational identification results in increased OCB altruism, OCB courtesy, OCB conscientiousness, and OCB civic virtue. According to the theory of planned behavior (Ajzen, 1991), attitudes, such as feelings of identification, should determine behavior, which in this case is OCB. The results confirmed that organizational identification did lead to increased helping behavior and therefore consistency with the literature was confirmed.

When the model was tested for mediated moderation, the results were not in support of the proposed relationships. When linear regression was used to test the relationships between the variables, none of the interaction terms were significantly related to organizational identification. One reason that may explain why the interaction of distributive justice and interactional justice did not have a significant positive effect on organizational identification is because employees may have experienced cognitive dissonance (Festinger, 1957). Cognitive dissonance in this case can occur if employees feel overly compensated with justice in their organization and therefore feel they do not have to be identified with their organization in order to get results. Therefore, even at high levels of organizational identification, the effect of the interaction of distributive justice and interactional justice on helping behavior would not have been enhanced.

Hypothesis 4, which proposed that organizational identification mediates the interactive effect of procedural justice and interactional justice on OCB, was the last hypothesis to be tested in this study. Theoretical implications were used to predict that interactional justice should buffer the effect of procedural justice on OCB, which should be facilitated by organizational identification. Extant research shows that procedural

justice is positively correlated with organizational identification (De Cremer et al., 2009; Riketta, 2005; Tyler & Smith, 1999; Walumbwa, 2009). All variables of study had significant positive intercorrelations at  $p < .01$  except between interactional justice and OCB sportsmanship, which was not significant, and procedural justice and OCB sportsmanship, which had a significant negative intercorrelation at  $p < .05$ . When tested for mediated moderation using the five dimensions of OCB (OCB altruism, OCB courtesy, OCB conscientiousness, OCB civic virtue, and OCB sportsmanship), none of the expected relationships were significant at  $p < .05$ . The interaction of procedural justice and interactional justice did not have a significant effect on the organizational identification; therefore, mediation through organizational identification was not possible. This was unexpected since the correlations of organizational identification with other main variables were significant and positive with the exception of OCB sportsmanship, which was positive but not significant. Therefore, no support for the mediated moderation effect of Hypothesis 4 was garnered.

Similar to the case of Hypothesis 3, it is quite possible that the length of time employees reported to their supervisor played a part in the model not being supported since interactional justice perceptions due to social exchange take time to develop. The category with the largest distribution in job tenure at that organization was 0-4 years. However, tenure in the present job position was not measured.

The literature infers that a high quality of interactional justice should lead to increased organizational identification. As seen in Table 7, the correlation coefficient between interactional justice and organizational identification was positive and significant at  $p < .01$ . This shows that employee perceptions of interactional justice might

be tied to the character of the organization, which is embodied in the concept of organizational identification. Table 7 also shows that the effect of organizational identification with the OCB altruism, OCB courtesy, OCB conscientiousness, and OCB civic virtue was positive and significant.

Moderate evidence establishing the influencing effect of organizational identification on OCB exists in the literature. The effect of interactional justice on OCB was sparsely tested, but the role of organizational identification in this relationship has never been tested before. As a result of this finding, further ad hoc analysis was performed to test if organizational identification mediates the relationship between interactional justice and OCB. The results showed that organizational identification partially mediates the effect of interactional justice on OCB altruism, OCB conscientiousness, and OCB civic virtue. This finding is a significant contribution to the literature on organizational justice, social exchange, and OCB.

### **Theoretical Implications**

This research contributes to the academic body of knowledge in several ways. Social exchange theory (Blau, 1964) was used to explain why, after time in an organization, employees form a psychological contract with their organization and reciprocate via acts of OCB. This study found that contrary to prior research in this area, tenure at that organization had no significant effect on acts of OCB and, hence, tenure was not used as a control variable.

The literature shows that between distributive justice and procedural justice, the latter has a stronger relationship with OCB (Greenberg, 1993), and it was anticipated that there would be strong support for interactional justice as a moderator of the relationships

between distributive justice and OCB and procedural justice and OCB. However, the results of this study showed no support for these relationships. This contributes to the literature on organizational justice and OCB.

This study makes another contribution to the literature as the first study to use interactional justice as a moderator in a mediated moderation model using justice dimensions and OCB. It was also predicted that there would be support for the interactive effect of distributive justice and interactional justice on OCB and for the interactive effect of procedural justice and interactional justice on OCB through organizational identification. Surprisingly, there was no support for the mediated moderation effect when the predictor variable was distributive justice and no support when the predictor variable was procedural justice. Therefore, these studied relationships serve as a significant contribution to the literature in the area of organizational justice and OCB. More research needs to be done in this area.

This is also the first study to test organizational identification as a mediator of the effect of interactional justice on OCB. The results of this test revealed that organizational identification does indeed mediate the effect of interactional justice on OCB altruism, OCB conscientiousness, and OCB civic virtue. This significant finding serves as a unique contribution and not only adds to existing literature on organizational justice, social exchange, and OCB but also provides a necessary starting point at which a new stream of research between OCB and the importance of one-on-one interaction or communication in organizations can be developed.

### **Managerial Implications**

Organizations today place more focus on the social or human aspects rather than



the mechanical aspects as was the norm in the past. The literature shows that more focus needs to be placed on the interactional aspect of justice. This study examined the role of social interactions in the workplace to determine if they do indeed have a significant role in mitigating the perceptions of distributive or procedural injustice in the organization.

While the results did not confirm that interactional justice reduces distributive or procedural injustice, they did confirm that distributive justice, procedural justice, and interactional justice are significant predictors of OCB. The results also revealed the important finding that the effects of high-quality social interactions are transferred to OCB through organizational identification. Managers can use this knowledge to focus on having high-quality interactions with their employees. Organizations should appoint managers who are strong on both interpersonal and informational components of interactional justice. Furthermore, training on communication skills and situational leadership can be conducted to teach managers how to accurately determine which method of communication is most appropriate to each individual.

Manager-employee communication should be used to motivate employees to perform extra-role actions. This will have far reaching implications for organizations that are undergoing budget cuts and have to subject their employees to reduced compensation. This research shows that good manager-employee interaction can have a direct effect of the performance of OCBs, and it can also have an indirect effect on the performance of OCBs if the employees are highly identified with their organization.

### **Study Limitations**

There are several limitations to this study. The first limitation that must be discussed is the sample size of 250. While it was large enough for statistical significance,

it was not large enough to be representative of the general population of the United States. Second, even though the respondents came from all levels in their organization, the majority of them belonged to non-managerial positions, so there was not a good distribution of respondents from the different organizational strata. A third potential drawback to consider is that the data was self-reported where fairness perceptions of the respondents were subjective, and, therefore, there was no way to verify the accuracy of the responses. Fourth, this was a cross-sectional study that may have resulted in decreased accuracy of research outcomes.

Last, the hypotheses were based on theoretical underpinnings of social exchange theory (Blau, 1964), norm of reciprocity, and psychological contracts, which all depend on the passage of time to be fully developed. The descriptive data for organizational tenure showed that the category with the highest number of employees was less than four years of work. This may have been insufficient time for employees to form strong psychological contracts that enable reciprocal behaviors via social exchange. Some of these limitations lead to suggestions for future research, which are discussed below.

### **Suggestions for Future Research**

While this study revealed some interesting findings on interactional justice and its effect on OCB in the workplace, much more knowledge on the interactive effects of interactional justice is waiting to be further uncovered and expanded. Since this study was conducted using the unconventional approach of using a crowd sourcing website to gather respondents, it is recommended that this study be replicated using a more traditional approach of data gathering, such as using the employees of a known organization or industry.

As the first known study of interactional justice in a mediated moderation framework using justice dimensions and OCB, it is recommended that this study be replicated many times in different industries to confirm the accuracy of the results. Repeating the study will also add to the body of knowledge on the interactive effects of interactional justice.

Future research should conduct this study using a much larger sample size, which may be more representative of the general workforce population. In addition, a sample population with a job distribution (non-managerial and managerial) and age distribution more reflective of the job and age distribution in the general workforce should be used. Tenure at that particular job position as well as the length of the employee's reporting relationship with his or her supervisor should be measured. It is possible that contextual factor(s) were overlooked when the study was conducted, and this may have rendered the results insignificant.

Since no support was found for interactional justice as a moderator on the relationships between distributive justice and OCB and procedural justice and OCB, and no support was found for the mediated moderation model when the predictor variables were distributive justice and procedural justice, further research should be conducted to increase the understanding of the relationships between these variables.

### **Summary and Conclusion**

In summary, much academic and practical relevance can be drawn from this research. This research investigated the relationships between justice constructs, organizational identification, and OCB. Linear regression was used to answer the research questions, and no support for interactional justice as a moderator between justice

constructs and OCB was found. No support was found for organizational identification as a mediator of the effect of the interaction of distributive justice and interactional justice on OCB. Similarly, no support was found for organizational identification as a mediator of the effect of the interaction of procedural justice and interactional justice on OCB. However, organizational identification was found to mediate the effect of interactional justice on OCB altruism, OCB conscientiousness, and OCB civic virtue. There is practical relevance to further exploring this relationship since there are far reaching managerial implications, as outlined previously. Interactional justice is an important topic that needs further study to not only understand its relationship with other justice constructs but with other antecedents and consequences in the workplace.

**APPENDIX A****DEMOGRAPHIC QUESTIONS**

PLEASE INDICATE WITH AN "X" OR ANSWER THE FOLLOWING:

Gender: Male \_\_\_\_\_ Female \_\_\_\_\_

Age: \_\_\_\_\_

Ethnicity:

American Indian/Native American \_\_\_\_\_

Asian/ Pacific Islander \_\_\_\_\_

Black/African American \_\_\_\_\_

Hispanic/Latino \_\_\_\_\_

White/Caucasian \_\_\_\_\_

Other \_\_\_\_\_

Prefer not to answer \_\_\_\_\_

Highest level of education attained:

Less than high school \_\_\_\_\_

High school \_\_\_\_\_

Some college \_\_\_\_\_

Associate degree \_\_\_\_\_

Bachelor's degree \_\_\_\_\_

Some graduate \_\_\_\_\_

Master's degree \_\_\_\_\_

Doctorate degree \_\_\_\_\_

Number of years of organizational tenure: \_\_\_\_\_

Your position is:

Senior executive or C-level executive \_\_\_\_\_

Senior manager or VP \_\_\_\_\_

Department manager or director \_\_\_\_\_

First-line manager \_\_\_\_\_

Non-managerial \_\_\_\_\_

**APPENDIX B****ORGANIZATIONAL JUSTICE SCALE**

For each question, please indicate your level of agreement by checking the box that best reflects your perception of your organization.

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

**Distributive Justice**

1. My work schedule is fair.
2. I believe my level of pay is fair.
3. I consider my workload to be quite fair.
4. Generally, the rewards I receive here are quite fair.
5. I feel that my job responsibilities are fair.

**Procedural Justice**

6. The decisions my organization makes in the level of organization are made in an unbiased manner.
7. My organization makes sure that all employee's concerns are heard before job decisions are made.
8. My organization has procedures to collect information for making decisions accurately and thoroughly.

9. My organization has procedures that are designed to allow the requests for clear explanation or additional information about a decision.
10. All decisions of my organization are applied consistently and impartially across all affected employees.
11. My organization has procedures that allow an employee to appeal or challenge a decision.

### **Interactional Justice**

12. When decisions are made about my job, my supervisor treats me with kindness and consideration.
13. When decisions are made about my job, my supervisor considers personal needs with the greatest care.
14. When decisions are made about my job, my supervisor treats me with a truthful manner.
15. When decisions are made about my job, my supervisor shows concerns for my rights as an employee.
16. Concerning decisions made about my job, my supervisor usually discusses the expected impacts of the decisions with me.
17. When making decisions about my job, my supervisor offers reasonable explanations that I understand clearly.
18. My supervisor explains clearly any decision if it is related to my job.



**APPENDIX C****ORGANIZATIONAL IDENTIFICATION SCALE**

Please rate the following from 1 = Strongly Agree to 5 = Strongly Disagree

1. When someone criticizes (name of organization), it feels like a personal insult.
2. I am very interested in what others think about (name of organization).
3. When I talk about this organization, I usually say “we” rather than “they”.
4. This organization’s successes are my successes.
5. When someone praises this organization, it feels like a personal compliment.
6. If a story in the media criticized the organization, I would feel embarrassed.

**APPENDIX D****ORGANIZATIONAL CITIZENSHIP BEHAVIOR SCALE**

Please answer the following using 1 = Strongly Disagree to 7 = Strongly Agree

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Neutral

5 = Slightly Agree

6 = Agree

7 = Strongly Agree

1. I help others who have heavy workloads. (Altruism)
2. I am the classic “squeaky wheel” that always needs greasing. (R) (Sportsmanship)
3. I believe in giving an honest day’s work for an honest day’s pay.  
(Conscientiousness)
4. I consume a lot of time complaining about trivial matters. (R) (Sportsmanship)
5. I try to avoid creating problems for coworkers. (Courtesy)
6. I keep abreast of changes in the organization. (Civic Virtue)
7. I tend to make “mountains out of molehills.” (R) (Sportsmanship)
8. I consider the impact of my actions on co-workers. (Courtesy)
9. I attend meetings that are not mandatory, but are considered important. (Civic Virtue)
10. I am always ready to lend a helping hand to those around me. (Altruism)

11. I attend functions that are not required, but help the company image. (Civic Virtue)
12. I read and keep up with organization announcements, memos and so on. (Civic Virtue)
13. I help others who have been absent. (Altruism)
14. I do not abuse the rights of others (Courtesy)
15. I willingly help others who have work related problems (Altruism)
16. I always focus on what's wrong, rather than the positive side. (R) (Sportsmanship)
17. I take steps to try to prevent problems with other coworkers. (Courtesy)
18. My attendance at work is above the norm. (Conscientiousness)
19. I always find fault with what the organization is doing. (R) (Sportsmanship)
20. I am mindful how my behavior affects other people's jobs. (Courtesy)
21. I do not take extra breaks. (Conscientiousness)
22. I obey my company rules and regulations even when no one is watching.  
(Conscientiousness)
23. I help orient new people even though it is not required. (Altruism)
24. I am one of this organization's most conscientious employees.  
(Conscientiousness)

(R) = reverse coded.

## APPENDIX E

### SURVEY DESCRIPTION

#### Fairness and Associated Behaviors in the Workplace

#### Welcome to the Survey on Workplace Fairness and Extra-Role Behavior!

The organizational climate has never been more dynamic with several channels of communication within the work environment. This study specifically looks at how employee-leader relationships are impacted by the perception of fairness of interactional justice (communication, support, and informational exchanges) with leaders. Understanding how to create an environment that management can utilize to encourage behaviors to foster higher productivity and increased efficiency is the aim of this study. Your participation is voluntary, anonymous, and confidential. The survey will not ask for your name or any other identifiable information. You may drop out of the survey at any time. Your response will be kept in a secure location and will only be available to the research team and the Nova Southeastern University Institutional Review Board. The survey is expected to take no more than 20 minutes to complete. Please complete the survey based on your own experiences and perceptions. If you have any questions about the survey, please feel free to contact:

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