

Disentangling Contributions of Process Elements to the Fair Process Effect: A Policy-Capturing
Approach

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Dissertation submitted to the faculty of
Virginia Polytechnic Institute and State University

In partial fulfillment of the requirements for the degree of
Doctor of Philosophy

In

Industrial/Organizational Psychology

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May 5, 2003

Blacksburg, VA

Keywords: Organizational Justice, Fair process effect

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(ABSTRACT)

Recent research on organizational justice suggests 3 elements of process-related justice: procedural, interpersonal, and informational justice. Early research on the fair process effect indicates that fair procedures in general can help to ameliorate the effects of negative outcomes. This study examined the relative importance of each specific process element in accounting for the fair process effect. In addition, this study examined whether there are substitutable effects among the process elements such that high fairness on one element substitutes for low fairness on another element. Administrative Assistants working at a university read 48 hypothetical profiles describing a supervisor's procedural, interpersonal and informational justice behaviors in handling a negative job-related outcome. Administrative Assistants provided overall judgments of the fairness of the situation. The policy capturing analysis indicated that the weights given to the fairness cues varied somewhat across individuals. Hierarchical cluster analysis indicated that participants' fairness policies could be grouped into 3 homogenous clusters: two "main effects clusters" and an "interaction cluster." The first main effects cluster equally weighted procedural, interpersonal and informational justice in their overall fairness evaluations. The second main effects cluster favored procedural justice over the other two forms of justice. Finally, participants in the interaction cluster utilized the three two-way interactions between the forms of justice. Between-subject analyses indicated that the available demographic and background variables were not related to the judges' policies. Research and practical implications are discussed.

ACKNOWLEDGEMENTS

I extend my deepest thanks to Neil Hauenstein, my advisor for nearly the past five years. When I look back to my first year in the program, I am truly amazed at all I have learned. The knowledge I have gained is a direct result of the countless hours Neil has spent working with me. In addition to molding me into a scholar of I/O psychology, Neil has helped me to increase my tolerance for ambiguity. As much as I would like to see everything as black and white, Neil has helped me to realize that more often the answers lie somewhere in the shades of gray. Thank you Neil for always making time for me, and for making me feel like a priority.

I would like to thank Roseanne Foti who has served on my thesis, prelim, and dissertation committees. Roseanne has been a valuable committee member and has always given much thought and consideration to the feedback she has given me. Moreover, Roseanne has been a role model in terms of how to successfully manage the work-family balance, an issue that grows daily in importance to me as I am quickly approaching motherhood.

I would like to thank John Donovan who has also served on my thesis, prelim, and dissertation committees. I often find myself remarking to others how fortunate the I/O program is to have John as one of its faculty members. John and I both started the program in the fall of 1998. John was not much older than I, and in several cases was younger than other graduate students. Despite his similarity in age with his students, from day one John was able to establish himself as someone from whom we could all learn a great deal. And he was able to accomplish this in a very unassuming and humble manner—qualities that I've come to recognize as being characteristic of John's personality in general. I have learned a great deal about I/O psychology from John, but I will most fondly remember the times we spent socializing outside the walls of Derring Hall.

I extend my thanks to Kevin Carlson who has served on my prelim and dissertation committees. In the fall of my third year, I took a human resource seminar from Kevin in the management department. It turned out to be one of the best classes I took as a graduate student at Virginia Tech. Since then, I have been singing his praises to anyone who will listen. As a result, I am probably part of the reason why Kevin has been asked to sit on so many committees of students in the I/O program. I am truly impressed by the passion and dedication with which Kevin approaches his work, and I am ever grateful for the painstakingly detailed feedback that Kevin has given me on my research.

I also extend my gratitude to John Muffo for serving on my dissertation committee. More importantly, I am most grateful to John for the opportunity to work as a graduate assistant for him in the Academic Assessment Program. If not for this assistantship, I would have had a much more difficult journey in getting to place where I am today. I also appreciate all the advice that John has given me over the years. I feel better equipped to handle a job in the "real world" after having worked for him.

On a more personal note, I would like to thank my family for their support. I thank my mother, Sue Grace, who has provided a role model of competence and success. From your example I have learned that I can accomplish anything that I set my mind to. I thank my father, Ken Buuck, for always being there for me with your loving and kind words of encouragement and pride. I can think of no safer place in the world than being enveloped in one of my dad's bear hugs. Ultimately, I thank my husband, Cooper Sinclair. I feel blessed to have you in my life. Through this whole process you have had a knack for knowing when to be a pleasant distraction, and when to back off and give me the time and space I needed to work on my research. Thank you for your constant understanding. And thank you for so much more—thank you for making me laugh and for teaching me not to take life or myself too seriously. Your passion and enthusiasm in even the smallest things have helped me to take more pleasure out of life. You are simply the best, and I am so excited to begin this next stage of our lives together as parents!

Table of Contents

Introduction	1
Review of Literature	3
Methods	21
Results	25
Discussion.....	36
References	44
Appendix A.....	53
Appendix B.....	54
Appendix C.....	55
Appendix D.....	68
Table 4.1	85
Table 4.2.....	86
Table 4.3.....	87
Table 4.4.....	88
Table 4.5.....	93
Table 4.6.....	95
Table 4.7.....	96
Figure 4.1.....	97
Figure 4.2.....	98
Figure 4.3.....	99
Figure 4.4.....	100
Vita.....	101

Chapter 1. Introduction

There is little question that “justice matters” (Cropanzano, Greenberg, & Schminke, 1998). Many believe that justice is a universal standard—the norms and values of which constitute a fundamental feature of human life (Van den Bos & Spruijt, 2002). According to Folger (1998), we care about justice because we have a basic respect for human dignity and worth. Not surprisingly, then, the issue of justice has received considerable attention from philosophers, sociologists, political scientists, economists, psychologists, and others. In fact, the philosopher Rawls (1971) referred to justice as “the first virtue of social institutions” (p. 3). In the domain of organizational research, Greenberg (1990) described justice as a basic requirement for the effective functioning of organizations. It should, therefore, come as no surprise that organizational justice is one of the most popularly researched areas in the field of organizational behavior (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 2000).

In a general sense, organizational justice is an area of psychological inquiry that focuses on perceptions of fairness in the workplace (Byrne & Cropanzano, 2001). Research on organizational justice began with the introduction of equity theory (Adams, 1965), which paved the way for multidimensional concepts of justice (Tornblom & Vermunt, 1999). Since the introduction of equity theory, research has revealed that justice perceptions are not only affected by distributions (i.e., outcomes), but are also affected by the fairness of procedures (Thibaut & Walker, 1975). Recently, the domain of what constitutes a fair process has been expanded to include interpersonal and informational elements (Colquitt, 2001; Colquitt, et al., 2001).

Research and theory have long suggested that the “forms” of justice interact with one another, but traditionally, the statistical interactive combinations have only been with procedural X outcome effects (e.g., Daly & Geyer, 1995; Greenberg, 1987). The robust interaction between procedures and outcomes has led to the notion of the *fair process effect*—the finding that fair procedures mitigate the effects of negative outcomes (Folger, 1987). Subsequent research has also indicated that fairness in interpersonal and informational factors can likewise soften the effects of negative outcomes (e.g., Skarlicki & Folger, 1997; Williams, 1999). While such findings are an important contribution to the justice literature, these findings reveal little about the relative importance people place on the different forms of justice. Left unexplained is the relative importance of procedures, for example, in comparison to interpersonal and informational elements in accounting for the fair process effect. Thus, a question yet to be answered is what is the relative importance of procedural, interpersonal and informational elements in the formation of justice judgments? Put differently, to what extent should supervisors who must deliver negative outcomes offer the opportunity to voice opinions? Demonstrate interpersonal sensitivity? Provide adequate explanations for the procedures? In order to develop a deeper understanding of how overall perceptions of fairness are formed, the first purpose of this study is verify that procedural, interpersonal, and informational justice each contribute unique variance to fairness judgments, and also to investigate the relative contribution of each element to the fair process effect.

While it has long been pointed out that researchers should integrate processes and outcomes by studying their interactive effects (e.g., Folger, 1984; Greenberg, 1986; Sweeney & McFarlin, 1993), it has only been recently suggested that researchers should integrate the various

process elements by studying their interactive effects (Skarlicki & Folger, 1997). That is, rather than identifying which process element has the greater mitigating effect on negative outcomes, it is relevant to examine whether the process elements interact with one another. The preceding paragraph describes the fair process effect in terms of the main effects of process elements. However, in many cases the process elements may be inconsistent with one another. One element may be judged as fair (e.g., the supervisor gives employees a chance to voice their opinions), but another element may be judged as unfair (e.g., the supervisor scoffs at the employees' suggestions). Recognizing that certain element(s) of the process may be judged as fair, while other element(s) may be judged as unfair opens opportunities to study whether process elements are substitutable with one another. For example, do the process elements interact with one another such that fairness on one element substitutes for unfairness on another element? In this study, it will be argued that the strength of the fair process effect may depend on the profile or pattern (i.e., combination of the levels) of procedural, interpersonal, and informational justice. This has been described as, "an especially fertile area for new inquiry" (Cropanzano, Byrne, Bobocel, & Rupp, 2001, p. 198).

The present study employs a policy capturing methodology to investigate these questions. Policy capturing is an idiographic method designed to statistically describe the unique information processing strategies of individuals (Hobson & Gibson, 1983). This makes policy capturing especially well suited for the purpose of studying justice, because justice is phenomenological; that is, what is fair or unfair is determined by the individual (Cropanzano & Schminke, 2001). Furthermore, a policy capturing analysis permits an investigation of the relative importance of different cues (i.e., procedural, interpersonal, and informational elements), and whether information about the cues is combined using a simple additive model or by more complex configural processing.

In summary, given the objectives of this study and the issues raised above, the literature review that follows will (a) describe the proactive and reactive orientations to studying justice, (b) review the various forms of justice, (c) discuss the debate surrounding the factor structure of justice, (d) present an information processing approach to reconciling that debate, (e) discuss the interactive effects of justice elements, (f) offer theoretical explanations for those interactions, and (g) on the basis of the literature reviewed, summarize the specific hypotheses to be tested.

Chapter 2. Review of Literature

Approaches to Studying Organizational Justice

In an effort to organize research and theory surrounding organizational justice, Greenberg (1987) classified justice research as being either reactive or proactive in its orientation. As implied by its name, reactive research is devoted to understanding how individuals react to fair or unfair conditions, in terms of behavioral responses like citizenship, performance and withdrawal (Greenberg & Wiethoff, 2001). As such, individuals' behavioral reactions serve as the dependent variables in this type of research. A typical research question of the reactive orientation is: How do people respond to fair and unfair conditions? In contrast, proactive research is devoted to fostering perceptions of fairness. Instead of considering the consequences associated with certain conditions, this approach examines the way fairness is created. Thus, justice is treated as an independent variable in proactive research. A typical research question of the proactive orientation is: How can fair conditions be created? Accordingly, the manner in which researchers address the reactive-proactive distinction is an indication of the particular approach that guides their research (Greenberg & Wiethoff, 2001).

While the value of the reactive orientation is duly noted, the current study adopts a proactive orientation. With the arrival of new and different conceptualizations of justice, the history of research devoted to understanding what promotes fairness perceptions has been marked by increasing complexity. As a result, there is a need to clarify how the various forms of justice combine to create overall perceptions of fairness. Before addressing this question, an overview of the different forms of justice is needed.

Forms of Justice

Proactively speaking, distributive justice is created by following proper rules when making allocation decisions. For example, an equitable allocation rule is commonly used to create perceptions of distributive justice. The methods of fostering procedural justice tend to be more complex. In the sections that follow, the different forms of justice are reviewed, and the various "rules" for creating perceptions of fairness are discussed.

Distributive Justice

Distributive justice is often heralded as marking the beginning of organizational justice research. Distributive justice relates to the fairness of outcomes (Adams, 1965; Deutsch, 1975; Homans, 1961; Leventhal, 1976). Research on distributive justice was derived from Adams' (1965) equity theory. Adams, who elaborated on the justice theories of Homans (1961), proposed that individuals are primarily concerned with the fairness of outcomes as opposed to the absolute level of outcomes. Specifically, Adams suggested that individuals make cognitive evaluations of the difference between their contributions and their resultant outcomes, and then compare that ratio to that of a comparison other. If the comparison results in a balanced perspective (i.e., both parties receive appropriate outcomes for their respective inputs), then the outcome is considered fair. If the ratios are unbalanced, then the outcome is considered unfair. In the event of an inequitable outcome, individuals are theorized to adjust their own or their perception of the comparison other's actual or perceived inputs or outcomes to attain balance (Greenberg, 1984).

These reactions may be either behavioral (e.g., putting forth less effort) or psychological (e.g., altering perceptions of outcomes) (Walster, Walster, & Berscheid, 1978).

While Adam's equity rule has garnered the most research attention (Cropanzano & Schminke, 2001), other distribution rules have also been identified. For example, Leventhal (1976) proposed that outcomes could be distributed on the basis of need or equality. According to a need rule, distributive justice exists when one's outcomes are appropriate for one's needs, irrespective of one's inputs. Accordingly, the individual with the greatest need receives the greatest outcome. In contrast, according to an equality rule, distributive justice exists when one's outcomes are equivalent to those of the comparison other. As such, individuals receive the same outcome, regardless of their relative individual inputs or needs. Studies have found that different situations (e.g., team vs. individual contexts) can activate specific distribution rules (Deutsch, 1975; Mannix, Neale, & Northcraft, 1995). In spite of these differences, all three allocation rules have as their goal the achievement of fair outcomes.

By the early 1980s it became evident that distributive justice alone did not explain everything (Greenberg, 1990). Researchers (e.g., Heneman, 1985; Mahoney, 1983) began to raise questions about justice that were not adequately addressed by the prevailing distributive justice theories. For example, questions of how compensation systems were administered and what practices were followed for conducting performance appraisals prompted concerns about fairness that were more process-oriented. These observations of strong process fairness effects in real-world settings are what ignited the interest in procedural justice research (Greenberg, 1990).

Procedural Justice

Procedural justice refers most generally to how a distribution decision is made and implemented (Konovsky, 2000). Research on procedural justice originated in social psychological investigations of legal phenomena. Thibaut and Walker (1975) were interested in comparing legal procedures where disputants had no control over the presentation of evidence bearing on their case (i.e., low process control/low decision control as in the inquisitorial system) to legal procedures where disputants had control over the presentation of their arguments (i.e., high process control/low decision control as in the adversarial system). Their research indicated that the adversarial system was seen as fairer than the inquisitorial system. This, they determined, was because the adversarial system allowed the disputants process control or "voice." It appeared that disputants were willing to give up control in the decision stage as long as they retained control in the process stage. Additional support for the voice effect was subsequently found in both legal and non-legal settings. For example, Tyler and colleagues demonstrated greater perceived fairness of voice procedures over no-voice procedures in contexts involving citizens' encounters with police officers (Tyler & Folger, 1980), and in voters' evaluations of elected officials (Tyler, Rasinski, & McGraw, 1984). Similarly, organizational researchers found that perceptions of the fairness of performance evaluations were positively related to allowing ratees an opportunity to express their viewpoints (Landy, Barnes, & Murphy, 1978; Landy, Barnes-Farrell, & Cleveland, 1980). Furthermore, recent meta-analytic evidence indicates that voice (i.e., process control) explains 26% of the variance in perceptions of process-related fairness (Colquitt, et al., 2001).

While such research suggests that perceptions of justice are at least partly dependent on voice, Leventhal and colleagues identified additional structural characteristics of the procedure that also influence justice perceptions (Leventhal, Karuza, & Fry, 1980). Specifically, Leventhal explained that fair procedures should be:

- (1) *Consistent*: Procedures should be consistent across persons and across time
- (2) *Free from bias*: Procedures should be neutral and impartial
- (3) *Accurate*: Procedures should be based on valid facts, information, and opinions
- (4) *Correctable*: Procedures should include mechanisms for correcting poor decisions
- (5) *Ethical*: Procedures should be based on prevailing standards of ethics and morality
- (6) *Representative*: Procedures should consider the views and opinions of all affected parties

Lind and Tyler (1988) noted that the representation rule is analogous to process control; consequently, the Leventhal criteria have been said to subsume the notion of process control advanced by Thibaut and Walker. Research has generally indicated that people better accept their allocations to the extent that they are made using these criteria (e.g., Cropanzano & Greenberg, 1997; Greenberg, 1986). In fact, the meta-analysis by Colquitt and colleagues revealed that when controlling for voice, the Leventhal criteria explained an additional 21% of the variance in process-related fairness perceptions (Colquitt, et al., 2001).

Interactional Justice

In two seminal papers, Bies presented the concept of interactional justice (Bies & Moag, 1986; Bies, 1987). Bies and Moag defined interactional justice as people's concern with, "the quality of interpersonal treatment they receive during the enactment of organizational procedures" (Bies & Moag, 1986, p. 44). They state that while people are clearly concerned about the fairness of outcomes and the fairness of formal procedures, they are also concerned about the interpersonal treatment they receive during the process. Based on a study of expectations for interpersonal treatment during recruitment, Bies and Moag identified four criteria of interactional justice: respect (being polite rather than rude), propriety (refraining from asking improper questions or making prejudicial comments), truthfulness (being candid in communications rather than deceptive), and justification (providing adequate explanations for the decision). In its most recent explication, Bies (2001) identified several factors that indicate the absence of interactional justice. These include derogatory judgments (wrongful accusations, "bad mouthing" others, use of pejorative labels), deception (lies, broken promises), invasion of privacy (disclosure of confidences, asking improper questions, using "spies"), abusive words or actions (rudeness, public criticism, insults), and coercion (duress, "stress interviews"). Bies also provides evidence that violating any of these elements of interactional justice leads to decreased perceptions of fair treatment. Colquitt and colleague's (2001) meta-analysis indicates that interactional justice explains an additional 6% of the variance, over and above formal procedures (i.e., process control and Leventhal criteria), in perceptions of process-related fairness.

Interpersonal Justice and Informational Justice. Greenberg (1993a) collapsed Bies and Moag's (1986) four criteria of interactional justice into two factors. He referred to Bies and Moag's respect and propriety criteria as *interpersonal justice* and their truthfulness and justification criteria as *informational justice*. Greenberg (1993a) defined interpersonal justice as

demonstrating concern for individuals regarding their distributive outcomes, and informational justice as providing knowledge about procedures. More recently, others have adopted this same convention of splitting interactional justice into an interpersonal justice element and an informational justice element (e.g., Bell, Wiechmann, Ryan, Davis, Delbridge, & Wasson, 2001; Colquitt, 2001; Colquitt et al., 2001; Kernan & Hanges, 2002; Konovsky, 2000).

The Factor Structure of Justice

Initial organizational justice research modeled the forms of justice as orthogonal (c.f., Alexander & Ruderman, 1987; Folger & Konovsky, 1989; Sweeney & McFarlin, 1993). However, more recent research supports the presence of relations between the various forms of justice (e.g., Colquitt et al., 2001; Hauenstein, McGonigle & Flinder, 2001). This has led to considerable debate on the dimensionality of organizational justice. The various perspectives on the dimensionality of justice, and research supporting those perspectives are reviewed below.

Early research by Adams (1965) and Homans (1961) suggested that organizational justice was unidimensional, defined simply by one's perceptions of outcomes. This unidimensional model was quickly replaced by the arrival of procedural justice. Initial research comparing distributive and procedural justice indicated that the two forms of justice exhibited different relationships with different outcome variables. For example, Alexander and Ruderman (1987) demonstrated that procedural justice explained more variance in job satisfaction, evaluation of supervisor, conflict, and trust in management, whereas distributive justice explained more variance in turnover intention. Similarly, Folger and Konovsky (1989) found that procedural justice accounted for more unique variance in trust in supervisor and organizational commitment, while distributive justice accounted for more unique variance in satisfaction with pay. Findings such as these led to the endorsement of a two-dimensional distributive/procedural justice model.

The clarity of the two-factor model was blurred with the introduction of interactional justice. Bies and Moag (1986) argued that interactional justice should be treated as a separate justice construct. They argued that people distinguish between the fairness of outcomes, procedures, and interactions. Accordingly, they suggested that it was theoretically and empirically meaningful to accept a three-factor model of justice.

Soon after the introduction of interactional justice, a second school of thought began to downplay the distinction between procedural justice and interactional justice. Consistent with their relational model, Lind and Tyler (1988) maintained that procedural justice judgments inherently involve both structural and interactional elements, thus they advocated broadening the scope of procedural justice to include structural and interactional elements. Similarly, Tyler and Bies (1990) argued that the dominant view of procedural justice was too narrow because it emphasized the structural aspects of decision-making procedures but neglected the role of the decision-maker's interpersonal conduct. As a result, Tyler and Bies argued that interactional justice should be subsumed under the rubric of a broader conceptualization of procedural justice. Likewise, Greenberg (1990) argued that procedural justice should be expanded to include Bies and Moag's (1986) notion of interactional justice.

The notion that interactional justice is embedded in existing justice constructs has had an impact on the manner in which researchers have conceptualized the construct, particularly in regards to the conceptualization of procedural justice. For example, in an article outlining managers' responsibilities in implementing fair decision-making procedures, Folger and Bies (1989) made little distinction between structural and interactional elements of procedures. Furthermore, several conceptual reviews on organizational justice have treated procedural and interactional justice as structural and social manifestations of the same underlying construct (e.g., Brockner & Wiesenfeld, 1996; Cropanzano & Greenberg, 1997; Greenberg, 1990). Consequently, it is not surprising to find that researchers often operationalize procedural justice by measuring formal/structural justice (i.e., process control and/or Leventhal criteria) along with interactional justice (which encompasses Greenberg's notion of interpersonal and informational justice) in one combined measure (e.g., Brockner, Siegel, Daly & Martin, 1997; Brockner, Wiesenfeld, & Martin, 1995; Folger & Konovsky, 1989; Konovsky & Folger, 1991; Lee & Fahr, 1999; Mansour-Cole & Scott, 1998; Moorman, Blakely, & Niehoff, 1998; Moorman, Niehoff, & Organ, 1993; Skarlicki & Latham, 1996, 1997). As noted by Colquitt et al. (2001), the practice of merging procedural justice and interactional justice into one general construct makes it impossible to determine if the different elements have independent effects.

More recently, there have once again been attempts to highlight distinction the between interactional and procedural justice (e.g., Bies, 2001; Cohen-Charash & Spector, 2000). In a recent book chapter, Bies (2001) returned to his original position, maintaining that interactional justice is a separate form of justice. He cites research to demonstrate that: (a) people distinguish the fairness of formal procedures from the fairness of interactions, and (b) procedural justice and interactional justice affect different outcome variables. For example, Bies and Tripp (1996) surveyed MBA students about events that provoke thoughts of revenge; they reported events that were clearly distributive, procedural, and interactional in nature. Additionally, Barling and Phillips (1993) investigated the differential effects of distributive, procedural and interactional justice on three outcomes (withdrawal, trust in management, and affective commitment). The results revealed main effects of interactional justice on all three outcomes, whereas procedural justice only had a main effect on trust in management, and distributive justice did not significantly affect any of the outcome variables. In light of such empirical evidence, Bies (2001) concluded that it makes theoretical and empirical sense to treat interactional justice as a distinct form of justice.

Still, others endorse a four-factor model of justice; one that consists of a distributive justice factor, a procedural justice factor, and an interactional justice factor that is divided into an interpersonal factor and an informational factor (e.g., Bell, et al., 2001; Colquitt, 2001; Colquitt, et al., 2001; Greenberg, 1993a, 1993b; Kernan & Hanges, 2002; Konovsky, 2000). These researchers argue that separating interactional justice is warranted because interpersonal justice and informational justice have been demonstrated to exert independent effects. Greenberg (1993b), for example, demonstrated the independent effects of interpersonal justice and informational justice when he manipulated the two separately in a lab study in which participants were underpaid for their performance on a task. He found that they were less likely to steal money from the experimenter when levels of interpersonal justice were high rather than low ($d = .82$), and when levels of informational justice were high rather than low ($d = .59$). In fact, when both factors were high, theft rate was lowest, and when both factors were low, theft rate was

highest. More recently, Kernan and Hanges (2002) tested a model of survivor reactions to reorganization, and found that procedural, interpersonal, and informational justice had different correlates.

At the other extreme, some researchers have advocated adopting a monistic perspective of justice. Cropanzano and Ambrose (2001) explain that individuals may not always perceive a distinction between distributive, procedural, or interactional justice. They argue that regardless of whether events are labeled “distributions” or “processes,” both deal with allocations of economic and socio-emotional outcomes. Accordingly, they suggest that by explicitly considering economic and socio-emotional outcomes, the similarity between the justice types becomes more apparent.

The individual studies reviewed thus far provide conflicting evidence on the dimensionality of justice. This may be because effects in individual studies can be found as a result of methodological reasons, or on the basis of chance alone (Schmidt & Hunter, 1996). To address this concern and to bring clarification to the matter, two recent meta-analyses on the dimensionality of organizational justice have been conducted. These meta-analyses found support for different models. Cohen-Charash and Spector (2000) found support for a three-factor model of justice (i.e., distributive, procedural, and interactional). In contrast, Colquitt and colleagues (2001) found support for a four-factor model (i.e., one in which interactional justice is divided into interpersonal and informational justice).

The above reviews delineate the breadth of perspectives on the factor structure of justice. Unfortunately, these investigations have brought little clarity to the issue. Rather, the various investigations provide evidence to support virtually every factor model. If there is empirical evidence to support all of the different models, then which one is right? Which ones are wrong? It could be argued that none of the of the factor structures are “right,” and none are “wrong.” An explanation for this oxymoronic statement is that justice is a context-sensitive construct (Cropanzano & Greenberg, 1997; Greenberg, 1990; 1993a). Given that organizational justice is considered context-sensitive, some variability in its *observed* factor structure across contexts may be expected. Initial research indicates that this may be the case. McGonigle and Hauenstein (2000) reported factor analytic evidence that the observed dimensionality of organizational justice varies across work contexts. This suggests, for example, that a four-factor model may appropriately reflect how people conceptualize and dimensionalize justice under one set of circumstances, whereas a one-factor model may be more appropriate under a different set of circumstances. Consequently, rather than asking, “What is the true factor structure of justice?” the more appropriate question may be, “Under what circumstances is one observed factor structure more appropriate than another?”

Information Processing: Controlled vs. Automatic Processes

One issue that may impact the invoked factor structure of justice is the manner in which the justice information is processed by the person(s). Surprisingly, information processing is a topic that has been under researched by organizational justice researchers. A consideration of information processing strategies may reveal that the “opposing” factor structures are appropriate in different situations. Generally speaking, both cognitive and social psychologists maintain that

human judgments range from those that carefully and consciously evaluate all available information in order to make deliberate and effortful judgments, to those that involve less attention to details, less conscious decision-making, and a greater reliance on heuristics for making quick and efficient judgments (Shiffrin & Schneider, 1977). The former is referred to as controlled information processing and the latter as automatic information processing.

Controlled and automatic information processing are not hard-and-fast categories, but rather ends of a continuous spectrum (Shiffrin & Schneider, 1977). As such, it seems plausible that the various observed factor models discussed above may fall at different points on this continuum. For example, there are situations where cognitive resources are not available or are in short supply thereby causing individuals to make judgments automatically through the use of a more heuristic process (Lind, 2001). When individuals do not have the cognitive resources available to actively consider all pieces of information, they likely make judgments based on whatever information is most salient. In situations such as this, a unidimensional factor structure of justice may be more appropriate. In contrast, there are situations where information is presented in such a way that individuals have the time and the cognitive resources to direct controlled attention to all of the fairness cues. A multidimensional factor structure of justice may be more appropriate for these types of situations. Furthermore, one may expect relatively high intercorrelations among the justice elements under conditions of automatic information processing due to the lack of cognitive capacity for differentiating among elements. In contrast, substantially lower correlations may be expected among conditions of controlled information processing because individuals have the cognitive capacity to draw finer-grained distinctions among the justice elements.

While both perspectives offer potential insight into how people make justice judgments, the present study is designed in such a way that participants are directed to actively consider all available information before forming an overall justice judgment. Consequently, the design of this study is more likely to invoke controlled information processing where individuals have the cognitive capacity to make distinctions among the various justice elements. According to this line of reasoning, the four-factor model of justice is more appropriate in this context. As such, this study adopts a four-factor (i.e., distributive, procedural, interpersonal, and informational) perspective of organizational justice where the justice elements are expected to be less correlated.

Process X Outcome Interactions

There may be value in separating the forms of justice for another reason—research suggests that the forms of justice interact to affect individuals' justice perceptions and subsequent behaviors. In other words, justice main effects do not tell the whole story (Brockner & Wiesenfeld, 1996; Cropanzano & Greenberg, 1997). Early reviews of justice research (Lind & Tyler, 1988) pointed out that in the typical justice study, procedural justice and outcomes interact with one another. Brockner and Wiesenfeld (1996) offered a more detailed and complete reckoning of this interaction. They reviewed 45 studies that examined the interaction between procedural fairness and outcomes. The results of this review revealed strong support for their interaction (i.e., predicted interaction in 43 of the 45 samples).

Before describing the nature of this interaction a word is in order regarding the differing conceptualizations of outcomes. Outcomes can be described in terms of outcome *fairness* (i.e., distributive justice) and outcome *favorability/negativity* (i.e., the extent to which the individual is benefited by the outcome). In the past, justice researchers, including Brockner and Wiesenfeld (1996), have treated the two concepts as interchangeable (e.g., Cropanzano & Folger, 1991). Part of the reason for treating fairness and favorability as interchangeable is that the two overlap conceptually to a great extent; several studies have established strong correlations between individuals' perceptions of outcome fairness and outcome favorability (e.g., Greenberg, 1994; Tyler & Caine, 1981). Also, in their review, Brockner and Wiesenfeld found that the form of the interaction effect was identical regardless of whether the outcome variable referred to fairness or favorability. These findings proliferated the practice of treating the two as interchangeable. More recently, however, research has indicated that fairness judgments and favorability judgments do not always have the same effect (Van den Bos, Lind, Vermunt, & Wilke, 1997; Van den Bos, Wilke, Lind, & Vermunt, 1998). In order to avoid ambiguities, the present study deals only with outcome negativity, as opposed to outcome unfairness.

The form of the Process X Outcome interaction can be expressed in different ways. From one viewpoint, process fairness moderates the effects of outcomes such that when process fairness is low, outcomes exert stronger effects on overall justice perceptions. When process fairness is high, however, outcomes exert less of an impact on justice perceptions. Alternatively, it is equally valid to maintain that outcomes moderate the effects of process fairness such that when outcomes are negative, process fairness has stronger effects on justice perceptions. When outcomes are positive, however, process fairness has less of an impact on justice perceptions. Stated differently, processes and outcomes have substitutable effects such that people perceive fairness as long as either the process is fair or the outcome is favorable.

The Process X Outcome interaction has been replicated across a variety of contexts including studies of organizational downsizing (Brockner, Konovsky, Cooper-Schneider, Folger, Martin & Bies, 1994), drug testing (Cropanzano & Konovsky, 1995), police-citizen encounters (Tyler & Folger, 1980), and introductions of smoking ban policies (Greenberg, 1990), thereby leading Brockner and Wiesenfeld (1996) to conclude that the Process X Outcome interaction is a robust effect. In particular, considerably more support has been found for the mitigating effect of fair procedures on negative outcomes (i.e., the *fair process effect*) than for the mitigating effect of fair outcomes on unfair procedures (i.e., the *fair outcome effect*) (Lind & Tyler, 1988). Fair process effects have been found in laboratory experiments (e.g., Folger, Rosenfield, & Robinson, 1983; Greenberg, 1993b), field studies (e.g., Brockner, et al., 1994; Gopinath & Becker, 2000), scenario studies (e.g., Barling & Phillips, 1993), and internet-based survey studies (Kickul, Lester, & Finkl, 2002). In fact, justice researchers have described the fair process effect as “exceedingly robust” (Kulik & Clark, 1993, p. 290), “one of the most frequently replicated findings in social psychology,” (Van den Bos, Bruins, Wilke, & Dronkert, 1999, p. 324), and “one of the most important discoveries in justice research” (Van den Bos, Wilke, et al., 1998, p. 1494).

An illustration of the fair process effect can be found in Lind, Kanfer, and Earley (1990). In this experiment, the researchers manipulated whether participants were allowed an opportunity to voice their opinion about an outcome they would receive. They found that

participants who were allowed voice reacted more positively to a negative outcome than participants who were not allowed voice. Similarly, Magner, Welker, and Johnson (1996) examined the impact of voice and outcome negativity (defined as a poor performance evaluation) on intent to stay with the company and trust in the supervisor. After controlling for the main effects of voice and outcome negativity, they found that their interaction was significant for both intent to stay ($\beta = -.13$) and trust in supervisor ($\beta = -.11$). The interaction pattern was such that the negative relationship between negative outcomes and both intent to stay and trust in supervisor became less negative as the amount of voice increased. Findings such as this have led some researchers to argue that procedural information is more important when outcomes are negative (e.g., Lind & Tyler, 1988).

Despite the robustness of the fair process effect, a small group of studies have observed the opposite effect (e.g., Folger, 1977; Kulik & Clark, 1993). These studies suggest that under special circumstances, fair procedures may result in *less* satisfaction with negative outcomes than unfair procedures. This has been termed the *frustration effect* (Folger, 1977). Frustration effects have generally only been observed with research on self-attributions (e.g., self-esteem, self-efficacy, Gilliland, 1994). Because the frustration effect occurs infrequently and only under these certain circumstances (Kulik & Clark, 1993; Lind & Tyler, 1988), the present study focuses on the justice judgments involved with the more pervasive fair process effect. That is, this study investigates how a fair process helps to ameliorate the effects of a negative outcome.

Theoretical Explanations for the Interaction Effect

Two theories in particular have been explicitly designed to account for the interaction between process and outcomes: referent cognitions theory (Folger, 1986, 1987) and fairness heuristic theory (Lind, 1995, 2001; Van den Bos, Lind, & Wilke, 2001; Van den Bos, Lind, et al., 1997). In the section that follows, the two theories are reviewed. The similarity and differences between the theories are discussed, and the distinction between automatic vs. controlled information processing is revisited in an effort to explain the conditions under which a particular theoretical viewpoint may be more or less likely to account for the interaction.

Referent Cognitions Theory

A prominent explanation for the Process X Outcome interaction is offered by Folger's (1986, 1987) referent cognitions theory (RCT). Over time, different versions of RCT have been developed (Folger, 1993; Folger & Cropanzano, 1998; 2001; Folger & Kass, 2000), but all share an important core principle: RCT argues that individuals react to situations by creating mental representations of "what might have been." These mental representations, first termed "referent cognitions" but later referred to as "counterfactuals," can be derived from several sources, including simple speculation, past experiences, social comparisons, and normative standards. In particular, RCT suggests that individuals evaluate situations by reflecting on "what might have been" under different circumstances (Folger, 1986). One way individuals accomplish such a comparison is to cognitively simulate how the current situation might be different had fairer procedures been used. In particular, the theory predicts that perceptions of injustice are maximized when outcomes are negative and the procedures upon which the outcome is based are unfair. RCT suggests that individuals will contrast this situation to the more positive outcomes that they would have obtained had fairer procedures been used. On the other hand, RCT predicts

that when people perceive fair procedures, perceptions of injustice will be minimal (i.e., the fair process effect), because under such conditions it would be difficult for individuals to think of alternative fairer procedures that could have led to better outcomes. In other words, when procedures are fair—for example, when people have input into a decision—outcomes are more likely to be seen as justified. This provides one theoretical explanation for the fair process effect.

Fairness Heuristic Theory

Another prominent explanation for the Process X Outcome interaction is offered by fairness heuristic theory (Lind, 1995, 2001; Van den Bos, Lind, & Wilke, 2001; Van den Bos, Lind, et al., 1997). Fairness heuristic theory (FHT) proposes that individuals are frequently uncertain about a decision maker's trustworthiness in a given situation. Uncertainty about the trustworthiness of the decision maker leads people to question whether they are being exploited. This puts individuals in what Lind (2001) referred to as the *fundamental social dilemma*. As Lind (2001) pointed out, the fundamental social dilemma is so pervasive in any sort of social encounter that trying to resolve each manifestation of the dilemma would place crippling demands on any person's cognitive processing capacity. Thus, people routinely resolve the dilemma by relying on impressions of fairness as a heuristic device for making inferences about a decision maker's trustworthiness. Furthermore, FHT argues that once people have formed fairness judgments, perceived fairness acts as a heuristic for interpreting subsequent information. This makes search strategies more cognitively efficient (Van den Bos, Lind, et al., 1997).

The theory also predicts that to be functional as a heuristic, justice judgments will be formed quickly. Once formed, the justice judgment is rarely revised because the justice judgment would be of little use as a heuristic if it were constantly using cognitive resources to be revised and updated with new information. Consequently, new incoming information is reinterpreted and assimilated to be congruent with the existing fairness judgment. Therefore, the theory suggests that fairness judgments are more strongly influenced by information that is available first than by information that becomes available at a later point in time. This has implications for how we understand the Process X Outcome interaction.

Following from FHT, the reason the fair process effect has been found more often than the fair outcome effect is not necessarily because procedures are more potent than outcomes; rather, FHT argues that in forming fairness judgments people seize on the first available information, and oftentimes, process information precedes outcome information. This is one possible explanation why more support has been found for the fair process effect than for the fair outcome effect. According to this line of reasoning, if outcome information precedes process information, then support for the fair outcome effect should emerge. Van den Bos, Vermunt and Wilke (1997) tested this prediction by making outcome information available either before or after process information. They found, as predicted by FHT, that the first information, whether process or outcome, set the stage for the interpretation of subsequent information.

Reconciling the Two Theories

The previous section reviewed two different theoretical explanations for the Process X Outcome interaction. Support exists for each framework, thereby making it difficult to determine whether RCT or FHT offers the better explanation for the interaction effect. Choosing which theory offers the better explanation, however, may not be the best way to approach the issue.

Recall in the above discussion on the dimensionality of justice, rather than viewing the different factor structures of justice as opposing models, it was suggested that one particular observed factor model might be more applicable under certain circumstances whereas a different model might be more applicable under a different set of circumstances. In particular, it was argued that a unidimensional model of justice might be more applicable when individuals need to make judgments automatically due to a lack of time and/or cognitive resources. Conversely, it was argued that a multidimensional model might be more applicable when individuals have the time and the cognitive resources to engage in controlled and systematic processing of all available information. This same line of reasoning can be used to reconcile RCT and FHT.

As suggested by Cropanzano and colleagues (2001), because substantial cognitive effort is necessary to form referent cognitions, RCT may be more pertinent in contexts where people have the time and the cognitive resources to engage in controlled information processing. In contrast, by definition, heuristics require very little cognitive effort. Consequently, FHT may be more pertinent in contexts where people engage in automatic information processing. There is empirical evidence consistent with this notion. For example, Roch and colleagues found that individuals used a simple equality heuristic for allocating resources when their cognitive load was high. Conversely, individuals did not use the heuristic when their cognitive load was low (Roch, Lane, Samuelson, Allison, & Dent, 2000). Because the present study takes place in a relatively controlled situation where participants are given sufficient time, and are instructed to consider all available information before forming an overall justice judgment, the RCT-based explanation for the interaction effect is more pertinent for the purposes of this study.

RCT in the Present Study

Referent cognitions theory's original description of process-related factors emphasized the interaction of formal procedural justice (e.g., voice) with outcomes on fairness perceptions. More recently, Folger (1993) suggested that attributes of process fairness that do not *cause* outcomes but rather *accompany* them—for example, interactional justice facets such as whether individuals are treated with dignity and respect—may also interact with outcomes. This revision to RCT stresses that individuals expect to find more than fair structural procedures. They also expect to be treated in an interactionally fair manner. As in the original version of RCT, outcomes that are lower than easily imagined alternative outcomes are necessary, but not sufficient for individuals to perceive injustice. When negative outcomes are accompanied by improper conduct, recipients are more likely to experience injustice. According to Folger (1993), interactional justice (defined as interpersonal sensitivity) that fulfills the decision maker's moral obligation to treat people in an interpersonally fair manner dissociates them from the negative outcomes, thereby eliciting weaker perceptions of injustice. In summary, the revised version of RCT suggests that the presence of a fair process, more recently defined to include interactional justice, can mitigate the effects of negative outcomes.

In support of this revision to RCT, several studies have shown that outcomes interact with interactional justice to impact justice perceptions. Consistent with the usual interaction pattern, research indicates that the effects of negative outcomes are attenuated when interactional justice is high (Brockner, et al., 1994; Cropanzano & Konovsky, 1995; Greenberg, 1993b, 1994; Jones & Skarlicki, in press). For example, Jones and Skarlicki (in press) examined the interactive effects of outcomes and interactional justice (operationalized as interpersonal treatment) on

actual turnover and found that negative outcomes significantly predicted turnover when interactional justice was low ($\beta = -2.52$), but not when interactional justice was high ($\beta = .01$). The researchers concluded that perceptions of fair interpersonal treatment offset the deleterious effects of the negative outcomes. Other researchers have isolated informational justice to investigate whether it acts in the same manner as formal procedures and interpersonal treatment to mitigate the effects of negative outcomes (Brockner, DeWitt, Grover, & Reed, 1990; Greenberg, 1993b; Gopinath & Becker, 2000; Shapiro, Buttner, & Barry, 1994, study 1; Williams, 1999). Research suggests that it does; for example, Gopinath and Becker (2000) found that managerial communications that helped employees understand the events surrounding a divestiture increased perceptions of the fairness of layoffs ($r = .43$). Furthermore, Shapiro and colleagues found that receiving an adequate explanation, as opposed to an inadequate explanation, ameliorated the effects of a rejection decision received by job candidates ($d = 1.97$).

The above research indicates that, consistent with RCT-based interactions, formal procedures, interpersonal treatment and informational justice all act in a similar fashion to mitigate the effects of negative outcomes. While these findings contribute to the literature by demonstrating that all three elements enhance fairness perceptions, research has not considered all three elements simultaneously. To date, empirical studies on the fair process effect have typically investigated only one or two elements at a time (e.g., Greenberg, 1993b, 1994; Jones & Skarlicki, in press; Skarlicki & Folger, 1997), or have subsumed the elements under an overall process element (e.g., Tyler & Bies, 1990).

A fuller understanding of the fair process effect requires a simultaneous examination of procedural, interpersonal and informational elements. This is the first purpose of the present study. In particular, it is hypothesized that, under negative outcomes, high fairness on each process element will contribute unique variance to the elevation of overall fairness perceptions (Hypotheses 1-3). These results are expected because (a) these justice elements are based on considerable research, (b) past research has shown that each element contributes to the fair process effect, and (c) researchers recently commenting on organizational justice have noted the importance of each of these elements (Bell, et al., 2001; Colquitt, 2001; Colquitt et al., 2001; Greenberg, 1993a; Kernan & Hanges, 2002; Konovsky, 2000).

Research has also neglected to examine the relative importance of the three process elements in accounting for the fair process effect. Left unexplained is the relative importance of interpersonal treatment, for example, in comparison to the other elements. Thus, a question yet to be answered is: what is the relative importance of formal procedures, interpersonal treatment and informational justice? Put differently, to what extent should managers who must deliver bad news allow the affected parties to voice their concerns? To what extent should they demonstrate interpersonal sensitivity? To what extent should they provide information about the procedures? The present analysis recognizes that managers' may not always be able to devote a sufficient amount of time and energy to each of these elements. As such, managers may need to consider the relative degree of importance of the various process elements. Consequently, the second purpose of this study is to examine the relative importance of the process elements in accounting for the fair process effect.

Although there is no empirical research on the relative importance of the three factors, Vermunt, Van der Kloot, and Van der Meer (1993) posit that, irrespective of the circumstances, there is no justification for treating people rudely. Interpersonal insensitivity disrespects fundamental human dignity. As such, they argue that the intransigent character of the interpersonal criteria make them highly salient when they are not met. In contrast, principles about procedures and information do not seem as fundamental. Greenberg (2001) similarly argues that what makes rude behavior unfair is the fact that it violates widely accepted standards about appropriate behavior in a social setting. Folger and Skarlicki (1998) also believe that interpersonal injustice has the strongest effect on fairness judgments, although they offer a somewhat different reason for its potent effects. They argue that inferences about the intent of the decision maker are crucial to individuals' fairness perceptions in that if individuals perceive negative outcomes are intentional, then they are likely to experience greater injustice than if negative outcomes are perceived as unintentional. They maintain that interpersonal injustice provides the best source of such inferences. That is, perceived interpersonal injustice entails that the decision maker could and should have acted differently. Accordingly, they maintain that interpersonal injustice should have the most powerful impact on fairness perceptions.

Empirical research also indicates that violations of interpersonal justice have particularly strong effects on fairness perceptions. For example, Tyler (1994) found that the potential for a fair process effect varied with the extent to which people felt their voice had been heard. If people felt that their voice was seriously considered, they expressed tolerance even for highly negative outcomes. People who felt their voice was not given serious consideration, however, responded solely to outcome negativity. The interpersonal sensitivity indicated by sincere, attentive listening, therefore, proved crucial to the moderating effect of voice as a procedural element (Tyler, 1994). Similarly, Mikula, Petri, and Tanzer (1990) reported findings from a study in which laypersons were asked to sort descriptions of unjust events in terms of their similarity/dissimilarity. The first and most important dimension to emerge related to the way people were treated in interpersonal interactions.

Although interpersonal injustice leads to strong perceptions of unfairness because of its saliency, it is unlikely that interpersonal justice leads to strong perceptions of fairness. In other words, if individuals expect to be treated in an interpersonally just manner, as mandated by widely accepted moral standards of social interaction, then, its presence should do little to cushion the effects of negative outcomes. Accordingly, it is hypothesized that high interpersonal justice will have the weakest effect on elevating overall fairness perceptions in the face of negative outcomes (Hypothesis 4). Stated differently, high procedural and high informational justice will ameliorate the effects of negative outcomes to a greater extent than high interpersonal justice.

Interaction Effects Among Process Elements

The justice literature reviewed thus far indicates that procedural justice, interpersonal justice, and informational justice are independently associated with cushioning the effects of negative outcomes. Consequently, most theorists assume that the more fair the process elements, then the more favorable the outcome, and by extension the more negative the process elements, the more negative the outcome (Tornblom & Vermunt, 1999). In other words, most theorists

assume that the degree of outcome favorability is a linear function of the degree of process fairness—meaning that individuals combine information about process elements in a simple additive manner. Yet, decision-making research suggests that information is often integrated by using more complex configural cue processing (e.g., Brehmer, 1974; Hitt & Barr, 1989). Ogilvie and Schmitt (1979) stated that configural cue processing is often overlooked because the linear model has proven to be robust and parsimonious. However, they suggest that certain contextual factors can induce complex information processing. Having the time and the cognitive resources to engage in systematic information processing, as in the present study, may be a contextual factor that could induce more complex configural cue processing. Moreover, the notion of configural cue processing is consistent with RCT in that RCT posits that process elements and outcomes interact with one another. By extension, it seems likely that the process elements may also interactively affect justice perceptions. This line of reasoning is in need of empirical investigation.

While a considerable amount of research has investigated the interactive effects between processes and outcomes (see Brockner & Wiesenfeld, 1996 for a review), very little research has explored possible interactive effects between the different process elements. Lack of such research has prompted Tornbloom and Vermunt (1999) to comment that our knowledge about justice conceptions in the context of negative outcomes is not yet complete. Even more serious is the possibility that conceptual models where process interactions were not explored (e.g., Greenberg, 1990; Jones & Skarlicki, in press) may be inaccurate. If the process elements interact with one another, but are not investigated, then a significant error of omission has occurred because variance attributable to the process elements may have been left unexplained. Another possibility is that the conceptual models may have been misspecified, meaning that the significance of the main effects may have been due to the omitted interaction (Aiken & West, 1991). Thus, research that fails to explore possible interactions between process elements does not tell the whole story, and may be incorrect in its conclusions. Moreover, failure to consider interactions reduces the likelihood of obtaining general policies (i.e., common “clusters” of rater policies) because the potentially accountable interaction variance is assumed to be error variance (Nystedt & Murphy, 1979; Stumpf & London, 1981).

While little empirical research has been conducted on the interactive effects between process elements, there are a few notable exceptions. Greenberg (1993b) tested the interactive effects of interpersonal justice and informational justice on stealing behavior and found that their interaction was not significant ($w^2 = .00$); rather, the two process elements exerted independent and additive effects on stealing. Similarly, Barling and Philips (1993) found no support for an interaction between interactional justice and formal procedures on trust in management, withdrawal, or affective commitment.

In contrast, others have found support for interactions between process elements. Van Yperen and colleagues examined the joint effect of procedural and interactional justice on employee reactions to a negative outcome (an increase in job duties without an increase in pay) (Van Yperen, Hagedoorn, Zweers, & Postma, 2000; study 2). They found that procedural justice and interactional justice interacted such that employee reactions to the negative outcome were mitigated only when both were perceived to be high. When either procedural justice or interactional justice was perceived to be low, employees expressed a strong intent to quit.

Consequently, Van Yperen and colleagues' results are consistent with the notion that high procedural and high interactional justice are both necessary to offset the adverse effects of negative outcomes.

Skarlicki and Folger (1997) also examined the joint effect of procedural and interactional justice on employee reactions to a negative outcome. Like Van Yperen and colleagues, Skarlicki and Folger found support for a two-way interaction, but of a different form. They found that procedural justice and interactional justice act as "substitutes" for each other. They described a hypothetical supervisor and explain that as long as the supervisor demonstrates interactional justice to at least a moderate degree, then the need for formal procedural safeguards is diminished. However, if interactional justice drops below a certain level, then the fairness of the procedures becomes crucial in determining how employees interpret and react to negative outcomes. Analogously, as long as the supervisor's decisions are based on fair procedures, then low interactional justice has less of an impact on reactions to negative outcomes. They found support for this line of reasoning. In particular, they found that organizational retaliatory behavior (ORB) to pay inequity was highest when procedural and interactional justice were both low (simple regression slope = $-.38$), but that this effect was reduced when either procedural or interactional justice were high (simple regression slopes = $.21$ and $-.11$, respectively). In other words, they found that the two elements had "substitutable" effects, with either being sufficient to mitigate the adverse effects of the negative outcome.

The above studies provide evidence that models that neglect to explore interactions between process elements may be insufficient to adequately address how fairness perceptions are formed. Findings that support process interactions suggest that instead of attempting to determine which process element is the strongest contributor to the fair process effect, it may be more fruitful to consider how the process elements combine interactively. To date, research has not examined process interactions among formal procedural justice, interpersonal justice, and informational justice when all three elements are simultaneously examined within the same study. Furthermore, in the few studies that have examined interactions between process elements, their operationalizations of the process elements have overlapped with one another. For example, the operationalization of procedural justice in Barling and Phillips (1993) included elements of informational justice (i.e., explanation of the need for action). Likewise, Van Yperen et al.'s (2000) operationalization of procedural justice included elements of informational justice (i.e., explanation of the need for action), and their operationalization of interactional justice included elements of procedural justice (i.e., opportunity to voice concerns). Similarly, interactional justice in Skarlicki and Folger (1997) included both procedural elements (i.e., consideration of the affected parties' viewpoint) and informational elements (i.e., explanations). Colquitt et al. (2001) referred to this contamination of measures as "cross-pollination." They explain that failure to separate the purportedly distinct process elements is problematic because it leads to the inability to determine which process element or which combination of process elements have the stronger effect on fairness perceptions.

In summary, most justice research has neglected to consider the interactions among process elements, and the few studies that have investigated process interactions have: (1) yielded conflicting results, (2) neglected to examine all possible combinations of interactions among process elements, and (3) cross-pollinated their operationalizations of the process

elements. Nonetheless, researchers today are making recommendations that organizational decision makers can compensate for being low on certain process elements by being high on others (Colquitt, Noe, & Jackson, 2002; Vermunt & Steensma, 2001). Clearly, more research is needed before such definitive recommendations can be made. Consequently, the final purpose of this study is to examine the interactive effects among process elements on perceptions of overall fairness.

Consistent with RCT-based interactions and the empirical findings of Skarlicki and Folger (1997), it is hypothesized that there will be a series of two-way interactions among the process elements such that being high on one element will substitute for being low on another, and thereby elevate overall fairness perceptions under a negative outcome. In particular, it is hypothesized that there will be a two-way interaction between formal procedural justice and interpersonal justice, such that being high on one will substitute for being low on the other (Hypothesis 5); there will be a two-way interaction between formal procedural justice and informational justice, such that being high on one will substitute for being low on the other (Hypothesis 6); and there will be a two-way interaction between interpersonal justice and informational justice such that being high on one will substitute for being low on the other (Hypothesis 7). Due to the absence of research on the three-way interaction between procedural, interpersonal, and informational justice, no formal hypothesis for the three-way interaction is posited, although the three-way interaction will be investigated for exploratory purposes.

Summary of Hypotheses

Despite the reoccurrence of procedural, interpersonal, and informational elements in the justice literature, no rigorous empirical research has examined how, and to what extent, these elements actually influence overall fairness perceptions in the face of negative outcomes. The purpose of this research, therefore, was to examine individuals' fairness perceptions in order to more fully understand how procedural, interpersonal, and informational factors contribute to the fair process effect. On the basis of referent cognitions theory and prior empirical research, the following predictions are made:

- Hypothesis 1:* Under a negative outcome, high procedural justice will contribute unique variance to the elevation of overall fairness perceptions.
- Hypothesis 2:* Under a negative outcome, high interpersonal justice will contribute unique variance to the elevation of overall fairness perceptions.
- Hypothesis 3:* Under a negative outcome, high informational justice will contribute unique variance to the elevation of overall fairness perceptions.
- Hypothesis 4:* Of the three process elements, high interpersonal justice will have the weakest effect on elevating overall fairness perceptions.
- Hypothesis 5:* Procedural and interpersonal justice will interact such that high fairness on one element will substitute for low fairness on the other element.
- Hypothesis 6:* Procedural and informational justice will interact such that high fairness on one element will substitute for low fairness on the other element.
- Hypothesis 7:* Interpersonal and informational justice will interact such that high fairness on one element will substitute for low fairness on the other element.

Policy Capturing

The present study uses experimental policy capturing to determine how individuals weigh and combine information about procedural, interpersonal and informational elements in forming overall fairness judgments. Policy capturing uses regression analyses to capture the cognitive processes underlying judgments. In a typical policy capturing study, participants are provided with a set of scenarios/profiles and are asked to provide a judgment on each. The independent variables, also referred to as cues, are systematically varied across the scenarios. The cues serve as the independent variables and the judgments made by the participants serve as the dependent variables. Individuals' global evaluations of the combinations of the manipulated cues permit inferences about how the cues influence their judgments.

Policy capturing is an ideographic statistical approach in the sense that each individual makes judgments on enough profiles to allow the calculation of a regression model for each person. The use of many observations from a single individual permits one to develop a model of the individual's decision policy (i.e., the linear or configural relationships among the cues). For example, a participant can be asked to make fairness judgments about a large number of different layoff situations that vary with regard to procedural, interpersonal, and informational justice. An individual regression equation can then be developed that describes each individual's unique method of combining and weighing each cue to reach an overall fairness judgment (Zedeck & Kafry, 1977). The resulting regression equation defines the individual's fairness policy. The identified regression weights serve as an indication of the relative importance of each cue, and the variance accounted for (R^2) serves as an index of the consistency or reliability of each person's policy. Since the key to policy capturing is a focus on each individual's judgments, fewer participants are needed than in traditional nomothetic approaches. This approach allows for the examination of individual judgment processes rather than the average responses from groups of participants, as is the usual case in between-subjects designs. The implicit assumption is that the captured policies are construct-valid representations of "true" rating policies (Hobson & Gibson, 1983). Furthermore, the error variation in this within-subjects design is likely to be less than the error variation in between-subjects design. This lower error variance increases the power to detect the proposed interaction effects.

Another appealing characteristic of policy capturing is the richness of information it provides about a person's information processing and judgmental structure (Dougherty, Ebert, & Callender, 1986). Policy capturing methodologies provide the ability to assess each individual's approach to judgment formation in an objective manner. Participants do not explicitly state their subjective assessments of how important cues are to their fairness judgments. Rather, the importance of the cues is inferred from the regression models. This is noteworthy, given that Reilly and Doherty (1992) reported that people lack self-insight into their decision rules when asked. Furthermore, by using factorial designs, policy capturing offers greater experimental control, thereby strengthening researchers' causal conclusions (i.e., internal validity) (Graham & Cable, 2001). Moreover, a considerable amount of research demonstrates the external validity of policy capturing. For example, Moore and Holbrook (1990) found that judgment policies obtained in a more contrived context (e.g., uncorrelated cues) did not differ substantively from those obtained in a more representative situation (e.g., correlated cues). As such, researchers have used policy capturing techniques to study a variety of decision-making processes about

organizational issues, including compensation decisions (Viswesveran & Barrick, 1992), promotion decisions (Viswesveran, Schmidt, & Deshpande, 1994), personnel-selection decisions (Dunn, Mount, Barrick, & Ones, 1995; Ones & Viswesveran, 1999), performance appraisal decisions (Rotundo & Sackett, 2002), and job pursuit decisions (Kristof-Brown, Jansen, & Colbert, 2002).

Chapter 3. Method

Sample

Participants were 83 Administrative Assistants from a large Southeastern university. The web link for the survey was emailed to 335 Administrative Assistants, representing a response rate of 25%. This sample size is typical of policy capturing research of this sort (e.g., Aiman-Smith, Bauer, & Cable, 2001; Ones & Viswesveran, 1999; Zhou & Martocchio, 2001). The Administrative Assistants recruited for participation were all senior secretaries. Their average length of job tenure was 18.5 years ($SD = 9.72$). The vast majority of the respondents were female (96.3%) primarily between the ages of 36 and 45 (although nearly 60% of the respondents did not indicate their age). Ninety-four percent of the respondents described themselves as Caucasian. In addition, 36.3% of the respondents described themselves as the primary breadwinner for their immediate family.

Scenarios

It is clear that people can experience feelings of injustice vicariously in situations that do not affect them directly (Greenberg & Wiethoff, 2001). Consequently, having participants read or watch hypothetical scenarios is a standard practice for investigating individuals' justice perceptions (e.g., Bies, Martin, & Brockner, 1993; Brockner, et al., 1995; Gopinath & Becker, 2000; Lind, Greenberg, Scott, & Welchans, 2000; Wiesenfeld, Brockner, & Martin, 1999). For the scenarios in this study, an orthogonal cue structure was deemed appropriate for several reasons. First, although procedural, interpersonal and informational justice are correlated, the level of correlation does not support the unity of the constructs (e.g., Colquitt, et al., 2001; Cohen-Charash & Spector, 2000). Second, prior research has overestimated the correlations between the elements due to the use of cross-pollinated measures (see Colquitt et al., 2001). That is, items intending to tap procedural justice, for example, have included items that tap interpersonal justice and vice versa. Consequently, the correlations among the justice elements have been overestimated. Third, research shows that people can and do make distinctions between the elements (e.g., Bies & Tripp, 1996). Fourth, Cooksey (1996) argued that simulation procedures that generate orthogonal cue values are appropriate when the goal of the study is to capture value systems (i.e., what is important to the judges). Fifth, Greenberg (1993b) argued that in order to understand more precisely what it is about process elements that make them effective for mechanisms facilitating the acceptance of negative outcomes, it is necessary to disentangle the contributions of each process element, even though those elements are frequently correlated in naturalistic settings. Greenberg (1993b) espoused the value of controlled experimental research in accomplishing this goal because such research provides the ability to isolate and manipulate the variables of interest. Greenberg (1993b) also argued that additional controlled experimental research is needed to more precisely pinpoint the most potent elements of justice. He stated that until each of the elements is better understood, attempts to collapse the process elements into a general procedural factor is a "premature move toward parsimony" (p. 99). Lastly, as argued earlier, the correlations among the justice elements should appear smaller under conditions of controlled information processing because individuals have the cognitive capacity to draw finer-grained distinctions among the elements. For these reasons, the use of an orthogonal cue structure is justified for the present study.

The orthogonal cue structure was accomplished by completely crossing all possible combinations of each cue (procedural, interpersonal, and informational) and their levels (low and high). This resulted in eight different configurations (2 X 2 X 2). Because interactions and main effects of the cues were predicted, a full factorial design was used (Graham & Cable, 2001). In order to have sufficient power to detect effects, Nunally (1978) recommended a profile-to-cue ratio of 10:1 for regression analyses. However, Stewart (1988) indicated that multiple correlations in the range of .7 to .9 are frequently obtained in policy capturing research, which translates to capturing roughly 50 to 80 percent of the variability in judgments in most contexts. Given this, Cooksey (1996) stated that the 10:1 criterion is too stringent; he recommended a profile-to-cue ratio of 5:1 for policy-capturing studies. Subscribing to the 5:1 ratio reduces the threat of respondent fatigue and also allows the scenarios to be richer in description because fewer behavioral incidents need to be repeated across scenarios. Strict adherence to the 5:1 ratio in the present study necessitates that respondents evaluate 35 hypothetical profiles (i.e., derived from three main effects, three two-way interactions, and one three-way interaction). However, to ensure that the eight different cue combinations were represented an equal number of times, this number was multiplied by five, thereby resulting in 40 profiles. In order to assess intra-rater reliability, a duplicate scenario was included for each of the eight cue combinations. This brought the total number of scenarios to 48.

Pilot Studies for Developing the Scenarios. Three pilot studies were conducted in order to develop the scenarios. In the first pilot study, a brainstorming task was conducted with administrative assistants. Administrative assistants were asked to develop examples of negative outcomes relevant to their position. They were also asked to think of supervisor behaviors (i.e., the behavioral cues) associated with those negative outcomes that represented both high and low levels of each type of fairness (i.e., procedural, interpersonal and informational).

In the second pilot study, a group of administrative assistants rated the negative outcomes identified in the first pilot study on a 5-point Likert scale where 1 = *more negative* (described as “really bad”) and 5 = *less negative* (described as “not so bad”). The purpose of this second pilot study was to identify multiple negative outcomes that were all perceived to be similar in their degree of negativity. Identifying more than one negative outcome for use in the scenarios helped to increase the richness of the scenarios. After having identified which outcomes would appear in the scenarios, the supervisor behaviors identified in the first pilot study could be further expanded upon. These additional examples of supervisor behaviors were guided by reviewing the ways in which the justice literature has defined, operationalized, described, and discussed procedural, interpersonal and informational justice.

In the third pilot study, the supervisor behaviors were scaled to ensure that each justice element was manipulated with equivalent strength (Cooper & Richardson, 1986). In order to accomplish this, a group of administrative assistants rated the supervisor behaviors on a 7-point Likert scale where 1 = *an extremely unfair behavior* and 7 = *an extremely fair behavior*. In addition to rating the fairness level of each supervisor behavior, the respondents were asked to categorize each behavior as representing procedural justice, interpersonal justice or informational justice.

Conducting these pilot studies helped to improve the face validity and construct validity of the task such that the Administrative Assistants were familiar with the judgment task. Therefore, the respondents should have been much more sensitive to the fidelity and realism of the task (Cooksey, 1996). Moreover, conducting these pilot studies should have helped to improve the reliability of the predictors thereby improving the ability to detect interaction effects (Aguinis, 1995).

Scenario Development. After identifying the outcomes and the supervisor behaviors in the pilot studies, the 40 unique scenarios were developed. In developing the scenarios, one supervisor behavior (i.e., cue) was randomly selected from each set of high and low behaviors for the procedural, interpersonal and informational lists. Behaviors were selected without replacement until there were no more unique behaviors remaining. After exhausting a list, behaviors were reused; however, the same combination of behaviors never appeared together more than once. The cues were randomly ordered within each profile to ensure that primacy and recency effects would not be confounded with the importance weights. For example, if information about procedural justice always preceded information about interpersonal justice, and the results showed that judges gave procedural information the strongest weight, then one could argue that the relative importance was confounded with the order of the cues. Moreover, variation in the order of cue presentation within scenarios made it necessary for respondents to read each scenario more carefully. The 48 scenarios were varied into three different orders and participants were randomly assigned to one of the three orders of the profile task. This process was carried out to minimize order effects and stereotypical or standardized rating processes (Rousseau & Aquino, 1993).

Procedure

The Administrative Assistants were sent an email encouraging them to participate in a study of workplace fairness (see Appendix A). The email explained that the purpose of the study was to gain a better understanding of workplace fairness from the perspective of administrative assistants. As an incentive to participate, participants were informed that they would be entered in a drawing to win one of two \$50 gift certificates to the local shopping center. Participants were asked to allow 45-60 minutes to complete the survey.

The scenarios were posted on a website; the direct web address for the survey was listed at the bottom of the email. Researchers who have compared on-line and traditional paper-and-pencil respondents have concluded that there are no significant response biases between these two methods on attitudinal data and/or demographic data (Bachmann, Elfrink, & Vazzana, 1996; Mehta & Sivadas, 1995; Tse, 1998). Once respondents clicked on the direct link to the survey, they were taken to an informed consent form. Upon indicating their consent, participants were automatically linked to the web page containing the scenarios.

After reading each scenario, participants were asked to judge the overall fairness of the situation using a 7-point Likert scale (*1 = extremely unfair* and *7 = extremely fair*). After evaluating all 48 scenarios, the respondents were asked to provide demographic and background information (i.e., age, race, sex, job tenure, and whether or not primary breadwinner). Participants were also asked to indicate the number of times they were interrupted while working on the survey, and whether or not they felt fatigued during the course of completing the survey.

Finally, participants were asked to compare each fairness type and indicate which one they thought was most important (e.g., procedural vs. interpersonal, etc.). Upon completion of the on-line survey, participants' responses were automatically submitted to a secured internet database.

Chapter 4. Results

Pilot Study 1

Four administrative assistants participated in the brainstorming task to identify examples of negative outcomes, and supervisor fairness behaviors related to those outcomes. They came up with five examples of negative outcomes (see Appendix B).

Pilot Study 2

The negative outcomes identified in the first pilot study were rated by 31 administrative assistants on a 5-point Likert scale where 1 = *extremely negative* and 5 = *less negative*. The descriptive statistics and interrater agreement indices appear in Table 4.1. Interrater agreement was calculated to verify that there was an acceptable level of agreement among the raters on these outcomes. James, Demaree, and Wolf's (1984; 1993) $r_{wg(I)}$ index was used for calculating agreement. The first, third and fifth outcomes were selected for the final scenarios because they had the lowest mean ratings, and their mean ratings were similar to one another. The $r_{wg(I)}$'s for outcomes 1, 3, and 5 were .65, .71, and .68, respectively. The conventional cut-off for establishing agreement is generally set at .70 (George, 1990). Outcome 3 met this criterion; however, outcomes 1 and 5 were slightly below this standard cut-off level. Nonetheless, the interrater agreement for these outcomes was deemed to be sufficient for the following reasons. First, the $r_{wg(I)}$ index is scale dependent. If a 7-point scale would have been used as opposed to the 5-point scale, then the $r_{wg(I)}$'s would likely have met the .70 criterion, assuming the variability of the ratings did not increase as the number of scale anchors increased. Increasing the number of scale anchors would not likely increase the variance of the ratings because raters were rating outcomes that were all negative, meaning that ratings were likely to have remained clustered at the lower end of the scale. Consequently, increasing the number of anchors on the rating scale would have increased the denominator without increasing the numerator (i.e., the variance), thereby resulting in higher levels of $r_{wg(I)}$. Secondly, respondents were given the option to provide comments on the outcomes. The respondents commented that the selected outcomes were both negative and very realistic. Here are several typical comments:

“These scenarios sounded really too real. This is about how employees are treated.”

“A couple of these scenarios have really happened to me or in the office where I worked.”

“Although these are just “scenarios”, a lot of them hit home with me, in that employers actually really do, do these types of things, usually without regard to the employee's needs or feelings.”

“All these scenarios are possibilities in today's Administrative Assistant world.”

“Scenarios 3, 4 and 5 have happened to me in past employment history.”

“Unfortunately these scenarios are not far-fetched. They are all pretty bad with the worst being #1, #3, #5.”

“I can relate to most of these. Over the last 12 years here at tech 3 out of the 5 have happened to me.”

Not a single person commented that these outcomes were far-fetched or that they were unrealistically negative. Consequently, this qualitative data further supports the decision to use the selected outcomes in the final scenarios.

The supervisor behaviors identified in the first pilot study were further refined and expanded upon after selecting the three most negative outcomes. This process resulted in a total of 150 supervisor behaviors.

Pilot Study 3

A group of 37 administrative assistants rated the 150 supervisor behaviors on a 7-point Likert scale where 1 = *an extremely unfair behavior* and 7 = *an extremely fair behavior*. In addition to rating the fairness level of each supervisor behavior, the respondents were asked to categorize each behavior as representing procedural justice, interpersonal justice or informational justice. See Appendix C for the list of the 150 supervisor behaviors.

In order for supervisor behaviors to be selected for inclusion in the final scenarios, they had to satisfy two criteria. First, only supervisor behaviors with $r_{wg(I)}$ greater than or equal to .70 were selected. Of the 150 supervisor behaviors, 102 met this criterion ($M = .87, SD = .09$). Secondly, at least 66.7% of the respondents had to agree on the classification of the behavior as representing procedural, interpersonal or informational justice. Of the remaining 102 supervisor behaviors, 65 had classification agreement of at least 66.70% ($M = 82.30\%, SD = 9.48$). However, four of these behaviors were inconsistent with the intended classification. For example, consider the following behavioral item: *The supervisor told his administrative assistant, “There will be an open forum held on Tuesday for all affected parties. At this forum, you will have a chance to make your opinions known.”* According to the justice literature, this behavior is an example of procedural justice because it gives individuals an opportunity to voice their opinions. However, 70.3% of the respondents classified this behavior as an example of informational justice. Consequently, this behavior and the three other misclassified behaviors were discarded, thereby resulting in a total of 61 supervisor behaviors with acceptable interrater agreement and classification agreement.

Next, the mean fairness level ratings and the range of fairness ratings were investigated to determine the number of high fairness and low fairness behaviors within each fairness category (see Table 4.2). In order to ensure fair comparisons, it was important that the range of ratings and the mean of those ratings be similar for each fairness category. In order to accomplish this, some of the more extreme ratings were discarded. In particular, more procedural behaviors (28) were identified for retention than either interpersonal (18) or informational behaviors (15). Consequently, there was more leeway in discarding procedural behaviors than interpersonal or informational behaviors. In order to make the means more similar across fairness types, three of the low fairness procedural behaviors were discarded, three of the high fairness procedural behaviors were discarded, and one of the high fairness interpersonal items was discarded (see Table 4.3). This resulted in a combined final total of 54 supervisor behaviors. The descriptive

statistics for the final 54 behaviors, and the number of times each behavior was used in a scenario can be seen in Table 4.4. The actual scenarios can be found in Appendix D.

Idiographic Results

Within-subjects regression analysis was calculated for each subject in order to determine how much importance they placed on each cue, and how consistently they used the cues to form overall fairness judgments. To do this, the cues were coded using effects coding; all of the high fairness cues were code as +1 and the low fairness cues were coded as -1. First, the three main effect variables were entered simultaneously into the regression equation. Next, the block of the three two-way cross-product terms were entered into the regression model via hierarchical multiple regression. Finally, the three-way interaction term was entered in the same fashion. The incremental R^2 associated with each block was examined. If the increment in R^2 was statistically significant (i.e., $p < .05$), then beta weights associated with each interaction term were examined for statistical significance. Depending on whether there was a significant increment in the multiple R^2 index, the R^2 associated with either Model 1 (main effects only), Model 2 (main effects and two-way interactions), or Model 3 (main effects, two-way interactions, and three-way interaction) was examined for each individual's policy. Accounting for a large amount of variance indicated that: (a) the individual was consistent in his/her weighting of cues, and (b) the individual's policy was adequately modeled using the cues included in the study. Because the cues were orthogonal, a measure of the relative importance of each cue in determining the overall fairness judgment of the decision maker was reflected in the standardized regression coefficient (β) and the zero-order correlation. These two indices led to equivalent conclusions since the cues were orthogonal (Dunn, Mount, Barrick, & Ones, 1995; Hobson & Gibson, 1983; Lane, Murphy, & Marques, 1982). The intra-rater reliability was also investigated for each participant by correlating the 8 selected scenarios with their duplicate. Table 4.5 shows the individual regression equations for each individual, as well as the intra-rater reliability (r_{xx}) for each person, the multiple R^2 , and the adjusted R^2 . The adjusted R^2 is a more conservative estimate that corrects for sample size and the number of predictors, and represents the extent to which the regression coefficients would generalize if replicated with the same cues but different scenarios.

An examination of the R^2 's indicates that there was considerable variation in the consistency with which participants weighted the cues in forming their overall fairness judgments. The R^2 's ranged from a low of .04 to a high of .96, and three participants had R^2 's less than .25. When these three outliers were excluded the R^2 's narrowed to a range of .38 to .96, with a mean of .65 ($SD = .12$). This mean R^2 compares very favorably with other policy-capturing studies that have used textual presentation of decision criteria (e.g., Martocchio & Judge, 1994; Pablo, 1994; Rousseau & Aquino, 1993). Consequently, the three outliers were dropped from further analyses because their policies could not be effectively modeled. This is common practice in policy capturing studies (e.g., Fritzsche, Finkelstein, & Penner, 2000; Rogelberg, Ployhart, Balzer, & Yonker, 1999). The intra-rater reliability was also examined for the 80 remaining participants. The reliabilities ranged from .54 to 1.00, with a mean of $r_{xx} = .83$ ($SD = .11$). Of the 80 respondents, 65% had intra-rater reliability of at least .80. These intra-rater reliabilities are comparable to other policy-capturing investigations of this sort (e.g., Rynes, & Lawler, 1983; Sherer, Schwab, & Heneman, 1987). Furthermore, recall that the 48 scenarios were varied into three different orders and that participants were randomly assigned to one of the three orders of

the profile task. Regressing profile task order on the overall fairness rating produced no significant order effects between different versions of the profile task ($\beta = -.001$). Consequently, the results of the analyses would not appear to be a function of order effects.

Given that the participants generally appeared to possess consistent and reliable decision-making strategies, the hypotheses were testable. The first hypothesis predicted that procedural justice would contribute unique variance to overall fairness perceptions. Across the 80 policies, high procedural justice had a positive significant impact ($p < .05$) on overall fairness judgments for 97.5% of the individuals, thereby supporting the first hypothesis. The mean for the significant beta weights for procedural justice was .54 ($SD = .12$), and the significant beta weights ranged from .24 to .84.

The second hypothesis investigated whether interpersonal justice contributed unique variance to overall fairness perceptions. The results indicated that high interpersonal justice had a significant positive impact on overall fairness judgments for 88.8% of the individuals, thereby supporting the second hypothesis. The mean for the significant beta weights for interpersonal justice was .39 ($SD = .10$), and the significant beta weights ranged from .21 to .61.

Hypothesis 3 examined whether informational justice contributed unique variance to overall fairness perceptions. Consistent with the third hypothesis, high informational justice had a significant positive impact on overall fairness judgments for 91.3% of the respondents. The mean for the significant beta weights for informational justice was .36 ($SD = .09$), and the significant beta weights ranged from .17 to .57.

The fourth hypothesis predicted that interpersonal justice would explain less variance in overall fairness judgments than procedural or interpersonal justice. The individual level analyses indicate that interpersonal justice did have a weaker impact on fairness judgments than procedural justice. The beta weight for interpersonal justice was significant for 88.8% of the respondents, whereas the beta weight for procedural justice was significant for 97.5% of the respondents. The chi-square analysis revealed that these two frequencies are significantly different, $\chi^2(1, n = 80) = 7.33, p < .05$, with a Phi coefficient indicating only a relatively weak positive association between these two binary variables, $\Phi = .42$. Furthermore, the mean beta weight for interpersonal justice ($M = .39, SD = .10$) was significantly less than the mean beta weight for procedural justice ($M = .54, SD = .12$), $t_{(69)} = 6.39, p < .01$. These results are consistent with the fourth hypothesis. However, the results do not support that interpersonal justice had a weaker impact on fairness perceptions than informational justice. The individual-level results indicate that interpersonal justice and informational justice had similar levels of impact on individuals' fairness perceptions. For example, 88.8% of the individuals had a significant beta weight for interpersonal justice and 91.3% had a significant beta weight for informational justice. The chi-square analysis revealed that these two frequencies were not significantly different, $\chi^2(1, n = 80) = .32, p = .26$, and the Phi coefficient indicated a weak positive association between interpersonal justice and informational justice, $\Phi = .13$. Also, the mean beta weights for interpersonal justice ($M = .39, SD = .10$) and informational justice ($M = .36, SD = .09$) were not significantly different, $t_{(63)} = 1.59, p > .05$.

Hypotheses 5, 6, and 7 dealt with the two-way interactions among the fairness cues. The descriptive results of the interactions are presented in this section. The substantive tests of these hypotheses are presented in the nomothetic analyses section. Testing the predicted substitutability effects in Hypotheses 5 - 7 requires understanding of the form of the interactions. Evaluating the form of each individual's significant two-way interactions is too cumbersome. Consequently, cluster analysis will be used to group participants with common policies, and the form of the interactions within each cluster will be evaluated. Results from the idiographic analyses, reveal that the interaction between procedural justice and interpersonal justice was significant for 30% of the respondents (i.e., 24 individuals). The mean of the significant beta weights was .25 ($SD = .08$), and the significant beta weights ranged from a minimum of .15 to a maximum of .41. The interaction between procedural justice and informational justice was significant for 26.3% of the respondents (i.e., 21 individuals). The mean of the significant beta weights was .28 ($SD = .05$), and ranged from .17 to .37. Finally, the two-way interaction between interpersonal and informational justice was significant for 33.8% of the respondents (i.e., 27 individuals). The mean of the positive significant beta weights for the interaction between interpersonal and informational justice was .25 ($SD = .06$), and the significant beta weights widely ranged from a low of -.35 to a high of .38. For this particular two-way interaction, participant #2 and participant #54 had significant negative beta weights. However, these negative beta weights cannot be meaningfully interpreted in light of the significant three-way interactions for these participants.

No formal hypothesis was stated for the three-way procedural X interpersonal X informational interaction. However, the three-way interaction was investigated for exploratory purposes. Only 12.5% of the respondents (i.e., 10 individuals) demonstrated a significant three-way interaction. Their mean beta weight was .29 ($SD = .18$) and ranged from a minimum of .14 to a maximum of .63.

Nomothetic Results

Given that individual policies could be reliably modeled for most subjects, it is possible to systematically examine commonalities across individuals. Identified commonalities among individuals may suggest the existence of general approaches to forming fairness judgments. Discussion of these general approaches, capitalizes on both the idiographic strength of policy capturing and the robustness of the nomothetic approach (Rogelberg, et al., 1999).

Ward's cluster-analysis method was used to summarize and seek out commonalities among individuals. Based on findings from 11 comparative studies, Ward's method consistently performs well and is considered the "best" clustering procedure (Green, 1990; Milligan & Cooper, 1987; Rogelberg, et al., 1999). In order to determine whether judges could be grouped into a smaller number of homogeneous clusters, each individual's standardized regression coefficients for the seven independent variables and the associated R^2 served as the data to be clustered. The Euclidean distance coefficient was used as the criterion for determining the most interpretable cluster solution. For each pair of participants, the squared Euclidean distance consists of the sum of the squared difference in standardized regression coefficients over all seven independent variables. Cluster analysis proceeded in a stepwise fashion. First, each individual's policy was considered a separate cluster. Then, with each step, the two most similar individual policies were grouped together. At each step, the cluster analysis provided a fusion

coefficient that represented the value of the distance between the two most dissimilar points of the clusters being combined. These coefficients were compared for successive stages to decide how many clusters best represented the data. Combining of clusters was no longer necessary when the increase in the fusion coefficient between two successive stages became relatively large.

The difference in the fusion coefficients going from a 3-cluster solution to a 4-cluster solution was .92. Up to that point, the largest increase in the fusion coefficient was .55. In other words, the distance coefficient between the 3-cluster solution and the 4-cluster solution nearly doubled in size from its previous largest increase, indicating that a 4-cluster solution represented an optimal solution. Another way to visually determine the optimal cluster solution is with a dendrogram. A dendrogram is a type of tree diagram that identifies the clusters being combined and the values of the coefficients at each step. Lines joining cases indicate a clustering. The dendrogram depicts which individuals were joined together into clusters and at what distance. SPSS does not plot actual distances, but re-scales them to numbers between 0 and 25. A dendrogram that clearly differentiates clusters will have small distances in the far, left-hand branches and large differences in the near right-hand branches. The dendrogram for this cluster analysis also supports a 4-cluster solution (see Figure 4.1).

Cluster policies. Table 4.6 presents a listing of the identified clusters and their mean standardized regression coefficients, reliability and R^2 s. Because the independent variables are orthogonal, squaring the beta weights serves as an index of variance accounted for in fairness judgments. Cluster 1 ($n = 36$) was the most frequently used decision strategy. In Cluster 1, individuals' overall fairness judgments were influenced by all three main effect variables with procedural justice explaining 26% ($\beta = .51$) of the variance in fairness judgments followed by interpersonal justice at 17% ($\beta = .41$), and informational justice at 13% ($\beta = .36$). The three two-way interactions and the one three-way interaction exerted a negligible impact on these individuals' fairness judgments.

Cluster 2 ($n = 2$) was the most infrequently used decision strategy. Cluster 2 relied primarily on the three-way procedural X interpersonal X informational interaction. This three-way interaction explained 37% ($\beta = .61$) of the variance in their fairness judgments. However, due to the fact that only 2 individuals were included in this cluster, it is difficult to have confidence in any generalizations from this cluster. Therefore, cluster 2 will not be discussed further.

Like individuals in Cluster 1, the individuals in Cluster 3 ($n = 22$) were influenced by all three main effect variables. Procedural justice accounted for 24% ($\beta = .49$) of the variance in their fairness judgments, followed by informational justice at 18% ($\beta = .42$) and interpersonal justice at 13% ($\beta = .36$). These individuals were also influenced to some degree by the three two-way interactions. The procedural X informational interaction explained 7% ($\beta = .27$) of the variance in fairness judgments, the interpersonal X informational interaction explained 5% ($\beta = .22$) of the variance in fairness judgments, and the procedural X interpersonal interaction explained 4% ($\beta = .20$) of the variance in fairness judgments. The three-way interaction had a negligible impact on fairness judgments for individuals in Cluster 3.

Finally, individuals in Cluster 4 ($n = 20$) were strongly influenced by the main effect of procedural justice, and to a much weaker extent by interpersonal justice and informational justice. The main effect of procedural justice explained 41% ($\beta = .64$) of the variance in fairness judgments, and interpersonal justice and informational justice explained 8% ($\beta = .29$) and 5% ($\beta = .22$), respectively. The three two-way interactions and the one three-way interaction appear not to have impacted these individuals' fairness judgments.

To aid understanding of the cluster analysis, Table 4.7 presents the overall mean fairness ratings for the eight fairness conditions for each cluster. At first glance, it is clear that Cluster 4 tended to be more lenient in their fairness ratings than Clusters 1 and 3, particularly when procedural justice was high. As to Clusters 1 and 3, their mean levels of fairness were similar, although they arrived at their fairness judgments through different decision mechanisms. That is, Cluster 1 used an additive decision policy, whereas Cluster 3 used a more multiplicative decision policy as evidenced by the regression coefficients for the three two-way interactions. Interestingly, there was a notable increase in fairness judgments in all clusters when going from the conditions where a single process element was low to the condition where all three process elements were high.

Hypotheses 1 – 4 were main effect hypotheses. Hypothesis 1 predicted that high procedural justice would positively impact fairness judgments. Based on the regression coefficients presented in Table 4.6, the decision strategy in Cluster 1 ($\beta = .51$), Cluster 2 ($\beta = .49$), and particularly in Cluster 4 ($\beta = .64$), are consistent with Hypotheses 1. Hypothesis 2 predicted that high interpersonal justice would positively impact fairness judgments. The results for Cluster 1 ($\beta = .41$) and Cluster 3 ($\beta = .36$) are most consistent with this hypothesis, although the results for Cluster 4 ($\beta = .29$) also provide some support for Hypothesis 2. Next, Hypothesis 3 predicted that high informational justice would positively impact fairness judgments. Once again, the findings for Cluster 1 ($\beta = .36$) and Cluster 3 ($\beta = .42$) are most consistent with this hypothesis. Cluster 4 ($\beta = .22$) also provided some support for Hypothesis 3. Based on these main effect hypotheses it is clear that Cluster 1 and Cluster 3 are similar in how they weighted the relative importance of the three process elements. Both clusters relied on all three process elements when forming fairness judgments, with procedural justice being somewhat more important than the other two process elements. Although while the magnitude of the regression coefficients for interpersonal and informational justice were quite similar for Clusters 1 and 3, interpersonal justice was slightly more important than informational justice in Cluster 1, whereas informational justice was slightly more important than interpersonal justice in Cluster 3.

Hypothesis 4 predicted that, of the three process elements, high interpersonal justice would have the weakest positive impact on fairness judgments. The results for Cluster 3 support this hypothesis, and the results for Cluster 1 and Cluster 4 partially support this hypothesis. For Cluster 3, interpersonal justice had a weaker impact on fairness judgments than procedural or informational justice. For Clusters 1 and 4, as predicted, procedural justice had a greater positive impact than interpersonal justice on fairness judgments. However, for both clusters, interpersonal justice demonstrated a greater positive impact on fairness judgments than informational justice. In other words, high informational justice, as opposed to high interpersonal justice, had the weakest positive impact on fairness judgments for Clusters 1 and 4. Consequently, Hypothesis 4 received mixed support.

Hypotheses 5–7 relate to the three two-way interactions. Cluster 3 was the only cluster where the two-way interactions had a meaningful impact on fairness judgments. Consequently, only Cluster 3 was used to draw support for Hypotheses 5–7. Traditionally, examination of a two-way interaction in a three-way analysis collapses over the third variable. However, given my concern for the interplay among the cues, I plotted the three two-way interactions for Cluster 3 using the means in Table 4.7 when the third variable was held constant at the low level. I then plotted the means for the combinations of the other two variables (i.e., high-high, low-low, high-low, and low-high). Although not the typical way to represent two-way interactions, these plots better demonstrate the patterns of fairness in relation to all the cues.

Hypothesis 5 predicted that procedural and interpersonal justice would interact such that high fairness on one would substitute for low fairness on the other. For Figure 4.2, the pattern of the interaction between procedural and interpersonal justice at low levels of informational justice indicates that, as expected, individuals had negative fairness judgments when both procedural justice and interpersonal justice were low ($M = 1.21$, $SD = .36$). However, contrary to Hypothesis 5, this tendency was also observed when *either* procedural justice or interpersonal justice was low. There was a multiplicative increase in fairness judgments when both procedural and interpersonal justice were high. This suggests that when informational justice is low, negative fairness judgments due to a negative outcome become less negative when both procedural and interpersonal justice are high ($M = 2.78$, $SD = 1.16$).

Hypothesis 6 predicted that procedural and informational justice would interact such that high fairness on one would substitute for low fairness on the other. This two-way interaction was plotted to provide insight into the nature of its interaction, and to determine whether the pattern was consistent with Hypothesis 6 (see Figure 4.3). The same procedures described above were used to plot the interaction. The pattern of the interaction indicates that, as expected, at low levels of interpersonal justice individuals' had negative fairness judgments when both procedural justice and informational justice were low ($M = 1.21$, $SD = .36$). However, contrary to Hypothesis 6, this tendency was also observed when *either* procedural justice or informational justice was low. There was a multiplicative increase in fairness judgments when both procedural and informational justice were high. This suggests that when interpersonal justice is low, negative fairness judgments due to a negative outcome become less negative when both procedural and informational justice are high ($M = 3.36$, $SD = 1.39$).

Finally, Hypothesis 7 predicted that interpersonal and informational justice would interact such that high interpersonal justice would substitute for low informational justice, and vice versa. Once again, this two-way interaction was plotted, using the same procedures described above (see Figure 4.4). The pattern of the interaction indicates that, as expected, at low levels of procedural justice individuals' had negative fairness judgments when both interpersonal justice and informational justice were low ($M = 1.21$, $SD = .36$). However, contrary to Hypothesis 7, negative fairness judgments were also observed when *either* interpersonal justice or informational justice was low. There was a multiplicative increase in fairness judgments when both interpersonal and informational justice were high. This suggests that when procedural justice is low, negative fairness judgments due to a negative outcome become less negative when both interpersonal and informational justice are high ($M = 2.47$, $SD = .91$).

When the results for Hypotheses 5 – 7 are each considered in relation to their wording, it appears that there is no support for the notion of substitutability among process elements. However, upon closer consideration, it becomes apparent that substitutability is occurring to a certain extent, but at a higher threshold and smaller magnitude than was predicted by the hypotheses. Hypotheses 5 – 7 posited that fairness judgments would be positively impacted as long as one of two process elements was high. The interactions plotted in Figures 2 – 4 do not support this notion. However, the plots of the interactions for members of Cluster 3 indicate that fairness judgments are somewhat positively impacted when two process elements are high, and the third process element is low. Because the form of the interaction is the same for all three combinations of the two-way interactions, it does not matter which of the two process elements are high. That is, if procedural justice and interpersonal justice are both high, then fairness judgments increase somewhat when informational justice is low; if procedural justice and informational justice are both high, then fairness judgments increase somewhat when interpersonal justice is low; and finally, if interpersonal justice and informational justice are both high, then fairness judgments increase somewhat when procedural justice is low. In this sense, substitutability is occurring such that high levels of fairness on two elements can substitute to a degree for low fairness on a third element. Consequently, while Hypotheses 5 – 7 are not supported in a strict sense interpretation, the notion of substitutability is supported. I just underestimated the threshold at which substitutability would occur in Hypotheses 5-7, and overestimated the magnitude of the substitutability effect. It should be noted, however, that when two process elements are high and the third process element is low, fairness judgments are not nearly as positive as when all three elements are high.

Cluster membership. In order to understand the variables that may cause individuals to be grouped into different clusters and to ascertain which variables differentiated individuals in their judgments about fairness, one-way analysis of variance was used to determine the degree to which variation in these factors varied as a result of cluster membership. In this case, the demographic and background information collected at the end of the survey were employed as dependent variables, with cluster membership serving as the grouping variable.

Demographic information was collected for sex, race, and age. For sex, 71 of the 80 respondents reported that they were female. The remaining 9 respondents did not answer the question. Consequently, no analyses were performed with sex as the criterion. Finally, for race, six of the participants did not respond to this question, and 96% of the remaining participants described themselves as “Caucasian.” Therefore, no analyses were performed with race as the criterion. The analysis of variance for age revealed no age effects, $F(3, 76) = .41, p > .05$.

In terms of background information, participants were asked to indicate their job tenure, and also whether they were the primary breadwinner in the family. No job tenure effects, $F(3, 76) = 1.65, p > .05$, or breadwinner effects were found, $F(3, 76) = 1.94, p > .05$.

Information was also collected on the number of times individuals were interrupted while completing the survey, and also on whether participants reported feeling fatigued during the course of completing the survey. The majority of the respondents (i.e., 78%) reported that they did not feel fatigued during the course of completing the scenario survey. The average number of

times that participants reported being interrupted was 2.89 ($SD = 1.56$) times. No fatigue effects, $F(3, 76) = .47, p > .05$, or interruption effects, $F(3, 76) = 2.20, p > .05$ were found.

Subjective Ratings. In order to determine if participants' subjective ratings were consistent with the objective ratings captured by the policy capturing analysis, the participants were presented with each paired combination of process elements such that one element appeared at the far left-end of the scale (e.g., procedural justice), and another element occurred at the far right-end of the scale (e.g., interpersonal justice). The element at the far left-end of the scale corresponded with a rating of 1.0, and the element at the far right-end of the scale corresponded with a rating of 7.0. Participants were asked to indicate the relative importance of the fairness elements by placing a marker on the scale closest to the element they viewed as more important. A rating of 3.5 indicated that participants viewed the two elements as equally important.

Recall that individuals in Cluster 1 relied on all three of the process elements when forming fairness judgments, with procedural justice ($\beta = .51$) weighted slightly stronger than interpersonal justice ($\beta = .41$), and interpersonal justice weighted slightly stronger than informational justice ($\beta = .36$). When comparing interpersonal justice vs. procedural justice, Cluster 1 members' subjective ratings were consistent with their objective ratings such that their subjective ratings favored procedural justice over interpersonal justice. Results from a one-sample t-test revealed that the sample mean of 4.58 ($SD = 1.16$) was significantly different from the neutral value of 3.5, $t(35) = 5.62, p < .01$. However, when comparing procedural justice vs. informational justice, their subjective ratings were inconsistent with their objective ratings in that their subjective ratings favored informational justice as opposed to procedural justice. The one sample t-test revealed that the sample mean of 3.97 ($SD = 1.18$) was significantly different from the neutral value of 3.5, $t(34) = 2.37, p < .05$. Similarly, when comparing interpersonal justice vs. informational justice, their subjective ratings were inconsistent with their objective ratings. Their subjective ratings favored informational justice over interpersonal justice, and the one-sample t-test revealed that the sample mean of 4.31 ($SD = .71$), was significantly different from the neutral value of 3.5, $t(35) = 6.81, p < .01$.

Individuals in Cluster 3 also relied on all three of the process elements when forming fairness judgments, with procedural justice ($\beta = .49$) weighted slightly stronger than informational justice ($\beta = .42$), and informational justice weighted slightly stronger than interpersonal justice ($\beta = .36$). When comparing interpersonal justice vs. procedural justice, Cluster 1 members' subjective ratings were consistent with their objective ratings such that their subjective ratings favored procedural justice over interpersonal justice. Results from a one-sample t-test, however, revealed that while the sample mean of 4.00 ($SD = 1.45$) was higher than the neutral value of 3.5, the two mean values were not significantly different, $t(21) = 1.62, p > .05$. Next, when comparing procedural justice vs. informational justice, their subjective ratings were inconsistent with their objective ratings in that their subjective ratings favored informational justice as opposed to procedural justice. However, the one sample t-test revealed that the sample mean of 3.81 ($SD = .93$) was not significantly different from the neutral value of 3.5, $t(20) = 1.53, p > .05$. Finally, when comparing interpersonal justice vs. informational justice, their subjective ratings were consistent with their objective ratings. Their subjective ratings favored informational justice over interpersonal justice, and the one-sample t-test

revealed that the sample mean of 4.14 ($SD = 1.35$), was significantly different from the neutral value of 3.5, $t(20) = 2.18$, $p < .05$.

Cluster 4 individuals relied primarily on procedural justice ($\beta = .64$) when making fairness judgments. To a considerably lesser degree, Cluster 4 members relied on interpersonal justice ($\beta = .29$), and to an even lesser extent on informational justice ($\beta = .22$). When comparing interpersonal justice vs. procedural justice, Cluster 4 members' subjective ratings were consistent with their objective ratings such that their subjective ratings favored procedural justice over interpersonal justice. Results from a one-sample t-test revealed that the sample mean of 5.10 ($SD = 1.17$) was significantly different from the neutral value of 3.5, $t(19) = 6.14$, $p < .01$. However, when comparing procedural justice vs. informational fairness, their subjective ratings were inconsistent with their objective ratings such that their subjective ratings slightly favored informational justice as opposed to procedural justice. The one-sample t-test revealed that the sample mean of 3.90 ($SD = 1.25$) did not differ significantly from the neutral value of 3.5, $t(19) = 3.90$, $p > .05$. Finally, when comparing interpersonal justice vs. informational justice, their subjective ratings were also inconsistent with their objective ratings such that their subjective ratings favored informational justice as opposed to interpersonal justice. The one-sample t-test revealed that the sample mean of 4.60 ($SD = 1.23$) was significantly different from the neutral value of 3.5, $t(19) = 4.00$, $p < .01$.

Overall, the subjective ratings of individuals in Clusters 1, 3 and 4 were consistent with their objective ratings in indicating that procedural justice was more important than interpersonal justice. However, their subjective ratings overestimated the importance placed on informational justice. The subjective ratings indicated that informational justice was more important than procedural justice and interpersonal justice. However, the objective ratings demonstrated that individuals in Clusters 1 and 4 placed the least amount of importance on informational justice. Interestingly, their subjective ratings, but not their objective ratings, were consistent with the prediction in Hypothesis 4 that interpersonal justice would have the weakest positive impact on fairness judgments. The discrepancies between the subjective and the objective ratings indicates that individual's actual judgment processes are different from what they report or believe to be the case. The finding that these individuals were poor judges of their objective ratings is a common finding in research of this sort (e.g., Hobson & Gibson, 1983; Ones & Viswesveran, 1999; Rousseau & Aquino, 1993), and thereby highlights the value of policy capturing research.

Chapter 5. Discussion

The notion of organizational justice, or fairness, has become one of the most frequently researched topics in industrial/organizational psychology (Colquitt, et al., 2001; Cropanzano & Greenberg, 1997). The importance of studying justice in the workplace has been underscored by findings that employee perceptions of *injustice* can result in negative employee behaviors such as organizational retaliatory behaviors (ORBs), which can be costly to organizations (Skarlicki & Folger, 1997; Van Yperen, et al., 2000). According to referent cognitions theory, the presence of a negative outcome is the first component in this two-component theory that triggers the aversive arousal that can ultimately lead to ORB (Skarlicki & Folger, 1997). The second component is process-related. If the process-related aspects of a negative outcome are perceived as unfair, then employees are likely to respond negatively. However, research has demonstrated that if the process-related elements are perceived as fair, then this can ameliorate the effects of the negative outcome. This phenomenon has been labeled the *fair process effect* (Folger, 1987).

Early research on the fair process effect conceptualized the process-related elements solely in terms of formal procedural justice (i.e., Leventhal criteria) (e.g., Lind, et al., 1990). However, more recent research has expanded process-related elements to include interpersonal justice and informational justice (e.g., Bell, et al., 2001; Colquitt, 2001; Colquitt et al., 2001; Kernan & Hanges, 2002; Konovsky, 2000). While this more recent research has noted the importance of procedural, interpersonal, and informational justice in contributing to fairness perceptions, there has been no empirical assessment that has simultaneously considered all three elements in relation to the fair process effect. Consequently, the first purpose of this study was to verify that each of the three process elements contributed unique variance to the elevation of overall fairness perceptions in the face of negative outcomes (H1 – H3). The second purpose was to investigate the relative importance of the three process elements in accounting for the fair process effect (H4), and the final purpose was to determine whether the process elements had substitutable properties (H5 – H7).

Both idiographic and nomothetic analyses were conducted to investigate the hypotheses. The idiographic analyses revealed some variation in the consistency with which individuals used the fairness cues to form overall fairness judgments. A cluster analysis was then conducted to search for commonalities across individuals. The cluster analysis revealed that judges' policies could be grouped into three clusters. Therefore, while the perception of fairness was not necessarily phenomenologically unique to each individual, the emergence of three relatively distinct clusters does suggest some uniqueness between subgroups of individuals. Members of Cluster 1 included individuals for whom all three process elements had a similarly important impact on fairness judgments. Likewise, individuals in Cluster 3 were also similarly impacted by all three process elements, although these individuals were also somewhat influenced by the three two-way interactions among the process elements. That is, these individuals' negative fairness judgments were reduced to some extent when two of the three process elements were high. Finally, Cluster 4 included individuals for whom procedural justice carried the most weight. These individuals' fairness judgments were particularly positive when procedural justice was high.

In relation to the specific predictions, Hypotheses 1 - 3 posited that procedural, interpersonal and informational justice would each explain unique variance in fairness judgments. While the idiographic analyses revealed some variation in the consistency of cue usage and some variation in the size of standardized regression coefficients, the results generally indicated that the three process elements had a positive and independent impact on overall fairness judgments for the majority of the respondents, thereby supporting Hypotheses 1 – 3. In particular, the standardized regression coefficient for procedural justice was significant for 97.5% of the participants. The standardized regression coefficient for interpersonal justice was significant for 88.8% of the participants, and the standardized regression coefficient for informational justice was significant for 91.3% of the participants.

Results from the nomothetic analyses shed additional light on these findings. For each cluster, procedural, interpersonal and informational justice continued to have an important impact on fairness judgments; however, the relative importance placed on each element and the manner in which the elements were combined varied across clusters. The strongest support for the prediction that procedural justice would positively impact fairness judgments (H1) came from Cluster 4. Out of the three clusters, individuals in Cluster 4 placed the most importance on the supervisor's use of fair procedures when forming fairness judgments. The individuals in Cluster 1 and Cluster 3 were also strongly influenced by formal procedures, although not quite as strongly as individuals in Cluster 4. Hypothesis 2 predicted that interpersonal justice would have an important and independent impact on fairness judgments. Both Cluster 1 and Cluster 3 support this hypothesis. The interpersonal sensitivity with which the supervisor handled the situation played an important role in the formation of justice judgments for individuals in these clusters. Finally, Hypothesis 3 predicted that informational justice would contribute unique variance to fairness perceptions. Once again, the strongest support for this hypothesis came from Clusters 1 and 3. These individuals' fairness judgments were positively impacted when the supervisor provided an explanation for the procedures used to make the decision.

Of the three process elements, Hypothesis 4 posited that high interpersonal justice would have the weakest impact on fairness judgments since individuals inherently expect to be treated in an interpersonally just manner (Vermunt, et al., 1993). The idiographic analyses, however, did not provide strong support for this hypothesis. Although procedural justice had the strongest impact on fairness judgments, the results indicate that interpersonal justice and informational justice were quite similar in their impact on fairness judgments. The finding that interpersonal and informational justice were both close seconds does not support Hypothesis 4. The nomothetic analyses provided mixed support for Hypothesis 4. Cluster 3 provided support for Hypothesis 4. That is, Cluster 3 individuals' fairness judgments were the least influenced by interpersonal justice. However, neither Cluster 1 nor Cluster 4 supported Hypothesis 4. For both of these clusters, informational justice rather than interpersonal justice had the weakest impact on fairness judgments. Interestingly, the subjective ratings of individuals in all three clusters were consistent with Hypothesis 4. In their subjective ratings, the participants indicated that interpersonal justice was less important than procedural justice and informational justice. This discrepancy between the objective and subjective ratings might suggest that individuals are more strongly affected by interpersonal transactions than what they realize.

Hypotheses 5, 6 and 7 dealt with the three two-way interactions among the process elements. Specifically, these hypotheses predicted that there would be substitutable effects among the process elements. The idiographic analyses provided initial evidence that some individuals utilized the fairness cues in an interactive manner; however, for feasibility purposes, the exact nature of those interactions were explored within clusters. Cluster 3 is the only cluster where the two-way interactions had an impact on fairness judgments; consequently, Cluster 3 is the only cluster from which support can be drawn for these hypotheses. As predicted, the three two-way interactions contributed unique variance to the fairness perceptions for individuals in this cluster. However, the form of those interactions differed from the form of the interactions predicted by the hypotheses. In particular, Hypothesis 5 predicted that there would be an interaction between procedural and interpersonal justice such that being high on one would substitute for being low on the other. In actuality, the plot of the interaction revealed that both elements had to be high at low levels of the third variable in order to have a positive impact on fairness judgments, and even then justice judgments remained somewhat negative. Similarly, Hypothesis 6 predicted that procedural and informational justice would have substitutable effects such that high fairness on one would substitute for low fairness on the other. The plot of the interaction revealed, however, that both procedural and informational justice had to be high when interpersonal justice was low in order to have a positive impact on fairness judgments, and even then justice judgments were slightly negative. Finally, Hypothesis 7 predicted that there would be an interaction between interpersonal and informational justice such that being high on one would substitute for being low on the other. The plot of the interaction once again revealed that this was not the case. Once again, both elements had to be high at low levels of the third variable in order to have a positive impact on fairness judgments, and even then justice judgments remained somewhat negative.

Even though Hypotheses 5 – 7 were not directly supported, this is not to say that there was no support for the notion of substitutability. When taken as a whole, the results of the two-way interactions reveal that high fairness on two elements substituted somewhat for low fairness on the third element. For example, when procedural and interpersonal justice were both high, then fairness judgments were positively impacted to a certain extent when informational justice was low. When procedural and informational justice were both high, then fairness judgments were somewhat positively impacted when interpersonal justice was low. Finally, when interpersonal and informational justice were both high, fairness judgments were somewhat positively impacted when procedural justice was low. Fairness judgments, however, were not nearly as positive when two elements were high as when all three elements were high.

Research Implications and Future Directions

The finding that procedural, interpersonal and informational justice positively impacted fairness perceptions in the face of negative outcomes is consistent with prior research that investigated each element individually (e.g., Lind, et al., 1990; Skarlicki & Folger, 1997; Williams, 1999). These findings also extend prior research by demonstrating that when all three elements are considered simultaneously *each* element contributed *unique* variance to fairness perceptions. This expands referent cognitions theory's explanation of the fair process effect by verifying that interpersonal justice and informational justice act in a similar fashion as procedural justice to help ameliorate the effects of negative outcomes, although procedural justice does appear to have a stronger impact on fairness judgments than interpersonal or informational

justice. These findings also qualify the nature of the fair process effect. The results indicate that justice judgments were less positive when any one of the three process elements was perceived as unfair, particularly if that one element was procedural justice. In other words, in order to get the full benefit of the fair process effect, it is important that none of the process elements be perceived as unfair.

Finding that all three elements had important and independent effects on individuals' fairness judgments also supports arguments to treat each element as a separate justice construct (Colquitt, 2001; Colquitt et al., 2001). This has implications for how researchers operationalize and measure justice. Since each process element had independent effects, this suggests that researchers should operationalize procedural justice specifically in terms of Leventhal criteria, as opposed to broadly defining procedural justice as encompassing structural, interpersonal and informational aspects of procedures. Similarly, the results suggest that justice researchers should treat interpersonal and informational justice as separate justice dimensions, rather than collapsing them under the term *interactional* justice. Furthermore, when measuring the process-related elements of justice, researchers should be careful not to cross-pollinate their measures. That is, measures of procedural justice should not include, for example, an item that states, "The manager clearly explained the procedures used to make the decision." This is an example of informational justice, and therefore should not be included in measures of procedural justice because doing so would falsely inflate correlations among the process elements, and mask the independent contribution of each element.

The finding that each process element contributed unique variance to fairness judgments also suggests support for the controlled-information processing argument by demonstrating that participants were able to make fine-grained distinctions between the elements. If individuals were heuristically processing the fairness cues as espoused by an automatic information processing perspective, then one would have expected to find less support for the independent effects of each element. According to an automatic information processing perspective, participants would have based their overall fairness judgments on whatever cue was most salient and used that as a heuristic for interpreting all subsequent fairness information. Future research should take into consideration that the contextual factors surrounding data collection may impact whether participants process fairness information in a more controlled or automatic fashion. The results from this study suggest that a relatively controlled experimental investigation may prompt individuals to engage in more controlled information processing.

The results from this study demonstrate that individuals are sensitive to the three process elements in a single cue sense. That is, procedural, interpersonal, and informational justice were each found to have contributed unique variance to fairness judgments. These findings do not rule out the possibility, however, that the same or similar increments in variance may have occurred if three procedural cues, for example, had been present as opposed to a single instance of each of the three process elements. In other words, future research needs to verify whether there is something unique about being high on the three different types of process-related fairness that improves fairness judgments, or whether the same results would occur by simply including more of one particular type of process fairness. Research by Hunton, Wall, and Price (1998) found that individuals were more satisfied with decisions over which they had voice rather than no voice, but that increasingly higher levels of voice had no effect at all. This finding suggests that there is

something unique about being high on the three different process elements, although future research is needed before definitive conclusions can be drawn.

The emergence of three relatively distinct clusters of fairness policies provides support for Cropanzano and Schminke's (2001) argument that not everyone perceives justice in the same fashion. That is, at least in the face of negative outcomes, it appears that certain subgroups of people place varying degrees of importance on the process-related elements of justice and combine those pieces of information in different manners. This has implications for theories of organizational justice, and suggests that any grand theory of justice will fail to adequately explain everyone's fairness perceptions. In other words, justice perceptions are too contextualized for one model to adequately describe how people perceive justice. This may explain why there has been considerable debate regarding the dimensionality of justice (Bies, 2001; Cohen-Charash, & Spector, 2001; Colquitt, 2001; Cropanzano, & Ambrose, 2001). If individuals are placing differing degrees of importance on the process elements and are combining those pieces of information in a different manner (i.e., additive vs. configural), as suggested by the results of this study, then this could explain why mixed support has been found for the 1-, 2-, 3-, and 4-factor models of justice. These prior investigations have all been between-subject analyses, and the differences in individuals' decision-making policies are masked when justice judgments are studied across individuals. Furthermore, evidence that certain subgroups of individuals combine information about fairness cues in an interactive manner, suggests that statistical models that allow only for the test of main effects might run the risk of being misspecified.

The finding of substitutable effects in Cluster 3 is consistent with Skarlicki and Folger's (1997) findings; however, in the present study substitutability occurred at a higher threshold than in their study and the magnitude of the effect was much smaller. Skarlicki and Folger found that being high on one element substituted for being low on a second, whereas the results of the present study found that being high on two elements substituted somewhat for low fairness on the third element. This difference in thresholds and magnitudes may be attributed to the differences in dependent variables in the two studies. Skarlicki and Folger were investigating justice from a reactive orientation in which the behavioral responses to a negative condition were being investigated. In contrast, the present study investigated justice from a proactive orientation devoted to examining how fairness perceptions are formed. In particular, recall that Skarlicki and Folger were investigating the impact of procedural and interactional justice on organizational retaliatory behaviors. Engaging in organizational retaliatory behavior is a rather extreme behavioral response, and, in general, people are motivated to avoid engaging in such extreme negative behaviors (Cropanzano et al., 2001). Consequently, it is not surprising that it takes *less* process fairness to curb such negative behavioral responses. In contrast, the dependent variable in the present study was an overall judgment of fairness, rather than an extreme behavioral response. Therefore, it is likely that it takes *more* process fairness in order to reduce negative justice judgments. Another explanation for the smaller magnitude of the substitutability effect in this study may be that the outcomes were extremely negative. As an outcome becomes increasingly negative it may diminish the likelihood of substitutability occurring, whereas if the outcome is only slightly negative, then it may be easier to find substitutability effects. Consequently, researchers should be aware that the nature of the substitutability effect might differ depending upon the particular criterion under investigation, and the extent of its negativity.

Given evidence of three relatively distinct clusters of decision makers, future research should not assume that individuals share an implicit agreement regarding the importance of fairness elements, and should begin to investigate boundary conditions that help to explain differences in fairness policies. In light of the limitations of policy capturing research (primarily that it becomes unmanageable when dealing with large data sets), it would be of great benefit to researchers if they could identify, on the basis of some individual difference variable, the particular cluster to which individuals belong. This would allow researchers to conduct between-subject analyses without being concerned that important individual differences are being masked. Unfortunately, none of the individual difference variables investigated in this study (i.e., age, race, sex, job tenure, breadwinner, fatigue, interruptions) offered insight into cluster membership. Consequently, it is interesting to speculate about other potential individual difference variables that might account for differences in fairness policies.

One individual difference variable that could offer potential insight is the cognitive ability of the decision maker. Individuals with greater cognitive ability are generally assumed to engage in more complex information processing. It would be interesting to investigate whether individuals like those in Cluster 3, who combined fairness information in an interactive manner, have greater cognitive ability than individuals like those in Clusters 1 and 4 who used a simple linear model when combining fairness information. Whether or not employees have prior experience dealing with a negative work outcome is another individual difference variable that might account for differences in fairness policies. For example, Miller and Skarlicki (2002) found that individuals who had not been in an organization where layoffs had occurred had higher intentions to retaliate as a result of being laid off than individuals who had prior exposure to layoffs. It may be that employees who have first hand experience with a negative work outcome are more sensitive to managers' process-related fairness behaviors than employees who have not previously encountered negative work outcomes. Another individual difference variable that might offer insight into cluster membership is equity sensitivity (Huseman, Hatfield, & Miles, 1987). Individuals who are more sensitive to negative outcomes (i.e., "Equity Sensitives") might weigh fairness cues differently from those who are less sensitive to negative outcomes (i.e., "Benevolents"). Finally, it would be interesting to investigate whether the Big Five personality variables help to explain cluster membership. For example, one might speculate that good interpersonal skills are more important to extroverted individuals. These are just a few potential individual difference variables that could account for differences in fairness policies. Future research should investigate these and other individual difference variables in order to help determine the boundary conditions that account for differences in fairness policies.

Practical Implications

As previously mentioned, when employees are delivered news of negative outcomes (e.g., denial of a raise), it can lead to their engaging in organizational retaliatory behaviors (e.g., stealing office supplies). These ORBs can be costly to organizations. Fortunately, it has consistently been found that the likelihood of ORB can be substantially reduced when organizational decision makers engage in behaviors that convey process-related fairness; for example, adhering to fair procedures, treating employees in a sensitive and respectful manner, and clearly and adequately explaining procedures. It is also fortunate that these types of behaviors tend to be relatively inexpensive human resource management tools, and that

managers tend to have more control over these process-related behaviors than they do over the severity of the news they deliver (Greenberg, 1990; Shapiro et al., 1994; Skarlicki & Folger, 1997). Not so fortunately, however, is that findings from the present study reveal that not everyone perceives these process-related behaviors in the same light. That is, individuals tend to have different policies for deciding what constitutes a fair process. This can make the job of the manager more challenging, because what one employee perceives as fair may not be perceived as fair by another employee.

While the results from the present study indicate that not everyone weighs the process-related behaviors in the same manner, the results do reveal that there are similarities among subgroups of individuals. In particular, for members of Cluster 1 and Cluster 3, all three process elements played an important role in impacting fairness judgments. Individuals like those in Clusters 1 and 3 present a particularly challenging case for managers because if any one of the three elements is lacking, then injustice is likely to be perceived. Consequently, in order for managers to ameliorate fairness judgments among these individuals, they would need to devote attention to ensuring that procedural, interpersonal and informational justice are all simultaneously high. In contrast, individuals like those in Cluster 4 present a less challenging case for managers. Cluster 4 members are relatively easy to please in the sense that only one of the process elements must be high. However, individuals like those in Cluster 4 are adamant in having high procedural justice. If procedural justice is lacking then individuals in this category are likely to perceive injustice.

In summary, a manager's best chance of ameliorating fairness judgments in the face of negative outcomes is to ensure that all three process elements are high. This is the only way to help ensure that members of all clusters have positive justice judgments. If, however, for one reason or another the manager cannot ensure high justice on all three elements (e.g., there's insufficient time to explain the procedures, or the manager does not possess good interpersonal skills), then the manager should at least make sure that procedural justice is high. Ensuring high procedural justice is most important because procedural justice tended to have a stronger impact on fairness judgments than interpersonal or informational justice.

Limitations and Strengths

The present study has a number of limitations and strengths that merit notice. The use of a policy capturing design enabled the data to be examined at both an idiographic and nomothetic level. Increased control was attained with this approach, but at the same time likely led to a decrease in realism, which presents concerns for external validity. Potential problems with external validity were minimized by: (1) having a sample of Administrative Assistants similar to the participants used in the final study generate the negative outcomes and the behavioral cues, (2) having a separate group of Administrative Assistants scale the behavioral cues, and (3) ensuring that no two behavioral cues appeared in combination together in a scenario more than once. In addition to external validity issues, participants may have experienced fatigue during the experiment because of the relatively large number of scenarios they were asked to consider. Fortunately, it appears that the extent of this problem may have been limited since the within-subject R^2 's were relatively high indicating that the participants demonstrated consistency in the cues they considered when making judgments. An additional limitation relates to the homogeneity of the sample. The overwhelming majority of the participants were middle-aged

white females. The homogeneity of this sample raises particular concerns for Hypothesis 4, which predicted that interpersonal justice would have the weakest impact on fairness judgments. One might expect that women, in particular, may be more sensitive to interpersonal justice than men. This may have contributed to the weak support for Hypothesis 4. Future research should investigate the generalizability of these findings in a more heterogeneous sample. Finally, although the orthogonality required to interpret the relative weights may not exactly simulate real-world situations, this disadvantage was outweighed by the opportunity to examine the independent effects of each element on fairness judgments (Greenberg, 1993b; Rousseau & Anton, 1988).

Despite its limitations, the design of this study offers a number of strengths. First, the amount of control that was obtained by using an experimental design allows conclusions to be drawn about the relative strength of the process elements on overall fairness judgments. Limiting the number of cues to three made it possible to create a completely crossed design whereby investigations of interactions between the cues was made possible. In addition, several efforts were made to bolster the internal validity of the study including using repeated scenarios to check for consistency within subjects' judgments, presenting the scenarios in randomized order to reduce order effects, and manipulating the cue order within scenario to control for potential bias.

Conclusion

This study provides the first comprehensive investigation of how procedural, interpersonal and informational justice simultaneously influence overall fairness judgments in the face of negative outcomes. By employing a mix of idiographic and nomothetic analyses, the present study has added to the knowledge base regarding fairness judgments in multiple ways. First, the within-subjects analysis indicated that all three process elements mattered for the majority of individuals, but that the relative importance of each element and the manner in which it was combined with other cues varied somewhat across individuals. This finding suggests that fairness judgments may not be functionally and psychologically equivalent for all individuals. This conclusion could not have been reached with data drawn from a purely between-subjects design. As such, researchers and practitioners should not assume that all individuals perceive fairness information in the same way. Second, results from the cluster analysis revealed support for three main categories of fairness policies. One cluster tended to give all three process elements similar importance, another cluster tended to use the elements in an interactive manner, and the final cluster relied most strongly on procedural justice in forming fairness judgments. From a research perspective, these findings suggest a potentially fruitful avenue of investigation. Specifically, it would be useful to know what individual difference variables help to explain individuals' fairness policies. From a practical perspective, the results suggest that the only way to ensure positive fairness judgments among all employees is for managers to incorporate high levels of all three process elements. In conclusion, by considering all three process elements simultaneously and by taking into account individual differences in decision policies, this study offers an improvement for better understanding and predicting the fair process effect.

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Appendix A – Email Notice (sample)

Dear Valerie:

I am a graduate student in the psychology department at Virginia Tech. For my dissertation, I am studying workplace fairness from the perspective of Administrative Assistants. As an Administrative Assistant, the insight you could offer to this study would be extremely beneficial. I respect your busy schedule, and I completely understand that your job duties take precedence over completing my on-line survey. However, if you could find some time over the next few days to complete my on-line survey, I would be extremely grateful. Also, I would be happy to make the results of the study available to you in May. To participate, simply click on the below weblink in order to be connected to the survey. Please allow 45-60 minutes to complete the survey.

By completing this survey, you will be entered in a drawing to win one of two \$50 gift certificates to the New River Valley Mall!!!

Thank-you so much for your time,
Andrea Sinclair

click here to begin:

http://www.aap.vt.edu/workplace_fairness1/workplace_fairness.html

Appendix B – Negative Outcomes

Outcome #1:

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Outcome #2:

Jane is the senior Administrative Assistant in her office. The support staff worker in Jane's office has been laid off. Due to recent budget cuts, there is NO possibility that the support staff worker will be replaced. As a result, Jane is forced to take over the additional responsibilities. This will increase Jane's workload exponentially. Jane will not receive any increase in compensation for taking on these additional duties.

Outcome #3:

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

Outcome #4:

Laura has worked in the same office for 10 years as an Administrative Assistant. She has just found out that she is being involuntarily transferred to a smaller department with fewer resources and less funding.

Outcome #5:

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

Appendix C – Supervisor Behaviors

In the survey that follows, you will read 150 examples of supervisor behaviors. For each of those behaviors, you will be asked to do two things. FIRST, you will be asked to identify which type of fairness the behavior represents (described below). SECOND, you will be asked to rate each behavior in terms of its level of fairness.

The three "types" of fairness being investigated in this study are:

1) INTERPERSONAL FAIRNESS - This refers to the quality of interpersonal treatment the person receives from the supervisor. Interpersonal fairness includes things like being respectful, demonstrating concern and sympathy, be kind and friendly, and being apologetic.

2) PROCEDURAL FAIRNESS - This refers to the fairness of the procedures used to make decisions. Generally speaking, fair procedures are ones that are: accurate (based on valid information/opinions), consistent (applied consistently over persons and over time), correctable (include a mechanism for correcting bad decisions), representative (give affected parties a chance to ask questions and voice opinions), ethical, and free from bias.

3) INFORMATIONAL FAIRNESS - This entails providing the affected parties with information and/or an explanation about the procedures used to make a decision.

First identify whether the supervisor behavior in question most closely represents interpersonal fairness, procedural fairness, or informational fairness. Then, rate the behavior in terms of its level of fairness on a scale that ranges from 1 to 7, with 1 = extremely unfair and 7 = extremely fair.

THE CONTEXT: Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

#1: The supervisor kindly tells Alice, "I'd be happy to write you a letter of recommendation."

#2: Before laying-off Alice, the supervisor checked his files with the files in the personnel office to make sure that he was basing his decision on accurate records.

#3: When asked about the specific procedures followed to make the decision, the supervisor replied, "I'm not at liberty to say how this decision was made."

#4: The supervisor came to the front office and said to Lois and Alice, "Ladies, I have to lay one of you off from work. Alice, I've decided that you're going to be the one laid off. Lois is family, and I just can't do that to family."

#5: The supervisor asked, "Do you have any questions about the layoff?"

#6: The supervisor explained, "This decision was not made capriciously. The department heads, college deans, the vice president, and the president himself were all present for the decision-

making. It was only after much deliberation and discussion of multiple alternatives that the group decided that layoffs were inevitable."

#7: The supervisor was looking at the wrong personnel file when he decided to layoff Alice.

#8: Alice received notice of her layoff via an email.

#9: When asked how the decision was made, the supervisor responded, "I can't answer your questions."

#10: After being informed of her layoff, Alice told her supervisor, "I'd like to use 8 hours of my annual leave to seek other employment." Her supervisor responded, "I'm sorry, that's not allowed." Alice looked up the State Layoff Policy on-line and printed a copy of where it states that employees are allowed to use annual or VSDP personal leave for the purpose of seeking other employment. Upon seeing this document the supervisor responded, "My oversight. By all means, take the time you need."

#11: State policy requires that management give employees at least 2 weeks notice prior to the layoff. The supervisor only gave Alice one week notice, and then fudged the dates so that it looked like he had given her the full two weeks notice.

#12: A memo was put in Alice's mailbox informing her that she had been laid off.

#13: Alice told her supervisor, "I think the decision was based on questionable data." He encouraged Alice to file a grievance to make her concerns known (i.e. appeal the decision).

#14: The supervisor asked Alice to come into his office. While he's typing away at his computer with his back to her he coldly said, "You're being laid off."

#15: The supervisor thoughtfully offered, "Please feel free to use me as a reference."

#16: The supervisor asked, "What's your opinion on this matter?"

#17: Alice asked, "Why was this decision made?" The supervisor replied, "Because things were getting boring around here and we needed to shake things up a bit."

#18: Once the supervisor informed Alice of the layoff, he gave her the maximum amount of paid leave (80 hours) to take time off to search for other employment.

#19: The supervisor stated, "The same procedures for making layoff decisions have been applied to everyone university-wide."

#20: The supervisor pulled out the budget and went over it with Alice step by step so that she could see that there was no money available to keep her on.

#21: Before the supervisor made the decision to layoff Alice, he asked her a set of very personal questions. He asked, "Do you plan to have children? If so, would you quit this job to stay home with your child? If your husband gets transferred somewhere else, would you quit this job? Do you have any health problems that could affect your work? Do you ever plan to go back to school? At what age do you hope to retire?"

#22: Alice recommended, "I think you should take into consideration employees' service activities within the university when you make decisions about whom to layoff." The supervisor took her recommendation into consideration when making the layoff decision.

#23: Alice said, " I have some questions about why I am being laid off." Her supervisor scribbled down a number on a note pad of someone she should call.

#24: The supervisor explained, "The layoff decision was made on the basis of multiple factors. First, I took into consideration ratings on past performance evaluations. Secondly, I took into consideration length of service. Thirdly, I took into consideration attendance records. And finally, I took into consideration involvement in extracurricular-type activities (e.g., participation in non-required training workshops like Microsoft Access, participation in staff senate, etc.).

#25: The supervisor diligently kept track of Alice's performance and carefully recorded her performance information in her file.

#26: The supervisor told Alice that the layoff decision was based on length of service. She later found out that the supervisor told her co-worker that the layoff decision was based on performance evaluation records.

#27: The supervisor is faced with laying off one of his two administrative assistants. He says, "This is not a personality contest. I'm making this decision solely based on past performance records."

#28: The supervisor said, "Please let me know if you have any insights on this issue."

#29: The supervisor explained, "I based the decision on years of experience, and letters of recommendation with the former being weighted more heavily than the latter."

#30: The supervisor stated, "These are the same procedures that were used last year to make layoff decisions, and these are the same procedures that are being used this year."

#31: When asked what criteria were used to make the decision, the supervisor replied, "I don't know."

#32: The supervisor asked, "How do you feel about all this?"

#33: The supervisor told Alice, "I cannot give you anymore information as to why you are being laid-off."

#34: The supervisor regretfully said, "I hate to lose you Alice; you've been a really great employee."

#35: As soon as the supervisor found out that he would have to layoff Alice, he let her know immediately so that she would have time to prepare to find another job.

#36: The supervisor asked the opinion of the senior administrative assistant in his office about whom to layoff. The senior administrative assistant recommended that the supervisor layoff Alice. Unbeknownst to the supervisor, the senior administrative assistant and Alice do not get along. Not surprisingly, the senior administrative assistant recommended that the supervisor layoff Alice.

#37: Rather than looking at past performance evaluation records, the supervisor pulled a name out of a hat in order to decide which of his administrative assistants to layoff.

#38: When Alice started to cry upon hearing the news, the supervisor said, "Don't be a wuss. I can't stand to see a person cry."

#39: The supervisor encouragingly stated, "If the budget situation improves, I'll give you a call back."

#40: The supervisor explained that he hired a well-respected professional consultant who conducted a thorough study of the office. Then, based on the results of that study the supervisor decided to layoff Alice.

#41: The supervisor investigated whether there were any other placement opportunities within the university for Alice.

#42: The supervisor is forced to layoff one of his two administrative assistants. Both are excellent workers. The supervisor and Alice are old family friends. Given this non-work relationship, the supervisor does not feel comfortable making the decision. He worries that he cannot be objective. Consequently, he brings in a qualified impartial third party who can be more objective about the situation. The third-party decision maker then makes an informed decision that Alice should be the one to be laid off. The supervisor follows through with this recommendation.

#43: Alice asked her supervisor, "How did you decide to lay me off and not the other administrative assistant?" The supervisor replied, "It does not matter how the decision was made."

#44: The supervisor told Alice, "You really aren't a very good secretary--you aren't cut out to handle this job. I'm sure you could find a job that better suits you--maybe as a cashier at the grocery store or the mall."

#45: Upon learning of the impending layoffs, the administrative assistant came up with a list of reasons for why she should not be laid off. She emailed the memo to her supervisor. The supervisor deleted the memo before even reading it.

#46: The supervisor conducted performance evaluations for Alice each time they were supposed to be conducted.

#47: Last week the supervisor told Alice that there was no chance that she would be laid off. This week he told her that she was being laid off.

#48: The supervisor explained, "In the face of budget cuts, I was forced to come up with ways to save money. I considered multiple ways to save money. For example, I considered dropping the number of courses offered in our department; I considered not allowing faculty or staff to use the photocopy machine; I considered reducing the amount of paid leave staff receive, and many other things. Even after taking into consideration all these options, I still don't have the money to pay for a full-time administrative assistant. Consequently, this is how the decision was made that you were to be laid off."

#49: Alice asked, "May I ask some questions about how the decision was made?" The supervisor responded, "No, you may not ask questions about how I made the decision."

#50: The supervisor said, "No department is receiving special treatment. Every department is faced with making these same decisions."

#51: Alice asked her supervisor about the procedures used to make the decision. He responded, "I cannot give you any more information."

#52: Alice asked, "May I sit in on a meeting between department supervisors discussing the issue of layoffs? I'd like to represent the opinion of the administrative assistants whom these layoffs will affect." The supervisor replied, "No you may not attend. There won't be an opportunity for you to voice your opinions at the meeting."

#53: The supervisor coldly says, "These things happen from time to time. That's a fact."

#54: The supervisor told Alice, "Alice we're going to miss you around here."

#55: The supervisor made every attempt to find a way to avoid laying off Alice.

#56: Alice said, "I have some questions about how you arrived at the decision to lay me off?" The supervisor replied, "There's nothing left to be said."

#57: Two supervisors work in the office. Supervisor #1 was using one set of procedures to make decisions about layoffs, and supervisor #2 was using a different set of procedures to make decisions about layoffs. The two supervisors met and worked it out so that they were both using the same set of procedures.

#58: Alice recommended, "I think you should take into consideration employees' service activities within the university when you make the decision about whom to layoff." The supervisor disregarded her suggestion.

#59: Two administrative assistants worked in the office. The supervisor had to layoff one of the two. Alice and her supervisor had been having an affair. Alice broke it off. She was the one laid off.

#60: Her supervisor told her, "I want to explain to you why I made the decision I made." He then carefully explained how he, and each of the senior administrative assistants were involved in the decision process. He explained that each person cast a vote, and the candidate who received the most votes was the one who was laid off."

#61: Alice was dismissed from her supervisor's office before she had a chance to ask any questions.

#62: There are two supervisors that work in Alice's office. Alice works on projects for both supervisors. Nonetheless, only one of the supervisors was involved in the decision to layoff Alice. Alice asked, "Why didn't my other supervisor have a say in the decision to lay me off?" The two supervisors then corrected the procedures so that both supervisors would be involved in making layoff decisions.

#63: Alice asked, "How did you make this layoff decision? Why are you laying off me and not Lois? I have worked here longer than Lois, and you've always given me excellent performance evaluations." The supervisor responds, "I like Lois better than you."

#64: Alice had worked in four different departments on campus, before she was laid off from her current position. Because Alice had moved from one department to another, the supervisor miscalculated her years of service. He reported this wrong information to the personnel office. Alice brought the miscalculation to the attention of her supervisor, and he immediately contacted the personnel office to correct his mistake.

#65: Even though the supervisor knew well over a month in advance of the impending layoff, he didn't tell Alice about it until the last possible minute.

#66: With compassion in his voice, the supervisor said, "If there's anything I can ever do for you, please let me know."

#67: The supervisor hired a well-respected professional consultant to make the decision. However, the consultant was not given all the relevant information about the candidates. Therefore, the consultant's recommendation was not based on accurate information.

#68: Two administrative assistants worked in the office. The supervisor had to layoff one of the two. Judith, who ran personal errands for the supervisor, was not laid off. Alice did not run personal errands for the supervisor; Alice was laid off.

#69: The supervisor printed off a copy of the state layoff procedure, and read through it with Alice step by step until he was sure that she understood it. Then, he explained this procedure in relation to her specific situation.

#70: The supervisor took Alice into his office and sat down in the chair next to hers. He looked her directly in her eyes and gently said, "Alice, I need to let you know that we're going to have to let you go."

#71: Alice said, "I have some questions?" The supervisor responded, "I've told you everything you need to know."

#72: The supervisor tried to console Alice by saying, "I once went through a very similar situation, and I remember how upset I was."

#73: The supervisor kept a performance diary on Alice, which he updated weekly. Consequently, when it came time to conduct performance evaluations, the supervisor was confident that he was accurately recalling her performance.

#74: Some years the supervisor didn't even do a performance evaluation.

#75: Alice had worked in four different departments on campus, before she was laid off from her current position. Because Alice had moved from one department to another, the supervisor miscalculated her years of service. He reported this wrong information to the personnel office. When Alice brought the miscalculation to the attention of her supervisor, he refused to call the personnel office and correct his mistake.

#76: Alice asked her supervisor, "I'd like to use 8 hours of my annual leave to seek other employment." Her supervisor responded, "I'm sorry, that's not allowed." Alice looked up the State Layoff Policy on-line and printed a copy of where it states that employees are allowed to use annual or VSDP personal leave for the purpose of seeking other employment. Even after seeing this document the supervisor still refused to allow her to take any time off to look for other employment.

#77: Even though the supervisor was very busy, he took the time to sit down with Alice and talked to her for well over an hour until Alice felt that she understood the situation.

#78: The supervisor gave Alice several weeks advance notice of the impending layoff, so that she could have a chance to investigate other job opportunities.

#79: The supervisor sadly stated, "Alice, I am genuinely sorry that this has happened."

#80: When Alice asked the supervisor how he arrived at the decision, the supervisor pretended not to hear Alice's questions.

#81: The supervisor asked, "Do you have any input on this matter that you'd like me to convey to the dean?"

#82: The supervisor was forced to layoff one of his two administrative assistants. Both had excellent attendance and performance evaluations. Consequently, the supervisor gave each a performance test (e.g., speed typing test, memo writing task), and then conducted a blind review of those results. Based on the results from the blind review, the supervisor laid off Alice.

#83: Alice's friend Judith is an administrative assistant in another department. Judith was also laid off. Alice asked Judith what her supervisor told her about how the decision was made. Alice learned that Judith's supervisor handled the situation in exactly the same manner as her own supervisor.

#84: Alice learned that her supervisor was not following the same layoff protocol as supervisors in other departments. Her supervisor was basing his decision on attendance records, whereas all the other supervisors at the university were basing their decisions on seniority.

#85: Alice was told that she was being laid off because she had poor ratings for punctuality on her performance evaluation records. However, when she had been late to work in the past her supervisor had told her, "punctuality is not part of your performance evaluation."

#86: With concern in his voice, the supervisor told Alice, "My door is always open if you ever want to talk."

#87: With optimism in his voice, the supervisor told Alice, "I heard of another job opening in physics. I'd be happy to put a good word in for you if you are interested."

#88: Instead of answering Alice's questions about how the decision was made, the supervisor changed the topic.

#89: The supervisor has made sexist comments in the past. When it comes time to decide whom to layoff, he decides to layoff Alice and not Jim, even though both have excellent performance evaluation records.

#90: "What will I do?????" gasps Alice. "Beats me," replied her supervisor.

#91: When making the decision, the supervisor reviewed all of Alice's performance evaluation records.

#92: The supervisor walked into Alice's office at 9:01 and said, "you're being laid off. Have your desk cleaned out, and all your personal items removed by lunchtime today." Then he walked out.

#93: The supervisor asked, "For future reference, how do you think we should handle these types of situations?"

#94: The supervisor said, "Alice, you're being laid off from work." On his way out the door, the supervisor mutters under his breath, "Maybe next time we'll be so lucky as to get a man in here to do the job."

#95: The supervisor asked, "Do you understand what I'm telling you?" Alice replied, "No, not really." The supervisor responded, "Well, that's all I can tell you."

#96: The supervisor had to layoff both of his administrative assistants. He told both of them about a vacant position in another department.

#97: The supervisor told his administrative assistant, "There will be an open forum held on Tuesday for all affected parties. At this forum, you will have a chance to make your opinions known."

#98: When Alice asked her supervisor a question regarding her layoff, he dropped everything he was doing in order to listen to her.

#99: Alice asked, "May I sit in on a meeting between department supervisors discussing the issue of layoffs? I'd like to represent the opinion of the administrative assistants whom these layoffs will affect." The supervisor replied, "Yes, you may, and there will be an opportunity for you to voice your opinions at the meeting."

#100: Alice asked, "May I ask some questions about how the decision was made?" The supervisor responded, "Yes, you may ask questions about how I made the decision."

#101: The university president sent out a memo to all supervisors specifying the exact protocol that supervisors should follow when making layoff decisions. Alice's supervisor followed the protocol exactly the way he was supposed to.

#102: Alice received a negative performance evaluation because she was being evaluated on duties that were not actually part of her job duties. When she brought this information to the attention of her supervisor, he said, "I'll see that it's corrected." The negative performance evaluation never was corrected, and in fact was used to base the decision of why Alice should be laid off.

#103: Alice asked, "Will you listen to my side of the story about why I think I should not be laid off?" The supervisor responded, "No, the decision has already been made."

#104: There are two administrative assistants working in the department. One of the administrative assistants must be laid off. The supervisor lays off Alice instead of Judith because Judith is his niece.

#105: The supervisor said, "You are not being singled out. Administrative assistants all across the university are being laid off because of budget cuts."

#106: The supervisor needed to lay off one of his two administrative assistants. The supervisor had a personality conflict with Alice. So, when it was time to make the layoff decision, he gave Alice a really difficult project that she couldn't possibly finish in the time allotted. When she failed to complete the project he cited this as evidence for why she should be laid off.

#107: Judith and Alice work in the same department. They were both laid off. They compared notes and found that the supervisor had followed the exact same layoff procedure for each of them.

#108: The supervisor explained, "The reason I've had to lay you off is because they are merging this department with another department on campus, and we will only need one administrative assistant for the newly merged office. The administrative assistant from the department we are merging with has been working for the university for 20 years. Because she has higher seniority, we are going to keep her."

#109: When making the decision, the supervisor only sought the opinion of one of the two senior administrative assistants in the office about whom to layoff.

#110: When making the decision, the supervisor only looked at Alice's performance evaluation record from one year.

#111: The supervisor used performance evaluation records, attendance and length of service in order to decide whether to la-off Alice. The supervisor only looked at length of service information to decide whether to layoff Judith.

#112: The new supervisor in the office had just replaced the former supervisor a mere two weeks ago. Consequently, the new supervisor was not familiar with Alice's work. Nonetheless, he decided to layoff Alice even though he was unfamiliar with her work performance.

#113: The supervisor respectfully responded, "I don't know the answer to that question, but I'll be happy to make some phone calls and find the answer for you."

#114: Alice was allowed to help determine when and how her layoff should be implemented.

#115: The new supervisor in the office had just replaced the former supervisor a mere two weeks ago. Therefore, the new supervisor was not familiar with Alice's work. Consequently, before making the layoff decision, he sought the opinion of the former supervisor who had worked with Alice for over 5 years.

#116: Alice was concerned about the procedures that had been used to make the decision. She went into her supervisor's office to ask him some questions. The supervisor turned her away saying, "The decision has already been made. It's too late for discussion."

#117: "What am I going to do?" Alice asked. "Hey, you're not the only one getting screwed over. This affects me too," replied the supervisor.

#118: The supervisor sent Alice to a meeting, but he didn't tell her what the meeting was about. It wasn't until she got there that she learned that the meeting was for people who were being laid off from their jobs.

#119: Alice was not allowed to help determine when and how her layoff should be implemented.

#120: Instead of answering Alice's questions about how the decision was made, the supervisor changed the topic.

#121: The supervisor had to layoff one of his two administrative assistants. The supervisor liked Alice better than Judith. However, Judith had worked in the department longer and had good attendance and past performance evaluations. Consequently, even though the supervisor liked Alice, he laid off Alice because she had less seniority.

#122: The supervisor laid off both of his administrative assistants. He only told one of them about a placement opportunity in another office on campus.

#123: Two supervisors work in the same office. Supervisor #1 was making lay off decisions for administrative assistants #1 and #2. Supervisor #2 was making lay off decisions for administrative assistants #3 and #4. Supervisor #1 was making decisions based on length of service. Supervisor #2 was making decisions based on performance evaluation records. This discrepancy in procedures was brought to the attention of the supervisors. Nonetheless, each supervisor continued to use his own criteria.

#124: The supervisor wished Alice good luck with her future endeavors.

#125: The supervisor gave Alice some words of encouragement by saying, "You're going to find a great job. I just know it. Anyone would be happy to have you."

#126: The supervisor was forced to layoff one of his two administrative assistants. Both are excellent workers. The supervisor and Lois are old family friends. Given this non-work relationship, the supervisor does not feel comfortable making the decision. He worries that he cannot be objective. Consequently, he brings in a qualified impartial third party who can be more objective about the situation. The third-party decision maker then makes an informed decision that Lois should be the one laid off. Nonetheless, the supervisor disregards this recommendation, and lays off Alice.

#127: When Alice started to cry upon hearing the news, her supervisor handed her a tissue and sympathetically said, "I know this is a difficult situation and you have every right to be upset."

#128: The supervisor told Alice she was being laid off. He said, "My budget has been cut in half and I just can't afford to keep you on." Alice later found out that the budget for the department was only cut by 5%.

#129: The supervisor told Alice, "I don't need to give you any more information than I already have."

#130: When asked about the specific procedures followed to make the decision, the supervisor replied, "I followed the procedures in the handbook."

#131: Alice was in the middle of working on a major project. The supervisor waited to tell Alice that she was being laid off until after she was finished working on the project so that it wouldn't affect her work.

#132: The supervisor is forced to layoff one of his two Administrative Assistants. Both have excellent attendance and performance evaluations. Consequently, the supervisor gives each a performance test (e.g., speed typing test, memo writing task), and then conducts a blind review of those results. Based on the results from the blind review, the supervisor makes his decision about whom to layoff. But before he makes the decision, he peeks at the names associated with the test results.

#133: Alice asked her supervisor, "Why is this happening? How was this decision made? Who else is it affecting?" The supervisor was shuffling through some papers on his desk and looked back up at Alice and says, "I'm sorry, I wasn't listening. Were you talking to me?"

#134: The supervisor gave Alice a copy of a memo from the university president explaining why there was a need to layoff employees. He then went over the memo with her so that he was sure she understood what it was saying.

#135: The supervisor explained, "The opinions of the two senior administrative assistants in the office weighed heavily in the decision to lay you off."

#136: Alice was in the middle of asking her supervisor a question when he said, "Can this wait? I've got an appointment for a hair cut in 15 minutes."

#137: Alice told the supervisor how she thinks he should have handled the situation. Upon hearing Alice's suggestion the supervisor responds, "That's the stupidest idea I've ever heard."

#138: Alice asked her former supervisor if she could use him as a reference on future job applications. He responded, "No, I have nothing good to say about you."

#139: Some time ago, Alice confided in her supervisor that she had some health problems. As of yet, her health problems had not interfered with her work. When it came time to make the layoff decision the supervisor laid off Alice. He told her she was being laid off because, "You may not be able to work much longer anyways due to your health concerns."

#140: Alice found out that other administrative assistants in other departments were also being laid off.

#141: The supervisor overheard a private phone conversation between Alice and her husband. The supervisor eaves dropped, and learned that Alice had just found out that she was pregnant. Later that week the supervisor had to decide which of his two administrative assistants to layoff. He decided to layoff Alice since she was probably going to be leaving anyways due to her pregnancy.

#142: The supervisor took Alice out to lunch and broke the news to her gently during lunch.

#143: Two administrative assistants worked in the office. The supervisor had to layoff one of the two. The supervisor changed the records so that it would look like Alice had poorer attendance than Judith. He then used this as a reason to layoff Alice.

#144: The supervisor kept poor performance evaluation records. Some years he did it, and other years he just copied down the ratings from the prior evaluation period.

#145: The supervisor asked Alice, "What type of an effect do you think your absence will have on this office?"

#146: There was a mistake in the department's budget. This mistake was brought to the attention of the supervisor. The supervisor corrected the mistake. In light of this mistake in the budget, Alice asked the supervisor if he would go back and check to see if there was now any money available to keep her on. He did not go back and check.

#147: The supervisor purposely kept Alice overly busy in her last few days of work so that he wouldn't be left doing the work after she was gone.

#148: The supervisor called Alice into his office. He said, "I've got some bad news." Just then the phone rang. He answered it and proceeded to talk to his wife on the phone for several minutes about their dinner arrangements. Once he got off the phone he looked back up at Alice and blankly said, "What were we talking about?" Alice told him he said he was about to give her some bad news." "Oh yeah," he says, "You're being laid off."

#149: Alice pleaded, "If you give me a chance and tell me what needs to be improved, I'll do my best to be a better worker." "No second chances here lady," said the supervisor. "Now get out of my office. I have work to do."

#150: Upon learning of the impending layoffs, Alice came up with a list of reasons for why she should not be laid off. She emailed the memo to her supervisor. The supervisor forwarded her memo to the dean in order to bring her concerns to the attention of someone higher up in the university.

Appendix D – Scenarios

FIRST SET

Scenario #1 High Proc, High Inter, High Info-aL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice found out that Judith, who works in the same department, was also laid off. Alice and Judith compared notes and found that the supervisor followed the same procedure for both employees when making the decision to lay them off. With concern in his voice, the supervisor told Alice, “My door is always open if you ever want to talk.” The supervisor also printed off a copy of the state layoff procedure, and read through it with Alice step by step until he was sure that she understood it. Then, he explained this procedure in relation to her specific situation.

Scenario #2 High Inter, High Info, High Proc-bR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

When Shelly started to cry upon hearing the news, her supervisor handed her a tissue and sympathetically said, “I know this is a difficult situation and I understand why you are upset.” The supervisor then pulled out the budget and went over it with Shelly step by step so that she could see that there was no money available to give her a raise. The supervisor then stated, “These same procedures for making decisions about raises have been applied to everyone university-wide.”

Scenario #3 High Info, High Proc, High Inter-cJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor said, “Sue, I want to explain to you how I made the hiring decision.” He then thoroughly described how he, and each of the senior administrative assistants who work in the office, were involved in making the decision. He explained that each person cast a vote as to whom they thought should be hired. In the end, the applicant with the most votes was the person who was hired. Also, before making the hiring decision, the supervisor checked his files with the files in the personnel office to make sure that he was basing his decision on accurate records. Before Sue left, the supervisor gave her some sincere words of encouragement when he said, “You’re going to find another great job. I just know it. You are a good worker.”

Scenario #4 High Proc, High Info, High Inter-dL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Once the supervisor informed Alice of the layoff, he gave her the maximum amount of paid leave (80 hours) to take time off to search for other employment. In addition, the supervisor gave Alice a copy of a memo from the university president explaining why there was a need to layoff employees. He then went over the memo with her so that he was sure she understood what it was saying. Later, when Alice asked her supervisor a question regarding her layoff, he dropped everything he was doing in order to listen to her.

Scenario #5 High Info, High Inter, High Proc-eR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor explained, "In the face of budget cuts, I was forced to come up with ways to save money. I considered multiple ways to save money. For example, I considered dropping the number of courses offered in our department; I considered not allowing graduate students use of the photocopier; I considered reducing the amount of paid leave staff receive, and many other things. Even after taking into consideration all these options, I still don't have money to give you a raise. Consequently, that is why I have denied your request for a raise." The supervisor sadly stated, "Shelly, I'm genuinely sorry that I cannot give you a raise." Shelly later found out that Robyn, who works in the same department, also asked the supervisor for a raise. Robyn's request for a raise was also denied. Shelly and Robyn compared notes and found that the supervisor followed the same procedure for both employees when making the decision to deny their requests for raises.

SECOND SET

Scenario #6 Low Inter, Low Proc, Low Info-fJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

Sue told the supervisor how she thought he should have handled the hiring situation. Upon hearing Sue's suggestion, the supervisor responded, "That's the stupidest idea I've ever heard." Sue later discovered that her supervisor had only looked at her performance evaluation record from one of the four years she had worked in the office. Consequently, Sue asked her supervisor,

“What procedures did you use to make the hiring decision?” Her supervisor replied, “I cannot give you any more information.”

Scenario #7 Low Proc, Low Inter, Low Info-gL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice was one of two administrative assistants working in the office. Due to budget cuts, the supervisor had to layoff one of the two. The supervisor changed the records so that it looked like Alice had poorer attendance than Judith. The supervisor then used this as a reason to layoff Alice and not Judith. The supervisor then coldly told Alice, “These things happen from time to time. That’s a fact.” Alice questioned, “How did you decide to lay me off and not Judith?” The supervisor responded, “It does not matter how the decision was made.”

Scenario #8 Low Inter, Low Info, Low Proc-hR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

Shelly was in the middle of asking her supervisor a question about the raise when he interrupted her and said, “Can’t this wait? I’ve got an appointment for a hair cut in 15 minutes.” “Besides,” the supervisor said, “I’ve already told you everything you need to know.” Shelly later found out that the supervisor was looking at the wrong personnel file when he decided to deny her request for a raise.

Scenario #9 Low Info, Low Proc, Low Inter-iJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor asked Sue, “Do you understand what I’m telling you?” Sue replied, “No, not really.” The supervisor responded, “Well, that’s all I can tell you.” Sue later discovered that rather than looking at past performance records, the supervisor pulled a name out of a hat in order to decide which applicant to hire. The supervisor coldly told her, “Hey, these things happen from time to time. That’s a fact.”

Scenario #10 Low Proc, Low Info, Low Inter-jL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice was one of two Administrative Assistants working in the office. The supervisor was forced to layoff one of the two. Both were excellent workers. The supervisor and Judith were old family friends. Given this non-work relationship, the supervisor did not feel comfortable making the decision about whom to lay-off. Consequently, the supervisor brought in a qualified impartial third party who could be more objective. The third-party decision maker made an informed recommendation that Judith should be the one laid off. Nonetheless, the supervisor disregarded this recommendation and laid-off Alice, and kept on his old family friend. When Alice asked what criteria were used to make the decision, the supervisor replied, "I don't know." Alice then pleaded, "If you give me a chance and tell me what needs to be improved, I'll do my best to be a better worker." To this the supervisor responded, "No second chances here lady. Now get out of my office."

THIRD SET

Scenario #11 High Info, High Inter, Low Proc-kR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor gave Shelly a copy of a memo from the university president explaining why the budget was so tight. He then went over the memo with Shelly so that he was sure that she understood what it was saying. Then with concern in his voice he told her, "My door is always open if you ever want to talk." This was a new supervisor. He had just replaced the former supervisor a mere two weeks ago. Consequently, this new supervisor was not familiar with Shelly's work. Despite his unfamiliarity with her work, he did not consult the opinion of the former supervisor before he made the decision to deny Shelly's request for a raise.

Scenario #12 Low Proc, High Inter, High Info-IJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor kept poor performance evaluation records on Sue. Some years he conducted performance evaluations, and other years he just copied down the ratings from the prior evaluation period. Before Sue left, the supervisor kindly offered, "Sue, I'd be happy to write you a letter of recommendation for another job." Sue then asked him some specific questions about the decision to hire the other applicant. He told her, "I don't know the answer to all your questions, but I will make some phone calls and find the answers for you."

Scenario #13 High Inter, High Info, Low Proc-mL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

The supervisor gave Alice some sincere words of encouragement when he said, “You’re going to find another great job. I just know it. You are a good worker.” Then, the supervisor printed off a copy of the state layoff procedure, and read through it with Alice step by step until he was sure that she understood it. He then explained the procedures in relation to her specific situation. The state policy requires that management give employees at least 2 weeks notice prior to the layoff. Alice’s supervisor only gave her one week notice, and then he fudged the dates so that it looked like he had given her the full two weeks notice.

Scenario #14: High Inter, Low Proc, High Info-nR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

When Shelly asked her supervisor a question about getting a raise, the supervisor dropped everything he was doing in order to listen to her. Shelly had received a negative performance evaluation in the past because she was being evaluated on duties that were not actually part of her job description. She brought this mistake to the attention of her supervisor. He told her, “I’ll see that this is corrected.” The negative performance evaluation was never corrected, and in fact was cited as a reason for why Shelly did not deserve a raise. Also, the supervisor pulled out the budget and went over it with Shelly step by step so that she could see that there was no money available to give her a raise.

Scenario #15: High Info, Low Proc, High Inter-oJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor said, “Sue, I want to explain to you how I made the hiring decision.” He then thoroughly described how he, and each of the senior administrative assistants who work in the office, were involved in making the decision. He explained that each person cast a vote as to whom they thought should be hired. In the end, the applicant with the most votes was the person who was hired. The supervisor told Sue that she had poor performance ratings for punctuality. However, when Sue had been late to work in the past her supervisor had told her, “Don’t worry—punctuality is not part of your performance evaluation.” Sue started to cry when she learned the news that she did not get the job. Her supervisor handed her a tissue and sympathetically said, “I know this is a difficult situation and I understand why you are upset.”

FOURTH SET

Scenario #16 High Info, Low Inter, High Proc-pL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

The supervisor explained, "In the face of budget cuts, I was forced to come up with ways to save money. I considered multiple ways to save money. For example, I considered dropping the number of courses offered in our department; I considered not allowing graduate students use of the photocopy machine; I considered reducing the amount of paid leave staff receive, and many other things. Even after taking into consideration all these options, I still don't have the money to pay for a full-time administrative assistant. Consequently, this is how I came to the decision that you were to be laid-off." Upon hearing the news of her layoff, Alice gasped, "What am I going to do???" The supervisor rudely responded, "Hey, you're not the only one getting screwed over. This affects me too." Alice had worked in four different departments on campus before she was laid off from this current position. Because Alice had moved from one department to another, the supervisor miscalculated her years of service. He reported this wrong information to the personnel office. Alice brought the miscalculation to the attention of her supervisor, and he immediately contacted the personnel office to correct his mistake.

Scenario #17: Low inter, High Proc, High Info-qR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor called Shelly into his office. He said, "I've got some bad news." Just then the phone rang. He answered it and proceeded to talk to his wife on the phone for several minutes about their dinner arrangements. Once he got off the phone he looked back up at Shelly and blankly said, "What were we talking about?" Shelly replied, "You said you had some bad news for me." "Oh yeah," he replied, "You're not getting a raise." Before making the decision to deny Shelly's request for a raise, the supervisor checked his files with the files in the personnel office to make sure that he was basing his decision on accurate records. The supervisor then explained that aside from the budget situation, the denial of her request for a raise was based on multiple factors. "First, he said, "I took into consideration ratings on past performance evaluations. Secondly, I took into consideration your length of service. Thirdly, I took into consideration attendance records. And finally, I took into consideration involvement in extracurricular-type activities (e.g., participation in non-required training workshops like Microsoft Access, participation in staff senate, etc.)."

Scenario #18: High Proc, High Info, Low inter-rJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested

parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The university president sent out a memo to all supervisors specifying the exact protocol that supervisors should follow when making hiring decisions. Sue's supervisor followed the protocol exactly the way he was supposed to. The supervisor then explained, "The hiring decision was based on years of experience and letters of recommendation, with the former being weighted more heavily than the latter." The supervisor then said, "Sue, you really aren't a very good secretary—you aren't cut out to handle this job. I'm sure you could find a job that better suits you—maybe as a cashier at the grocery store or the mall."

Scenario #19: High Info, High Proc, Low Inter-sL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

The supervisor explained that aside from the budget situation, the decision to lay her off was based on multiple factors. "First, he said, "I took into consideration ratings on past performance evaluations. Secondly, I took into consideration your length of service. Thirdly, I took into consideration attendance records. And finally, I took into consideration involvement in extracurricular-type activities (e.g., participation in non-required training workshops like Microsoft Access, participation in staff senate, etc.)." Once the supervisor informed Alice of the layoff, he gave her the maximum amount of paid leave (80 hours) to take time off to search for other employment. Later, Alice asked her supervisor, "Why is this happening? How was this decision made? Who else is it affecting?" The supervisor was shuffling through some papers on his desk and looked blankly back up at Alice and said, "I'm sorry. I wasn't listening. Were you talking to me?"

Scenario #20: Low Inter, High Info, High Proc-tR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor asked Shelly to come into his office. While he was typing away at his computer with his back to her he abruptly said, "You're not getting the raise." He then explained, "In the face of budget cuts, I was forced to come up with ways to save money. I considered multiple ways to save money. For example, I considered dropping the number of courses offered in our department; I considered not allowing graduate students use of the photocopy machine; I considered reducing the amount of paid leave staff receive, and many other things. Even after taking into consideration all these options, I still don't have the money to give you a raise." The supervisor then stated, "These same procedures for making decisions about raises have been applied to everyone university-wide."

FIFTH SET

Scenario #21: Low Info, Low Inter, High Proc-uJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

When asked how he arrived at the decision to hire the other applicant, the supervisor responded, "I can't answer your questions." Sue pleaded, "If you give me a chance and tell me what needs to be improved, I'll do my best to be a better worker." To this the supervisor responded, "No second chances here lady. Now get out of my office." The university president sent out a memo to all supervisors specifying the exact protocol that supervisors should follow when making hiring decisions. Sue's supervisor followed the protocol exactly the way he was supposed to.

Scenario #22: Low Inter, Low Info, High Proc-vL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice asked her supervisor, "Why is this happening? How was this decision made? Who else is it affecting? The supervisor was shuffling through some papers on his desk and looked blankly back up at Alice and said, "I'm sorry. I wasn't listening. Were you talking to me?" She responds, "Yes." The supervisor then replied, "I don't know." Alice had worked in four different departments on campus before she was laid off from her current position. Because Alice had moved from one department to another, the supervisor miscalculated her years of service. He reported this wrong information to the personnel office. Alice brought the miscalculation to the attention of her supervisor, and he immediately contacted the personnel office to correct his mistake.

Scenario #23: High Proc, Low Inter, Low Info-wR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

Shelly found out that Robyn, who works in the same department, also asked the supervisor for a raise. Robyn's request for a raise was also denied. Shelly and Robyn compared notes and found that the supervisor followed the same procedure for both employees when making the decision to deny their requests for raises. Later that day, Shelly was in the middle of asking her supervisor a question about the decision, when he interrupted her and said, "Can't this wait? I've got an appointment for a hair cut in 15 minutes." Then she asked him, "What criteria were used to make this decision?" The supervisor replied, "I don't know."

Scenario #24: Low Inter, High Proc, Low Info-xJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor told Sue, “You really aren’t a very good secretary—you aren’t cut out to handle this job. I’m sure you could find a job that better suits you—maybe as a cashier at the grocery store or the mall.” Sue had worked in four different departments on campus before she was laid off from this current position. Because she had moved from one department to another, the supervisor miscalculated her years of service. He reported this wrong information to the personnel office. Sue brought the miscalculation to the attention of her supervisor, and he immediately contacted the personnel office to correct his mistake. Later, Sue told her supervisor, “I have some questions.” The supervisor responded, “I’ve told you everything you need to know.”

Scenario #25: Low Info, High Proc, Low Inter-yL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice questioned, “How did you decide to lay me off and not the other administrative assistant who works in this office?” The supervisor replied, “It does not matter how the decision was made.” Before laying-off Alice, the supervisor checked his files with the files in the personnel office to make sure that he was basing his decision on accurate records. Alice later told the supervisor how she thought he should have handled the layoff situation. Upon hearing Alice’s suggestion the supervisor responded, “That’s the stupidest idea I’ve ever heard.”

SIXTH SET

Scenario #26: Low Info, High Inter, Low Proc-zJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

Sue asked her supervisor, “What criteria were used to make the hiring decision?” The supervisor replied, “I don’t know.” Then, the supervisor regretfully stated, “Sue, I hate to lose you; you’ve been a really great employee.” In the past, however, the supervisor had made sexist comments. Therefore, it came as no surprise that the supervisor decided to hire the other applicant who was a man.

Scenario #27: High Inter, Low Proc, Low Info-aaR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor sadly stated, “Shelly, I’m genuinely sorry that I cannot give you a raise.” Earlier that week, the supervisor had overheard a private phone conversation between Shelly and her husband. The supervisor eavesdropped, and learned that Shelly had just found out that she was pregnant. He decided not to give Shelly the raise because he thought that she would probably be leaving anyways due to her pregnancy. When Shelly later asked the supervisor why he didn’t give her a raise, he responded, “I can’t answer your questions.”

Scenario #28: Low Proc, Low Info, High Inter-bbL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice was one of two Administrative Assistants who worked in the office. The supervisor was forced to layoff one of them. Both had excellent performance and attendance records. Consequently, the supervisor decided to give each a performance test (i.e., speed typing test, memo writing task), and then he conducted a blind review of those results. Based on the results from the blind review, the supervisor made his decision about whom to layoff. But before he made the decision, he peeked at the names associated with the test results. Therefore, his decision was not an objective one. After making the layoff announcement, the supervisor asked, “Alice do you understand what I’m telling you?” Alice replied, “No, not really.” The supervisor responded, “Well, that’s all I can tell you.” Then, with optimism in his voice, the supervisor told Alice, “I heard of another job opening in the physics department. I’d be happy to put in a good word for you if you’re interested.”

Scenario #29: Low Info, Low Proc, High Inter-ccR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

After informing her that her request for a raise had been denied, the supervisor told Shelly, “I don’t need to give you any more information than I already have.” There were two supervisors and two Administrative Assistants who worked in this particular office. The two supervisors were equally responsible for overseeing the work of the two Administrative Assistants, Shelly and Robyn. Both Shelly and Robyn had requested raises. Supervisor #1 made the raise decision for Shelly and Supervisor #2 made the decision for Robyn. Supervisor #1 was making raise decisions based on length of service, whereas Supervisor #2 was making raise decisions based on performance evaluation records. This discrepancy in procedures was brought to the attention of the supervisors. Nonetheless, each supervisor continued to use his own criteria. Shelly started to

cry when she learned that she did not get a raise. Her supervisor handed her a tissue and sympathetically said, “I know this is a difficult situation and I understand why you are upset.”

Scenario #30: Low Proc, High Inter, Low Info-ddJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor hired a well-respected professional consultant to make the hiring decision. However, the consultant was not given all the relevant information about the applicants. Therefore, the consultant’s recommendation was not based on accurate information. Before Sue left, the supervisor kindly offered, “Sue, I’d be happy to write you a letter of recommendation for another job.” Sue then asked, “What procedures did you use to make the hiring decision?” The supervisor responded, “I cannot give you any more information.”

SEVENTH SET

Scenario #31: High Info, Low Inter, Low Proc-eeL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

The supervisor explained that aside from the budget situation, the decision to lay her off was based on multiple factors. “First,” he said, “I took into consideration ratings on past performance evaluations. Secondly, I took into consideration years of experience. Thirdly, I took into consideration attendance records. And finally, I took into consideration involvement in extracurricular-type activities (e.g., participation in non-required training workshops like Microsoft Access, participation in staff senate, etc.)” Upon hearing the news of her layoff, Alice gasped, “What am I going to do???” The supervisor rudely responded, “Hey, you’re not the only one getting screwed over. This affects me too.” The state policy requires that management give employees at least 2 weeks notice prior to the layoff. Alice’s supervisor only gave her one week notice, and then he fudged the dates so that it looked like he had given her the full two weeks notice.

Scenario #32: High Info, Low Proc, Low Inter-ffR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor gave Shelly a copy of a memo from the university president explaining why the budget was so tight. He then went over the memo with Shelly so that he was sure that she understood what it was saying. Nonetheless, when making the decision about whether or not to

give Shelly a raise, her supervisor had only looked at her performance evaluation record from one of the eight years she had worked in the office. Shelly asked her supervisor, "Why is this happening? How was this decision made? Who else is it affecting?" The supervisor was shuffling through some papers on his desk and looked blankly back up at Shelly and said, "I'm sorry. I wasn't listening. Were you talking to me?"

Scenario #33: Low Proc, Low Inter, High Info-ggJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The new supervisor in the office had just replaced the former supervisor a mere two weeks ago. Consequently, this new supervisor was not familiar with Sue's work. Despite his unfamiliarity with Sue's work, he did not consult the opinion of the former supervisor before he made the decision to hire the other applicant. The supervisor asked Sue to come into his office. While he was typing away at his computer with his back to her, he abruptly said, "You didn't get the job." The supervisor then explained, "The hiring decision was based on years of experience and letters of recommendation, with the former being weighted more heavily than the latter."

Scenario #34: Low Inter, Low Proc, High Info-hhL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

The supervisor called Alice into his office. He said, "I've got some bad news." Just then the phone rang. He answered it and proceeded to talk to his wife on the phone for several minutes about their dinner arrangements. Once he got off the phone he looked back up at Alice and blankly said, "What were we talking about?" She replied, "You said you had some bad news for me." "Oh yeah," he replied, "You're being laid off." Alice was one of two Administrative Assistants working in the office. Rather than looking at past performance records, the supervisor pulled a name out of a hat in order to decide which administrative assistant to layoff. The supervisor then pulled out the budget and went over it with Alice step by step so that she could see that there was no money available to keep her on.

Scenario #35: Low Inter, High Info, Low Proc-iiR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor called Shelly into his office. He said, "I've got some bad news." Just then the phone rang. He answered it and proceeded to talk to his wife on the phone for several minutes

about their dinner arrangements. Once he got off the phone he looked back up at Shelly and blankly said, "What were we talking about?" She replied, "You said you had some bad news for me." "Oh yeah," he replied, "You're not getting a raise." Shelly then proceeded to ask the supervisor some questions about how the decision was made. The supervisor responded, "I don't know the answers to all your questions, but I will make some phone calls and find the answers for you." Shelly later learned that the supervisor was looking at the wrong personnel file when he made the decision to deny her request for a raise.

EIGHTH SET

Scenario #36: Low Info, High Inter, High, Proc-jjJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

Sue asked her supervisor, "How did you make the hiring decision." He responded, "I don't need to give you any more information than I already have." Then, with optimism in his voice, the supervisor told Sue, "I heard of another job opening in the physics department. I'd be happy to put in a good word for you if you're interested." The supervisor then stated, "These same procedures for making hiring decisions have been applied to everyone university-wide."

Scenario #37: High Inter, High Proc, Low Info-kkL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

The supervisor regretfully stated, "Alice, I hate to lose you; you've been a really great employee." Alice was one of two Administrative Assistants working in the office. The supervisor was forced to layoff one of the two. Both were excellent workers. The supervisor and Alice were old family friends. Given this non-work relationship, the supervisor did not feel comfortable making the decision about whom to lay-off. Consequently, the supervisor brought in a qualified impartial third party who could be more objective. The third-party decision maker made an informed recommendation that Alice should be the one laid off. The supervisor followed through with this recommendation. Later, Alice told her supervisor, "I have some questions." The supervisor responded, "I've told you everything you need to know."

Scenario #38: High Proc, High Inter, Low Info-llR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The university president sent out a memo to all supervisors specifying the exact protocol that supervisors should follow when making decisions about awarding raises. Shelly's supervisor followed the protocol exactly the way he was supposed to. When Shelly asked her supervisor a question about getting a raise, the supervisor dropped everything he was doing in order to listen to her. The supervisor asked Shelly, "Do you understand what I'm telling you?" Shelly replied, "No, not really." The supervisor responded, "Well, that's all I can tell you."

Scenario #39: High Inter, Low Info, High Proc-mmJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor sadly stated, "Sue, I'm genuinely sorry that I cannot offer you this job." Sue questioned, "How did you decide to hire the other applicant and not me?" The supervisor responded, "It does not matter how the decision was made." Both applicants were excellent candidates. The supervisor and Sue were old family friends. Given this non-work relationship, the supervisor did not feel comfortable making the decision about whom to hire. Consequently, the supervisor brought in a qualified impartial third party who could be more objective. The third-party decision maker made an informed recommendation that the other applicant should be the one hired. The supervisor followed through with this recommendation.

Scenario #40: High Proc, Low Info, High Inter-nnL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Once the supervisor informed Alice of the layoff, he gave her the maximum amount of paid leave (80 hours) to take time off to search for other employment. Sue asked her supervisor, "How did you make this layoff decision." He responded, "I don't need to give you any more information than I already have." Before Alice left, the supervisor kindly offered, "Alice, I'd be happy to write you a letter of recommendation for another job."

REPLICATES

1_Scenario #3 High Info, High Proc, High Inter-ooJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor said, "Sue, I want to explain to you how I made the hiring decision." He then thoroughly described how he, and each of the senior administrative assistants who work in the office, were involved in making the decision. He explained that each person cast a vote as to whom they thought should be hired. In the end, the applicant with the most votes was the person who was hired. Also, before making the hiring decision, the supervisor checked his files with the files in the personnel office to make sure that he was basing his decision on accurate records. Before Sue left, the supervisor gave her some sincere words of encouragement when he said, "You're going to find another great job. I just know it. You are a good worker."

2_Scenario #7 Low Proc, Low Inter, Low Info-ppL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Alice was one of two administrative assistants working in the office. Due to budget cuts, the supervisor had to layoff one of the two. The supervisor changed the records so that it looked like Alice had poorer attendance than Judith. The supervisor then used this as a reason to layoff Alice and not Judith. The supervisor then coldly told Alice, "These things happen from time to time. That's a fact." Alice questioned, "How did you decide to lay me off and not Judith?" The supervisor responded, "It does not matter how the decision was made."

3_Scenario #11 High Info, High Inter, Low Proc-qqR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor gave Shelly a copy of a memo from the university president explaining why the budget was so tight. He then went over the memo with Shelly so that he was sure that she understood what it was saying. Then with concern in his voice he told her, "My door is always open if you ever want to talk." This was a new supervisor. He had just replaced the former supervisor a mere two weeks ago. Consequently, this new supervisor was not familiar with Shelly's work. Despite his unfamiliarity with her work, he did not consult the opinion of the former supervisor before he made the decision to deny Shelly's request for a raise.

4_Scenario #20: Low Inter, High Info, High Proc-rrR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor asked Shelly to come into his office. While he was typing away at his computer with his back to her he abruptly said, "You're not getting the raise." He then explained, "In the face of budget cuts, I was forced to come up with ways to save money. I considered multiple ways to save money. For example, I considered dropping the number of courses offered in our department; I considered not allowing graduate students use of the photocopy machine; I

considered reducing the amount of paid leave staff receive, and many other things. Even after taking into consideration all these options, I still don't have the money to give you a raise." The supervisor then stated, "These same procedures for making decisions about raises have been applied to everyone university-wide."

5_Scenario #21: Low Info, Low Inter, High Proc-ssJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

When asked how he arrived at the decision to hire the other applicant, the supervisor responded, "I can't answer your questions." Sue pleaded, "If you give me a chance and tell me what needs to be improved, I'll do my best to be a better worker." To this the supervisor responded, "No second chances here lady. Now get out of my office." The university president sent out a memo to all supervisors specifying the exact protocol that supervisors should follow when making hiring decisions. Sue's supervisor followed the protocol exactly the way he was supposed to.

6_Scenario #30: Low Proc, High Inter, Low Info-ttJ

Sue has been a wage employee in the same office for the past 4 years. The position is being made into a full-time salary position with full benefits. Sue is being interviewed for the position. However, university policy also requires that the position be advertised to outside interested parties. One outside person applies for the job. Sue feels that she has the upper hand since she has first-hand experience with the job responsibilities. In the end, the other person is hired, and Sue is let go.

The supervisor hired a well-respected professional consultant to make the hiring decision. However, the consultant was not given all the relevant information about the applicants. Therefore, the consultant's recommendation was not based on accurate information. Before Sue left, the supervisor kindly offered, "Sue, I'd be happy to write you a letter of recommendation for another job." Sue then asked, "What procedures did you use to make the hiring decision?" The supervisor responded, "I cannot give you any more information."

7_Scenario #32: High Info, Low Proc, Low Inter-uuR

Shelly has been working as an Administrative Assistant in the same office for 8 years. She has never received a raise. Her performance evaluations and her attendance records are excellent. She asks for a raise. Due to recent budget cuts, her request for a raise is denied.

The supervisor gave Shelly a copy of a memo from the university president explaining why the budget was so tight. He then went over the memo with Shelly so that he was sure that she understood what it was saying. Nonetheless, when making the decision about whether or not to

give Shelly a raise, her supervisor had only looked at her performance evaluation record from one of the eight years she had worked in the office. Shelly asked her supervisor, “Why is this happening? How was this decision made? Who else is it affecting?” The supervisor was shuffling through some papers on his desk and looked blankly back up at Shelly and said, “I’m sorry. I wasn’t listening. Were you talking to me?”

8_Scenario #40: High Proc, Low Info, High Inter-vvL

Alice has been working as an Administrative Assistant for 17 years. Due to recent budget cuts, she has just found out that she has been laid off from her job.

Once the supervisor informed Alice of the layoff, he gave her the maximum amount of paid leave (80 hours) to take time off to search for other employment. Sue asked her supervisor, “How did you make this layoff decision.” He responded, “I don’t need to give you any more information than I already have.” Before Alice left, the supervisor kindly offered, “Alice, I’d be happy to write you a letter of recommendation for another job.”

Table 4.1

Descriptive Statistics and Interrater Agreement for Negative Outcomes

	Mean	Standard Deviation	$r_{wg(I)}$
Outcome 1	1.42	.85	.65
Outcome 2	2.32	.98	.52
Outcome 3	1.42	.76	.71
Outcome 4	2.48	1.15	.34
Outcome 5	1.55	.81	.68

Table 4.2

Supervisor Behavior Ratings with all Behaviors Included

Element:	Low Fairness Behaviors			High Fairness Behaviors		
	Range	Mean	Total #	Range	Mean	Total #
Procedural	1.00 – 1.70	1.20	18	6.00 – 6.89	6.55	10
Interpersonal	1.14 – 1.46	1.28	9	5.89 – 6.57	6.15	9
Informational	1.19 – 1.54	1.35	7	5.95 – 6.73	6.36	8

Table 4.3

Supervisor Behavior Ratings with Extreme Behavior Ratings Omitted

Element:	Low Fairness Behaviors			High Fairness Behaviors		
	Range	Mean	Total #	Range	Mean	Total #
Procedural	1.03 – 1.70	1.34	15	6.00 – 6.81	6.45	7
Interpersonal	1.14 – 1.46	1.28	9	6.05 – 6.57	6.24	8
Informational	1.19 – 1.54	1.35	7	5.95 – 6.73	6.36	8

Table 4.4

Statistics for Selected Supervisor Behaviors

Procedural Category	Percent Agreement	Mean $R_{wg(1)}$	Mean Rating	Times Used
Low Procedural Fairness Behaviors:				
#143 Two administrative assistants worked in the office. The supervisor had to layoff one of the two. The supervisor changed the records so that it would look like Alice had poorer attendance than Judith. He then used this as a reason to layoff Alice.	77.81	1.00	1.03	1
#37 Rather than looking at past performance evaluation records, the supervisor pulled a name out of a hat in order to decide which of his administrative assistants to layoff.	86.12	.97	1.11	2
#11 State policy requires that management give employees at least 2 weeks notice prior to the layoff. The supervisor only gave Alice one week notice, and then fudged the dates so that it looked like he had given her the full two weeks notice.	81.14	.84	1.16	2
#89 The supervisor has made sexist comments in the past. When it comes time to decide whom to layoff, he decides to layoff Alice and not Jim, even though both have excellent performance evaluation records.	70.38	.95	1.17	1
#144 The supervisor kept poor performance evaluation records. Some years he did it, and other years he just copied down the ratings from the prior evaluation period.	86.12	.97	1.17	1
#67 The supervisor hired a well-respected professional consultant to make the decision. However, the consultant was not given all the relevant information about the candidates. Therefore, the consultant's recommendation was not based on accurate information.	70.34	.97	1.22	2
#112 The new supervisor in the office had just replaced the former supervisor a mere two weeks ago. Consequently, the new supervisor was not familiar with Alice's work. Nonetheless, he decided to layoff Alice even though he was unfamiliar with her work performance.	66.74	.96	1.22	1
#85 Alice was told that she was being laid off because she had poor ratings for punctuality on her performance evaluation records. However, when she had been late to work in the past her supervisor had told her, "punctuality is not part of your performance evaluation."	67.63	.96	1.30	1
#102 Alice received a negative performance evaluation because she was being evaluated on duties that were not actually part of her job duties. When she brought this information to the attention of her supervisor, he said, "I'll see that it's corrected." The negative performance evaluation never was corrected, and in fact was used to base the decision of why Alice should be laid off.	81.12	.81	1.33	1
#7 The supervisor was looking at the wrong personnel file when he decided to layoff Alice.	73.00	.77	1.38	2
#123 Two supervisors work in the same office. Supervisor 1 was making lay off decisions for administrative assistants 1 and 2. Supervisor 2 was making lay off	94.43	.93	1.39	1

decisions for administrative assistants 3 and 4. Supervisor 1 was making decisions based on length of service. Supervisor 2 was making decisions based on performance evaluation records. This discrepancy in procedures was brought to the attention of the supervisors. Nonetheless, each supervisor continued to use his own criteria.				
#126 The supervisor was forced to layoff one of his two administrative assistants. Both are excellent workers. The supervisor and Lois are old family friends. Given this non-work relationship, the supervisor does not feel comfortable making the decision. He worries that he cannot be objective. Consequently, he brings in a qualified impartial third party who can be more objective about the situation. The third-party decision maker then makes an informed decision that Lois should be the one laid off. Nonetheless, the supervisor disregards this recommendation, and lays-off Alice.	69.41	.78	1.47	1
#141 The supervisor overheard a private phone conversation between Alice and her husband. The supervisor eaves dropped, and learned that Alice had just found out that she was pregnant. Later that week the supervisor had to decide which of his two administrative assistants to layoff. He decided to layoff Alice since she was probably going to be leaving anyways due to her pregnancy.	74.39	.81	1.47	1
#132 The supervisor is forced to layoff one of his two Administrative Assistants. Both have excellent attendance and performance evaluations. Consequently, the supervisor gives each a performance test (e.g., speed typing test, memo writing task), and then conducts a blind review of those results. Based on the results from the blind review, the supervisor makes his decision about whom to layoff. But before he makes the decision, he peeks at the names associated with the test results.	77.87	.81	1.56	1
#110 When making the decision, the supervisor only looked at Alice's performance evaluation record from one year.	69.46	.74	1.70	2
Overall Totals for Low Procedural Fairness:	76.40	.88	1.34	1.33
High Procedural Fairness Behaviors:				
#42 The supervisor is forced to layoff one of his two administrative assistants. Both are excellent workers. The supervisor and Alice are old family friends. Given this non-work relationship, the supervisor does not feel comfortable making the decision. He worries that he cannot be objective. Consequently, he brings in a qualified impartial third party who can be more objective about the situation. The third-party decision maker then makes an informed decision that Alice should be the one to be laid off. The supervisor follows through with this recommendation.	86.11	.72	6.00	2
#19 The supervisor stated, "The same procedures for making layoff decisions have been applied to everyone university-wide."	70.31	.78	6.09	3
#64 Alice had worked in four different departments on campus, before she was laid off from her current position.	75.00	.84	6.50	3

Because Alice had moved from one department to another, the supervisor miscalculated her years of service. He reported this wrong information to the personnel office. Alice brought the miscalculation to the attention of her supervisor, and he immediately contacted the personnel office to correct his mistake.				
#107 Judith and Alice work in the same department. They were both laid off. They compared notes and found that the supervisor had followed the exact same layoff procedure for each of them.	94.42	.94	6.56	3
#18 Once the supervisor informed Alice of the layoff, he gave her the maximum amount of paid leave (80 hours) to take time off to search for other employment.	75.72	.88	6.57	3
#2 Before laying-off Alice, the supervisor checked his files with the files in the personnel office to make sure that he was basing his decision on accurate records.	94.61	.92	6.59	3
#101 The university president sent out a memo to all supervisors specifying the exact protocol that supervisors should follow when making layoff decisions. Alice's supervisor followed the protocol exactly the way he was supposed to.	97.28	.97	6.81	3
Overall Totals for High Procedural Fairness:	84.78	.86	6.45	2.86

Interpersonal Category	Percent Agreement	Mean $R_{wg(1)}$	Mean Rating	Times Used
Low Interpersonal Fairness Behaviors:				
#149 Alice pleaded, "If you give me a chance and tell me what needs to be improved, I'll do my best to be a better worker." "No second chances here lady," said the supervisor. "Now get out of my office. I have work to do."	80.00	.92	1.14	2
#14 The supervisor asked Alice to come into his office. While he's typing away at his computer with his back to her he coldly said, "You're being laid off."	94.61	.83	1.22	2
#136 Alice was in the middle of asking her supervisor a question when he said, "Can this wait? I've got an appointment for a hair cut in 15 minutes."	88.99	.96	1.23	2
#137 Alice told the supervisor how she thinks he should have handled the situation. Upon hearing Alice's suggestion the supervisor responds, "That's the stupidest idea I've ever heard."	88.92	.94	1.23	2
#148 The supervisor called Alice into his office. He said, "I've got some bad news." Just then the phone rang. He answered it and proceeded to talk to his wife on the phone for several minutes about their dinner arrangements. Once he got off the phone he looked back up at Alice and blankly said, "What were we talking about?" Alice told him he said he was about to give her some bad news. "Oh yeah," he says, "You're being laid off."	77.85	.90	1.25	3
#117 "What am I going to do?" Alice asked. "Hey, you're not the only one getting screwed over. This affects me too," replied the supervisor.	88.95	.93	1.31	2
#133 Alice asked her supervisor, "Why is this happening? How was this decision made? Who else is it affecting?"	75.34	.88	1.31	3

The supervisor was shuffling through some papers on his desk and looked back up at Alice and says, "I'm sorry, I wasn't listening. Were you talking to me?"				
#44 The supervisor told Alice, "You really aren't a very good secretary--you aren't cut out to handle this job. I'm sure you could find a job that better suits you--maybe as a cashier at the grocery store or the mall."	88.92	.81	1.33	2
#53 The supervisor coldly says, "These things happen from time to time. That's a fact."	78.46	.85	1.46	2
Overall Totals for Low Interpersonal Fairness:	84.67	.89	1.28	2.22
High Interpersonal Fairness Behaviors:				
#79 The supervisor sadly stated, "I'm genuinely sorry this has happened."	100.00	.78	6.05	3
#86 With concern in his voice, the supervisor told Alice, "My door is always open if you ever want to talk."	89.21	.77	6.11	2
#34 The supervisor regretfully said, "I hate to lose you Alice; you've been a really great employee."	97.33	.87	6.14	2
#127 When Alice started to cry upon hearing the news, her supervisor handed her a tissue and sympathetically said, "I know this is a difficult situation and you have every right to be upset."	100.00	.77	6.14	3
#125 The supervisor gave Alice some words of encouragement by saying, "You're going to find a great job. I just know it. Anyone would be happy to have you."	100.00	.73	6.19	2
#87 With optimism in his voice, the supervisor told Alice, "I heard of another job opening in physics. I'd be happy to put a good word in for you if you are interested."	86.57	.79	6.32	2
#1 The supervisor kindly tells Alice, "I'd be happy to write you a letter of recommendation."	86.55	.86	6.38	3
#98 When Alice asked her supervisor a question regarding her layoff, he dropped everything he was doing in order to listen to her.	66.73	.93	6.57	3
Overall Totals for High Interpersonal Fairness:	90.80	.82	6.24	2.50

Informational Category	Percent Agreement	Mean $R_{wg(1)}$	Mean Rating	Times Used
Low Informational Fairness Behaviors:				
#95 The supervisor asked, "Do you understand what I'm telling you?" Alice replied, "No, not really." The supervisor responded, "Well, that's all I can tell you."	75.77	.97	1.19	3
#129 The supervisor told Alice, "I don't need to give you any more information than I already have."	82.93	.97	1.23	3
#31 When asked what criteria were used to make the decision, the supervisor replied, "I don't know."	70.34	.82	1.30	3
#71 Alice said, "I have some questions?" The supervisor responded, "I've told you everything you need to know."	73.00	.95	1.31	2
#43 Alice asked her supervisor, "How did you decide to lay me off and not the other administrative assistant?" The supervisor replied, "It does not matter how the decision was made."	73.00	.82	1.41	3
#51 Alice asked her supervisor about the procedures used to make the decision. He responded, "I cannot give you	78.46	.86	1.49	3

any more information."				
#9 When asked how the decision was made, the supervisor responded, "I can't answer your questions."	75.78	.71	1.54	3
Overall Totals for Low Informational Fairness:	75.61	.87	1.35	2.86
High Informational Fairness Behaviors:				
#48 The supervisor explained, "In the face of budget cuts, I was forced to come up with ways to save money. I considered multiple ways to save money. For example, I considered dropping the number of courses offered in our department; I considered not allowing faculty or staff to use the photocopy machine; I considered reducing the amount of paid leave staff receive, and many other things. Even after taking into consideration all these options, I still don't have the money to pay for a full-time administrative assistant. Consequently, this is how the decision was made that you were to be laid off."	67.69	.74	5.95	3
#29 The supervisor explained, "I based this decision on years of experience, and letters of recommendation with the former being weighted more heavily than the latter."	70.40	.80	6.10	2
#113 The supervisor respectfully responded, "I don't know the answer to that question, but I'll be happy to make some phone calls and find the answer for you."	72.22	.85	6.25	2
#20 The supervisor pulled out the budget and went over it with Alice step by step so that she could see that there was no money available to keep her on.	83.85	.82	6.3	3
#24 The supervisor explained, "The layoff decision was made on the basis of multiple factors. First, I took into consideration ratings on past performance evaluations. Secondly, I took into consideration length of service. Thirdly, I took into consideration attendance records. And finally, I took into consideration involvement in extracurricular-type activities (e.g., participation in non-required training workshops like Microsoft Access, participation in staff senate, etc.)."	75.00	.70	6.35	3
# 134 The supervisor gave Alice a copy of a memo from the university president explaining why there was a need to layoff employees. He then went over the memo with her so that he was sure she understood what it was saying.	86.19	.95	6.56	3
#60 Her supervisor told her, "I want to explain to you why I made the decision I made." He then carefully explained how he, and each of the senior administrative assistants were involved in the decision process. He explained that each person cast a vote, and the candidate who received the most votes was the one who was laid off."	72.33	.83	6.60	2
#69 The supervisor printed off a copy of the state layoff procedure, and read through it with Alice step by step until he was sure that she understood it. Then, he explained this procedure in relation to her specific situation.	66.98	.96	6.73	2
Overall Totals for High Informational Fairness:	74.33	.83	6.36	2.5

Table 4.5

Individual Regression Equations

Subj.	β_1	β_2	β_3	β_4	β_5	β_6	β_7	r_{xx}	R^2	$adj R^2$
1	.44**	.48**	.33**	--	.32**	--	--	.88	.65	.60
2	--	--	.26*	--	--	-.24*	.59**	.94	.56	.48
3	.42**	.61**	.33**	.23**	--	.23**	--	.85	.78	.74
4	.43**	.30**	.53**	--	.24**	.30**	--	.77	.70	.66
5	.50**	.48**	.31**	--	--	--	--	.85	.57	.54
6	.57**	.42**	.33**	--	--	.20*	--	.69	.67	.63
7	.64**	.36**	.29**	.21**	.29**	--	--	.92	.76	.72
8	.33**	.39**	.50**	--	.29**	.35**	--	.95	.74	.71
9	.31**	.42**	.35**	--	--	--	--	.84	.39	.35
10	.55**	.40**	.36**	--	--	--	--	.91	.59	.56
11	.47**	.37**	.50**	.27**	.30**	.20**	.20**	.89	.85	.82
12	.48**	.32**	--	--	--	--	--	.75	.38	.34
13	.56**	.36**	.36**	--	.27**	.20*	--	.95	.70	.65
14	.37**	.37**	.37**	.37**	.37**	.37**	.37**	1.00	.96	.95
15	.47**	.29*	.33**	--	--	--	--	.78	.41	.37
16	.67**	.29**	--	--	--	--	--	.79	.56	.53
17	.60**	.43**	.43**	--	--	.27**	--	.81	.81	.78
18	.55**	.27**	.43**	.21*	--	--	.21*	.91	.65	.59
19	.59**	.33**	--	--	--	--	--	.75	.59	.52
20	.45**	.41**	.43**	--	--	.26**	--	.88	.68	.62
21	.52**	.59**	.31**	.22**	--	.17*	--	.95	.79	.76
22	.47**	.49**	.42**	.22**	.19**	.32**	.14*	.88	.84	.81
23	.73**	.31**	.23**	--	--	--	--	.92	.68	.66
24	.48**	.29**	.45**	--	--	--	--	.91	.52	.49
25	.47**	.52**	.42**	--	--	--	--	.93	.66	.64
26	.50**	.54**	.25**	--	--	--	--	.76	.60	.57
27	.54**	.27*	.36**	--	--	--	--	.82	.59	.46
28	.76**	.24**	--	--	--	--	--	.82	.66	.63
29	.59**	.38**	.25*	--	--	--	--	.81	.55	.52
30	.66**	.30**	.30**	.22**	--	--	--	.95	.70	.65
31	.52**	.56**	.26**	--	--	--	--	.73	.65	.62
32	.49**	.30**	.57**	--	--	--	--	.94	.66	.63
33	.54**	.44**	.40**	--	--	.19*	--	.77	.70	.66
34	.45**	.50**	.42**	.16*	.29**	.18*	.16*	.84	.79	.75
35	.55**	.26**	.45**	--	.32**	.28**	.15*	.72	.79	.75
36	.58**	.43**	.26**	--	--	--	--	.83	.59	.56
37	.51**	.36**	.38**	.22**	.32**	.22**	--	.99	.73	.69
38	.50**	.40**	--	--	--	--	--	.96	.44	.40
39	.32**	.44**	.22*	.32**	--	.22*	--	.55	.50	.43
40	.57**	.37**	.35**	--	--	--	--	.90	.58	.56

41	.46**	.48**	.34**	--	--	--	--	.60	.55	.52
42	.61**	.42**	.23*	--	--	--	--	.80	.59	.56
43	.57**	.45**	.25**	.31**	--	--	--	.86	.73	.69
44	.57**	.23*	.29**	--	--	--	--	.75	.46	.43
45	.65**	--	--	--	--	--	--	.69	.49	.46
46	.41**	.46**	.46**	.22**	--	.28**	--	.76	.73	.69
47	.49**	.36**	.44**	--	--	--	--	.96	.56	.54
48	.50**	.50**	.39**	--	--	--	--	.89	.66	.63
49	.82**	--	.17*	--	--	--	--	.95	.70	.68
50	.40**	.55**	.36**	.19*	--	.19*	--	.76	.67	.63
51	.68**	.21**	.46**	.15*	.29**	--	--	.97	.83	.80
52	.31**	.29*	.50**	--	--	--	--	.64	.43	.39
53	.77**	.29**	--	--	--	.18*	--	.83	.74	.70
54	--	--	--	--	--	-.35**	.63**	.99	.56	.48
55	.53**	.37**	.47**	.16*	.22**	.22**	--	.74	.76	.72
56	.48**	.25**	.43**	--	.35**	.21*	--	.80	.67	.62
57	.50**	.48**	.33**	.23*	--	.21*	--	.78	.70	.65
58	.77**	--	.26**	--	--	--	--	.71	.68	.66
59	.55**	--	.28*	--	--	--	--	.74	.41	.37
60	.53**	.40**	.45**	--	--	--	--	.95	.64	.61
61	.55**	.37**	.44**	.31**	.28**	--	--	.63	.81	.78
62	.54**	.32**	.38**	--	.27**	--	--	.87	.63	.57
63	.84**	--	.19**	--	--	--	--	.81	.76	.75
64	.51**	.59**	.25**	.41**	.17**	--	--	.88	.88	.86
65	.53**	.42**	.45**	--	--	--	--	.84	.66	.64
66	.43**	.47**	.34**	.41**	.24**	.28**	.22**	.98	.87	.84
67	.65**	.25**	.29**	--	--	--	--	.70	.57	.54
68	.54**	.26**	.44**	--	--	--	--	.66	.56	.53
69	.78**	--	.34**	--	.27**	--	--	.86	.81	.78
70	.57**	.49**	.38**	--	--	--	--	.90	.71	.69
71	.24**	.47**	.47**	--	.23*	.38**	--	.92	.70	.65
72	.59**	.31**	.31**	.33**	.25**	--	--	.98	.73	.69
73	.53**	.35**	.37**	.24**	--	.20*	--	.94	.65	.60
74	.61**	--	.26*	--	--	--	--	.89	.50	.43
75	.35**	.40**	.40**	.28**	.28**	.38**	.26**	.54	.81	.77
76	.66**	--	.32**	--	--	--	--	.87	.54	.51
77	.59**	.35**	.27**	--	--	--	--	.78	.54	.51
78	.58**	.41**	.35**	--	--	--	--	.73	.62	.60
79	.44**	.50**	.24**	.37**	.22*	--	--	.87	.71	.67
80	.55**	.28**	.34**	--	--	--	--	.72	.50	.47

Note. β_1 = procedural cue; β_2 = interpersonal cue; β_3 = informational cue; β_4 = procedural X interpersonal; β_5 = procedural X informational; β_6 = interpersonal X informational; β_7 = procedural X interpersonal X informational.

* $p < .05$. ** $p < .01$.

Table 4.6
Fairness Clusters and their Respective Mean Beta Weights, Reliability, and Multiple R²

Cluster	β_1	β_2	β_3	β_4	β_5	β_6	β_7	r_{xx}	R^2	$adj R^2$
1 ($n = 36$)	.51	.41	.36	.15	.11	.13	.05	.83	.62	.59
2 ($n = 2$)	.16	.03	.14	-.12	-.07	-.29	.61	.96	.56	.48
3 ($n = 22$)	.49	.36	.42	.20	.27	.22	.13	.86	.77	.73
4 ($n = 20$)	.64	.29	.22	-.01	-.01	.03	.04	.80	.58	.55

Note. β_1 = procedural cue; β_2 = interpersonal cue; β_3 = informational cue; β_4 = procedural X interpersonal; β_5 = procedural X informational; β_6 = interpersonal X informational; β_7 = procedural X interpersonal X informational.

Table 4.7

Condition Means Broken Down by Cluster

	Cluster 1 (<i>n</i> = 36)		Cluster 2 (<i>n</i> = 2)		Cluster 3 (<i>n</i> = 22)		Cluster 4 (<i>n</i> = 20)		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<u>ALL LOW:</u>									
Low PJ, low inter, low info	1.19	.32	2.00	.00	1.21	.36	1.31	.34	
<u>TWO LOW:</u>									
Low PJ, low inter, high info	1.88	.67	7.00	.00	1.55	.72	2.38	.82	
Low PJ, high inter, low info	1.84	.60	6.75	.12	1.63	.72	2.63	.88	
High PJ, low inter, low info	2.31	.80	6.33	.24	2.07	1.01	4.32	.92	
<u>ONE LOW:</u>									
Low PJ, high inter, high info	3.20	.75	3.58	1.53	2.47	.91	3.66	.90	
High PJ, high inter, low info	3.81	.69	4.50	.24	2.78	1.16	5.19	.71	
High PJ, low inter, high info	3.53	1.00	5.17	.47	3.36	1.39	4.92	.93	
<u>ALL HIGH:</u>									
High PJ, high inter, high info	6.26	1.16	6.17	1.18	6.48	.53	6.41	.95	

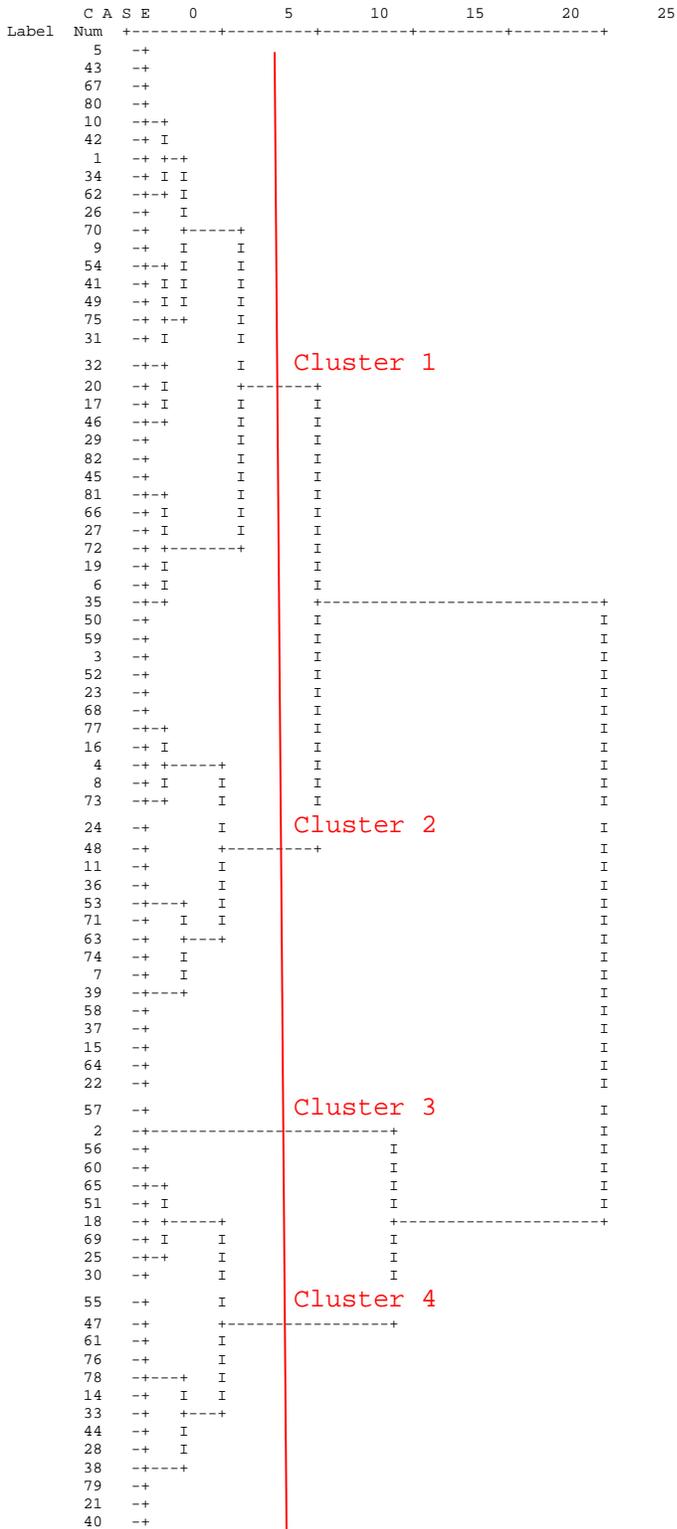


Figure 4.1. Dendrogram for 4-Cluster Solution

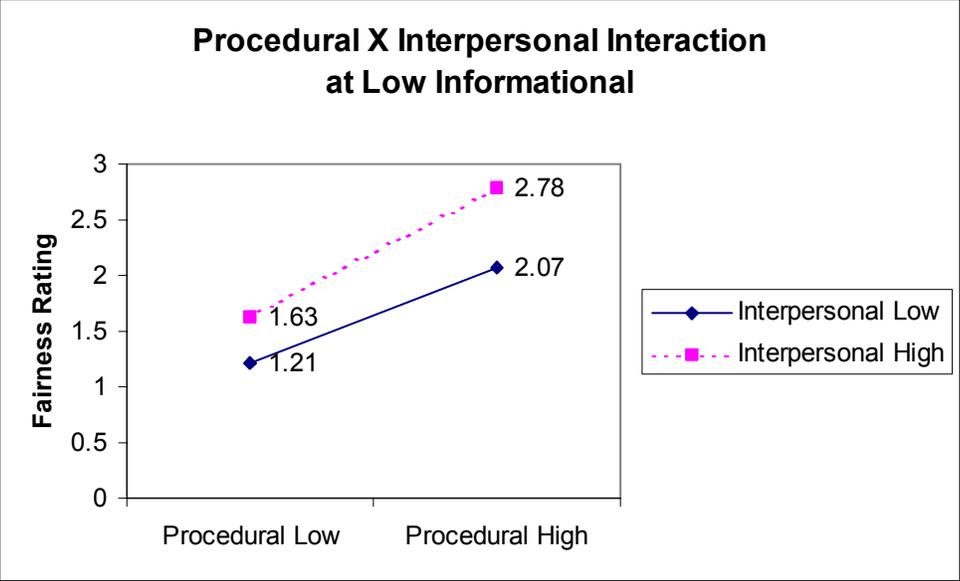


Figure 4.2. Plot of Procedural X Interpersonal Interaction at Low Informational Justice for Cluster 3

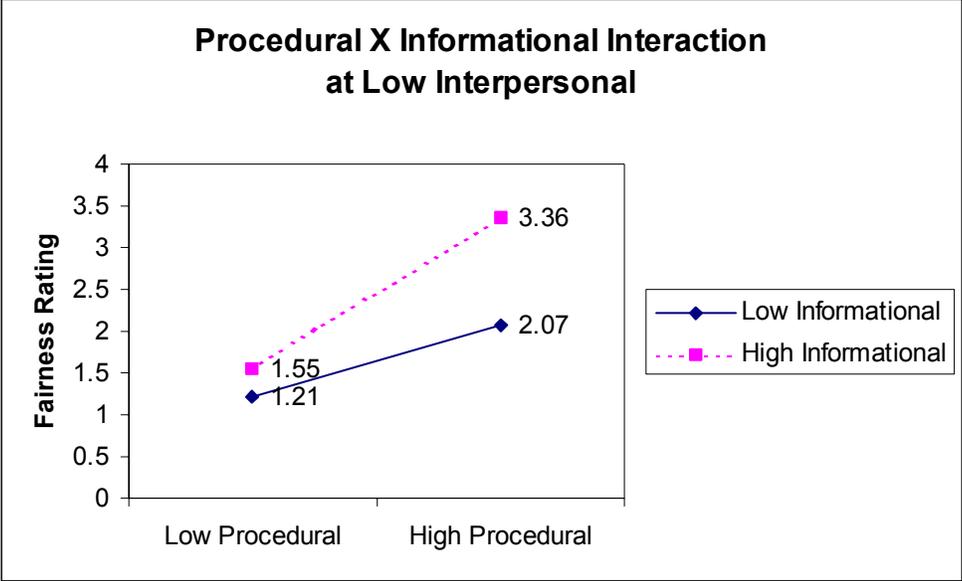


Figure 4.3. Plot of Procedural X Informational Interaction at Low Interpersonal Justice for Cluster 3

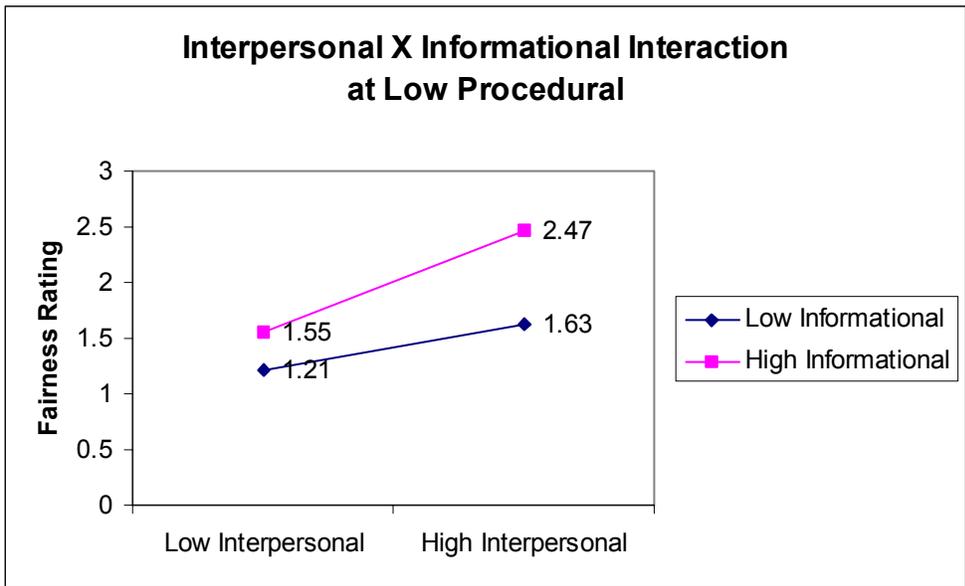


Figure 4.4. Plot of Interpersonal X Informational Interaction at Low Procedural Justice for Cluster 3

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Sinclair, A. L., & Muffo, J.A. (in press). *The use of Biglan categories in assessing general education courses*. AIR 2002 Annual Forum Paper. (ERIC Document Reproduction Service)

Buuck, A. L. (maiden name) (1999). Rivalry versus harmony: The role of group goals. In H. Chandler and J.W. Finney (Eds.), *Exploring Introductory Psychology*. New York: McGraw-Hill, Inc.

PAPERS UNDER REVIEW:

Hauenstein, N. M. A., Brown, R. D., & Sinclair, A. L. BARS and those mysterious, missing middle anchors. Paper under review at *Organizational Research Methods*.

Hauenstein, N. M. A., & Sinclair, A. L. A closer look at Cronbach’s accuracy components as dependent variables. Paper under review at *Organizational Research Methods*.

CONFERENCE PRESENTATIONS:

Sinclair, A. L. (April, 2003). Team effectiveness: Reward allocation rules, procedural justice, and team cooperation. Poster presented at the 18th Annual Conference for the Society of Industrial and Organizational Psychology, Orlando, Florida.

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Hauenstein, N. M. A., Sinclair, A. L., Robson, V., Quintella, Y., & Donovan, J. J. (April, 2003). Performance Dimensionality and the Occurrence of Ratee Race Effects. Poster presented at the 18th Annual Conference for the Society of Industrial and Organizational Psychology, Orlando, Florida.

Muffo, J. A., Sinclair, A. L., & Robson, V. (May, 2003). A comparison of web versus paper alumni surveys. Scholarly paper accepted for presentation at the 2000 Assessment of Institutional Research Forum, Tampa, Florida.

Hauenstein, N. M. A., Sinclair, A. L., Robson, V., Quintella, Y., & Donovan, J. J. (April, 2002). Ratee race effects in performance: Task performance versus contextual performance. Poster presented at the 17th Annual Conference for the Society of Industrial and Organizational Psychology, Toronto, Canada.

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TEACHING EXPERIENCE:

Recitation Instructor for Introductory Psychology (Virginia Tech, Fall 1998 – Spring 1999)

- Responsible for planning, instructing, and grading four recitation courses

PROFESSIONAL EXPERIENCE:

Academic Assessment Program (Virginia Tech, Spring 1999 – present)

- Conduct focus groups with student and faculty
- Deliver presentations to faculty and administration
- Work with faculty and administration to create an instrument for assessing Core Curriculum
- Evaluate the university's Core Curriculum courses
- Develop and maintain multiple on-line surveys
- Develop and analyze surveys using univariate and multivariate statistics
- Edit newsletter
- Train junior research assistant

Executive Decisions International, LLC (Chicago, IL, January 2003 – present)

- Develop 360 degree feedback instrument
- Provide feedback report

American Express Financial Services (Roanoke, VA, Fall 2000)

- Conducted job analysis for the position of Financial Advisor

Shenandoah Life (Roanoke, VA, Winter 1998 – Summer 1999)

- Developed survey for compensation practices and use of information technologies

GRANT:

Analysis of the Organizational Structure of the Metropolitan Museum of Art – Primary Investigator (New York, Spring 1998)

- Received \$2,000 from Hanover College Richter Grant Program to conduct on-site investigation
- Established relationship with internal contact person through which I networked to attain additional meetings with employees in various departments within the museum

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