

MANAGERIAL MOTIVATION FOR JUSTICE RULE ADHERENCE: USING SELF-  
DETERMINATION THEORY AS A FRAMEWORK

By

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I'd like to dedicate this dissertation to my family. To my mother, my best friend, Magaly Jerez, who always strived to give me the best in life, even if it meant making personal sacrifices. You are, and have always been, an inspiration to me. To the memory of my father, Carlos Jerez, who always emphasized the importance of an education. I will always treasure all those late nights of algebra homework!

I'd also like to dedicate this dissertation to my wonderful husband, Richard Phelan. Thank you for being patient as I followed my dreams, and for always believing in me, especially during the times I lost faith in myself. I love you!

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Although research has shown that subordinate perceptions of the degree to which managers adhere to procedural, distributive, interpersonal, and informational justice rules explains variance in subordinate attitudes and behaviors, a key question remains unexplored: why do managers adhere to those justice rules in the first place? The purpose of this dissertation was twofold. First, this dissertation uses self-determination theory to identify four different reasons why managers adhere to justice rules (intrinsic, identified, introjected, and external motivation). In other words, whereas some managers may genuinely want to adhere to justice rules for its own sake, it is likely that other managers do so as a means to other ends. The second purpose of this dissertation was to identify managerial traits, taken from narrow facets of the Big Five, that predict managerial motivation for justice rule adherence. Managerial motives for justice rule adherence were then proposed as mediating mechanisms, explaining the relationship between managerial traits and subordinate perceptions of justice rule adherence. The moderating role of structural distance was also examined, given that managers who are more proximal to their subordinates will gain more frequent opportunities to adhere to justice rules. The results of this study suggest that managerial traits predict both managerial motivations for justice rule adherence, as well as subordinate perceptions of justice rule adherence. Unexpectedly, managerial motivations for

justice rule adherence did not predict subordinate perceptions of justice rule adherence. It should also be noted that structural distance did not moderate these effects, though it did demonstrate main effects with subordinate perceptions of justice rule adherence.

## CHAPTER 1 INTRODUCTION

Although interest in issues of justice dates back to Aristotle (Aristotle, 1759), *organizational justice*, a term coined by Greenberg (1987) to describe people's perceptions of fairness in an organizational context, did not gain widespread interest until the early 1960's. During the past fifty years, the organizational justice literature has gone through several changes (for a review, see Colquitt, Greenberg, & Zapata-Phelan, 2005). One of the first influential contributions to the organizational justice literature came from Adams (1965). Adams (1965) developed equity theory, which suggests that individuals compare the ratio of their inputs, or what they bring to a job, and their outcomes, defined as what they receive in return, to the ratio of a referent other. Individuals experience overpayment inequity if the referent other receives fewer outcomes relative to their inputs. Underpayment inequity is experienced if the referent other receives more outcomes relative to their inputs. The theory also outlines the processes that occur once an inequity is perceived. Using cognitive dissonance as a framework (Festinger, 1957), Adams (1965) suggested that perceived inequities are cognitively taxing. To deal with the distress caused by inequity, one can alter one's inputs or outcomes, attempt to change the referent other's inputs or outcomes, or withdraw from the situation depending on whether overpayment or underpayment is experienced.

Up to this point, equity theory only considered the impact of disproportionate outcomes. However, equity theory is now viewed as comprising one part of a larger literature on "distributive justice", which includes Leventhal's (1976) and Deutsch's (1975) articulations of the equity, equality, and need rules. Distributive justice now refers to whether an appropriate allocation norm is utilized, and is commonly defined as the perceived fairness of decision outcomes (Adams, 1965; Homans, 1961; Leventhal, 1976). Despite the evolution of distributive

justice issues, equity theory is not without criticism (for reviews, see Adams & Freedman, 1976; Greenberg, 1982; Mowday, 1979).

In spite of its limitations, equity theory created enough interest in justice issues to move the literature in a new direction. Beginning in the 1970's, justice researchers expanded their attention from reactions caused by inequity to a focus on the perceived fairness of decision-making processes used to determine outcomes. This new justice dimension was labeled procedural justice (Leventhal, 1980; Thibaut & Walker, 1975). Thibaut and Walker's (1975) interest in procedural justice stemmed from research on fairness perceptions in the context of legal dispute resolutions. Their initial research focused on the distinction between adversarial systems, which separate procedures and outcomes, and inquisitorial systems, in which a judge controls both the process and outcome. Using a trial simulation, Walker, LaTour, Lind, and Thibaut (1974) found that irrespective of the verdict, participants preferred trials using adversarial systems to those using inquisitorial procedures. These results are important because they demonstrated that the use of fair procedures could positively affect satisfaction with the procedure and verdict. This stream of research led Thibaut and Walker to conceptualize procedural justice in terms of the degree of control a procedure affords, or more specifically, an "optimal distribution of control" (Thibaut & Walker, 1975, p. 2). In their subsequent work, Thibaut and Walker (1978) focused on two specific types of control: decision control, which is the degree to which one has control over the final outcome, and process control, defined as the degree to which one has control over the various procedures used to determine the final outcome.

Although the work of Thibaut and Walker (1978) focused on dispute resolution contexts, Leventhal (1980) argued that procedural justice concerns were also relevant to the reward allocation contexts commonly discussed in equity theory research. Leventhal (1980) outlined six

specific procedural justice rules: consistency, bias suppression, accuracy, correctability, representativeness, and ethicality. According to Leventhal (1980), procedures should display consistency across time and individuals while also minimizing personal biases. Fair procedures should also reflect accurate, valid information to minimize errors, and allow opportunities to change or even reverse decisions. Finally, procedures should be both representative of the parties involved and consistent with the fundamental ethical values of the parties involved.

Initial research involving procedural justice focused on distinguishing it from distributive justice. Some studies attempted to factor-analytically distinguish procedural and distributive justice (Greenberg, 1986) while others focused on establishing distinct relationships between the two justice dimensions and various outcomes (Alexander & Ruderman, 1987; Folger & Konovsky, 1989; Tyler & Caine, 1981). As expected, several studies supported procedural justice as a distinct construct. Moreover, some research suggested that procedural justice had significantly stronger effects on some outcomes than did distributive justice (Folger & Konovsky, 1989; Tyler & Caine, 1981).

While discussions of procedural justice alluded to issues of process fairness (e.g., Leventhal, 1980), justice scholars did not take interest in interpersonal issues until Bies and Moag's (1986) discussion of interactional justice, which they defined as the perceived fairness of interpersonal treatment. Similar to Leventhal's (1980) approach with procedural justice, Bies and Moag (1986) identified four interactional justice rules: truthfulness, justification, propriety, and respect. Although the interactional justice terminology was seldom used initially, research did begin examining the various rules proposed by Bies and Moag (1986). One of the first studies to examine the justification component was conducted by Bies and Shapiro (1988). Their results demonstrated that justifications positively influenced fairness perceptions.

Although these results imply that providing justifications is important, Bies and Shapiro (1988) embedded procedural justice within conceptualization of interactional justice. Moorman (1991) was actually the first to empirically separate interactional justice from procedural justice. In this study, Moorman (1991) examined the effects of distributive, procedural, and interactional justice on citizenship behaviors, defined as behaviors that are discretionary, not directly recognized by the formal reward system, and that help promote the effective functioning of the organization (Organ, 1988). His results supported a relationship between interactional justice and four out of five dimensions of citizenship behavior. Greenberg (1990), in turn, was the first to evaluate the effects of interactional justice on counterproductive outcomes. Greenberg (1990) used three manufacturing plants initiating a temporary pay cut to evaluate the effects of interactional justice on actual behavioral outcomes. In the adequate explanation condition, he manipulated the justification and respect rules by providing an adequate justification for the temporary pay cut. In the inadequate explanation condition, employees were merely notified of the impending pay cut. The third condition consisted of a control group which did not receive a temporary pay cut. The plant assigned to the inadequate explanation condition experienced significantly higher theft and turnover than any other condition.

A few years later, Greenberg (1993a) suggested separating Bies and Moag's (1986) interactional justice rules into two justice facets: interpersonal justice, which captures the respect and propriety rules, and informational justice, described as the truthfulness and justification components. Greenberg's (1993b) initial study supported the separation of interpersonal and informational justice. In this study, undergraduates were asked to perform a clerical task for payment. Both interpersonal and informational justice were then independently manipulated. In the high interpersonal justice condition, participants were treated respectfully while the low

interpersonal justice condition exposed participants to a disinterested experimenter.

Informational justice was manipulated by either providing or omitting an explanation for the payment received. The results confirmed Greenberg's (1993b) hypothesis; interpersonal and informational justice had unique effects on theft. A more recent study by Colquitt (2001) provided additional evidence in the form of factor analytic data supporting the separation of interactional justice, specifically demonstrating that the four dimensions of organizational justice (distributive, procedural, interpersonal, and informational) predicted different kinds of outcomes.

As this overview has indicated, most field studies in the literature utilize subordinate perceptions of managers' adherence to the various justice rules as the independent variable in the causal system, predicting a number of attitudinal and behavioral variables (for a review, see Conlon, Meyer, & Nowakowski, 2005). Recent meta-analyses have cemented the importance of the four justice dimensions in predicting various outcomes (Cohen-Charash & Spector, 2001; 2002; Colquitt, Conlon, Wesson, Porter, & Ng, 2001). For instance, Colquitt et al.'s (2001) review demonstrated that most of the variance explained by the justice dimensions in withdrawal was due to distributive justice, whereas procedural justice demonstrated the strongest relationships with task performance, job satisfaction, and organizational commitment. Interpersonal and informational justice dimensions also predicted key outcomes, such as citizenship behavior and negative reactions (Colquitt et al., 2001).

Despite knowing that organizational justice does demonstrate significant effects on organizational outcomes, the last fifty years have left us with an important gap in the literature (Figure 1). To date, we know relatively little about *why* managers adhere to justice rules, as only a handful of justice scholars have begun to examine antecedents to subordinate perceptions of justice rule adherence. Patient and Skarlicki (2005) recently echoed a similar sentiment, writing:

“Almost no research has explored fairness from the perspective of the transgressor... By exploring why managers deliver bad news in ways that are likely to be regarded as insensitive and unfair, we focus on justice as a dependent variable. This line of inquiry is relatively underresearched” (p. 152).

One of the first studies to examine a potential justice antecedent was conducted by Korsgaard, Roberson, and Rymph (1998). These authors proposed that subordinate behaviors, in the form of assertive communication, may act as effective influence tactics and result in increased justice rule adherence on behalf of the manager. In the first of two studies, undergraduates were asked to evaluate the performance of another participant on a critical thinking skills test. In actuality, a confederate served as the participant and therefore performance was held constant across conditions. In the high assertiveness condition, the confederate responded to the participant’s performance feedback using an assertive predetermined script. In this condition, the confederate spoke in a confident manner, maintained eye contact, listened attentively to the participant, and directly questioned the participant’s feedback. In the low assertiveness condition, confederates responded to the feedback received by making vague statements, indirectly disagreeing with the feedback, and failing to maintain both good eye contact and body posture. As expected, participants in the high assertiveness condition were more likely to provide the confederates with procedural justice in the form of process control and decision control, and informational justice in the form of justifications for the feedback provided. Korsgaard et al. (1998) also conducted a second study using employees at a large retail firm. In this study, employees were randomly assigned to one of three conditions: assertive communication training, formal appraisal training, and informal appraisal training.

Unfortunately the results from this study did not demonstrate a significant effect of assertiveness training on employees' perceptions of organizational justice.

Scott, Colquitt, and Zapata-Phelan (2007) chose a slightly different approach by focusing on the influence of subordinate characteristics rather than behaviors on managerial justice rule adherence. They specifically examined the effects of subordinate charisma on perceptions of interpersonal and informational justice using a sample from a large national insurance company. Using an approach/avoidance framework, these authors suggested that charismatic subordinates could actually increase positive sentiments and decrease negative sentiments felt by a manager, thus positively affecting interpersonal and informational justice. As expected, their results demonstrated that positive and negative sentiments fully mediated the relationship between managerial perceptions of subordinate charisma and subordinate perceptions of interpersonal justice. Unexpectedly, the results were not significant for informational justice, though managerial perceptions of subordinate charisma did predict subordinate perceptions of procedural justice.

In contrast to the subordinate approach taken by Korsgaard et al. (1998) and Scott et al. (2007), Masterson, Byrne, and Mao (2005) and Patient and Skarlicki (2005) were some of the first scholars to propose managerial-focused characteristics as determinants of justice rule adherence, with a specific focus on interactional justice. Masterson et al. (2005) suggested managerial empathy and managerial agreeableness as two characteristics that might influence interpersonal justice, in addition to proposing subordinate characteristics as antecedents of informational justice. Patient and Skarlicki (2005) also proposed managerial empathy as an antecedent to interactional justice, in addition to managerial feelings of self-worth and level of

moral development. Though no empirical work has them propositions, these propositions are an important first step in the development of managerial justice antecedents.

This dissertation takes a managerial focus to justice antecedents, similar to that of Masterson et al. (2005) and Patient and Skarlicki (2005). One purpose of this dissertation is to identify different reasons why managers may be motivated to adhere to justice rules. Do managers treat subordinates fairly because they genuinely want to treat subordinates fairly, or do managers treat subordinates fairly merely to avoid the negative consequences associated with treating subordinates unfairly? It is likely that some managers treat subordinates fairly because they *want to* while others treat subordinates fairly because they feel they *have to* or *ought to*. I propose that managers may treat subordinates fairly for different reasons.

The theoretical grounding for this dissertation's major predictions will be provided by self-determination theory (SDT). Self-determination theory is a theory of motivation that focuses on motives that drive behavior regulation (Deci & Ryan, 2000). The motives can be separated into two types, extrinsic and intrinsic motivation, with extrinsic motivation consisting of four subtypes (Table 1-1). The first form of extrinsic motivation is external motivation, which suggests that behavior regulation occurs because of specific external contingencies, such as avoiding punishment or seeking rewards (Deci & Ryan, 2000). Introjected motivation is more internalized than external motivation, though behavior is still contingent on internal consequences. Identified motivation suggests that the individual has both accepted and identifies with the behavior. Integrated motivation, though still a form of extrinsic motivation, suggests that an individual has not only identified with the behavior, but has also integrated the behavior into one's self-concept. Intrinsic motivation suggests that behavior regulation is completely self-determined. In sum, "SDT differentiates the *content* of goals or outcomes and the *regulatory*

*process* through which the outcomes are pursued, making predictions for different contents and different processes.” (Deci & Ryan, 2000, p. 227, emphasis in original).

A recent review by Sheldon, Turban, Brown, Barrick, and Judge (2003) stated that self-determination theory was flexible enough to explain several organizational processes, such as transformational leadership and goal commitment, among others. Moreover, they suggested that their “intent in discussing such a wide range of organizational phenomena is to demonstrate the potentially far-reaching applicability of SDT and thereby, hopefully, to stimulate additional theorizing and research in other domains” (Sheldon et al., 2003, p. 370). Though they did not suggest pairing self-determination theory with the justice literature, the motives proposed by self-determination theory appropriately describe potential motivations for justice rule adherence. For example, a manager may adhere to justice rules for external reasons (e.g., “Because I want to be rewarded”), for introjected reasons (e.g., “Because I don’t want to feel guilty”), for identified or integrated reasons (e.g., “Because I see myself as a fair manager”), or for intrinsic reasons (e.g., “Because I truly enjoy being fair”).

The second purpose of this dissertation is to establish a set of managerial traits that may predict managerial motives for justice rule adherence, as self-determination theory suggests that individual factors influence behavior regulation. One potentially fruitful avenue is that of the Big Five (Digman & Inouye, 1986; Goldberg, 1981; Norman, 1963; Tupes & Christal, 1961). The Big Five is a five-factor framework consisting of the following traits: extraversion (including positive emotions and assertiveness), agreeableness (including compliance, straightforwardness, and altruism), conscientiousness (including dutifulness, achievement orientation, and reliability), neuroticism (including anxiety and vulnerability), and openness to experience (including ideas and values) (Costa & McCrae, 1992). Though there is some dispute as to the nature of the

narrow traits that make up the Big Five (Costa & McCrae, 1992; Goldberg, 1990; Hofstee, de Raad, & Goldberg, 1992; Saucier & Ostendorf, 1999), the Big-Five framework is a well accepted model of personality structure (Fiske, 1994). Thus, I utilized the Big Five framework to identify narrow managerial traits that might affect subordinate perceptions of justice rule adherence, with managerial motives for justice rule adherence acting as the mediating mechanism. The sections that follow describe these propositions in greater detail.

Table 1-1. Motivation types

Regulation Type	External Motivation	Introjected Motivation	Identified Motivation	Integrated Motivation	Intrinsic Motivation
Definition	Behavior regulated by external contingencies such as rewards and punishments  Least self-determined (controlled)	Behavior regulated by internal contingencies such as guilt and pride	Behavior regulated by one's appreciation and recognition of the behavior	Behavior regulated by the integration of the behavior with one's identity	Behavior regulated by inherent interest  Self-determined (autonomous)
Example item: Why are you engaged in this activity?	"Because it would create hassles on the job"	"Because I would feel ashamed of myself"	"Because it is an essential goal to me"	"Because it is part of who I am"	"Because it is inherently satisfying"

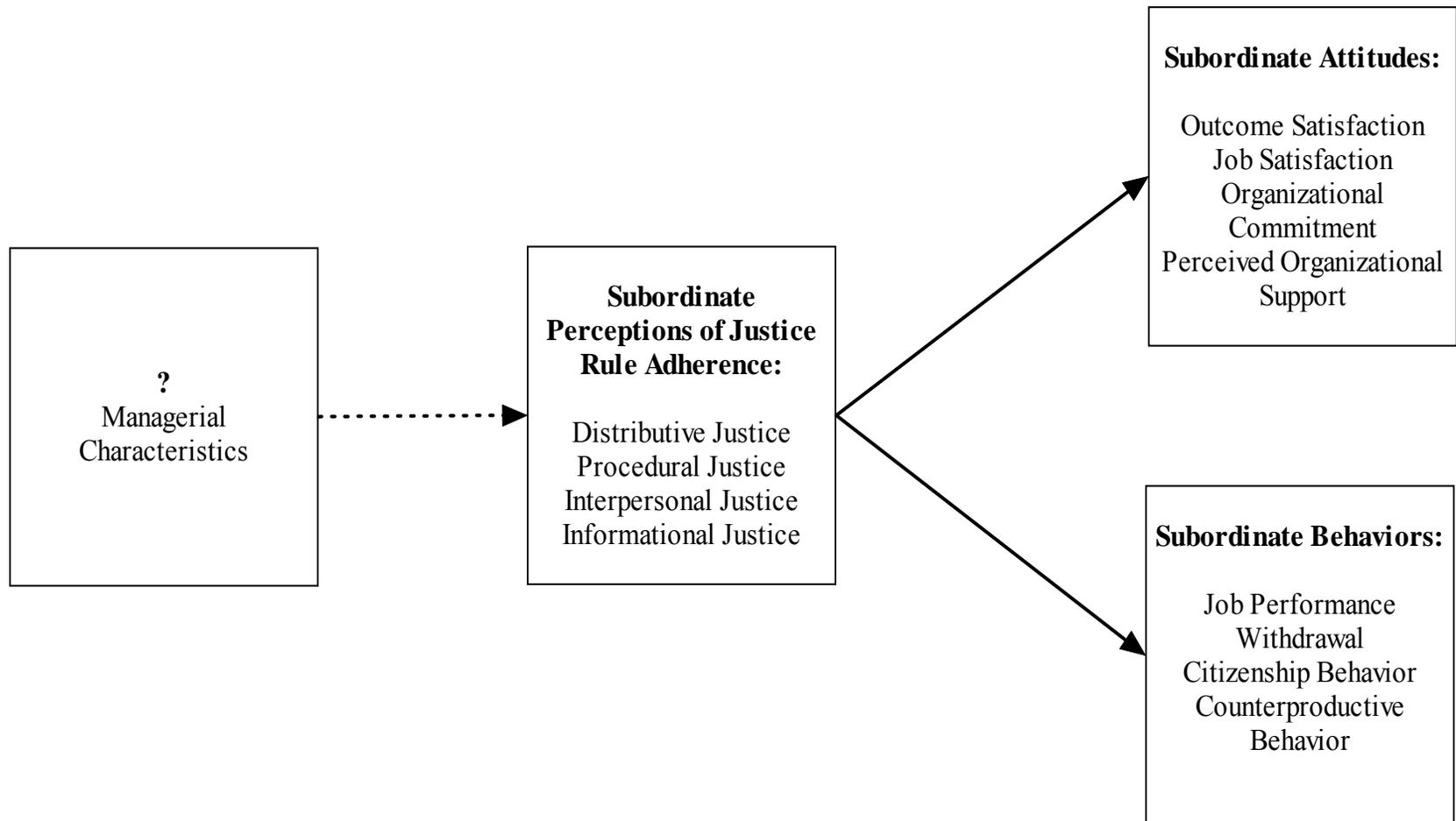


Figure 1-1. Current state of the organizational justice literature.

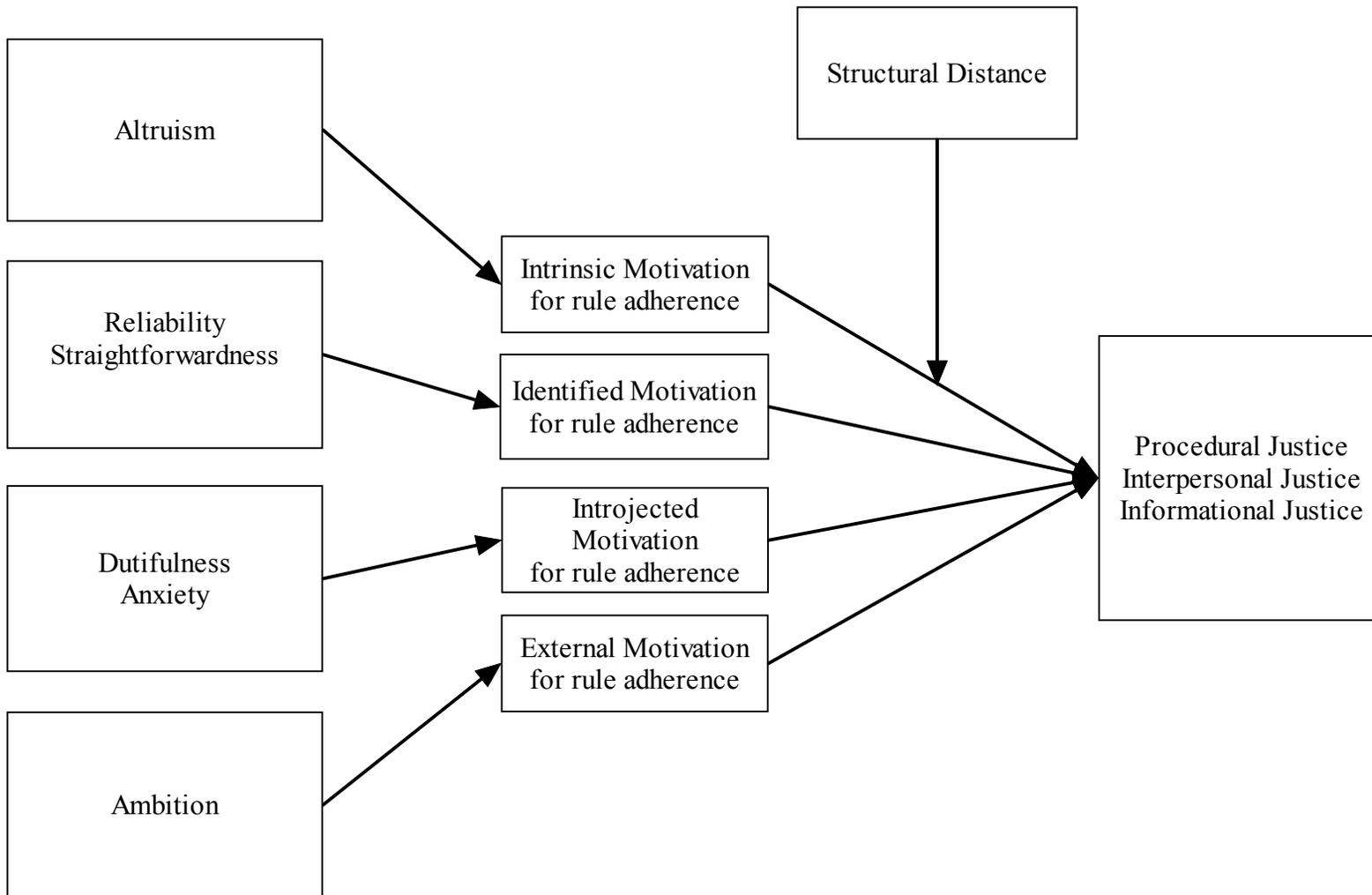


Figure 1-2. Model of hypothesized relationships.

## CHAPTER 2 LITERATURE REVIEW

### **Self-Determination Theory**

Self-determination theory is a meta-theory comprised of four motivation theories (for reviews, see Deci & Ryan, 1985a; Gagné & Deci, 2005; Ryan & Deci, 2002; Sheldon et al., 2003): cognitive evaluation theory, causality orientations theory, basic needs theory, and organismic integration theory. The first theory to develop was that of cognitive evaluation theory, which focuses on the undermining effects of extrinsic rewards on intrinsic motivation, defined as the engagement in an activity or task because of the inherent enjoyment or interest in that particular activity (Deci, 1975). The development of causality orientations theory took the focus away from extrinsic factors such as rewards, by suggesting that individual differences should also have an impact on motivation (Deci & Ryan, 1985b; Ryan & Deci, 2002). Relatedly, basic needs theory proposes that need satisfaction is essential for one's well being (Ryan & Deci, 2002). Organismic integration theory places less emphasis on intrinsic motivation, focusing instead on identifying various forms of extrinsic motivation, some of which can be beneficial (Deci & Ryan, 1985a; Ryan & Deci, 2002). The evolution of each of these theories has helped develop self-determination theory into the broad theory of motivation that it is today. Thus, a clear understanding of self-determination theory requires an understanding of the theories that comprise it.

One of the first precursors to cognitive evaluation theory was the work conducted by de Charms (1968). De Charms (1968) sought to concentrate on motivation as the most proximal antecedent to causation, as it is our motivations, our intentions, that lead us to cause certain behaviors. He specifically suggested that even though one initiates a behavior, intentional causality could be separated into internal and external perceived locus of causality, derived from

Heider's (1958) perceived locus of causality (PLOC) construct. De Charms (1968) also proposed that one experiences intrinsic motivation when one is the primary causal agent for a particular behavior (internal perceived locus of causality) while extrinsic motivation is experienced when external events are the primary causes of behavior (external perceived locus of causality). Consistent with what is now known as cognitive evaluation theory, de Charms (1968) proposed that a change in locus of causality from internal to external, such as that caused by the addition of an external reward, likely reduces intrinsic motivation.

Deci and Ryan's (1985a) cognitive evaluation theory expanded on de Charms' (1968) proposition by suggesting that extrinsic rewards undermine intrinsic motivation because they undermine one's desire to be self-determining (i.e., autonomously choosing one's behavior) and competent. Initial research in this area focused on self-determination by examining the potential undermining effects of monetary rewards on intrinsic motivation (for reviews, see Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1985a). Specifically, rewards are thought to undermine self-determination because they are usually perceived as controlling (Deci & Ryan, 1985a).

Deci (1971) initially examined the effects of extrinsic rewards on intrinsic motivation using a sample of college students. In this study, Deci (1971) assigned participants to one of two conditions, both of which included working on four timed intrinsically motivating puzzles. The participants in the experimental condition were paid \$1 for each completed puzzle while the control group participants were not paid. To measure intrinsic motivation, Deci relied on what is now known as the free-choice method, meaning that subjects were observed during a free-choice period to determine whether they would choose to continue working on the puzzles despite the lack of an extrinsic reward. Intrinsic motivation was inferred by the amount of time participants spent on the puzzles during the free-choice period. Over the course of working on the four

puzzles, the participants in the experimental condition experienced a decrease in intrinsic motivation relative to that of the control group, presumably due to a decrease in self-determination stemming from the monetary reward.

Subsequent research attempted to establish additional extrinsic factors that, when present, decrease intrinsic motivation. Both Ross (1975) and Ross, Karniol, and Rothstein (1976) tested the effects of food rewards on intrinsic motivation. As expected, rewards in the form of food decreased intrinsic motivation for two different tasks. Lepper and Greene (1975) chose to reward preschool-aged participants with an opportunity to play with a fun toy. They found that rewarding participants with an opportunity to play had an undermining effect on intrinsic motivation to work on a puzzle. Lepper and Greene (1975) also examined an additional extrinsic factor, surveillance. Their results revealed that watching participants while they worked on a puzzle task decreased intrinsic motivation. These results correspond with cognitive evaluation theory in that they suggest that intrinsic motivation is decreased when extrinsic factors are interpreted as controlling and undermining self-determination.

Although several individual studies support the undermining effects of extrinsic rewards on intrinsic motivation, meta-analyses have been less than optimistic. Cameron and Pierce (1994) conducted a meta-analysis on the relationship between extrinsic rewards and intrinsic motivation. After examining 94 studies, they concluded that “our overall findings suggest that there is no detrimental effect of extrinsic rewards on intrinsic motivation” (p. 394). A more recent meta-analysis was conducted by Eisenberger, Pierce, and Cameron (1999). They found that extrinsic rewards have differential effects on motivation, depending on how the extrinsic reward is presented. Extrinsic rewards communicating task significance increase intrinsic motivation while rewards that trivialize the task decrease intrinsic motivation (Eisenberger et al.,

1999). Even Deci and colleagues (1999) meta-analysis did not fully support cognitive evaluation theory. Their results suggest that while performance contingent rewards negatively affected objective free-choice measures of intrinsic motivation ( $k = 101$ ), there was no undermining effect for self-report measures of intrinsic motivation ( $k = 84$ ) (Deci et al., 1999). Taken together, these meta-analyses suggest that while extrinsic rewards can theoretically undermine intrinsic motivation, it is an effect that does not necessarily occur with great frequency in practice.

A second proposition laid out by cognitive evaluation theory is that extrinsic rewards that increase perceptions of competence will actually increase intrinsic motivation towards challenging tasks. For instance, Anderson, Manoogian, and Reznick (1976) examined the effects of positive feedback on intrinsic motivation using preschool-aged children. In addition to demonstrating that monetary rewards undermine intrinsic motivation, their results also showed an increase in intrinsic motivation when participants received verbal positive feedback. Meta-analytic results have reached similar conclusions, demonstrating that positive feedback is positively related to both objective (e.g., free-choice observation) and subjective (e.g., self-report) measures of intrinsic motivation (Deci et al., 1999).

Cognitive evaluation theory's focus on extrinsic or contextual factors was later counterbalanced by causality orientations theory's emphasis on the motivational effects of individual differences. Although contextual factors affect motivation, Deci and Ryan (1985b) observed that "different people seem to respond differently to the same events" (p. 110). This observation led to causality orientations theory, which suggests that individual differ with respect to "causality orientations," described as one's orientation towards a particular type of motivation (Deci & Ryan, 1985b). Deci and Ryan (1985b) proposed that causality orientations affect both the kinds of environments people seek out and the way people react to different kinds of

environments (Deci & Ryan, 1985b). Three individual differences (i.e., causality orientations) have been associated with this theory: autonomy orientation, control orientation, and impersonal orientation.

Individuals high on autonomy orientation, previously termed internal orientation (Deci, 1980), tend to experience the environment in ways conducive to self-determination (i.e., internal locus of causality). These individuals are also inclined to seek out situations that allow for genuine choice, and generally perceive situations as encouraging choice. Conversely, control oriented individuals are likely to prefer situations that dictate appropriate behavior. Thus, these individuals tend to use situational constraints as motivators (Deci & Ryan, 1985b). Unlike autonomy oriented individuals, those high on control orientation experience the environment as controlling, offering limited choices (i.e., external locus of causality). Individuals high on impersonal orientation tend to experience the environment as so controlling that behavior occurs irrespective of the individual's intentions. An individual with an impersonal orientation experiences trouble coping with contingencies, along with a general tendency towards perceived incompetence. Impersonal orientation likely results in amotivation, which refers to a lack of behavioral intentions (Deci & Ryan, 1985a; Deci & Ryan, 2000). When an individual experiences amotivation, behavior either does not occur at all, or it occurs unintentionally (Deci & Ryan, 1985a).

Although causality orientations theory does not specifically outline other individual differences, there are clearly some traits that are similar to the causality orientations (Deci & Ryan, 1985b). For example, self-esteem or self-appraisal, are somewhat similar to autonomy orientation (Deci & Ryan, 1985b). Self-consciousness, which refers to an individual's tendency to attend to either private aspects of the self (private self-consciousness) or public aspects of the

self (public self-consciousness), shares some similarities with control orientation (Deci & Ryan, 1985a; Deci & Ryan, 1985b). Locus of control, which is the tendency to believe that outcomes are determined either by external forces (external locus of control) or internal forces (internal locus of control), is fairly similar to impersonal orientation, particularly external locus of control (Deci & Ryan, 1985a; Deci & Ryan, 1985b). Previous research has supported these assertions, demonstrating that self-esteem, locus of control, and public and private self-consciousness are significantly related to the various causality orientations (Deci & Ryan, 1985b).

Unlike causality orientations theory's focus on individual differences, the basic needs theory posits that all individuals have three basic needs, defined as "*innate psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being*" (Deci & Ryan, 2000, p. 229, emphasis in original). The three needs are autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan, 1995; Ryan & Deci, 2002). The need for autonomy refers to feeling in control of one's behavior (Deci & Ryan, 2000; Ryan & Deci, 2002). Autonomy does not refer to total freedom or independence, but rather it refers to feeling connected to one's actions (Deci & Ryan, 1985a; Ryan & Deci, 2002). Sheldon et al. (2003) describe autonomy as "felt volition" (p. 366). The need for competence suggests that people want to feel effective and capable. According to Ryan and Deci (2002), the need for competence guides people towards greater challenges in an attempt to learn new skills. Relatedness refers to the desire to experience a sense of belonging, both socially (e.g., with the community at large) and interpersonally (e.g., with other people) (Deci & Ryan, 1985a; Ryan & Deci, 2002).

According to basic needs theory, the satisfaction of the need for autonomy, competence, and relatedness positively affects one's well-being (Ryan & Deci, 2002). Previous research has been consistent with this proposition (e.g. Ilardi, Leone, Kasser, & Ryan, 1993; Kasser & Ryan,

1999). Two of the self-determination theories, cognitive evaluation theory and causality orientations theory, offer potential antecedents to need satisfaction. Cognitive evaluation theory focuses on contextual factors as antecedents of need satisfaction. For example, positive feedback may increase perceptions of one's abilities, helping to fulfill one's need for competence (Deci & Moller, 2005). In contrast, causality orientations theory emphasizes the effects of individual differences on intrinsic motivation, which in turn affects need satisfaction (for a review, see Sheldon et al., 2003). For instance, an autonomy orientation is predicted to increase resiliency towards controlling situations, thus increasing the likelihood of satisfying one's need for autonomy (Deci & Ryan, 1985a).

Between cognitive evaluation theory and causality orientations theory, the latter has received significantly less attention in the self-determination literature (Sheldon et al., 2003). Despite the comparative popularity of cognitive evaluation theory, an often discussed limitation is that it only applies to inherently interesting tasks. In other words, cognitive evaluation theory is silent on boring tasks, as evidenced by the inclusion criteria used in Deci et al.'s (1999) meta-analysis. "Because the field of research being evaluated concerns reward effects on people's intrinsic motivation for interesting activities, we included in the primary meta-analyses only studies, or conditions within studies, in which the interest value of the target tasks was at least neutral." (p. 635). This issue makes it particularly difficult to apply cognitive evaluation theory to the workplace, as many jobs involve at least some mundane tasks.

Organismic integration theory is an attempt to resolve cognitive evaluation theory's emphasis on interesting tasks by suggesting that there are several forms of extrinsic motivation (Table 1). Organismic integration theory begins with the assumption that as humans, we have a desire to grow and internalize our behaviors with our sense of selves (Deci & Ryan, 2002).

Internalization, which “refers to the process through which an individual acquires an attitude, belief, or behavioral regulation and progressively transforms it into a personal value, goal, or organization” is viewed as a continuum (Deci & Ryan, 1985a, p. 130). The more internalized a behavior becomes, the more likely the behavior occurs autonomously (i.e., in a self-determined fashion). Using the concept of internalization, Deci and Ryan (1985a) proposed a taxonomy of extrinsic motivation, ranging from no self-determination to complete self-determination. In other words, extrinsic motivation can range from controlled to autonomous. In fact, Deci and Ryan (1985a) borrow from the developmental psychology literature to suggest that behaviors can increase in internalization over time. However, organismic integration theory was not meant as a stage theory, meaning that people do not necessarily move through the types of extrinsic motivation, eventually reaching the most integrated forms of motivation (Gagné & Deci, 2005). In terms of work behaviors, the key component of self-determination theory is the assertion that behaviors that are not intrinsically motivating can still be internalized.

The least internalized of the four forms of extrinsic motivation is *external motivation*. This type of motivation is equivalent to that referenced by operant conditioning theory (Skinner, 1953). When individuals experience external motivation, their behavior is controlled or motivated by external contingencies (e.g., “Because of the various fringe benefits this job provides”) (Gagné et al., 2006). In order to experience external motivation, one has to anticipate the potential consequences associated with a particular behavior. Thus, when behavior is externally motivated, it likely occurs in an attempt to either avoid consequences (e.g., punishment) or attain consequences (e.g., praise) (Deci & Ryan, 1985a). Because externally motivated behavior is guided by external contingencies, the withdrawal of contingencies is likely to eliminate the behavior (Deci & Ryan, 1985a).

*Introjected motivation* suggests that external contingencies have been somewhat internalized, and it is those internalized contingencies that guide behavior (Deci & Ryan, 1985a). In other words, consequences are administered internally rather than externally, yet the internal contingencies regulating behavior are not integrated into one's sense of self. When motivation is introjected, external contingencies are no longer needed to continue the behavior. Instead, individuals are motivated to engage in behaviors due to internal contingencies, such as avoiding feelings of guilt or shame or enhancing feelings of self-worth (Deci & Ryan, 1985a). An individual engaged in a behavior for introjected reasons may report doing so "because I will feel bad about myself if I don't" (Ryan & Connell, 1989, p. 752). However, introjected motivation is still not self-determined because contingencies, albeit internal, still regulate behavior (Deci & Ryan, 1985a).

*Identified motivation* is experienced when behavior is consciously seen as important or valuable. When experiencing identified motivation, people identify with the behavior, though they still recognize the instrumentality of the behavior for achieving personal goals. According to Deci and Ryan (2002), this type of extrinsic motivation is somewhat autonomous. Thus, identification suggests that behaviors occur because the individual personally supports them (e.g., "Because I think this activity is good for me") (Guay, Vallerand, & Blanchard, 2000, p. 184). It is possible that identified motivations are not completely integrated into the self. However, identified motivations are clearly more self-determined than either introjected or external motivation.

*Integrated motivation* occurs when one identifies completely with the behavior. In other words, every aspect of one's sense of self is congruent with the behavior. This type of motivation is the most self-determined form of extrinsic motivation, and is consistent with complete

internalization. Although one wholly identifies with behavior, it is still instrumental and therefore not intrinsically regulated. When compared with identified motivation, the distinction between the two types of motivation becomes blurred, both theoretically and empirically. Conceptually, both integrated and identified motivation are described as autonomous, with identified being “relatively autonomous” (Gagné & Deci, 2005, p. 335) and identified being “completely autonomous.” Also, both motivations are described as integrated with one’s sense of self, though identified motivation can still be compartmentalized to only certain aspects of one’s self. Empirical research has also tended to focus on one versus the other. For instance, Ryan and Connell (1989) examined external, introjected, identification, and intrinsic motives, without mention of integrated motivation (see also Guay et al., 2000). Even some reviews choose to discuss identified and omit integrated motivation (e.g., Sheldon et al., 2003). Moreover, integrated motivation also shares some conceptual similarities with intrinsic motivation (Ryan & Deci, 2002), making it difficult to tease them apart. Due to the ambiguity regarding integrated motivation, this dissertation omits it entirely.

The motivational distinctions described by self-determination theory can be seen in other literatures as well (for reviews, see Gagné & Deci, 2005; Sheldon et al., 2003). For instance, Kohlberg’s (1969) cognitive moral development theory mirrors the extrinsic motivation continuum in self-determination theory. The first stage of moral development suggests that moral behavior occurs because of a concern or fear of punishment. Stage two suggests that the benefits received from others motivate moral behavior. The descriptions for stage one and two mirror that of extrinsic motivation. The third stage resembles introjected motivation, in that moral behavior is based on others’ expectations. Recall that introjected motivation suggests that avoiding feelings of guilt drive behavior. Thus, an individual in the third stage of moral development

might be moral to avoid letting others down. The highest stages of moral development suggest that moral behavior is based on one's moral principles. These behaviors occur more autonomously, similar to identified motivation.

There are also similarities between self-determination theory's motivational distinctions and the three organizational commitment components, namely continuance, normative, and affective (Allen & Meyer, 1990). Organizational commitment is typically defined as a psychological state that decreases the likelihood that employees will turnover (i.e. leave the organization). When the costs of leaving are too high, individuals are likely to experience continuance commitment (Meyer & Allen, 1984). These individuals are less likely to turnover because they feel they *have to* stay with the organization. Continuance commitment resembles external motivation in that both suggest behaviors are motivated by external constraints. A subsequent addition to the framework was normative commitment, defined as felt obligation or responsibility to stay (Allen & Meyer, 1990). These individuals are less likely to turnover because they feel they *ought to* stay. Normative commitment can be thought of as a type of introjected motivation, because staying with a company is viewed as a means of avoiding guilt. When an individual is emotionally attached to an organization, they are said to experience affective commitment (Meyer & Allen, 1984). Individuals that are affectively committed to the organization remain at the organization because of a true desire to do so (e.g., *I want to* stay), resembling intrinsic motivation.

Self-determination theory can even be compared to the literature on power. In this literature, scholars usually distinguish between different motivational processes for accepting influence, namely internalization, identification and compliance (Kelman, 1958). Internalization resembles intrinsic motivation in that behavioral changes occur due to intrinsic interest.

Identification is similar to identified motivation in that although one identifies with the behavior, the behavior is still instrumental. The process of identification suggests accepting influence due to a desire to maintain a relationship, though the individual does identify with the behavior.

Compliance suggests that behavioral or attitudinal changes occur because of an expectation for reward, or to simply avoid negative consequences associated with noncompliance (Kelman, 1961). It is therefore similar to extrinsic motivation.

### **Applying SDT to Managers Justice Rule Adherence**

The applicability of self-determination theory is substantial. In educational research, self-determination research has focused on evaluating the effectiveness of various learning environments (Deci & Ryan, 1985a). Sports activities also provide a nice context to study intrinsic motivation, as people normally play sports to have fun. Self-determination theory has also been applied to the workplace, with some research focusing on the effects of contingent rewards on intrinsic motivation (Deci & Ryan, 1985a). However, few studies examine the four types of extrinsic motivation in the workplace. Instead, some scholars choose to examine only a few of the extrinsic motivations (e.g., Koester, Losier, Vallerand, & Carducci, 1996; Ryan, Rigby, & King, 1993). Others lump them together into an autonomy continuum (e.g., Grolnick & Ryan, 1987) and some contrast autonomy and controlled motivations (e.g., Williams, Grow, Freedman, Ryan, & Deci, 1996; Sheldon & Elliot, 1998; Sheldon & Elliot, 1999).

The motivational distinctions proposed by Deci and Ryan (2000) in self-determination theory offer a good framework for evaluating why managers adhere to justice rules. This dissertation proposes that managers may have different motivations for adhering to justice rules, with the type of motivation experienced affecting employees' perceptions of justice rule adherence. Although the amount of motivation may not differ depending on the type of motivation experienced, self-determination theory suggests that the quality of functioning will

(Deci & Ryan, 2000). In other words, the processes through which motivations are acted up vary depending on how internalized the motivation is, with intrinsic motivation capturing the strongest degree of internalization.

A look at the broader literature of work motivation can help explain the importance of self-determination theory's motivation types. Work motivation describes three primary motivational outcomes: direction, intensity, and persistence (Kanfer, 1990). The direction of behavior indicates one's behavioral choices. This outcome is applicable when there are mutually exclusive options, such as deciding whether to work or not to work. Intensity refers to how much effort is exerted towards the behavioral choice (Kanfer, 1990). Task effort is a frequently used measures of intensity (Kanfer, 1990). Persistence suggests the maintenance of the behavioral choice over time (Kanfer, 1990). The upcoming passages suggest that the *frequency of effort* (i.e., intensity) and *persistence of effort* directed towards justice rule adherence *depends on the motivation type experienced*. This dissertation will refer to frequency of effort rather than intensity, as frequency of effort more clearly captures intensity as it is likely to operate when attempting to adhere to justice rules. My general prediction is that, although both intrinsic and extrinsic motivations should equally affect direction of effort, the frequency of effort and persistence of effort should decline as motivations become less self-determined.

Intrinsic motivation is an exemplar of self-determined motivation (Deci, 1975). According to Deci and Ryan (1985a), intrinsic motivation is based on an inherent interest in a task or activity. Thus, intrinsically motivated individuals are likely to behave in accordance with their interests by exerting effort directed towards the intrinsically motivating task (Ryan & Connell, 1989). If intrinsic motivation is indeed marked by stronger intensity of effort, it follows that managers with an intrinsic motivation for fair treatment will create opportunities to adhere to

justice rules. For example, a manager might go out of his or her way to gather employees' opinions, thereby fulfilling Leventhal's (1980) representative rule for procedural justice. Alternatively, a manager might go out of his or her way to provide explanations to employees, thereby fulfilling Bies and Moag's (1986) justification rule. In this case, the manager is doing those things simply because he or she enjoys doing them.

Frequency of effort is also relevant for intrinsic motivation, as it implies an intensity of task directed attention. This is demonstrated by the fact that intrinsically motivated individuals create situations that are congruent with their interests (Deci & Ryan, 1980; Deci & Ryan, 1985a). Moreover, intrinsically motivated behaviors occur naturally, almost instinctively (Deci & Ryan, 2000). The inherent interest associated with intrinsic motivation should make it easier to focus attention towards intrinsically motivating tasks, as tasks that are intrinsically motivating should be more resistant to distractions (Beal, Weiss, Barros, & MacDermid, 2005). Increased focus of attention is beneficial to performance, as performance tends to decline as attention is focused away from the task at hand (Beal et al., 2005; Kahneman, 1973). In sum, intrinsic motivation should positively affect justice rule adherence to the extent that intrinsic motivation allows for a greater frequency of effort.

In addition, intrinsically motivated individuals demonstrate task persistence, as evidenced by the popular free-choice measure of intrinsic motivation (Deci, 1971; Deci & Ryan, 1985a). The protocol for measuring intrinsic motivation in this manner typically consists of the experimenter leaving the room for a valid reason to create the free-choice period. During this time, the participants are unaware they are being watched, and have other activities to work on. Whether or not participants return to the task at hand during this time is used as a measure of intrinsic motivation. Free-choice measures not only capture direction of effort, but also how long

participants spend on the task, which is a clear operationalization of persistence of effort (for a review, see Deci & Ryan, 1985a). Thus, I propose the following hypothesis:

**Hypothesis 1:** Intrinsic motivation is positively related to interpersonal, informational, and procedural justice.

The mechanisms explaining the effects of identified motivation on behaviors are similar to those of intrinsic motivation, given that identified motivation shares some similarities with intrinsic motivation. According to Deci and Ryan (1985a), autonomous motivation (e.g., identified and intrinsic) produces greater initiative than controlled motivation. Individuals that are motivated for identified reasons believe in the importance and value of the behavior (Deci & Ryan, 1985a). Thus, managers who experience identified motivation for justice rule adherence are likely to demonstrate initiative by seeking and taking advantage of opportunities that arise, as doing so allows them to behave in accordance with their values. In fact, Greenberg (1988) suggested that “others’ beliefs in one’s fairness may help reinforce one’s identity” (p. 157). Managers experiencing a genuine concern for employees should find it easy to continually suppress their own biases when making decisions. Moreover, these individuals should also adhere to the ethicality rule of procedural justice, which suggests that procedures used should be compatible with one’s moral and ethical values (Leventhal, 1980). Similarly, identified motivation should also make it easier for managers to adhere to informational justice rules. A manager that believes in the value of being open and honest with their employees is likely to do so, thereby fulfilling Bies and Moag’s (1986) truthfulness dimension.

Identified motivation should not only affect the direction of effort, but it should affect the frequency of effort exerted towards the task at hand. Individuals that experience identified motivation identify with the importance of the task at hand, which, according to Beal et al. (2005), should make it easier for the individual to focus attention towards the task. However,

identified motivation is a form of extrinsic motivation, which suggests that the behavior is considered instrumental. The instrumentality associated with identified motivation should result in less frequent effort when compared to intrinsic motivation. Specifically, the instrumentality associated with identified is a potential distraction which intrinsic motivation lacks. According to Beal et al. (2005), off-task distractions are detrimental to performance, irrespective of the source. In addition, the fact that identified motivation is only somewhat internalized could also pose distractions, subsequently affecting effort frequency.

Identified motivation is also proposed to affect persistence of effort (Deci & Ryan, 2000). Because behavior is autonomously chosen and consistent with one's internal values, individuals should find it easier to sustain effort levels than more controlled motivations (Sheldon & Elliot, 1999). The importance of autonomously engaging in a task is evidenced by previous research demonstrating more persistence of effort than that demonstrated by more controlled forms of motivation (Sheldon & Elliot, 1999; Williams et al., 1996). However, identified motivation should lead to a weaker persistence of effort than intrinsic motivation. Although intrinsic motivation and identified motivation are similar in terms of self-determination, intrinsic motivation suggests an inherent interest and enjoyment in the task at hand, which identified motivation lacks (Deci & Ryan, 1985a). The importance of task enjoyment on persistence cannot be overstated, as intrinsically motivating tasks "should have a relative advantage over less intrinsically motivating tasks in terms of combating distraction and cognitive interference" (Beal et al., 2005: p. 1059). With respect to justice rule adherence, identified motivation will likely demonstrate weaker relationships than that of intrinsic motivation. Thus, I propose the following hypothesis:

**Hypothesis 2:** Identified motivation is positively related to interpersonal, informational, and procedural justice, albeit more weakly than that of intrinsic motivation.

Introjected motivation is a more controlled form of motivation than either identified or intrinsic motivation (Deci & Ryan, 1985a). The difference between introjected motivation and more autonomous forms of motivation is that introjected motivation consists of internal contingencies guiding one's behavior. Some of the exemplars of introjected motivation discussed by Deci and Ryan (1985a) are concerns about the approval of others and the avoidance of negative feelings such as guilt and shame. In terms of justice rule adherence, it is likely that some managers are motivated to adhere to justice rules in order to avoid experiencing negative feelings. For instance, refraining from deceit (i.e., informational justice) should prevent feelings of guilt that might occur if a manager is in fact deceitful. Attempting to suppress biases by abandoning personal self-interests (Leventhal, 1980) is one way to avoid feeling badly about oneself. Similarly, adhering to Bies and Moag's (1986) propriety rule should specifically prevent feelings of shame (Kelman, 1973).

Introjected motivation should also affect the frequency of effort exerted. Although introjected motivation is not as autonomous as intrinsic or identified, partial internalization has occurred. In fact, research has demonstrated that introjected motivation is positively correlated with effort intensity, albeit not as strongly as identified motivation (Ryan & Connell, 1989). However, there are some potentially negative consequences associated with introjected motivation. Some scholars have speculated that managers may distance themselves from employees to avoid criticism (Cameron, Freeman, & Mishra, 1993). If a manager is motivated by the approval of others, as introjected motivation implies, he or she might be likely to refrain from adhering to justice rules in an effort to maintain feelings of self-worth. For example, an introjectedly motivated manager might provide fewer explanations (i.e., low levels of informational justice) when discussing a negative performance evaluation than a more

autonomously motivated manager. According to Folger and Skarlicki (1998), some managers distance themselves from employees as a way of avoiding blame in layoff situations.

The nature of introjected motivation is such that behavioral persistence might be hampered, as introjected motivation involves managing “conflicting impulses” such as should I refrain from a behavior, or should I not refrain from a behavior (Deci & Ryan, 1985a, p. 136). In fact, Deci and Ryan (1985a) have likened introjected motivation to self-control, as the individual is internally administering positive or negative sanctions. According to Muraven and Baumeister (2000, p. 247) “exerting self-control may consume self-control strength, reducing the amount of strength available for subsequent self-control.” This logic suggests that the controlled nature of introjected motivation may make it difficult to maintain high levels of effort levels. Research contrasting autonomous and controlled motivation has in fact demonstrated that effort is less persistent when motivated is more controlled (Sheldon & Elliot, 1998; Sheldon & Elliot, 1999). Thus, introjected motivation still leads to effort directed towards the focal behavior (Deci & Ryan, 1987), albeit less consistently than that of more autonomous forms of motivation. Thus, I propose the following hypothesis:

**Hypothesis 3:** Introjected motivation is positively related to interpersonal, informational, and procedural justice, albeit more weakly than that of intrinsic and identified motivations.

Externally motivated behaviors, the least autonomous form of extrinsic motivation, occur due to external contingencies (Deci & Ryan, 1985a). Some of the exemplar contingencies discussed by Deci and Ryan (1985a) are the avoidance of punishment or the attainment of positive outcomes. In terms of justice rule adherence, Greenberg and Cohen (1982) have speculated that some justice behaviors may occur for instrumental reasons. For example, some managers may adhere to justice rules to avoid negative consequences. In terms of informational justice, managers might offer excuses (i.e., high levels of informational justice) as a way of

preventing conflicts between him/herself and employees. Abiding by the procedural justice rule of ethicality is also a potential means of avoiding negative consequences. Justice rule adherence is also associated with beneficial outcomes (for a review, see Colquitt et al., 2001), and thus some managers might adhere to justice rules to reap certain rewards. For instance, treating employees with sincerity and respect, as indicated by high interpersonal justice, is associated with beneficial outcomes such as trust (Colquitt et al., 2001). Thus, motivation to adhere to justice rules, albeit for external reasons, should positively affect effort directed towards the focal behavior.

External motivation should result in weaker frequency of effort than introjected motivation because no internalization of the external contingencies has occurred (Ryan & Deci, 2002). Still, Ryan and Deci (2006) suggest that external contingencies can be powerful with respect to controlling or eliciting behavior. Externally motivated behaviors are still motivated, and therefore should lead to the focal behavior despite being based on external contingencies. In fact, behavioral theories are based on the premise that reinforcers, such as extrinsic rewards, actually enhance performance (Skinner, 1953). However, it is likely that effort intensity is weakest with respect to external motivation, as individuals are likely to do the minimum required to achieve the desired outcome (Ryan & Deci, 2006). In fact, external motivation demonstrates some of the most inconsistent relationships with effort intensity, as compared to other forms of motivation (Ryan & Connell, 1989). Moreover, it is possible that external motivation may have unintended negative effects on justice rule adherence. For instance, Patient and Skarlicki (2005) suggested that one of the reasons managers fail to adhere to interpersonal and informational justice rules is the avoidance of litigation, a type of external motivation.

Persistence of effort might also suffer when managers are externally motivated. According to Ryan and Deci (2006), this negative consequence should be attributed to the lack of self-determination inherent with external motivation, as controlled motivations are inherently less reliable than autonomous motivations (Deci & Ryan, 1985a). However, a more specific reason may lie in the contingencies related to external motivation. As defined by Deci and Ryan (1985a), external motivation includes the motivating potential of avoiding negative consequences, which more autonomous motivations lack. It is possible that the avoidance aspect of external motivation is detrimental to effort persistence. Previous research has demonstrated that individuals focused on avoiding potential losses were less likely to demonstrate task persistence than those focusing on potential gains (Crowe & Higgins, 1997). Moreover, external motivation has been shown to have weaker effects than intrinsic motivation on the persistence of effort—a key predictor of performance (Deci & Ryan, 2000; Vallerand, 1997). Thus, I hypothesize the following:

**Hypothesis 4:** External motivation is positively related to interpersonal, informational, and procedural justice, albeit weaker than that of introjected motivation.

All of the above hypotheses have notably omitted distributive justice, which was previously defined as the perceived fairness of decision outcomes (Adams, 1965; Homans, 1961). The nature of distributive justice lessens the potential impact of motivations on adherence to distributive justice rules, for two primary reasons. First, distributive justice issues come up less frequently, as issues pertaining to distributive justice become relevant primarily in resource allocation contexts only (Adams, 1965). In fact, Bies (2005) has noted that distributive justice issues are typically explored in exchange contexts such as specific organizational decisions or resource allocations, while other forms of justice are more relevant in everyday encounters between employees and managers. Second, managers normally have less control over

distributive justice than other justice dimensions, as distributive justice is more structural in nature. The characteristics of resource allocation contexts tend to constrain a manager's ability to influence outcome allocations (Sheppard, Lewicki, & Minton, 1992). For example, contractual agreements may stipulate pay increases as a certain percentage of current income, irrespective of performance. Therefore, motivations for justice rule adherence are not hypothesized to predict distributive justice. However, this dissertation will still include a measure of distributive justice for use as a control variable.

### **Moderators of Justice Motivation Effects**

The previous section built a case for the effects of motivation on adherence to justice rules. However, it is well known that behavior is not solely a function of motivation. Rather, behavior is a function of both motivation and situational factors (e.g., Campbell, 1990). An important situational factor affecting behavior is *opportunity* (e.g., Campbell, 1990). If managers are given the opportunity to adhere to justice rules, then motivation should be a strong predictor of behavior. However, if opportunities are lacking, the relationship between motivation and justice rule adherence should be weaker. Therefore, it is likely that the relationships hypothesized for motivation and justice rule adherence are moderated by a manager's opportunity to adhere to justice rules.

One potential indicator of interaction opportunity is *structural distance* (Napier & Ferris, 1993). Napier and Ferris' (1993) conceptualization of structural distance includes two indicators (opportunity to interact and spatial distance) that capture dyadic interaction between a leader and his or her followers, with each indicator capturing a slightly different aspect of the interaction. Opportunity to interact encompasses a manager's overall accessibility, as well as the potential for social contact both at work and outside of work (Napier & Ferris, 1993). Spatial distance, sometimes discussed as physical proximity (e.g., Podsakoff, Todor, Grover, & Huber, 1984;

Howell & Hall-Merenda, 1999; Howell, Neufeld, & Avolio, 2005) refers to task interaction opportunities between a manager and his or her employees (Napier & Ferris, 1993). These dimensions of structural distance indirectly reflect the potential for interaction between a manager and his or her employees. Therefore, this dissertation will focus on the construct of structural distance.

Several leadership scholars have suggested that structural distance creates fewer interaction opportunities between managers and employees (Bass, 1990; Howell & Hall-Merenda, 1999; Howell et al., 2005). Consequently, fewer interaction opportunities can negatively affect interaction quality between a manager and his or her employees. For example, structural distance is thought to negatively affect communication (for a review, see Bass, 1990), as some qualitative research suggests that frequency of communication decreases as structural distance between employees increases (Gullahorn, 1952). In addition, structural distance may hinder a manager's ability to provide timely feedback (Howell et al., 2005).

Some scholars even suggest that structural distance may neutralize the effects of leader behaviors, in effect making leadership irrelevant (Kerr & Jermier, 1978). Conversely, structural proximity provides ample interaction opportunities, which affects a manager's influence (Bass, 1990). In essence, structural distance acts as a moderator of leadership behaviors. Structural distance is relevant to motivation for justice rule adherence because it becomes more practical to adhere to justice rules when structural distance is low. In other words, structural proximity should make it easier for managers to act on their motivations. According to Leventhal (1980), one method of adhering to the accuracy rule of procedural justice is keeping detailed, accurate records of pertinent information. Informal sorts of record-keeping are more difficult to do in high distance situations, so the effects of being motivated to adhere to procedural justice should be

neutralized in such settings. In order to adhere to the representativeness rule, employees' basic concerns and values should be taken into consideration (Leventhal, 1980). It becomes easier to adhere to the representativeness rule when structural distance is low, as the effects of being motivated should be maximized in these situations. Adhering to Bies and Moag's (1986) justification rule becomes easier if opportunities to give explanations increase. Thus, the positive effects of motivation should be maximized when these opportunities are present (i.e., in low distance situations). Structural distance should also affect the timeliness of explanations (i.e., informational justice), as structural distance should make it more difficult to provide timely explanations. In other words, the constraints associated with structural distance should neutralize the beneficial effects of motivation on informational justice.

In sum, structural distance should maximize the effects of motivation on justice rule adherence. This prediction will be tested using Napier and Ferris' (1993) structural distance indicators.

**Hypothesis 5a:** Opportunity to interact moderates the relationship between the motivation types and justice perceptions, such that the relationships become stronger as opportunity to interact increases.

**Hypothesis 5b:** Spatial distance moderates the relationship between the motivation types and justice perceptions, such that the relationships become stronger as spatial distance decreases.

### **Personality**

The secondary purpose of this dissertation is to establish a set of managerial traits that may predict managerial motivation for justice rule adherence. According to self-determination theory, individual differences are important to the study of motivation (Ryan & Deci, 2006). Self-determination theory specifically suggests that individual differences in causality orientations affect one's tendency to experience certain types of motivation across different situations (Ryan & Deci, 2006). Although causality orientations have been examined in the self-determination literature, they are seldom discussed in the personality literature. An evaluation of the personality

literature might provide traits that specifically impact motivation for justice rule adherence. Therefore, this dissertation focuses on personality traits taken from the personality literature rather than self-determination theory.

The search for identifiable personality characteristics dates back over a century (for a review, see John & Srivastava, 1999). Sir Francis Galton (1884) was one of the first scholars to suggest a revolutionary guide for the study of personality: the “lexical hypothesis.” The lexical hypothesis suggests that the most important, most relevant personality characteristics are encoded in language. One of the first landmark personality studies asked 1300 raters to analyze a set of 60 adjectives (Thurstone, 1934). Thurstone (1934) asked the raters to think of one person and identify each adjective they might use to describe this particular individual. Using these ratings, Thurstone (1934) concluded that all sixty adjectives could be accounted for by five independent factors, an uncanny foreshadowing of current personality theory. Around the same time, Allport and Odbert (1936) expanded on the lexical hypothesis to compile their list of adjectives. Using an unabridged English dictionary, Allport and Odbert (1936) compiled a list of almost 18,000 personality relevant words. Although the sheer size of the list was overwhelming, Allport and Odbert (1936) identified personality traits, temporal states, and behavioral descriptors as three categories relevant to personality. However, these categories offered little in terms of an organizing framework.

Cattell (1943) was the first scholar to use Allport and Odbert’s (1936) adjective list in an attempt to assemble a personality framework. Because Allport and Odbert’s (1936) adjective list was clearly too unwieldy, Cattell (1943) focused on less than 25 percent of the list. Using his knowledge of personality along with various clustering procedures, Cattell (1943) reduced the list of terms to 35 clusters. In subsequent analyses, Cattell (1945) condensed that list even

further, proposing 12 personality factors. Cattell's (1943, 1945) work was impactful because it stimulated additional research in the area of personality. In fact, several scholars have re-examined Cattell's (1945) factor structure. One of the most impactful works was that of Fiske (1949). Using a shortened version of Cattell's (1947) personality scale, Fiske (1949) demonstrated that five factors fit the data best. Fiske's (1949) results were in sharp contrast to Cattell's (1945) 12 factors.

Tupes and Christal (1961) set out to resolve the inconsistencies between the works of Cattell and Fiske by re-analyzing Cattell (1947) and Fiske's (1949) correlation matrices. A total of eight correlation matrices were analyzed, with all analyses suggesting "five relatively strong and recurrent factors and nothing more of any consequence" (Tupes & Christal, 1961, p. 14). Although Tupes and Christal (1961) suggested five factors, some scholars were still troubled by the disparity between analyses using the same data. This disparity led to additional studies, such as that of Norman (1963). Using Cattell's (1947) adjective descriptors, Norman's (1963) data collection resulted in five factors, the same as that of Tupes and Christal (1961).

However, unlike Tupes and Christal (1961), Norman (1963) offered names for the five factors: extroversion or surgency, agreeableness, conscientiousness, emotional stability, and culture. The descriptors used for the extroversion factor consisted of talkative, adventurous, sociable, and frank, while agreeableness was described by the terms good-natured, not jealous, mild, and cooperative. The descriptors used for conscientiousness were tidy, responsible, scrupulous, and persevering, while emotional stability was described by the terms poised, calm, composed, and not hypochondriacal. Finally, culture consisted of the following terms: artistically sensitive, intellectual, refined, and imaginative. Although there has been some disagreement on

the exact nature of these five factors (e.g., Costa & McCrae, 1992; Goldberg, 1990), they eventually became known as the “Big Five” (Goldberg, 1981).

Norman’s continued skepticism compelled him to derive a new list of adjectives, essentially leading him to update Allport and Odbert’s (1936) work. Norman’s (1967) adjective list was eventually culled down to 75 categories. Although Norman did little with his new adjective list, it was eventually utilized by a scholar named Goldberg. Goldberg (1990) used Norman’s (1967) adjective list, in addition to his own, in an attempt to “demonstrate the generality of the Big-Five representation within sets of trait terms that are far more representative of the total English trait lexicon than were those included in any previous study” (Goldberg, 1990, p. 1217). To achieve this goal, Goldberg (1990) conducted several studies, all of which yielded some variation on the Big Five traits. As noted by several scholars (e.g., McCrae & Costa, 1985), Goldberg’s (1990) factor structure was remarkably similar to that of Tupes and Christal (1961), with the exception of the fifth factor being labeled intellect as opposed to culture.

Lexical approach proponents have focused intently on establishing a personality structure. However, some scholars have focused on developing personality questionnaires. Arguably the most notable work in this area has come from Costa and McCrae. While Cattell was one of the first to develop a widely used questionnaire based on the lexical approach (the 16PF), he did so based on his 12 factors (Cattell, Eber, & Tatsuoka, 1976). Based on other scholars’ works suggesting five factors rather than twelve (e.g., Fiske, 1949; Norman, 1963; Tupes & Christal, 1961), Costa and McCrae (1976) decided to analyze the 16PF in an attempt to create a new personality scale. Their results yielded three factors resembling three of the Big Five factors: neuroticism (also called emotional stability), extraversion, and openness. These three factors

became part of a new personality scale named the NEO (Costa & McCrae, 1985). McCrae and Costa (1985) then examined additional scales measuring the two missing factors, namely agreeableness and conscientiousness (see also McCrae & Costa, 1987). These studies demonstrated adequate convergence between the NEO scales and Big Five adjective-based measures (McCrae & Costa, 1985; McCrae & Costa, 1987). Costa and McCrae (1992) eventually published a revised NEO, which not only measures the Big Five factors, but also allows for the measurement of several facets that make up each factor.

The importance of personality to the study of organizational behavior should not be minimized. In fact, Hogan (2004, p. 20) recently suggested that “every aspect of organizational behavior and dynamics is related to personality, and that the fundamental question in organizational theory concerns organizational effectiveness, that organizational effectiveness is a function of leadership, and that leadership is a function of personality.” In addition, the Big Five gives us a common language from which to work. Several decades of research using peer report, self-report, and expert ratings in a variety of samples have consistently demonstrated five replicable factors (for a review, see McCrae & Costa, 1999).

Still, scholars have struggled with the issue of whether to use broad, general traits such as the Big Five, or narrow, specific traits as predictors of important organizational outcomes (for reviews, see Hogan & Roberts, 1996; Ones & Viswesvaran, 1996; Schneider, Hough, & Dunnette, 1996). This issue has been termed the “bandwidth-fidelity” trade-off (Hogan & Roberts, 1996). Bandwidth refers to the amount of information obtained by a specific measurement while fidelity refers to reliability or accuracy of measurement (Cronbach, 1960). The tradeoff occurs because as the amount of information increases (bandwidth), the internal consistency of that information decreases (fidelity). According to Cronbach (1960), one way to

deal with this trade-off is to base measurement decisions on the complexity of the criteria in question. In other words, when criteria are complex, complex predictors are most useful. Conversely, validity increases when narrow predictors are used to predict more specific criteria (Hogan & Roberts, 1996). This issue is seldom debated, as evidenced by the following statement by Hogan and Roberts (1996, p. 629) “We know of no body of evidence that questions Cronbach’s proposals.”

If we apply Cronbach’s (1960) propositions to the justice literature, they seem to suggest a focus on traits narrower than that of the Big Five, for the following reasons. First, organizational justice dimensions are arguably more narrow than, for example, overall job performance—a decidedly broad criterion. Following this logic, the predictors used should match the criteria in question, suggesting a focus on narrower traits. Second, broad traits have not explained much variance in managerial justice rule adherence. A recent study by Mayer, Nishii, Schneider, and Goldstein (2007) examined the effects of leader personality on managerial adherence to justice rules, as perceived by several employees. Their results demonstrated that leader neuroticism negatively predicted supervisory adherence to procedural justice rules. However, this was the only significant effect out of all 12 potential main effects.

Other research in the area of organizational justice has examined the Big Five traits as moderators of justice effects. Unfortunately, even these effects tend to be small or non-existent. For instance, Skarlicki, Folger, and Tesluck (1999) did not find support for their hypothesized interaction between agreeableness and organizational justice. Instead, they found support for a more complicated three way interaction between agreeableness, distributive justice and interactional justice (Skarlicki et al., 1999). Colquitt, Scott, Judge, and Shaw (2006) also examined interactions between the justice dimensions and the Big Five, but failed to demonstrate

any significant effects, despite using several justice dimensions and several behavioral reactions as outcomes. Scott and Colquitt (2007) examined interactions between all Big Five traits and distributive, procedural, and interactional justice on four outcomes. A total of 60 interactions were tested, with only two reaching adequate significance levels. In contrast, both Colquitt et al. (2006) and Scott and Colquitt (2007) identified several significant interactions using narrow traits. Taken together, these results suggest that the use of the Big Five in the justice literature has been mostly fruitless.

Based on previous research in the area of organizational justice, this dissertation will focus on narrow managerial traits. However, a focus on narrow traits does not suggest eschewing the Big Five, as they are themselves composed of lower level traits. In fact, several scholars suggest that the Big Five can be understood as a hierarchy (Goldberg, 1993). For instance, Costa and McCrae (1992) suggest that neuroticism is made up of the following narrow traits: anxiety, hostility, depression, impulsiveness, vulnerability, and self-consciousness. Therefore, this dissertation will focus on the Big Five as an organizing framework, while specifically using narrow traits as predictors of motivation for justice rule adherence and perceptions of organizational justice. This approach retains the “common language” offered by the Big Five while also focusing on narrow traits that should match the specificity of the motivational and justice criteria. Although hypotheses will be offered only for narrow traits, the broader dimensions will also be measured for comparative purposes.

### **Personality and Motivation for Justice Rule Adherence**

Personality traits can be defined as basic tendencies that we infer from observable patterns of behavior (McCrae & Costa, 1999). According to McCrae and Costa’s (1999) Five Factor theory, traits affect behaviors through their effect on *characteristic adaptations*, defined as “concrete manifestations of basic tendencies” (p. 69). Some examples of characteristic

adaptations are attitudes, beliefs, values, acquired skills, and learned behaviors (McCrae & Costa, 1996). Although basic tendencies and characteristic adaptations are distinct, sometimes the lines are blurred between the two, as evidenced by commonly used items in personality measures. Personality questionnaires often include items about one's attitudes, beliefs, habits, and preferences—a clear reflection of characteristic adaptations rather than basic tendencies (McCrae & Costa, 1996). However, it is important to recognize that basic tendencies are just that, tendencies. Without the enactment or manifestation of traits that occur through characteristic adaptations, traits would simply be unrealized potential (McCrae & Costa, 1996).

Personality traits affect the way people think, the way they feel, and the way they behave (McCrae & Costa, 1996). Personality traits also influence an individual's motivational choices (Mount, Barrick, Scullen, & Rounds, 2005). A clear summary of the effects of personality is provided by Mount et al. (2005, p. 447): Personality traits “influence choices individuals make about which tasks and activities to engage in, how much effort to exert on those tasks, and how long to persist with those tasks.” Therefore, personality should affect the type of motivation (e.g., intrinsic, identified, introjected, and external motivation) a manager experiences towards justice rule adherence.

It is important to note that there are several conceptualizations of the Big Five, such as Goldberg's (1990), Saucier and Ostendorf's (1999), and Costa and McCrae's (1992) versions. Although all conceptualizations include the Big Five broad traits, the narrow traits sometimes vary between scholars. For example, Goldberg (1990) includes warmth as a facet of agreeableness while Costa and McCrae (1992) suggest that warmth is a facet of extraversion. Instead of choosing one conceptualization over another, I have focused on the most theoretically relevant narrow traits, which requires that I sample from multiple perspectives. Therefore, my

narrow traits may come from Goldberg (1990), Saucier and Ostendorf (1999), or Costa and McCrae's (1992) conceptualizations.

One trait that is particularly relevant to intrinsic motivation is *altruism*, which is considered a narrow trait loading on agreeableness (Costa & McCrae, 1992). Saucier and Ostendorf's (1999) conceptualization of agreeableness includes the narrow trait generosity, which can be likened to altruism (see also Goldberg, 1990). Altruism is described by adjectives such as charitable, thoughtful, unselfish, and generous (Costa & McCrae, 1992). These adjectives seem particularly relevant to intrinsic motivation because they tend to be other-focused, and intrinsic motivation for justice rule adherence can be thought of as a type of other-focus task. Moreover, intrinsic motivation suggests a lack of interest in personal rewards, which is similar to that of trait altruism. According to Staub (1978, p. 10), "A prosocial act may be judged altruistic if it appears to have been intended to benefit others rather than to gain either material or social rewards." Therefore, managers that are altruistic may adhere to justice rules based on the inherent enjoyment gained out of assisting others, not based on potential rewards. Put differently, managers high on trait altruism likely demonstrate behaviors which suggest a genuine interest in their employees, such as adhering to justice rules.

**Hypothesis 6:** Altruism is positively related to intrinsic motivation.

*Straightforward* individuals may be likely to adhere to justice rules for identified reasons. The narrow trait of straightforwardness loads on agreeableness (Costa & McCrae, 1992). These individuals tend to be sincere, frank, and ingenuous (Costa & McCrae, 1992). Recall that identified motivation suggests that behavior occurs because it is consistent with one's values (Deci & Ryan, 1985a). It is likely that straightforward individuals will adhere to truthfulness and justification rules of informational justice because doing so is consistent with being

straightforward. In addition, managers who are straightforward most likely value abiding by justice rules. Straightforward individuals most likely see the importance in adhering to justice rules and therefore act in ways that are consistent with their values.

Managers possessing trait *reliability* are also likely to adhere to justice rules for identified reasons. Reliability is conceptualized as a narrow trait of conscientiousness (Goldberg, 1990; Saucier & Ostendorf, 1999). These individuals are described as dependable, responsible, reliable, and respectful (Saucier & Ostendorf, 1999). Reliable individuals are also described as conscientious by Goldberg (1990). Individuals who are reliable are likely to adhere to justice rules because of identified reasons. Recall that identified motivation suggests that the focal behavior is accepted as important and valuable (Deci & Ryan, 1985a). Trait reliability suggests that individuals take pride in being dependable and respectful. Therefore, reliability likely affects the respectability rule of interpersonal justice and the consistency rule of procedural justice. Put differently, adhering to justice rules likely occurs because doing so is consistent with a reliable individual's espoused self-concept.

**Hypothesis 7a:** Straightforwardness is positively related to identified motivation.

**Hypothesis 7b:** Reliability is positively related to identified motivation.

Introjected motivation for justice rule adherence is likely affected by the narrow trait *anxiety*. Anxiety is considered a facet of neuroticism (Costa & McCrae, 1992; Goldberg, 1990). Anxious individuals are typically afraid, fearful, and prone to worry (Costa & McCrae, 1992; Goldberg, 1990). Saucier and Ostendorf (1999) conceptualize neuroticism as including the narrow trait insecurity, similarly described as fretful and nervous. In fact, students with trait test anxiety were more likely to worry about their academic performance (Elliott & McGregor, 1999). Moreover, these individuals were more likely to adopt an avoidance goal regulation,

which suggests a focus on avoiding negative outcomes such as looking badly (Elliot & McGregor, 1999). Recall that introjected motivation is consistent with the avoidance of a negative appearance. Therefore, it is likely that anxious individuals worry about whether or not they are adhering to justice rules. The tendency to worry should motivate these individuals to adhere to justice rules for introjected reasons.

The *dutifulness* narrow trait also seems relevant to introjected motivation. According to Costa and McCrae's (1992) five factor conceptualization, dutifulness is a narrow trait of conscientiousness. Dutiful individuals tend to abide by ethical principles and moral obligations (Costa & McCrae, 1992). Introjected motivation for justice rule adherence suggests that a manager adheres to justice rules because they think they *ought* to adhere to justice rules. Dutiful individuals most likely adhere to justice rules because they feel they should, an idea similar to that of introjected motivation. Recall that introjected motivation also suggests an avoidance of negative feelings (Deci & Ryan, 1985a). The moral obligations felt by dutiful individuals may lead to introjected motivation, as adhering to justice rules may prevent feelings of guilt or shame.

**Hypothesis 8a:** Anxiety is positively related to introjected motivation.

**Hypothesis 8b:** Dutifulness is positively related to introjected motivation.

Trait *ambition* likely leads to external motivation for justice rule adherence. Ambition is considered a narrow trait loading on conscientiousness (Goldberg, 1990). Ambitious individuals tend to be enterprising, ambitious, and opportunistic (Goldberg, 1990). Other Big Five conceptualizations include facets similar to ambition, such as industriousness (Saucier & Ostendorf, 1999) and achievement-striving (Costa & McCrae, 1992). Using justice rule adherence for external reasons, such as "getting ahead," is one potential manifestation of trait ambition. Recall that external motivation was previously described as being conceptually similar to

continuance commitment. Interestingly, a recent study reported that conscientiousness was positively related to continuance commitment (Erdheim, Wang, & Zickar, 2006). Extrapolating from these results, I propose that ambitious individuals are likely to experience external motivation for justice rule adherence.

**Hypothesis 9:** Ambition is positively related to external motivation.

### **Summary**

This dissertation attempts to identify different reasons why managers may be motivated to adhere to justice rules. The motivational distinctions proposed by self-determination theory appropriately describe potential motivations for justice rule adherence. For example, a manager may treat his or her employees fairly for external reasons (e.g., “Because I don’t want to be punished”), for introjected reasons (e.g., “Because I don’t want to feel guilty”), for identified reasons (e.g., “Because I see myself as a fair manager”), or for intrinsic reasons (e.g., “Because I truly enjoy being fair”). I also propose that structural distance moderates these relationships, as having the opportunity to engage in justice rule adherence should make it easier for a manager to act on his or her motivations.

The second purpose of this dissertation is to establish a set of narrow managerial traits that may predict managerial motivations for justice rule adherence. This dissertation proposes that altruism predicts intrinsic motivation, straightforwardness and reliability predict identified motivation, anxiety and dutifulness predict introjected motivation, and ambition predicts external motivation. Taken together, my propositions form a model which suggests that managerial motivations for justice rule adherence act as mediating mechanisms between the narrow personality traits and organizational justice (Figure 2).

**Hypothesis 10:** Motivation for justice rule adherence mediates the relationship between trait altruism and perceptions of procedural, interpersonal, and informational justice.

**Hypothesis 11:** Motivation for justice rule adherence mediates the relationship between the narrow traits straightforwardness and reliability, and perceptions of procedural, interpersonal, and informational justice.

**Hypothesis 12:** Motivation for justice rule adherence mediates the relationship between the narrow traits dutifulness and anxiety and perceptions of procedural, interpersonal, and informational justice.

**Hypothesis 13:** Motivation for justice rule adherence mediates the relationship between trait ambition and perceptions of procedural, interpersonal, and informational justice.

## CHAPTER 3 MATERIALS AND METHODS

### **Sample and Procedures**

Alumni from a large southeastern university were recruited to participate in this dissertation. A list of 2500 names was randomly drawn from a database of 7000 registered alumni who were known to be employed full-time. Potential participants received a postcard in the mail explaining that the purpose of the study is to assess attitudes about supervisory behaviors. The postcards stated that the potential participants are eligible for the study if they are 1) employed full-time, 2) not self-employed, 3) have a direct supervisor, and 4) have a colleague that reports directly to the same supervisor. The potential participants were asked to provide this information on the postcard and mail it back. Potential participants can check one of three boxes, 1) interested and eligible for the study, 2) not interested but eligible, or 3) not eligible.

Out of the 2500 mailings, 775 of those were returned undeliverable. Of the remaining 1725 that were presumably delivered, 568 participants did not meet the eligibility requirements, and thus are not included in the final response rate. Participants that decide to participate received a link to an online survey. This survey included measures of organizational justice in addition to measures of structural distance. The survey also asked participants to provide email addresses for their immediate supervisor and a coworker. I then emailed the supervisor and coworker the email links for their respective surveys. The supervisor survey contained measures of managerial motivation for justice rule adherence. The coworker survey contained measures of managerial personality. Past research has shown that peer ratings of personality are as valid, or even more valid, than self-ratings (Barrick & Mount, 1996). Moreover, the use of three ratings provides a procedural remedy for avoiding common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). All participants, including the supervisor and coworker, earned \$5 cash

payment for their participation. Approximately 12% of the alumni agreed to participate in the study, for a total of 136. Out of the 136 alumni that have agreed to participate, 81% participated (110). However, completed data (including supervisor and coworker data) was obtained from 54 alumni.

To supplement the alumni data, I used executive MBA students enrolled in an organizational behavior course at a large, southeastern university. All employees worked full time and the majority of them held managerial positions. The research project was described as an investigation of the relationship between job attitudes and job behaviors. The individuals were given a packet containing a survey, instructing them to fill out the employee survey and return it in the postage paid envelope provided. The employees were then instructed to email their supervisor and coworker with links to an online survey. The supervisors and coworkers were given a \$5 Starbucks gift card in exchange for their participation. Packets were given to a total of 56 employees with 51 returned for a response rate of 91%. Of the 54 employees who returned surveys, 46 of them (85%) had their supervisor and coworker participate resulting in an overall response rate of 81%.

A total of 161 employees (103 male, 58 female) participated in the study. The participants came from a variety of industries, including information technology, healthcare, banking, financial services, telecommunications, pharmaceuticals, and engineering. The participants were 40 years old on average ( $SD = 9.19$ ) and had been with their organizations for an average of 8.85 years ( $SD = 8.16$ ). The sample was 79% Caucasian, with other ethnicities as follows: Hispanic (5%), Asian/Pacific Islander (9%), African American (3.5%). Some participants choose “other” as their ethnicity (4%).

## Measures

*Procedural justice.* Procedural justice was measured using the scale developed and validated by Colquitt (2001). Participants were asked about the procedures used to make decisions about their pay, evaluations, promotions, rewards, etc. The items assessed adherence to Leventhal's (1980) and Thibaut and Walker's (1975) justice rules. The seven-item scale included: "Are you able to express your views and feelings during those procedures?", "Can you influence the decisions arrived at by those procedures?", "Are those procedures applied consistently?", "Are those procedures free of bias?", "Are those procedures based on accurate information?", "Are you able to appeal the decisions arrived at by those procedures?" and "Do those procedures uphold ethical and moral standards?" All items used a response scale ranging from 1 = *To a Very Small Extent* to 5 = *To a Very Large Extent*, with a coefficient alpha of .86.

*Interpersonal justice.* Interpersonal justice was measured using the scale developed and validated by Colquitt (2001). Participants were asked about the interpersonal treatment received from their managers. The items assessed adherence to Bies and Moag's (1986) respect and propriety rules (see also Greenberg, 1993). The four-item scale included: "Has your supervisor treated you in a polite manner?", "Has your supervisor treated you with dignity?", "Has your supervisor treated you with respect", and "Has your supervisor refrained from improper remarks or comments?" All items used a response scale ranging from 1 = *To a Very Small Extent* to 5 = *To a Very Large Extent*, with a coefficient alpha of .90.

*Informational justice.* Informational justice was measured using the scale developed and validated by Colquitt (2001). Participants were asked about managerial explanations and communications given about decision-making procedures. The items assessed adherence to Bies and Moag's (1986) truthfulness and justification rules (see also Greenberg, 1993). The five-item scale included: "Has he/she been candid when communicating with you?", "Has he/she

explained decision-making procedures thoroughly?”, “Were his/her explanations regarding procedures reasonable”, “Has he/she communicated details in a timely manner?” , and “Has he/she tailored communications to meet individuals’ needs?”. All items used a response scale ranging from 1 = *To a Very Small Extent* to 5 = *To a Very Large Extent*, with a coefficient alpha of .88.

*Distributive justice.* Distributive justice was measured using the scale developed and validated by Colquitt (2001). Participants were asked about the outcomes received from their supervisor, such as pay, rewards, evaluations, promotions, assignments, etc. The five-item scale included: “Do those outcomes reflect the effort you have put into your work?”, “Are those outcomes appropriate for the work you have completed?”, “Do those outcomes reflect what you have contributed to your work?”, and “Are those outcomes justified, given your performance?” All items used a response scale ranging from 1 = *To a Very Small Extent* to 5 = *To a Very Large Extent*, with a coefficient alpha of .95

*Opportunity to interact.* Opportunity to interact was measured with an ad hoc scale based on Napier and Ferris’ (1993) conceptualization of this construct. Napier and Ferris (1993) discuss social contact and accessibility as two important aspects of interaction opportunity. Participants were asked about their own relationship with their supervisor. The four-item scale included: “My supervisor is accessible”, “I often have to wait to talk to my supervisor” (R), “I can interact with my supervisor on a frequent basis”, and “I often have the opportunity to interact with my supervisor.” All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .75.

*Spatial distance.* Spatial distance was measured using the scale developed by Kerr and Jermier (1978). The three-item scale included: “The nature of my job is such that my immediate

superior is seldom around me when I'm working", "On my job my most important tasks take place away from where my immediate superior is located", and "My immediate superior and I are seldom in actual contact or direct sight of one another." All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .84.

*Managerial Personality.* The focal employee's coworker was asked to provide measure of narrow managerial traits. The instructions were as follows: "Listed below are a number of statements that may or may not apply to your coworker's supervisor. Choose a number for each statement to indicate the extent to which you agree or disagree with that statement. Then circle that number."

*Altruism.* Altruism was measured using IPIP scale developed by Goldberg, Johnson, Eber, Ashton, Cloninger, and Hough (2006). The ten-item scale included: "Makes people feel welcome", "Anticipates the needs of others", "Loves to help others", "Is concerned about others", "Has a good word for everyone", "Look down on others (R)", "Is indifferent to the feelings of others (R)", "Makes people feel uncomfortable (R)", "Turns his/her back on others (R)", and "Takes no time for others (R)" All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .95.

*Straightforwardness.* Straightforwardness was measured using IPIP scale developed by Goldberg et al. (2006). The ten-item scale included: "Would never cheat on his/her taxes", "Sticks to the rules", "Believes that honesty is the basis for trust", "Keeps his/her promises", "Is true to his/her own values", "Knows how to get around the rules (R)", "Cheats to get ahead (R)", "Puts people under pressure (R)", "Pretends to be concerned for others (R)", and "Takes advantage of others (R)." All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .87.

*Anxiety.* Anxiety was measured using IPIP scale developed by Goldberg et al. (2006). The ten-item scale included: “Worries about things”, “Fears for the worst”, “Is afraid of many things”, “Gets stressed out easily”, “Gets caught up in his/her problems”, “Is not easily bothered by things (R)”, “Is relaxed most of the time (R)”, “Is not easily disturbed by events (R)”, “Doesn't worry about things that have already happened (R)”, and “Adapts easily to new situations (R).” All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .91.

*Dutifulness.* Dutifulness was measured using IPIP scale developed by Goldberg et al. (2006). The ten-item scale included: “Tries to follow the rules”, “Keeps his/her promises”, “Pays his/her bills on time”, “Tells the truth”, “Listens to his/her conscience”, “Breaks rules (R)”, “Breaks his/her promises (R)”, “Gets others to do his/her duties (R)”, “Does the opposite of what is asked (R)”, and “Misrepresents the facts (R).” All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .88.

*Reliability.* Reliability was measured using the adjective scale developed by Saucier and Ostendorf (1999). Coworkers were asked to use the following list of traits to describe their coworker's supervisor as accurately as possible. Please write a number indicating how accurately a trait describes the supervisor. The eight-item scale included: “Reliable”, “Dependable”, “Responsible”, “Prompt”, “Punctual”, “Respectful”, “Undependable (R)”, and “Unreliable (R).” All items used a response scale ranging from 1 = *Extremely Inaccurate* to 9 = *Extremely Accurate*, with a coefficient alpha of .92.

*Ambition.* Ambition was measured using an adjective scale developed by Goldberg (1990). Coworkers were asked to use the following list of traits to describe their coworker's supervisor as accurately as possible. Please write a number indicating how accurately a trait

describes the supervisor. The three-item scale included: “Ambitious,” “Enterprising,” and “Opportunistic.” All items used a response scale ranging from 1 = *Extremely Inaccurate* to 9 = *Extremely Accurate*, with a coefficient alpha of .74.

*Conscientiousness.* Conscientiousness was measured using the Big Five Inventory (BFI) (John, Donahue, & Kentle, 1991). Coworkers were asked to indicate the extent to which they agreed with the following statements about their coworker’s supervisor. The nine-item scale included: “Does a thorough job,” “Does things efficiently,” “Makes plans and follows through,” “Is a reliable worker,” “Perseveres until the task is finished,” “Is easily distracted (R),” “Can be somewhat careless (R),” “Tends to be lazy (R),” and “Tends to be disorganized (R).” All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .89.

*Agreeableness.* Agreeableness was measured using the BFI (John et al., 1991). Coworkers were asked to indicate the extent to which they agreed with the following statements about their coworker’s supervisor. The nine-item scale included: “Is kind to almost everyone,” “Likes to cooperate with others,” “Is helpful and unselfish with others,” “Has a forgiving nature,” “Is generally trusting,” “Tends to find fault with others (R),” “Starts quarrels with others (R),” “Can be cold and aloof (R),” and “Is sometimes rude to others (R).” All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .92.

*Neuroticism.* Neuroticism was measured using the BFI (John et al., 1991). Coworkers were asked to indicate the extent to which they agreed with the following statements about their coworker’s supervisor. The nine-item scale included: “Can be moody,” “Is sometimes depressed or blue,” “Gets nervous easily,” “Can be tense,” “Worries a lot,” “Remains calm in tense situations (R),” “Is emotionally stable, not easily upset (R),” “Is relaxed and handles stress well

(R),”and “Is outgoing and sociable(R).” All items used a response scale ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*, with a coefficient alpha of .90.

### **Content Validation**

The measures of motivation for justice rule adherence used in this study were validated using Hinkin and Tracey’s (1999) content validation method. Undergraduates from a large southeastern university were recruited to participate. In exchange for participation, all participants received one extra credit point. Participants were asked to complete an online survey for the content validation of the motivation for justice rule adherence scales. The items used in the motivation scales were adapted from the following scholarly works: Guay et al., (2000), Ryan and Connell (1989), and Gagné et al. (2006). The first author also created several of her own motivation for justice rule adherence items.

The participants rated each of the 48 items (12 items for each type of justice motivation) on the extent to which they believe the items was consistent with the four motivation types. The response choices ranged from 1 (not at all) to 5 (completely). Each page corresponded with a different motivation type, while providing the definition for one of the motivation types at the top of the page. Intrinsic motivation was defined as “the engagement in an activity or task because of the inherent enjoyment or interest in that particular activity.” Identified motivation was defined as “the engagement in an activity or task because of the inherent value and important of that particular activity.” Introjected motivation was defined as “the engagement in an activity or task because of the internal contingencies associated with that particular activity, such as preventing feelings of guilt or shame, or enhancing feelings of self-worth.” External motivation was defined as “the engagement in an activity or task because of the external contingencies associated with that particular activity, such as the avoidance of punishment or the attainment of rewards.” The items were then randomly distributed throughout each page. In other

words, the participants responded to each of the 48 items four times, once on each page. The online format of the survey allowed for several versions of the questionnaire, which helped control for response bias due to ordering effects.

The Hinkin and Tracey (1999) procedure was then used to winnow the 48 items down to a more manageable set of 16 items (4 items per motivation type). Specifically, a one way ANOVA was used to test whether each item was rated as more consistent with one of the definitions than with the other three. Any items with insufficient “between definitions” variance in the expected direction were dropped. The set of 48 items was winnowed down to a set of 16; four items for each motivation dimension (Table 3-1). While several items were accurately rated as being most consistent with their respective definitions, the best four items were chosen. Figure 3-1 shows the ANOVA results for the combined four-item scales. As depicted, each scale demonstrated the expected pattern of results.

**Motivation for justice rule adherence** Participants were asked about why they treat employees fairly. The instructions were as follows: “If given the opportunity to treat employees in a fair manner, why might you choose to do so? For the purposes of this questionnaire, “treating employees fairly” means using consistent and unbiased decision-making procedures that result in equitable outcomes and communicating with employees in an honest and respectful way.” The items assessed intrinsic, identified, introjected, and external motivation as conceptualized by Deci and Ryan’s (1986) self-determination theory. The four-item intrinsic motivation scale included: “Because I think being a fair manager is inherently satisfying.”, “Because I have a good time when I treat employees fairly.”, “Because being a fair manager is something I get a kick out of.”, “Because treating employees fairly is fun for me.” The four-item identified motivation scale included: “Because being a fair manager is personally meaningful to

me.”, “Because treating employees fairly is an essential goal to me.”, “Because I think being a fair manager matches my core values.”, “Because treating employees fairly fits my basic philosophy.” The four-item introjected motivation scale included: “Because I might feel embarrassed if I was unfair to my employees.”, “Because being unfair would feel humiliating to me.”, “Because treating employees unfairly would harm my self-regard.”, “Because treating employees unfairly would make me feel guilty.” The four-item external motivation scale included: “Because I would receive a poor evaluation if I act unfairly.”, “Because treating employees unfairly jeopardizes my job security.”, “Because being unfair would create hassles on the job.”, and “Because I would experience penalties if I treated employees unfairly.”

I tested the factor structure of the motivation scales with a confirmatory factor analysis using LISREL 8.52 (Jöreskog & Sörbom, 1996). The following five factor structures were tested by entering the covariance matrix of the items into LISREL 8.52 (Jöreskog & Sörbom, 1996): (a) the hypothesized four-factor model for motivation, which includes intrinsic motivation, identified motivation, introjected motivation, and external motivation (b) an alternate three factor model that includes an intrinsic motivation factor, identified motivation factor, and a “controlled motivation” factor (combining introjected motivation and external motivation) (c) an alternate two factor model that includes an intrinsic motivation factor and an “extrinsic motivation” factor (combining identified motivation, introjected motivation, and external motivation), (d) an alternative two factor model that includes an “autonomous motivation” factor (combining intrinsic motivation and identified motivation) and a “controlled motivation” factor (combining introjected motivation and external motivation), and (e) a one factor model (combining all motivation types). Fit statistics for the hypothesized four-factor model were as follows:  $\chi^2(98, N = 111) = 229.96, p < .001; \chi^2/df = 2.35; CFI = .94; RMR = .08$ . Acceptable model fit is usually

inferred when the ratio of chi-square to degrees of freedom falls below 3, when CFI rises above .90, when RMSEA is .08 or lower, and when RMR is .10 or lower (Browne & Cudeck, 1993; Kline, 2005). As expected, the four-factor measurement model fit the data significantly better than alternative measurement models as judged by a chi-square difference test (Table 3-2). All 16 factor loadings were statistically significant and averaged as follows: intrinsic motivation (.82), identified motivation (.91), introjected motivation (.89), and external motivation (.81).

Table 3-1. Justice motivation items included in the content validation study

	Items
Intrinsic Motivation	<p>Because treating employees fairly is inherently enjoyable.            Because I think being a fair manager is inherently satisfying.*            Because being a fair manager is delightful.            Because I have a good time when I treat employees fairly.*            Because being a fair manager is stimulating.            Because I have fun when I am a fair manager.            For the moments of happiness that being a fair manager brings me.            For the joy I feel while being a fair manager.            Because being a fair manager is something I get a kick out of.*            Because treating employees fairly is fun for me. *</p>
Identified Motivation	<p>Because treating employees fairly is personally gratifying.            Because being fair is fundamentally important to me.            Because being fair is essential in my opinion.            Because being a fair manager is a key value to me.            Because being a fair manager is a valuable goal of mine.            Because being fair is consistent with my values.            Because being fair is a personal goal of mine.            Because being a fair manager is important to me.            Because being a fair manager is personally meaningful to me.*            Because being a fair manager fits my personal values.            Because treating employees fairly is fundamental in my opinion.            Because treating employees fairly is an essential goal to me.*            Because I think being a fair manager matches my core values.*            Because treating employees fairly is a key belief of mine.            Because I think being a fair manager is consistent with my beliefs.            Because treating employees fairly fits my basic philosophy.*</p>
Introjected Motivation	<p>Because treating employees fairly makes me feel more decent as a person.            Because I would feel guilty if I treated employees unfairly.            Because I might feel a sense of regret if I treated my employees unfairly.            Because being a fair manager makes me feel better about myself.            Because I might feel embarrassed if I was unfair to my employees.*            Because treating employees fairly would make me feel proud.            Because I would feel ashamed of myself if I were unfair.            Because I would feel pleased with myself if I acted fairly.            Because being unfair would feel humiliating to me.*            Because being unfair would reduce my self-respect.            Because treating employees unfairly would harm my self-regard.*            Because treating employees unfairly would make me feel guilty.*            Because being an unfair manager would make me feel worse about myself.</p>
External Motivation	<p>Because being fair helps me avoid negative consequences.            Because there are negative repercussions for treating employees unfairly.            Because I would receive a poor evaluation if I act unfairly.*            Because treating employees unfairly jeopardizes my job security.*            Because being unfair would create hassles on the job.*            Because being a fair manager could get me valuable benefits.            Because treating employees fairly could earn me a favorable evaluation.            Because being a fair manager brings praise from other people.            Because there are positive consequences associated with treating employees fairly.            Because I receive valuable perks when I treat employees fairly.            Because I would experience penalties if I treated employees unfairly.*            Because treating employees fairly is associated with beneficial consequences.            Because being a fair manager is linked to positive outcomes.</p>

\* Final items used in dissertation hypothesis testing

Table 3-2. Comparison of alternative factor structures for motivation for justice rule adherence

Model	$\chi^2$ (df)	$\chi^2$ diff (df)	CFI	RMR
Hypothesized Four-Factor Model	229.96 (98)	---	.94	.08
Intrinsic, Identified, and Controlled Model	456.22 (101)	226.26 (3)	.83	.13
Intrinsic and Extrinsic	656.39 (103)	426.43 (5)	.73	.18
Autonomous and Controlled	635.70 (103)	407.74 (5)	.74	.20
One-Factor Model	803.50 (104)	573.54 (6)	.66	.19

*Note.*  $n = 111$  after listwise deletion. All  $\chi^2$  values are significant at  $p < .001$ .

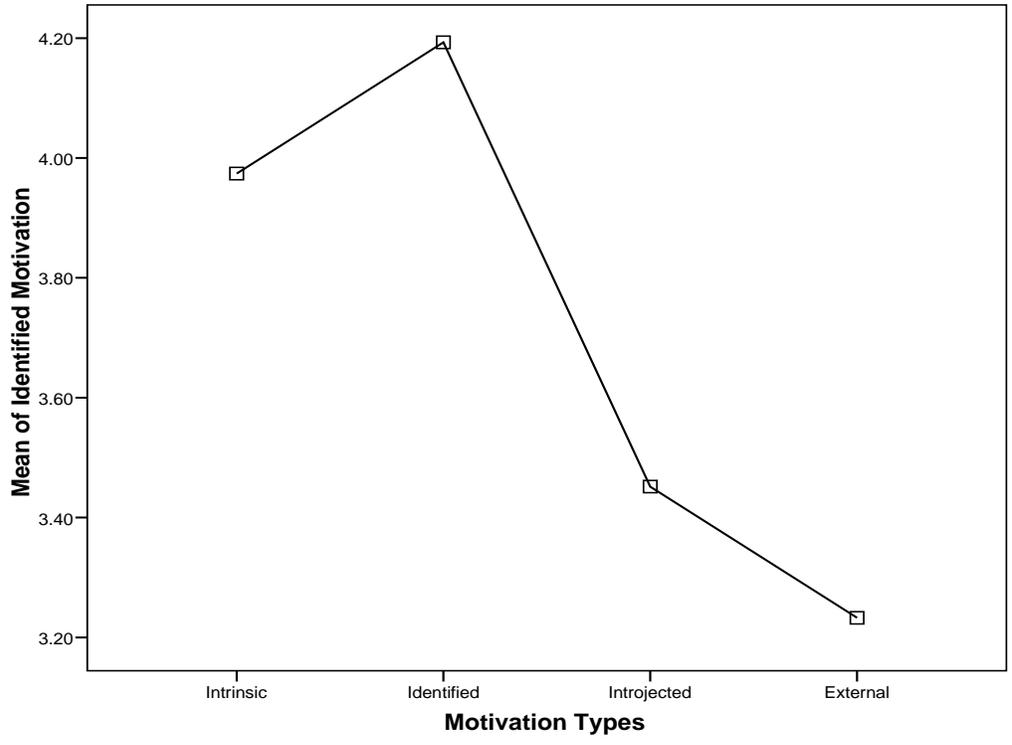
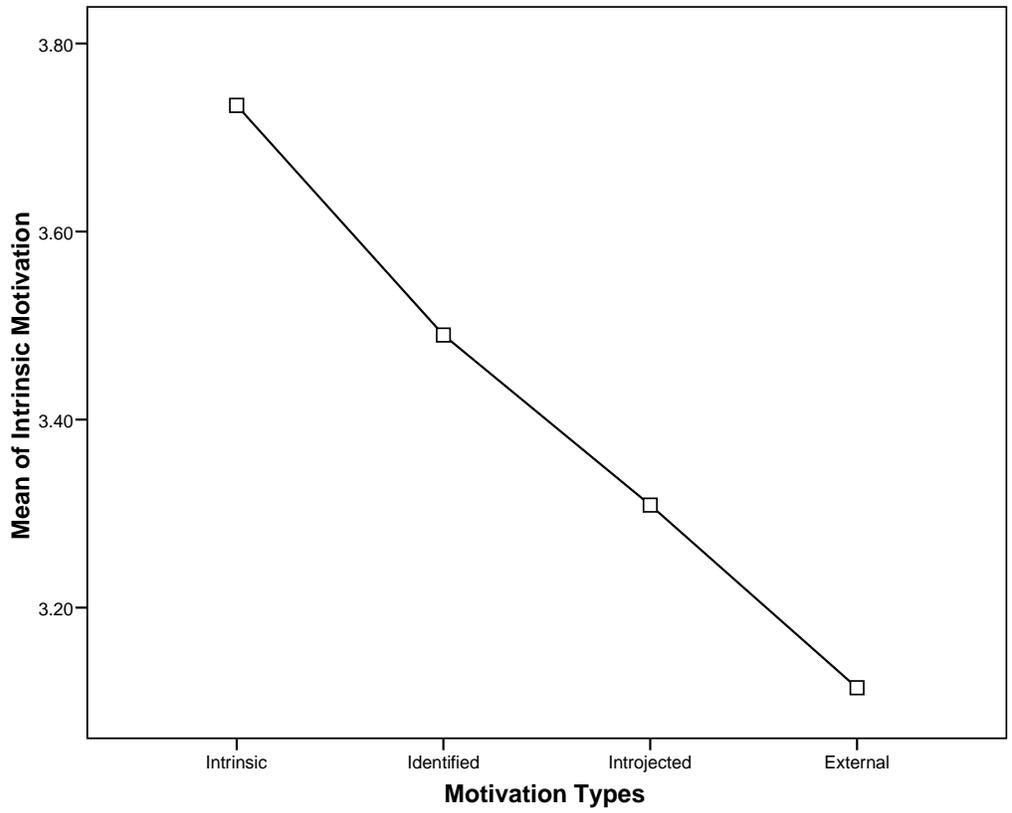


Figure 3-1. Hinkin and Tracey (1999) ANOVA results for four-item scales used in dissertation hypothesis tests.

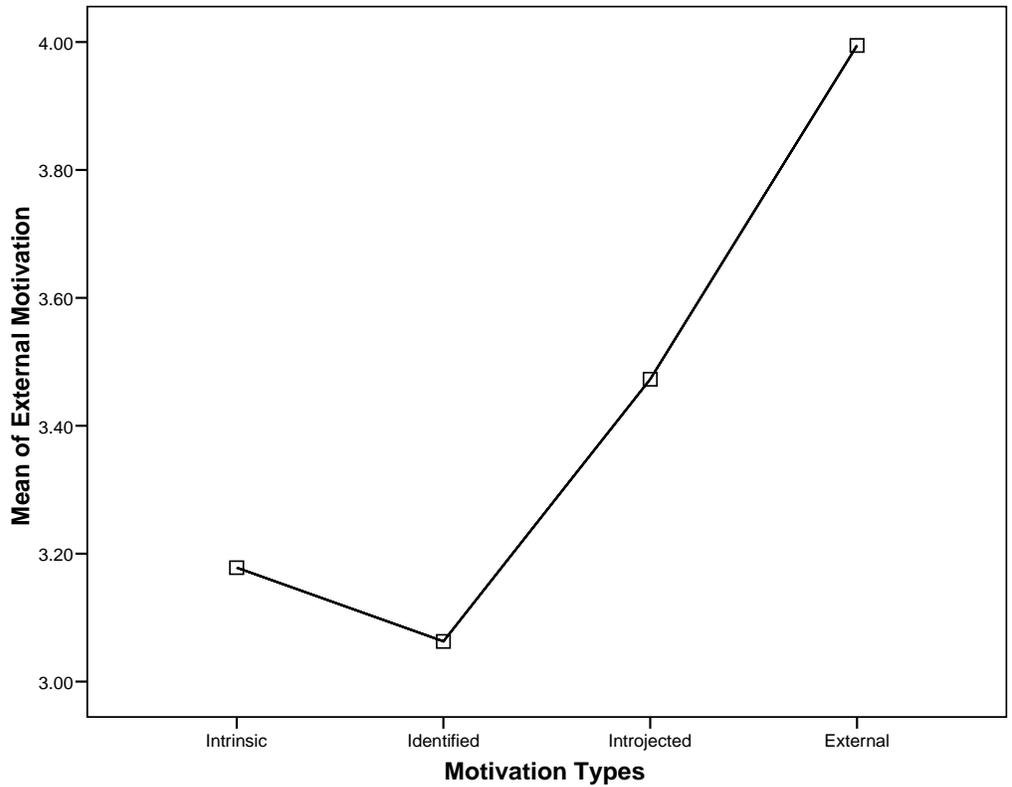
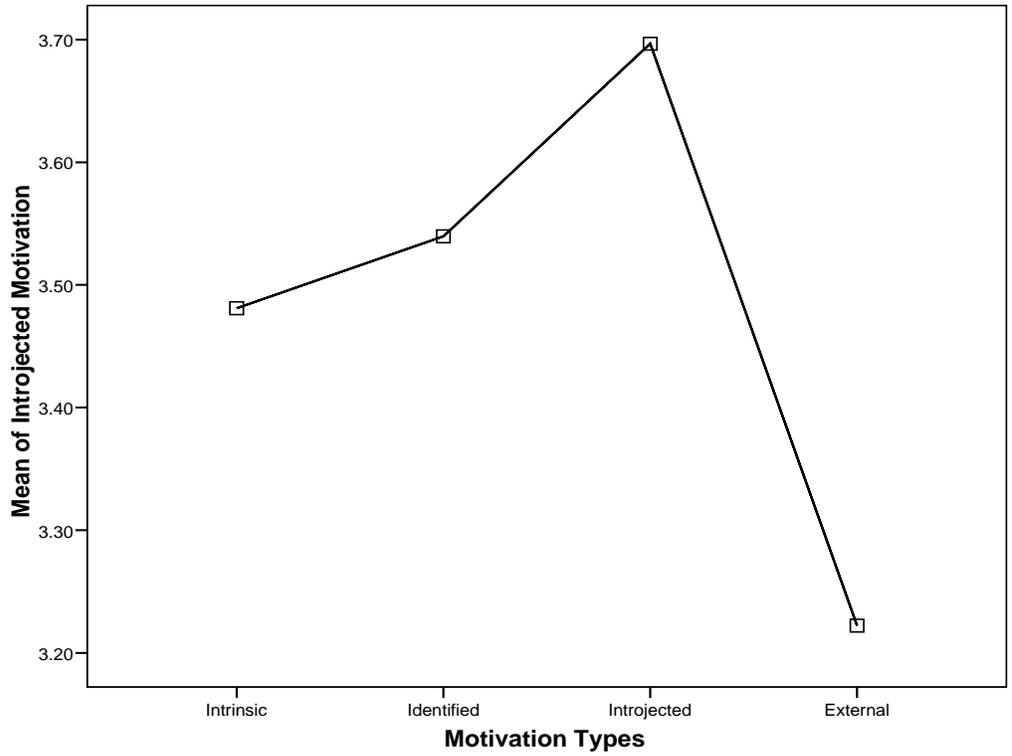


Figure 3-1. Continued

## CHAPTER 4 RESULTS

### Descriptive Statistics

Table 4-1 presents the means, standard deviations, and zero-order correlations among the variables in the study, with the coefficient alphas for each scale shown on the diagonal. The table reveals several relationships between personality traits and the motivation types. Altruism, a facet of agreeableness, was positively related to intrinsic ( $r = .18$ ) and external motivation ( $r = .19$ ). The relationship between trait reliability, a facet of conscientiousness, and introjected motivation was also significant ( $r = .20$ ). Straightforwardness, a facet of agreeableness, was positively correlated with introjected ( $r = .24$ ) and external motivation ( $r = .29$ ). Ambition, a facet of conscientiousness, was negatively correlated with identified ( $r = -.23$ ), introjected ( $r = -.20$ ), and external motivation ( $r = -.17$ ). These results are notable because they are not same-source linkages, given the use of coworker ratings of supervisor personality and supervisor ratings of motivation. Comparing those results with the broad dimensions of the Big Five, conscientiousness was positively related to intrinsic ( $r = .19$ ), identified ( $r = .18$ ), introjected ( $r = .37$ ), and external motivation ( $r = .21$ ). However, neither agreeableness nor neuroticism demonstrated significant relationships with the motivation types. This is an interesting point because narrow facets of agreeableness (altruism and straightforwardness) demonstrated significant relationships with three out of the four motivation types. Thus, focusing on the narrow traits offered additional information that may have been missed if focusing solely on the broad Big Five traits.

It is also important to examine the justice dimensions, and their relationships with various personality traits. Altruism was positively related to interpersonal ( $r = .26$ ) and informational justice ( $r = .28$ ). Similar effects were observed for the conscientiousness facet of trait reliability,

with interpersonal ( $r = .24$ ) and informational justice ( $r = .29$ ). Straightforwardness was also positively related to interpersonal ( $r = .22$ ) and informational justice ( $r = .26$ ). Dutifulness, a facet of conscientiousness, demonstrated significant relationships with procedural ( $r = .18$ ), interpersonal ( $r = .22$ ), and informational justice ( $r = .30$ ). Anxiety, a narrow trait of neuroticism, exhibited negative relationships with interpersonal ( $r = -.24$ ) and informational justice ( $r = -.19$ ). The broad Big Five traits were also significantly correlated with interpersonal and informational justice. Conscientiousness was positively related to interpersonal ( $r = .18$ ) and informational justice ( $r = .28$ ). Agreeableness was also positively related to interpersonal ( $r = .32$ ) and informational justice ( $r = .32$ ). Neuroticism demonstrated significant negative effects for interpersonal ( $r = -.33$ ) and informational justice ( $r = -.35$ ). Taken together, these results demonstrate a similar pattern of results with the narrow and broad traits when using justice as an outcome. Thus, focusing on either narrow or broad traits would lead to similar results.

Yet another set of important links are those between motivation and justice perceptions. While no hypotheses were made for distributive justice, it demonstrated a positive relationship with intrinsic motivation ( $r = .17$ ). Thus, supervisors that report engaging in fair treatment because of inherent enjoyment are seen as more distributively just by their employees. Unfortunately, none of the hypothesized relationships for procedural, interpersonal, or informational justice were significant.

### **Tests of Hypotheses**

**Motivation to justice hypotheses.** The main effects hypotheses linking motivation to justice were tested using structural equation modeling. Given my small sample size, I tested the model in Figures 4-1 using a “partially latent” approach where scale scores were used as single indicators of the latent variables with error variances set to  $(1-\alpha)*\text{variance}$  (Kline, 2005). I allowed the disturbance terms for procedural and informational justice to covary given that

informational justice is often used to judge procedural justice. I also allowed the disturbance terms for interpersonal and informational justice to covary to represent unmeasured common causes, such as a higher-order “interactional justice” factor. Fit statistics were as follows:  $\chi^2 (1 N = 100) = 15.11, p < .001; \chi^2/df = 15.11; CFI = .89; RMR = .03.$

Hypothesis 1 predicted that intrinsic motivation would be positively related to procedural, interpersonal, and informational justice. As seen in Figure 4-1, intrinsic motivation was not significantly related to either procedural ( $b = -.07$ ), interpersonal ( $b = .10$ ), or informational justice ( $b = -.20$ ). Therefore, this Hypothesis was not supported. Hypothesis 2 predicted that identified motivation would be positively related to procedural, interpersonal, and informational justice, albeit more weakly than intrinsic motivation. As shown in Figure 4-1, identified motivation was not significantly related to either procedural ( $b = .00$ ), interpersonal ( $b = .08$ ), or informational justice ( $b = -.06$ ). To test the progressively weakening effects, I used equality constraints, which force two or more parameters to equal one another (Kline, 2005). I then ran a chi-square difference test (Kline, 2005) to compare the model with and without the equality constraint, with the expectation that significantly better fit will result from the model without the equality constraint. First, I constrained the path from intrinsic motivation to procedural justice and the path from identified motivation to procedural justice as equal. A chi-squared difference test indicated no significant difference between the two models (Table 4-2). I then constrained the path from intrinsic motivation to interpersonal justice and the path from identified motivation to interpersonal justice as equal. Again, no significant difference was found between the two models. The third constraint examined was the path from intrinsic motivation to informational justice and the path from identified motivation to informational justice. A chi-squared difference test indicated no significant difference between the two models. Thus, the progressively

weakening effects predicted by Hypothesis 2 were not supported, which is not surprising, given how similar the regression coefficients were for intrinsic and identified motivation.

Hypothesis 3 predicted that introjected motivation would be positively related to procedural justice, interpersonal, and informational albeit more weakly than that of identified motivation. As depicted in Figure 4-1, introjected motivation was not significantly related to procedural ( $b = -.17$ ) or informational justice ( $b = .08$ ), but was significantly related to interpersonal justice ( $b = -.30$ ). To test the progressively weakening effects, I constrained the path from identified motivation to procedural justice and the path from introjected motivation to procedural justice as equal. A chi-squared difference test indicated no significant difference between the two models (Table 4-2). I then constrained the path from identified motivation to interpersonal justice and the path from introjected motivation to interpersonal justice as equal. Again, no significant difference was found between the two models. The third constraint examined was the path from identified motivation to informational justice and the path from introjected motivation to informational justice. A chi-squared difference test indicated no significant difference between the two models. Thus, the weakening effects depicted by Hypothesis 3 were not supported, which is again not surprising, given the similarity in the regression coefficients.

Hypothesis 4 predicted that external motivation would be positively related to procedural justice, interpersonal, and informational albeit more weakly than that of introjected motivation. As shown in Figure 4-1, external motivation was not significantly related to either procedural ( $b = .19$ ), interpersonal ( $b = .03$ ), or informational justice ( $b = .12$ ). To test the weakening effect, I constrained the path from introjected motivation to procedural justice and the path from external motivation to procedural justice as equal. A chi-squared difference test indicated no significant

difference between the two models (Table 4-2). I then constrained the path from introjected motivation to interpersonal justice and the path from external motivation to interpersonal justice as equal. Again, no significant difference was found between the two models. The third constraint examined was the path from introjected motivation to informational justice and the path from external motivation to informational justice. A chi-squared difference test indicated no significant difference between the two models. Thus, Hypothesis 4 was not supported.

**Distance moderation predictions.** Hypotheses 5a-b predicted that structural distance would moderate the relationships between the motivations for justice rule adherence and procedural, interpersonal, and informational justice, respectively. The regressions used to test these hypotheses are shown in Table 4-3. The first step of the regressions includes intrinsic motivation, identified motivation, introjected motivation, and external motivation. The second step in the regression includes the structural distance variables (opportunity for interaction and spatial distance). While no main effect predictions were made for structural distance, the data suggest that opportunity to interact was positively related to procedural ( $r = .34$ ), interpersonal ( $b = .31$ ), and informational justice ( $b = .38$ ). It should be noted that these links are same source and therefore should be interpreted with caution. The third step of the regression includes the motivation x structural distance product terms, with product terms created after mean-centering the independent variables (Cohen, Cohen, West, & Aiken, 2003). As shown in the third step of Table 4-3, none of the expected interactions were statistically significant. Therefore, hypotheses 5a-b were not supported.

**Personality to motivation hypotheses.** The main effects hypotheses linking personality to motivation were tested using structural equation modeling. Given my small sample size, I tested the model in Figures 4-1 to 4-4 using a “partially latent” approach where scale scores were used

as single indicators of the latent variables with error variances set to  $(1-\alpha)*\text{variance}$  (Kline, 2005). I allowed the disturbance terms for intrinsic, identified, introjected, and external motivation to covary to represent unmeasured common causes, such as a higher-order “motivation” factor. Fit statistics were as follows:  $\chi^2 (18 N = 100) = 43.91, p < .001; \chi^2/df = 2.44; CFI = .95; RMR = .08$ .

Hypothesis 6 predicted that altruism would be positively related to intrinsic motivation. As shown in Figure 4-2, this hypothesis was supported ( $b = .21$ ). Thus, supervisors who were described by coworkers as caring and accepting reported more inherent enjoyment in acting in a fair way. Hypothesis 7 a-b predicted that straightforwardness and reliability would be positively related to identified motivation. This hypothesis was not supported, as neither straightforwardness nor reliability demonstrated a significant effect on identified motivation. Hypothesis 8 a-b predicted an effect of dutifulness and anxiety on introjected motivation. As depicted in Figure 4-2, this hypothesis was supported, as both dutifulness and anxiety were significant predictors of introjected motivation ( $b = .44$  and  $.17$ , respectively). Thus, supervisors described by coworkers as honest and anxious reported engaging in fair treatment in order to avoid feelings of guilt. Hypothesis 9 predicted that ambition would be positively related to external motivation. This Hypothesis was supported, as ambition was a significant predictor of external motivation ( $b = .55$ ). Thus, supervisors described by coworkers as enterprising and opportunistic reported engaging in fair treatment in order to avoid negative consequences associated with failing to treat employees fairly. Taken together, these results suggest that supervisor personality traits are relevant to motivation to engage in justice rule adherence.

However, it is also important to examine the effect of broad personality traits on motivation for justice rule adherence. Recall that several scholars suggest that the Big Five can

be understood as a hierarchy (Goldberg, 1993). Thus, a focus on narrow traits begs the question, do the broad Big Five traits demonstrate similar effects, as they are themselves composed of lower level traits? In general, scholars have struggled with the issue of choosing broad traits vs. narrow, specific traits as predictors of important organizational outcomes (for reviews, see Hogan & Roberts, 1996; Ones & Viswesvaran, 1996; Schneider, Hough, & Dunnette, 1996). As stated previously, this issue has been termed the “bandwidth-fidelity” trade-off (Hogan & Roberts, 1996). Thus, the question is whether the theoretical nuances offered by narrow, specific traits is worth losing some information gained by using broad traits. Therefore, I tested an additional model in which the structural paths were drawn from the narrow trait predictions. For example, anxiety is a narrow trait of neuroticism; therefore the corresponding structural path for neuroticism should be the same as that of anxiety. Fit statistics for the broad traits model were as follows:  $\chi^2 (6 N = 100) = 12.16, p < .001; \chi^2/df = 2.027; CFI = .96; RMR = .04$ . As shown in Figure 4-3, agreeableness was not significantly related to either intrinsic ( $b = .12$ ) or identified motivation ( $b = .04$ ). Although conscientiousness was not significantly related to identified motivation ( $b = .06$ ), it did demonstrate significant, positive relationships with introjected and external motivation ( $b = .49$  and  $.38$ , respectively). As shown in Figure 4-3, neuroticism was not significantly related to introjected motivation ( $b = .04$ ).

I also combined the narrow and broad traits into one model (Figure 4-4). This model was tested to demonstrate whether the narrow, specific traits predict incremental variance above and beyond the broad, Big Five traits. The results suggest that while altruism was significantly related to intrinsic motivation ( $b = .71$ ), agreeableness was not ( $b = -.52$ ). Neither straightforwardness nor agreeableness were significantly related to identified motivation ( $b = .10$  and  $.03$ , respectively). Similar results were obtained for conscientiousness and its narrow trait

reliability ( $b = .19$  and  $-.20$ , respectively). Fit statistics for the combined traits structural model were as follows:  $\chi^2 (24 N = 100) = 51.60, p < .001$ ;  $\chi^2/df = 2.15$ ; CFI = .98; RMR = .06. As shown in Figure 4-4, neither anxiety nor neuroticism were significantly related to identified motivation ( $b = .20$  and  $-.10$ , respectively). While dutifulness was not significantly related to introjected motivation ( $b = -.05$ ), conscientiousness did demonstrate significant, positive relationships with introjected and external motivation ( $b = .40$  and  $.44$ , respectively). However, ambition was not significantly related to external motivation ( $b = -.02$ ). These results suggest that the narrow traits and broad dimensions exert few significant independent effects on the motivation variables, which is not surprising, given the necessarily high level of multicollinearity in these analyses.

**Tests of mediation.** Hypotheses 14-17 predicted that motivation for justice rule adherence mediates the relationship between the narrow traits and perceptions of procedural, interpersonal, and informational justice. To test these hypotheses, I utilized the three step mediation test recommended by Baron and Kenny (1986). In the first step of this procedure, one must demonstrate a significant relationship between the predictor variable (personality) and the mediator variable (motivation for justice rule adherence). The second step of the procedure requires that the mediator (motivation for justice rule adherence) demonstrate a significant relationship with the outcome variable (justice perceptions), when controlling for the predictor variable (personality). The final step requires demonstrating a significant relationship between the predictor variable and the outcome variable, with that relationship becoming reduced or non-significant when the mediator is controlled. As reported previously (Figure 4-2), the results do partially support the first step. Specifically, altruism was positively related to intrinsic motivation, dutifulness and anxiety were significant predictors of introjected motivation, and

ambition was a significant predictor of external motivation. With respect to the second step, only one relationship was significant: introjected motivation was negatively related to interpersonal justice. Moreover, this relationship was not in the predicted direction. According to Baron and Kenny (1986) a relationship between the mediator and outcome is a prerequisite for mediation. Due to the lack of mediator-outcome relationships, there is no need to test mediation.

Table 4-1. Descriptive statistics and zero-order correlations

Variable	M	SD	1	2	3	4	5
1. Altruism	4.02	.70	.95				
2. Reliability	6.83	1.11	.63*	.92			
3. Straightforwardness	3.92	.59	.72*	.65*	.87		
4. Dutifulness	4.03	.59	.69*	.63*	.83*	.88	
5. Anxiety	2.43	.67	-.45*	-.36*	-.48*	.47*	.91
6. Ambition	7.02	1.51	.05	.07	-.04	.05	-.10
7. Conscientiousness	4.25	.45	.60*	.74*	.63	.63*	-.34*
8. Agreeableness	4.10	.47	.86*	.59*	.67*	.66*	-.50*
9. Neuroticism	2.27	.62	-.65*	-.41*	-.57*	-.56*	.77*
10. Intrinsic Motivation	3.54	.82	.18*	.10	.13	.01	-.15
11. Identified Motivation	4.67	.47	.05	.09	.13	.04	.07
12. Introjected Motivation	3.64	1.01	.13	.20*	.26*	.13	-.04
13. External Motivation	3.29	.88	.19*	.13	.29*	.13	.11
14. Procedural Justice	3.72	.72	.09	.11	.09	.18*	-.02
15. Interpersonal Justice	4.58	.60	.26*	.24*	.22*	.22*	-.24*
16. Informational Justice	3.84	.78	.28*	.29*	.26*	.30*	-.19*
17. Distributive Justice	3.72	.97	.02	.03	.05	.15	-.12
18. Spatial Distance	3.35	1.22	-.02	.00	-.03	-.10	.04
19. Opportunity to Interact	4.07	.71	.10	.21*	.18*	.20*	-.10

*Note.*  $n = 100-161$ . \*  $p < .05$ , one-tailed.

Table 4-1. Continued

Variable	6	7	8	9	10	11	12
1. Altruism							
2. Reliability							
3. Straightforwardness							
4. Dutifulness							
5. Anxiety							
6. Ambition	.74						
7. Conscientiousness	.05	.89					
8. Agreeableness	.00	.54*	.92				
9. Neuroticism	-.08	-.46*	-.71*	.90			
10. Intrinsic Motivation	-.05	.19*	.08	-.14	.86		
11. Identified Motivation	-.23*	.18*	.08	.01	.30*	.88	
12. Introjected motivation	-.20*	.37*	.11	-.15	.53*	.42*	.91
13. External Motivation	-.17*	.21*	.16	.00	.25*	.02	.35*
14. Procedural Justice	-.02	.12	.05	-.10	-.02	-.03	-.06
15. Interpersonal Justice	-.07	.18*	.32*	-.33*	.03	.02	-.11
16. Informational Justice	.05	.28*	.32*	-.35*	.01	.02	.06
17. Distributive Justice	-.10	.08	.00	-.08	.17*	.08	.07
18. Spatial Distance	.02	.04	-.03	.01	.06	.20*	-.05
19. Opportunity to Interact	.02	.15	.19*	-.11	.02	-.06	-.03

*Note.*  $n = 100-161$ . \*  $p < .05$ , one-tailed.

Table 4-1. Continued

Variable	13	14	15	16	17	18	19
1. Altruism							
2. Reliability							
3. Straightforwardness							
4. Dutifulness							
5. Anxiety							
6. Ambition							
7. Conscientiousness							
8. Agreeableness							
9. Neuroticism							
10. Intrinsic Motivation							
11. Identified Motivation							
12. Introjected Motivation							
13. External Motivation	.85						
14. Procedural Justice	.13	.86					
15. Interpersonal Justice	-.02	.50*	.90				
16. Informational Justice	.12	.62*	.61*	.88			
17. Distributive Justice	.13	.56*	.40*	.52*	.95		
18. Spatial Distance	-.15	-.14*	.04	-.12	-.04	.84	
19. Opportunity to Interact	.19*	.34*	.31*	.38*	.24*	-.36*	.75

*Note.*  $n = 100-161$ . \*  $p < .05$ , one-tailed.

Table 4-2. Comparison of various equality constraints for motivation → justice linkages

Model	$\chi^2$ (df)	$\chi^2$ diff (df)	CFI	RMR
Model without Constraints	15.11 (1)	---	.89	.03
Intrinsic/Identified to Proc Constrained	15.24 (2)	.13 (1)	.89	.03
Intrinsic/Identified to Inter Constrained	15.12 (2)	.01 (1)	.90	.03
Intrinsic/Identified to Info Constrained	15.53 (2)	.42 (1)	.89	.03
Identified/Introjected to Proc Constrained	15.52 (2)	.41 (1)	.89	.03
Identified/Introjected to Inter Constrained	17.18 (2)	2.06 (1)	.88	.03
Identified/Introjected to Info Constrained	15.37 (2)	.26 (1)	.89	.03
Introjected/External to Proc Constrained	16.95 (2)	1.84 (1)	.88	.04
Introjected/External to Inter Constrained	16.70 (2)	1.59 (1)	.88	.04
Introjected/External to Info Constrained	15.14 (2)	.03 (1)	.90	.03

*Note.*  $n = 100$  after listwise deletion.  $\chi^2$  values

Table 4-3. Moderated regressions used to test hypotheses 5a-b

Procedural Justice	Model 1			Model 2			Model 3		
	R <sup>2</sup>	ΔR <sup>2</sup>	B	R <sup>2</sup>	ΔR <sup>2</sup>	B	R <sup>2</sup>	ΔR <sup>2</sup>	B
1. Intrinsic Motivation	.03	.03	-.02	.03	.03	-.02	.03	.03	-.05
Identified Motivation			.04			.03			.19
Introjected Motivation			-.09			-.08			-.07
External Motivation			.14†			.12			.12
2. Spatial Distance				.06	.03	.03	.06	.03	.02
Opportunity to Interact						.20†			.24*
3. Intrinsic x Distance							.16	.10	-.11
Identified x Distance									.10
Introjected x Distance									.02
External x Distance									.11
Intrinsic x Interact									.02
Identified x Interact									-.37
Introjected x Interact									-.20
External x Interact									.03

*Note.*  $n = 112$  after listwise deletion. \*  $p < .05$ , two-tailed. †  $p < .10$ , two-tailed.

Table 4-3. Continued

Interpersonal Justice	Model 1			Model 2			Model 3		
	R <sup>2</sup>	ΔR <sup>2</sup>	B	R <sup>2</sup>	ΔR <sup>2</sup>	B	R <sup>2</sup>	ΔR <sup>2</sup>	B
1. Intrinsic Motivation	.03	.03	.08	.03	.03	.07	.03	.03	.05
Identified Motivation			.09			.05			-.01
Introjected Motivation			-.12†			-.10			-.09
External Motivation			.02			.00			.02
2. Spatial Distance				.08	.05	.09†	.08†	.05†	.13*
Opportunity to Interact						.20†			.24*
3. Intrinsic x Distance							.13	.05	.13
Identified x Distance									-.06
Introjected x Distance									-.07
External x Distance									-.01
Intrinsic x Interact									.05
Identified x Interact									-.27
Introjected x Interact									-.05
External x Interact									.02

*Note.*  $n = 112$  after listwise deletion. \*  $p < .05$ , two-tailed. †  $p < .10$ , two-tailed.

Table 4-3. Continued

Informational Justice	Model 1			Model 2			Model 3		
	R <sup>2</sup>	ΔR <sup>2</sup>	B	R <sup>2</sup>	ΔR <sup>2</sup>	B	R <sup>2</sup>	ΔR <sup>2</sup>	B
1. Intrinsic Motivation	.02	.02	-.06	.02	.02	-.06	.02	.02	-.10
Identified Motivation			.02			.00			.15
Introjected Motivation			.03			.04			.06
External Motivation			.10			.07			.09
2. Spatial Distance				.07*	.05*	.07	.07*	.05*	.05
Opportunity to Interact						.28*			.27*
3. Intrinsic x Distance							.13	.06	.00
Identified x Distance									.22
Introjected x Distance									.03
External x Distance									-.04
Intrinsic x Interact									.10
Identified x Interact									-.05
Introjected x Interact									-.10
External x Interact									.00

*Note.*  $n = 112$  after listwise deletion. \*  $p < .05$ , two-tailed. †  $p < .10$ , two-tailed.

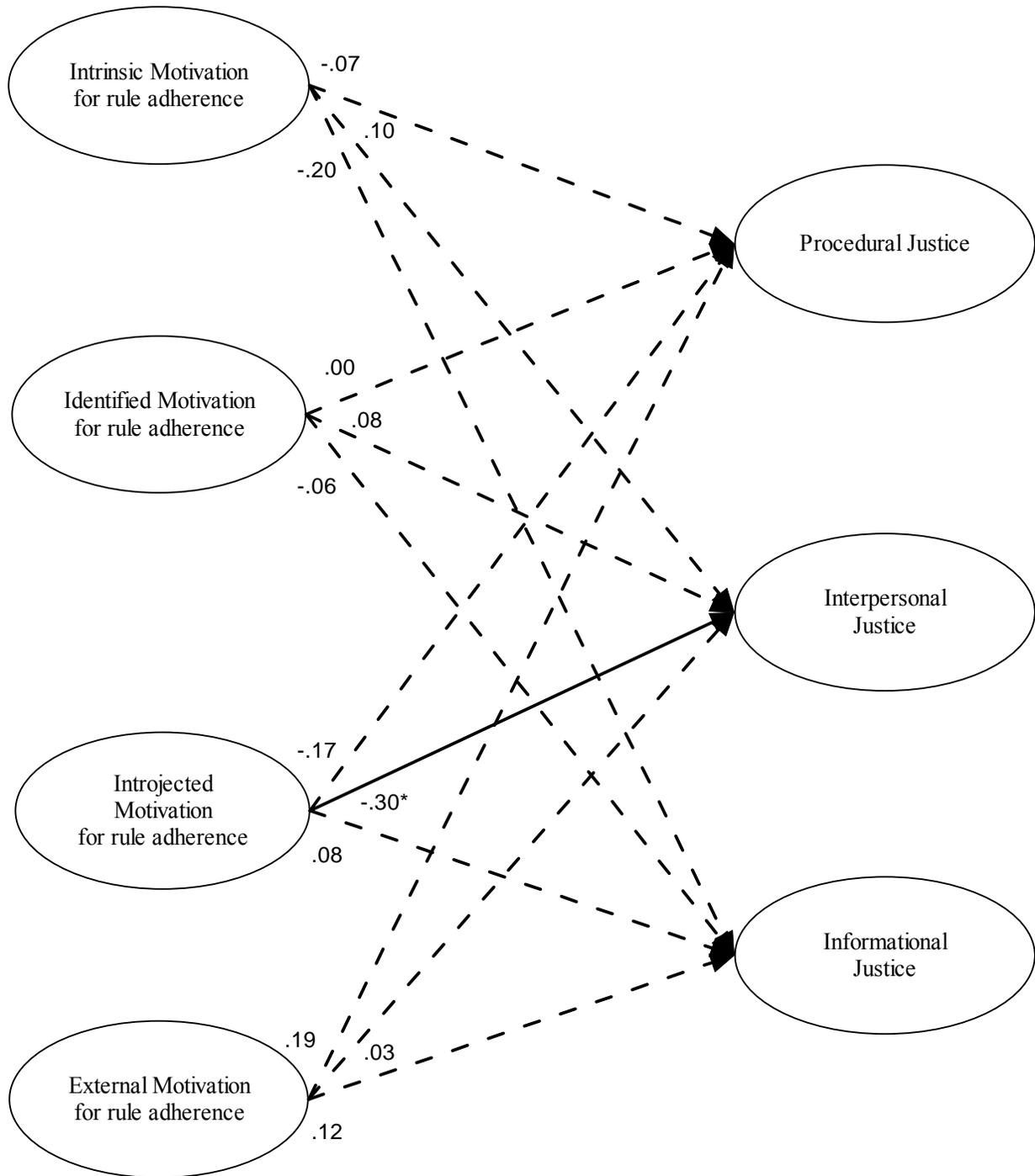


Figure 4-1. Structural equation model used to test hypotheses 1-4

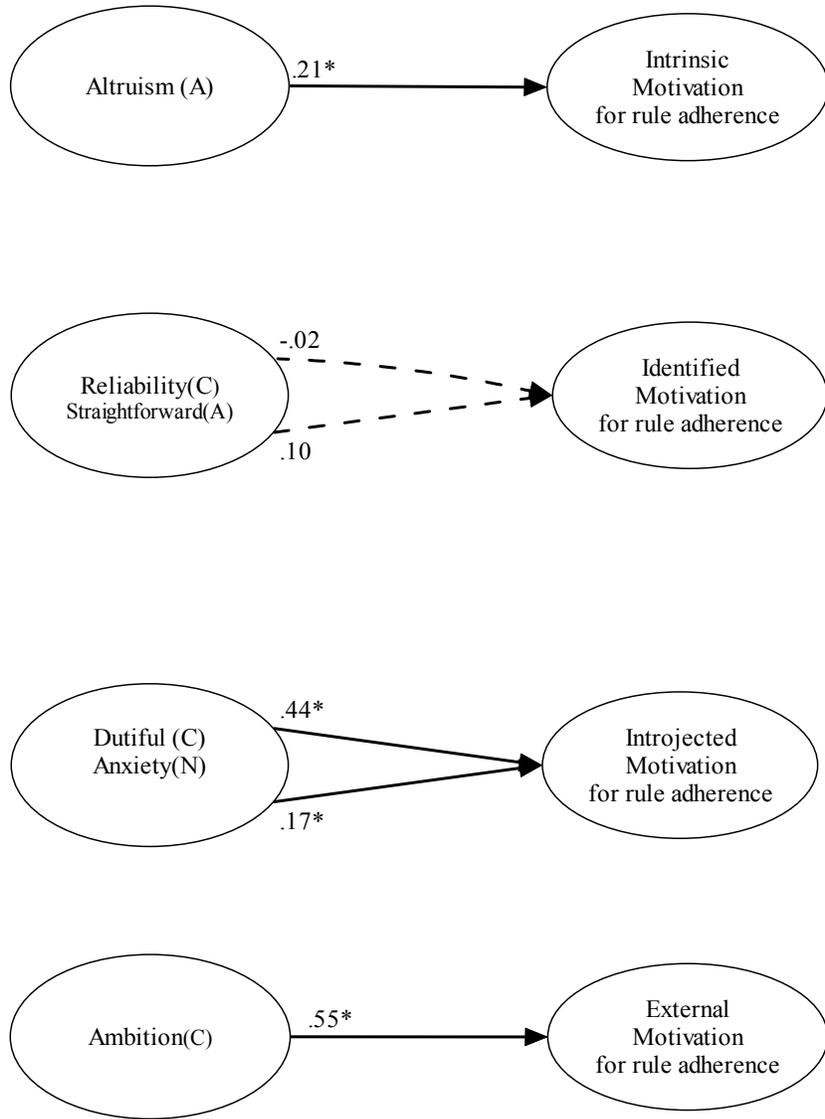


Figure 4-2. Structural equation model used to test hypotheses 6-9. Each narrow trait has a letter beside it. That letter corresponds to the broad trait that subsumes that narrow trait. C represents conscientiousness, A represents agreeableness, and N represents neuroticism. \*  $p < .05$ , one-tailed.

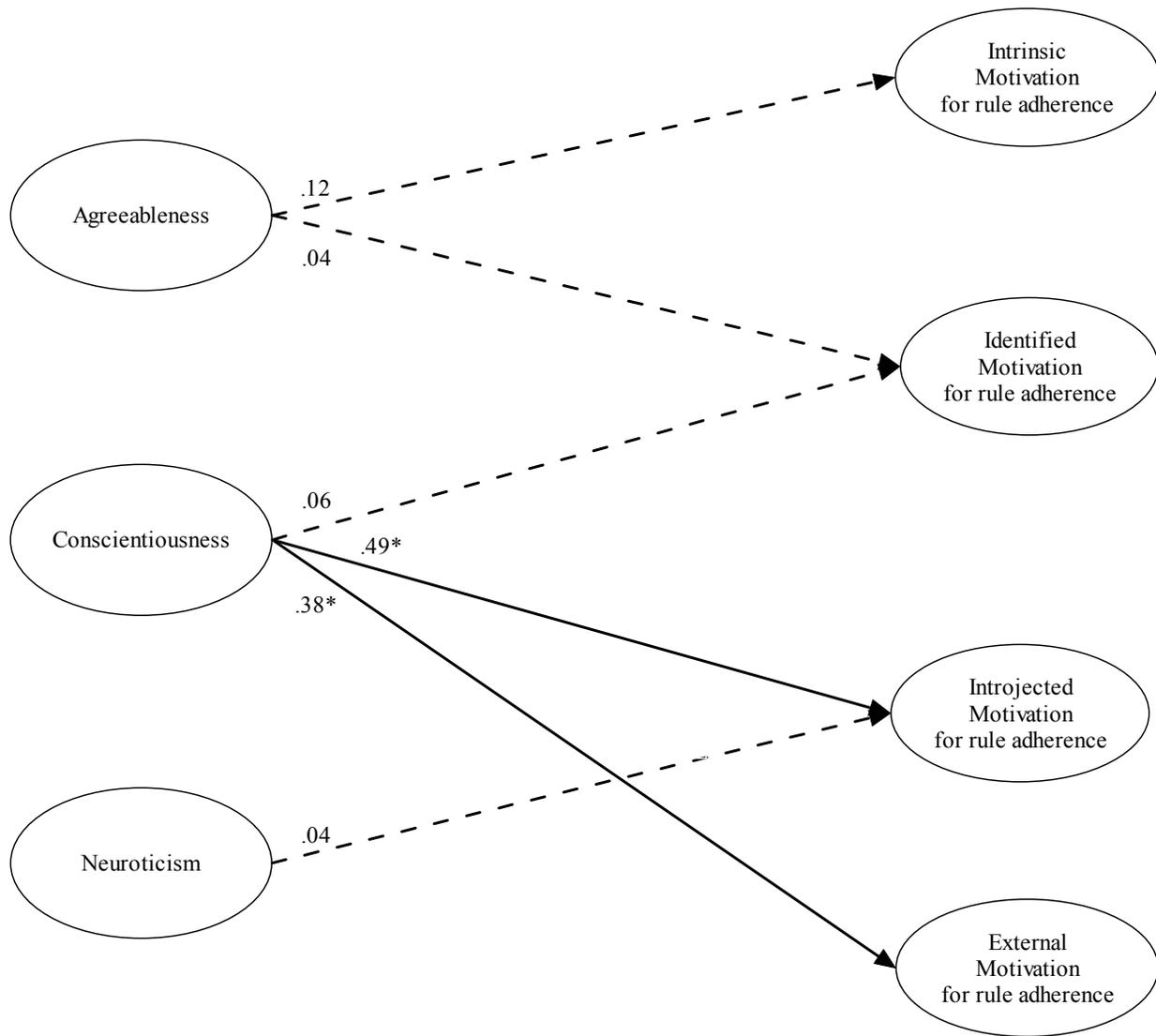


Figure 4-3. Structural equation model used to test hypotheses 6-9. \*  $p < .05$ , two-tailed

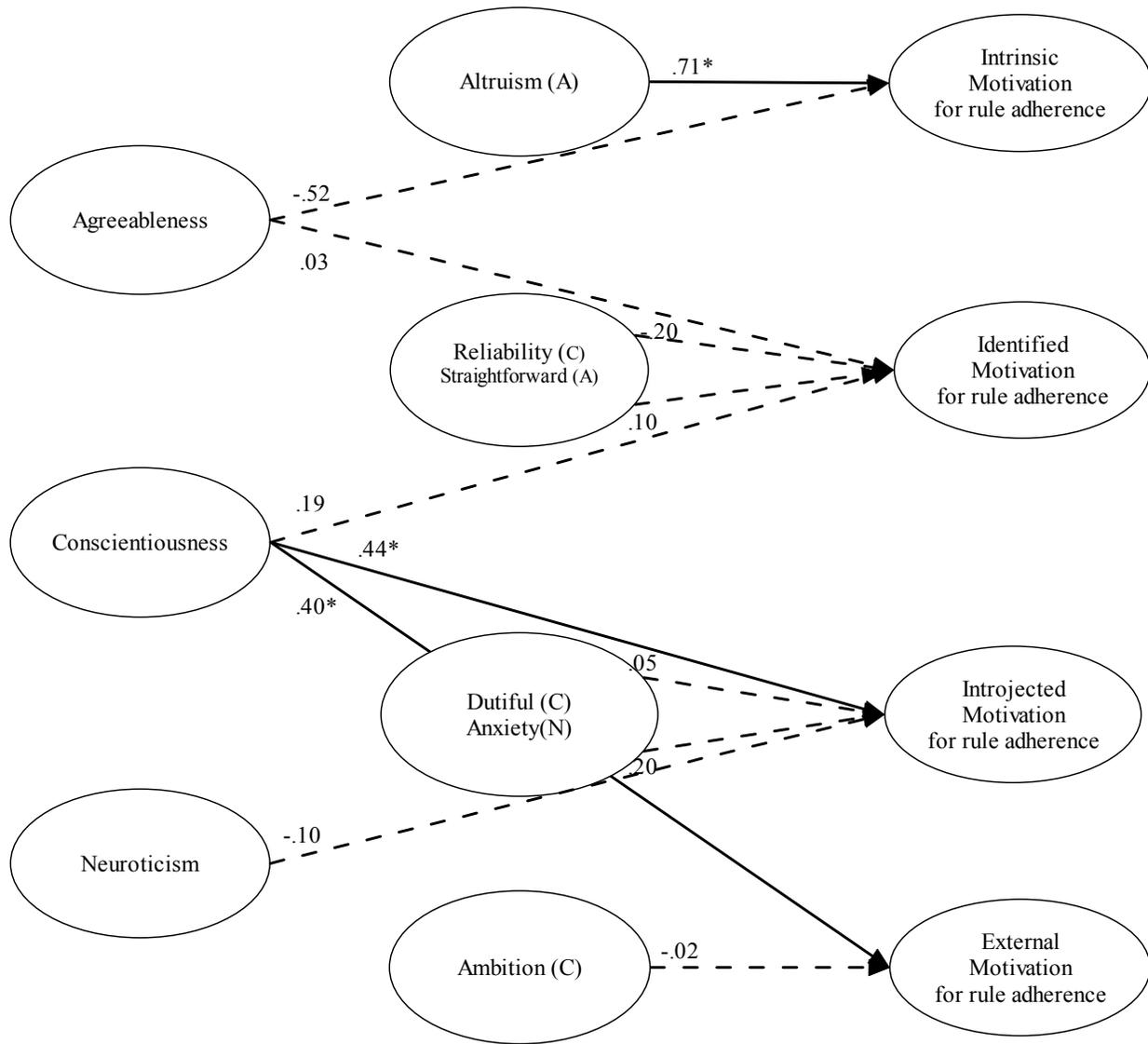


Figure 4-4. Structural equation model used to test hypotheses 6-9. Each narrow trait has a letter beside it. That letter corresponds to the broad trait that subsumes that narrow trait. C represents conscientiousness, A represents agreeableness, and N represents neuroticism. \*  $p < .05$ , two-tailed.

## CHAPTER 5 DISCUSSION

Although research has shown that employee perceptions of the degree to which managers adhere to procedural, distributive, interpersonal, and informational justice rules explains variance in employee attitudes and behaviors, a key question remains unexplored: why do managers adhere to those justice rules in the first place? The purpose of this dissertation was twofold. First, I used self-determination theory to identify four different reasons why managers might adhere to justice rules. Clearly not all managers adhere to justice rules for the same reasons. Thus, it is possible that whereas some managers may genuinely want to adhere to justice rules for its own sake, it is likely that other managers do so as a means to other ends. The second purpose was to identify managerial traits, taken from narrow facets of the Big Five, which predict managerial motivation for justice rule adherence and employee justice perceptions.

What stood out most from this study were the effects of personality on justice rule adherence, none of which were same source. Specifically, I found that the narrow traits of conscientiousness, trait reliability and dutifulness (Goldberg, 1990; Saucier & Ostendorf, 1999), were positively related to interpersonal and informational justice. Recall that interpersonal and informational justice capture the rules outlined by Bies and Moag (1986), with interpersonal justice referring specifically to the respect and propriety rules while informational justice consists of the truthfulness and justification components. Thus, managers described as reliable and dependable, as well as punctual and responsible, were also seen as more respectful and truthful. Individuals high on trait reliability are more likely to adhere to social norms and conventions, thus explaining their propensity to adhere to the respect and propriety rules of interpersonal and the truthfulness rule of informational justice. Similarly, it is likely that dutiful

individuals regard low interpersonal and informational justice as unethical; therefore they should be more likely treat employees with respect, propriety, and sincerity.

Conscientiousness also predicted procedural, interpersonal, and informational justice. This is consistent with the usual conceptualization of conscientiousness, which consists of competence, orderliness, and reliability (Costa & McCrae, 1992; Goldberg, 1990; Saucier & Ostendorf, 1999). Thus, managers seen by their employees as efficient were also said to be more likely to adhere to procedural justice rules, as conceptualized by Leventhal (1980). These rules include consistency, accuracy, representativeness, ethicality, bias suppression, and correctability (Leventhal, 1980). One way conscientiousness might positively affect procedural justice is through detailed record keeping, making it easier for them to adhere to the accuracy rule. Conscientious supervisors were also more likely to adhere to interpersonal and informational justice rules. Therefore, managers described as orderly and capable by their coworkers were also seen by their employees as more respectful and truthful. One explanation for this effect is that conscientious supervisors are likely to feel that adhering to interpersonal and informational justice rules by treating employees with respect and sincerity is one of the many obligations of a good supervisor.

Altruism and straightforwardness were positively related to interpersonal and informational justice. Thus, managers described as giving and sincere were also described as adhering to the respect and truthfulness rules of interpersonal and informational justice. This is consistent with Costa and McCrae's (1992) conceptualization of altruism, described by adjectives such as charitable, thoughtful, unselfish, and generous, as well as their conceptualization of straightforwardness, described as a propensity to be sincere, frank, and ingenuous. Altruistic supervisors are likely generous with the time they spend with their

employees, which should make it easier to adhere to interpersonal and informational justice rules. Supervisors high on trait straightforwardness, described as sincere and frank individuals, are likely to adhere to the respect rules of interpersonal justice and the truthfulness rule of informational justice. Similar effects were observed for agreeableness, the broad trait subsuming trait altruism and trait straightforwardness (Goldberg, 1990). These results are consistent with Goldberg's (1990) conceptualization of agreeableness, which includes adjective descriptors such as warm, courteous, and amicable. Specifically, agreeable supervisors are more likely to put themselves in their employee's shoes (i.e., empathize with them), and therefore should also be more likely to understand the importance of treating employees with sincerity and respect.

Yet another narrow trait predicting justice rule adherence was that of anxiety. Unlike the previous traits, anxiety demonstrated negative effects with both interpersonal and informational justice. Thus, managers described as nervous and tense were less likely to treat their employees with respect and less likely to provide truthful explanations. It is likely that anxious managers are preoccupied with their own issues, thus decreasing their ability to adhere to interpersonal and informational justice rules. Organ, Podsakoff, and MacKenzie (2006) have made similar arguments with respect to citizenship behaviors. Specifically, they speculated that emotionally stable (i.e., low neuroticism) individuals might possess more of the psychological stamina needed to engage in discretionary behaviors, because they would be less preoccupied with their own problems. Neuroticism, the broad trait subsuming anxiety, demonstrated similar effects with justice perceptions. This is consistent with Costa and McCrae's (1992) conceptualization of neuroticism, described as prone to experience depressive affect and more likely to experience insecurity and bitterness. Their increased propensity to experience negative emotional states should increase the probability of negative encounters with employees. For example, neurotic

supervisors might be more likely to disrespect their employees and fail to provide justifications for their actions.

It is also important to mention the effects of personality on motivation for justice rule adherence. Conscientiousness demonstrated positive effects with intrinsic, identified, introjected, and external motivation. Conscientious individuals are likely to understand just how important justice rule adherence is, and may agree with many reasons or motivations to do so. After all, these individuals are typically described as competent. These results are particularly interesting, given that the narrow traits making up conscientiousness were expected to predict three out of the four justice motivations. However, evaluating the narrow traits of conscientiousness as predictors provides additional insights into these relationships. While trait reliability was positively related to introjected motivation, dutifulness was unrelated to the motivation types. Perhaps the dependability and responsibility aspects of trait reliability lead these individuals to worry about appearing to behave in ways inconsistent with their self-concept. Interestingly, ambition was negatively related to identified, introjected, and external motivation. It is possible ambitious supervisors they lack motivation for justice rule adherence. Their efforts may be focused instead on their own task performance. Taken together, these results suggest that the conscientiousness effects are likely driven primarily by trait reliability rather than dutifulness.

Contrary to expectations, motivation for justice rule adherence was unrelated to employee justice perceptions. Based on SDT, I had expected that the four justice motivations would provide four different reasons for adhering to justice rule. Unexpectedly, none of the four motivations predicted justice in either the structural equation models or in a zero-order sense. This is surprising because the psychometric properties of my measure were good, and personality

did predict the justice motivations. A supplementary data collection effort can provide some insight into these non significant findings. Specifically, I collected data on managerial perceptions of their own justice rule adherence in an attempt to compare supervisor and employee perceptions. Although same source, using managerial perceptions of their own justice rule adherence does demonstrate some significant effects with justice motivation. Three of the four justice motivations significantly predicted procedural justice ( $r = .17$  for intrinsic,  $r = .35$  for identified, and  $r = .18$  for introjected motivation). In addition, identified motivation significantly predicted interpersonal justice ( $r = .37$ ). These data suggest that motivation for justice rule adherence does predict how fairly supervisors *think they themselves are*. However, there is surprisingly little correspondence between supervisor and employee perceptions of justice rule adherence. Specifically, perceptions of procedural justice are correlated a mere  $r = .14$ , as are informational justice perceptions. Interpersonal justice demonstrated somewhat higher agreement  $r = .19$ , but still a relatively small effect size.

It may therefore be that this disconnect when judging justice explains the lack of a relationship between justice motivation and employee perceptions of justice rule adherence. The lack of correspondence between supervisor and employee measures of justice is quite interesting, though not completely unexpected in hindsight. We can use the literature on leader-member exchange (LMX) to provide some context for the across-source correlations listed above. In general, the LMX literature has reported moderate convergence between supervisor and employee measures of LMX. Specifically, Gerstner and Day (1997) report a meta-analytic uncorrected correlation of .29 between employee and supervisor reported LMX. In addition, the literature on mentor-protégé relationships typically demonstrates moderate to weak agreement between mentors and protégés (Raabe & Beehr, 2003; Wanberg, Kammeyer-Mueller, &

Marchese, 2006). For example, Wanberg et al. (2006) found that mentors and protégés demonstrated surprisingly low agreement on the amount of psychosocial mentoring received by the protégé ( $r = .14$ ).

Aside from examining main effects, this dissertation also proposed structural distance as a moderator of the motivation to justice rule adherence effects. Unexpectedly, structural distance variables did not moderate the motivation and justice perception relationships. Opportunity to interact was not a significant moderator of any of the four effects, nor was spatial distance. However, opportunity to interact was directly related to employee perceptions of procedural, interpersonal, and informational justice. Thus, employees reporting that their managers are accessible were also more likely to report them as being procedurally, interpersonally, and informationally fair. According to Leventhal (1980), one method of adhering to the accuracy rule of procedural justice is keeping detailed, accurate records of pertinent information. In addition, adhering to the representativeness rule requires consideration of employees' basic concerns and values (Leventhal, 1980). Clearly adhering to these procedural justice rules is likely more difficult when interaction opportunities are low. For instance, the informal sort of record-keeping required by the accuracy rule is more difficult if supervisors and employees rarely interact. In addition, interaction opportunities should increase a supervisor's knowledge of his or her employee's basic concerns and values, thus making adherence to the representative rule easier.

Opportunity to interact also demonstrated positive direct effects on interpersonal and informational justice. Adhering to Bies and Moag's (1986) justification rule should become easier if opportunities to interact with employees increase, therefore providing additional opportunities to provide explanations. Previous research is consistent with this line of thinking, as structural distance may hinder a manager's ability to provide timely feedback (Howell et al.,

2005). In general, that frequency of communication decreases as structural distance between employees increases (Gullahorn, 1952). Consequently, fewer interaction opportunities can negatively affect interaction quality between a manager and his or her employees. Note, however, that these relationships were observed using same-source data. Thus, future research should examine these relationships using non same-source data, as these results offer a number of other avenues for future research.

First and foremost, future research should examine potential mediators of the opportunity to interact-justice effects, noted above. One potential explanation of this effect is that increased interaction opportunities are likely capable of providing employees with explanations for unfair treatment. To be specific, increased interaction likely exposes employees to their supervisor's daily interactions. This increased exposure may provide built in explanations for a manager's justice rule adherence, or lack thereof. While explanations may not always be beneficial, explanations can potentially improve perceptions of justice rule adherence. This is consistent with previous research, which suggests that explanations have beneficial effects on justice perceptions (for a review, see Bobocel & Zdaniuk, 2005). In fact, a recent meta-analysis found that explanations were positively related to both procedural and distributive justice, though interpersonal and informational justice were not examined (Shaw, Wild, & Colquitt, 2003). Conversely, low levels of interaction can be problematic for a different reason; in this case unfair instances are likely to loom large. In other words, while increased interactions may not change the likelihood of fair treatment, it may make it easier for employees to recount instances of fair treatment.

Future research might also integrate personality and opportunity to interact, as certain supervisors might be more inclined to seek out positions in which interaction with employees is

high. Previous theorizing is consistent with this proposition, in that personality, among other variables, predicts job choice. In fact, several theoretical works, including Schneider's attraction-selection-attrition model (Schneider, Smith, Taylor, & Fleenor, 1998), Holland's (1985) vocational choice model, and person-job fit (e.g., Judge & Cable, 1997), address the idea that people make work related choices, at least to some extent, based on their personalities. In addition, personality traits influence an individual's motivational choices (Mount et al., 2005). In other words, personality influences the extent to which certain tasks are valued, and therefore how much effort and persistence is exerted on these tasks (Mount et al., 2005). With respect to interaction opportunities, it is likely that certain personality traits may lead to increased effort directed towards creating these high employee interaction opportunities. Interestingly, my data suggest that supervisors rated by their coworkers as high on reliability, straightforwardness, dutifulness, as well as agreeableness had employee's report high levels of interaction opportunities. Previous research is consistent with these findings, as agreeableness has been linked with communion striving, defined as behaviors meant to obtain and develop personal relationships at work (Barrick et al., 2002). Thus, agreeable supervisors should be more likely to create high interaction opportunities, as a way to develop relationships with their employees.

### **Limitations**

This dissertation has some limitations that should be noted. For example, the sample size was limited for some of the tests of hypotheses. Although data was collected for over one hundred and sixty focal employees, significant attrition occurred due to the requirement of two additional data sources, that of the supervisor and a coworker. However, it is important to note that the unsupported hypotheses did not seem to be a function of low statistical power. The average regression coefficient for the motivating to justice rule adherence hypotheses was only .07. Thus, the unsupported hypotheses can be attributed to the very low effect sizes found.

Moreover, some of the effects were not in the predicted direction, which is clearly not a power issue.

Another important limitation to consider is that this study consisted of a correlational field study, which raises concerns about internal validity. In fact, Pedhazur and Schmelkin (1991) suggested that causation cannot be inferred without manipulating the independent variable. Similarly, Stone-Romero and Rosopa (2004) asserted that longitudinal or experimental data is needed to confirm mediation. While this is a valid concern for most correlational field studies, the use of personality as the independent variable diminishes this concern somewhat. According to most personality scholars, the Big Five personality traits tend to be thought of as heritable psychological tendencies (Loehlin, 1992; Loehlin, McCrae, Costa, & John, 1998). Consistent with this proposition, previous research has demonstrated that personality tends to remain consistent throughout time (Ilies & Judge, 2003; Roberts & DelVecchio, 2000). In fact, Costa and McCrae (1994) have demonstrated relatively strong test-retest correlations for adults, around .50 to .80. Thus, it is likely that separating the measures over a short span of time would not have altered the personality results in any meaningful way.

### **Practical Implications**

Despite these limitations, the results of this study offer a number of practical implications. To increase the likelihood of fair treatment, one can hire managers that are more likely to treat employees fairly. Specifically, these results suggest that conscientiousness, agreeableness, and neuroticism are traits that predict interpersonal and informational justice. The use of conscientiousness as a selection tool has more advantages than just increased fair treatment. Previous research has demonstrated that conscientiousness had a moderate positive effect on task performance (Barrick & Mount, 1991). In fact, many Fortune 1000 companies either currently use, or are planning on using, personality tests in the workplace (Piotrowski & Armstrong,

2006). Such tests could be used as selection tools in jobs where a significant supervisory component is present, or as placement tools when employees in technical positions are promoted into managerial roles.

These results also suggest that increasing interaction opportunities between employees and their supervisors might have beneficial effects on justice perceptions. Specifically, this study suggests that employees reporting increased interaction opportunities and supervisor accessibility also perceive their supervisors as more likely to adhere to procedural, interpersonal, informational, and distributive justice rules. This is an important finding because changes in the nature of work may make interaction opportunities rarer, negatively affecting justice perceptions. For example, organizations are increasingly offering flexible work arrangements and telecommuting opportunities (SHRM Foundation, 2001). These types of changes are likely to affect employee supervisor interactions by making face-to-face interactions more difficult. In a discussion of the changing nature of work, House (1995) echoed the importance of employee-supervisor interactions, by writing: “Interaction facilitation by supervisors will become increasingly important in the twenty-first century because of the enhanced complexity of work and proliferation of autonomous team-oriented work groups” (p. 434). Thus, when interaction opportunities are relatively rare, supervisors should be more aware of their adherence to justice rules.

In these situations, providing training on justice rule adherence might be particularly beneficial. Previous research has demonstrated that leaders can be trained successfully on procedural, interpersonal, and informational justice principles (Greenberg, 1999; Skarlicki & Latham, 1996). However, justice training, as currently conceptualized, is likely to have little effect if employee-supervisor interaction opportunities are rare. Therefore, it might make more

sense to focus justice training on justice behaviors that can be enacted, in distance environments, as well as face-to-face contexts. For example, supervisors might be taught to create opportunities to provide their employees with explanations over email or via voicemail, thus adhering to informational justice rules as conceptualized by Bies and Moag (1986).

## LIST OF REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic Press.
- Adams, J. S., & Freedman, S. (1976). Equity theory revisited: Comments and annotated bibliography. In L. Berkowitz & E. Walster (Eds.), *Advances in experimental social psychology* (pp. 43-90). New York: Academic Press.
- Alexander, S., & Ruderman, M. (1987). The role of procedural and distributive justice in organizational behavior. *Social Justice Research, 1*, 177-198.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1-18.
- Allport, G. W., & Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs, 47*, No. 211.
- Anderson, R., Manoogian, S. T., & Reznick, J. S. (1976). The undermining and enhancing of intrinsic motivation in preschool children. *Journal of Personality and Social Psychology, 34*, 915-922.
- Antonakis, J., & Atwater, L. (2002). Leader distance: A review and a proposed theory. *Leadership Quarterly, 13*, 673-704.
- Aristotle. (1759). *Hobbes translation of Aristotle art of rhetoric*. London: Gale Group.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Barrick, M. R., & Mount, M. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1-26.
- Barrick, M. R., & Mount, M. (1996). Effects of impression management and self-deception on the predictive validity of personality constructs. *Journal of Applied Psychology, 81*, 261-272.
- Barrick, M. R., Stewart, G. L., & Piotrowski, M. (2002). Personality and job performance: Tests of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology, 87*, 43-51.
- Bass, B. M. (1990). Bass and Stogdill's handbook of leadership: Theory, research, and managerial application, 3<sup>rd</sup> edition. New York: The Free Press.

- Beal, D. J., Weiss, H. M., Barros, E., & MacDermid, S. M. (2005). An episodic process model of affective influences on performance: *Journal of Applied Psychology*, *90*, 1054-1068.
- Bies, R. J. 2005. Are procedural and interactional justice conceptually distinct? In J. Greenberg & J. A. Colquitt (Eds.), *The handbook of organizational justice* (pp. 85-112). Mahwah, NJ: Erlbaum.
- Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiations in organizations* (Vol. 1, pp. 43-55). Greenwich, CT: JAI Press.
- Bies, R. J., & Shapiro, D. L. (1988). Voice and justification: Their influence on procedural fairness judgments. *Academy of Management Journal*, *31*, 676-685.
- Bobocel, D. R., & Zdaniuk, A. (2005). How can explanations be used to foster organizational justice? In J. Greenberg & J. A. Colquitt (Eds.), *The handbook of organizational justice* (pp. 469-498). Mahwah, NJ: Erlbaum.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Thousand Oaks, CA: Sage.
- Cameron, K., Freeman, S., & Mishra, A. (1993). Downsizing and redesigning organizations. In G. Huber & W. Glick (Eds.), *Organizational change and redesign* (pp. 19-63). New York: Oxford University Press.
- Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analysis. *Review of Educational Research*, *64*, 363-423.
- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette, & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., pp. 687-732). Palo Alto, CA: Consulting Psychologists Press.
- Cattell, R. B. (1943). The description of personality: Basic traits resolved into clusters. *Journal of Abnormal and Social Psychology*, *38*, 476-507.
- Cattell, R. B. (1945). The principal trait clusters for describing personality. *Psychological Bulletin*, *42*, 129-169.
- Cattell, R. B. (1947). Confirmation and clarification of primary personality factors. *Psychometrika*, *12*, 197-220.
- Cattell, R. B., Eber, H. W., & Tatsuoka, M. M. (1976). *Handbook for the sixteen personality factor questionnaire (16PF)*. Champaign, IL: IPAT.

- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86, 287-321.
- Cohen-Charash, Y., & Spector, P. E. (2002). The role of justice in organizations: A meta-analysis: Erratum. *Organizational Behavior and Human Decision Processes*, 89, 1215.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425-445.
- Colquitt, J. A., Greenberg, J., & Zapata-Phelan, C. P. (2005). What is organizational justice? A historical overview. In J. Greenberg & J. A. Colquitt (Eds.), *The handbook of organizational justice* (pp. 3-56). Mahwah, NJ: Erlbaum.
- Colquitt, J. A., Scott, B. A., Judge, T. A., & Shaw, J. C. (2006). Justice and personality: Using integrative theories to derive moderators of justice effects. *Organizational Behavior and Human Decision Processes*, 99, 110-127.
- Conlon, D. E., Meyer, C. J., & Nowakowski, J. M. (2005). How does organizational justice affect performance, withdrawal, and counterproductive behavior? In J. Greenberg & J. A. Colquitt (Eds.), *The handbook of organizational justice* (pp. 3-56). Mahwah, NJ: Erlbaum.
- Costa, P. T., Jr., & McCrae, R. R. (1976). Age differences in personality structure: A cluster analytic approach. *Journal of Gerontology*, 31, 564-570.
- Costa, P. T., Jr., & McCrae, R. R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *The NEOPI-R: Revised NEO personality inventory and NEO five-factor inventory*. Lutz, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (1994). "Set like plaster?" Evidence for the stability of adult personality. In T. Heatherton & J. Weinberger (Eds.), *Can personality change?* (pp. 21-40). Washington, DC: American Psychological Association.
- Cronbach, L. J. (1960). *Essentials of psychological testing* (2<sup>nd</sup> edition). New York: Harper Row.

- Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations. Promotion and prevention in decision-making. *Organizational Behavior and Human Decision Processes*, 69, 117-132.
- de Charms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105-115.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum Press.
- Deci, E. L. (1980). *The psychology of self-determination*. Lanham, MD: Lexington Books.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627-668.
- Deci, E. L., & Moller, A. C. (2005). The concept of competence: A starting place for understanding intrinsic motivation and self-determined extrinsic motivation. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 579-597). New York: Guilford Publications.
- Deci, E. L., & Ryan, R. M. (1980). The empirical exploration of intrinsic motivational processes. *Advances in Experimental Social Psychology*, 13, 39-80.
- Deci, E. L., & Ryan, R. M. (1985a). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1985b). The general causality orientation scale: Self-determination in personality. *Journal of Research in Personality*, 19, 109-134.
- Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, 53, 1024-1037.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice. *Journal of Social Issues*, 31, 137-150.
- Digman, J. M., & Inouye, J. (1986). Further specification of the five robust factors of personality. *Journal of Personality and Social Psychology*, 50, 116-123.

- Earley, P. C., & Lind, E. A. (1987). Procedural justice and participation in task selection: The role of control in mediating justice judgments. *Journal of Personality and Social Psychology*, *52*, 1148-1160.
- Eisenberger, R., Pierce, W. D., & Cameron, J. (1999). Effects of reward on intrinsic motivation—Negative, neutral, and positive: Comment on Deci, Koestner, and Ryan (1999). *Psychological Bulletin*, *125*, 677-691.
- Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, *76*, 628-644.
- Erdheim, J., Wang, M., & Zickar, M. J. (2006). Linking the big five personality constructs to organizational commitment. *Personality and Individual Differences*, *41*, 959-970.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal and Social Psychology*, *44*, 329-344.
- Fiske, D. W. (1994). Two cheers for the big five! *Psychological Inquiry*, *5*, 123-124.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, *32*, 115-130.
- Folger, R., & Skarlicki, D. P. (1998). When tough times make tough bosses: Managerial distancing as a function of layoff blame. *Academy of Management Journal*, *41*, 79-87.
- Gagné, M., Forest, J., Batistelli, A., Van den Broeck, A., Vansteenkiste, M., Gilbert, M. H., Grenier, S., Aubé, C., & Morin, E. (2006). Validation of the motivation at work scale (MAWS) using self-determination theory. Unpublished manuscript, Concordia University.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*, 331-362.
- Galton, F. (1884). Measurement of character. *Fortnightly Review*, *36*, 179-185.
- Gerstner, C., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, *82*, 827-844.
- Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 2, pp. 141-165). Beverly Hills, CA: Sage.

- Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, *59*, 1216-1229.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, *48*, 26-34.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality*, *40*, 84-96.
- Greenberg, J. (1982). Approaching equity and avoiding inequity in groups and organizations. In J. Greenberg & R. L. Cohen (Eds.), *Equity and justice in social behavior* (pp. 389-435). New York: Academic Press.
- Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. *Journal of Applied Psychology*, *71*, 340-342.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, *12*, 9-22.
- Greenberg, J. (1988). Cultivating an image of justice: Looking fair on the job. *Academy of Management Executive*, *11*, 155-157.
- Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: The hidden cost of paycuts. *Journal of Applied Psychology*, *75*, 561-568.
- Greenberg, J. (1993a). The social side of fairness: Interpersonal and informational classes of organizational justice. In R. Cropanzano (Ed.), *Justice in the workplace: Approaching fairness in human resource management* (pp. 79-103). Hillsdale, NJ: Erlbaum.
- Greenberg, J. (1993b). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, *54*, 81-103.
- Greenberg, J. & Cohen, R. L. (1982). Why justice? Normative and instrumental interpretations. In J. Greenberg & R. L. Cohen (Eds.), *Equity and justice in social behavior* (pp. 437-469). New York: Academic Press.
- Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, *52*, 890-898.
- Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the assessment of situational intrinsic and extrinsic motivation: The situational motivation scale (SIMS). *Motivation and Emotion*, *24*, 175-213.

- Gullahorn, J. T. (1952). Distance and friendship as factors in the gross interaction matrix. *Sociometry*, *15*, 123-134.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hinkin, T. R., & Tracey, J. B. (1999). An analysis of variance approach to content validation. *Organizational Research Methods*, *2*, 175-186.
- Hofstee, W. K. B., de Raad, B., & Goldberg, L. R. (1992). Integration of the big five and circumplex approaches to trait structure. *Journal of Personality and Social Psychology*, *63*, 146-16.
- Hogan, R. (2004). Personality psychology for organizational researchers. In B. Schneider & D. B. Smith (Eds.), *Personality and Organizations* (pp. 3-21). Mahwah, NJ: Erlbaum.
- Hogan, J., & Roberts, B. W. (1996). Issues and non-issues in the fidelity-bandwidth trade-off. *Journal of Organizational Behavior*, *17*, 627-637.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments*. Odessa, FL: Psychological Assessment Resources.
- Homans, G. C. (1961). *Social behaviour: Its elementary forms*. London: Routledge & Kegan Paul.
- House, R. J. (1995). Leadership in the twenty-first century: A speculative inquiry. In A. Howard (Ed.), *The changing nature of work* (pp. 411-450). San Francisco: Jossey-Bass.
- Howell, J. M., & Hall-Merenda, K. M. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, *84*, 680-694.
- Howell, J. M., Neufeld, D. J., & Avolio, B. J. (2005). Examining the relationship of leadership and physical distance with business unit performance. *Leadership Quarterly*, *16*, 273-285.
- Ilardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, *23*, 1789-1805.
- Ilies, R., & Judge, T. A. (2003). On the heritability of job satisfaction: The mediating role of personality. *Journal of Applied Psychology*, *88*, 750-759.
- Jackson, C. L., Colquitt, J. A., Wesson, M. J., & Zapata-Phelan, C. P. (2006). Psychological collectivism: A measurement validation and linkage to group member performance. *Journal of Applied Psychology*, *91*, 884-899.

- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory – Versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.
- John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin & O.P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp: 102-137). New York: Guilford.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8 user's reference guide*. Mooresville, IN: Scientific Software, Inc.
- Judge, T. A., & Cable, D. M. (1997). Applicant personality, organizational culture, and organization attraction. *Personnel Psychology*, *50*, 359-394.
- Judge, T. A., & Ferris, G. R. (1993). Social context of performance evaluation decisions. *Academy of Management Journal*, *36*, 80-105.
- Kahneman, D. (1973). *Attention and effort*. New Jersey: Prentice Hall.
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. D. Dunnette, & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., pp. 75-170). Palo Alto, CA: Consulting Psychologists Press.
- Kasser, T., & Ryan, R. M. (1999). The relation of psychological needs for autonomy and relatedness to vitality, well-being, and mortality in a nursing home. *Journal of Applied Social Psychology*, *29*, 935-954.
- Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, *2*, 51-60.
- Kelman, H. C. (1961). Process of opinion change. *Public Information Quarterly*, *25*, 57-78.
- Kelman, H. C. (1973). Violence without moral restraint: Reflections on the dehumanization of victims and victimizer. *Journal of Social Issues*, *29*, 25-61.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, *22*, 375-403.
- Klauss, R., & Bass, B. M. (1982). *Interpersonal communication in organizations*. New York: Academic Press.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Koester, R., Losier, G. F., Vallerand, R. J., & Carducci, D. (1996). Identified and introjected forms of political internalization: Extending self-determination theory. *Journal of Personality and Social Psychology*, *70*, 1025-1036.

- Kohlberg, L. (1969). State and sequence: The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory* (pp. 347-480). Chicago: Rand McNally.
- Korsgaard, M. A., Roberson, L., & Rymph, R. D. (1998). What motivates fairness? The role of subordinate assertive behavior on managers' interactional fairness. *Journal of Applied Psychology, 83*, 731-744.
- Lepper, M. R., & Greene, D. (1975). Turning play into work: effects of adult surveillance and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology, 31*, 479-486.
- Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In L. Berkowitz & W. Walster (Eds.), *Advances in experimental social psychology* (Vol. 9, pp. 91-131). New York: Academic Press.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. Gergen, M. Greenberg, and R. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum Press.
- Loehlin, J. C. (1992). *Genes and environment in personality development*. Newbury Park, CA: Sage.
- Loehlin, J. C., McCrae, R. R., Costa, P. T., & John, O. P. (1998). Heritabilities of common and measure-specific components of the Big Five personality factors. *Journal of Research in Personality, 32*, 431-453.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*, 83-104.
- Masterson, S. S., Byrne, Z. S., & Mao, H. (2005). Interpersonal and informational justice: Identifying the differential antecedents of interactional justice behaviors. In S. W. Gilliland, D. D. Steiner, D. P. Skarlicki, & Van den Bos, K. (Eds.), *What motivates fairness in organizations?* (pp. 79-103). Greenwich, CT: Information Age Publishing.
- Mayer, D. M., Nishii, L. H., & Schneider, B. (2007). The precursors and products of justice climates: Group leader antecedents and employee attitudinal consequences. *Personnel Psychology, 60*, 929-963.
- McCrae, R. R., & Costa, P. T., Jr. (1985). Updating Norman's "adequate taxonomy": Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology, 49*, 710-721.

- McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*, 81-90.
- McCrae, R. R., & Costa, P. T., Jr (1996). Toward a new generation of personality theories: Theoretical contexts for the five-factor model. In J. S. Wiggins (Ed.), *The five factor model of personality: Theoretical perspectives* (pp. 51-87). New York: Guilford.
- McCrae, R. R., & Costa, P. T., Jr. (1999). A five-factor theory of personality. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139–153). New York: Guilford Press.
- McCrae, R. R., Costa, P. T., Jr, & Martin, T. A. (2005). The NEO-PI-3: A more readable revised NEO personality inventory. *Journal of Personality Assessment*, *84*, 261-270.
- Meyer, J. P., & Allen, N. J. (1984). Testing the “side-bet theory” of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, *69*, 372-378.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behavior: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, *76*, 845-855.
- Mount, M. K., Barrick, M. R., Scullen, S. M., & Rounds, J. (2005). Higher order dimensions of the big five personality traits and the big six vocational interest types. *Personnel Psychology*, *58*, 447-478.
- Mowday, R. T. (1979). Equity theory predictions of behavior in organizations. In R. M. Steers & L. W. Porter (Eds.), *Motivation and work behavior* (pp. 53-71). New York: Academic Press.
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and the depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, *126*, 247-259.
- Napier, B. J., & Ferris, G. R. (1993). Distance in organizations. *Human Resource Management Review*, *3*, 321-357.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, *66*, 574-583.
- Norman, W. T. (1967). *2800 personality trait descriptors: Normative operating characteristics for a university population*. Ann Arbor, MI: Department of Psychology, University of Michigan.
- Ones, D. S., & Viswesvaran, C. (1996). Bandwidth-fidelity dilemma in personality measurement for personnel selection. *Journal of Organizational Behavior*, *17*, 609-626.

- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Beverly Hills, CA: Sage.
- Patient, D. L., & Skarlicki, D. P. (2005). Why managers don't always do the right thing when delivering bad news: The role of empathy, self-esteem, and moral development in interactional fairness. In S. W. Gilliland, D. D. Steiner, D. P. Skarlicki, & Van den Bos, K. (Eds.), *What motivates fairness in organizations?* (pp. 149-178). Greenwich, CT: Information Age Publishing.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. Mahwah, NJ: Erlbaum.
- Piotrowski, C., & Armstrong, T. (2006). Current recruitment and selection practices: A national survey of fortune 1000 firms. *North American Journal of Psychology*, 8, 489-496.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method bias in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward and punishment behaviors: Fact or fiction? *Organizational Behavior and Human Performance*, 34, 21-63.
- Raabe, B., & Beehr, T. A. (2003). Formal mentoring versus supervisor and coworker relationships: Differences in perceptions and impact. *Journal of Organizational Behavior*, 24, 271-293.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, 126, 3-25.
- Ross, M. (1975). Salience of reward and intrinsic motivation. *Journal of Personality and Social Psychology*, 32, 245-254.
- Ross, M., Karniol, R., & Rothstein, M. (1976). Reward contingency and intrinsic motivation in children: A test of the delay of gratification hypothesis. *Journal of Personality and Social Psychology*, 33, 442-447.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 36, 397-427.

- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, *57*, 749-761.
- Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An organismic dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.) *Handbook of self-determination research* (pp. 3-33). New York: University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will? *Journal of Personality*, *74*, 1557-1585.
- Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality and Social Psychology*, *65*, 586-596.
- Saucier, G., & Ostendorf, F. (1999). Hierarchical subcomponents of the big five personality factors: A cross-language replication. *Journal of Personality and Social Psychology*, *76*, 613-627.
- Schneider, R. J., Hough, L. M., & Dunnette, M. D. (1996). Broad-sided by broad traits: How to sink science in five dimensions or less. *Journal of Organizational Behavior*, *17*, 639-655.
- Scott, B. A., & Colquitt, J. A. (2007). Are organizational justice effects bounded by individual differences? *Group and Organization Management*, *32*, 290-325.
- Scott, B. A., Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Justice as a dependent variable: Subordinate charisma as a predictor of interpersonal and informational justice perceptions. *Journal of Applied Psychology*, *92*, 1597-1609.
- Schneider, B., Smith, D. B., Taylor, S., & Fleenor, J. (1998). Personality and organizations: A test of the homogeneity of personality hypothesis. *Journal of Applied Psychology*, *83*, 462-470.
- Sheldon, K. M., & Elliot, A. J. (1998). Not all personal goals are personal: Comparing autonomous and controlled reasons as predictors of effort and attainment. *Personality and Social Psychology Bulletin*, *24*, 546-557.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, *76*, 482-497.
- Sheldon, K. M., Turban, D. B., Brown, K. G., Barrick, M. R., & Judge, T. A. (2003). Applying self-determination theory to organizational research. In J. J. Martocchio & G. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 22, pp. 357-393). Boston, MA: Elsevier.

- Sheppard, B. H., Lewicki, R. J., & Minton, J. W. (1992). *Organizational justice: The search for fairness in the workplace*. New York: Lexington Books.
- SHRM Foundation. (2001). *SHRM 2001 benefits survey*. Society for Human Resource Management.
- Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal*, *42*, 100-108.
- Skarlicki, D. P., & Latham, G. P. (1996). Increasing citizenship behavior within a labor union: A test of organizational justice theory. *Journal of Applied Psychology*, *81*, 161-169.
- Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.
- Staub, E. (1978). *Positive social behavior and morality: Social and personal influences* (Vol. 1). New York: Academic Press.
- Stone-Romero, E. F., & Rosopa, P. J. (2004). Inference problems with hierarchical multiple regression-based tests of mediating effects. In J. Martocchio (Ed.), *Research in personnel and human resources management* (Vol. 23, pp. 249-290). Oxford, UK: Elsevier.
- Shaw, J. C. Wild, E., & Colquitt, J. A. (2003). To justify or excuse? A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, *88*, 444-458.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Thibaut, J., & Walker, L. (1978). A theory of procedure. *California Law Review*, *66*, 541-566.
- Thurstone, L. L. (1934). The vectors of the mind. *Psychological Review*, *41*, 1-32.
- Tupes, E. C., & Christal, R. E. (1961). Recurrent personality factors based on trait ratings (Technical Report No. ASD-TR-61-97). Lackland Air Force Base, TX: US. Air Force.
- Tyler, T. R., & Caine, A. (1981). The influence of outcomes and procedures on satisfaction with formal leaders. *Journal of Personality and Social Psychology*, *41*, 642-655.
- Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in experimental social psychology*, *29*, 271-360.
- Walker, L., LaTour, S., Lind, E. A., & Thibaut, J. (1974). Reactions of participants and observers to modes of adjudication. *Journal of Applied Social Psychology*, *4*, 295-310.
- Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior*, *69*, 410-423.

Williams, G. C., Grow, V. M., Freedman, Z. R., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss management. *Journal of Personality and Social Psychology*, *70*, 115-126.

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