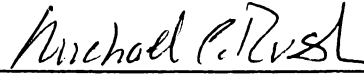


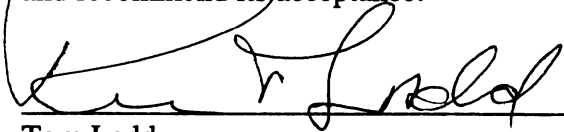
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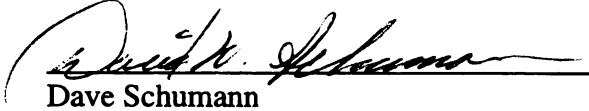


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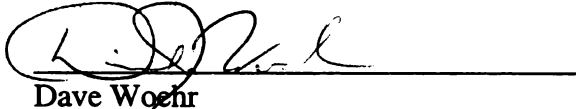
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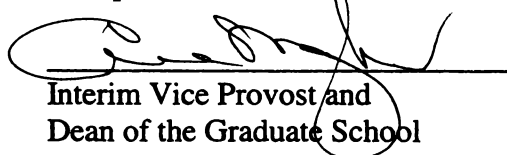


Dave Schumann



Dave Woehr

Accepted for the Council:



Interim Vice Provost and
Dean of the Graduate School

HOW EQUITY SENSITIVITY AFFECTS ATTITUDES AND BEHAVIORS

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

William C. Roedder
August 2001

DEDICATION

This dissertation is dedicated to my parents, Gwen and Bill Roedder.
Without their encouragement and support, this would not have been possible.

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ABSTRACT

Research on equity sensitivity has continued steadily since the introduction of the construct in 1985. While the initial study (Huseman, Hatfield, & Miles, 1985) examined the relationship of equity sensitivity to job satisfaction, more recent research has expanded the scope of inquiry to include variables such as organizational citizenship behavior (OCB) (Konovsky & Organ, 1996), and organizational commitment (O'Neill & Mone, 1998). However, the extant research leaves open to debate some major theoretical questions. How does equity sensitivity affect attitudes and behaviors? How are perceptions of justice involved?

The current literature suggests three potential models for how equity sensitivity affects attitudes and behaviors. The first model (the Perceptions Only model) contends that equity sensitivity interactively affects perceptions of equity conditions. The second model (the Reactions Only model) contends that equity sensitivity interactively affects reactions to perceptions of equity conditions. The third model (the Perceptions and Reactions model) contends that equity sensitivity interactively affects both perceptions of equity conditions and reactions to these perceptions. The purpose of this study was to determine which of these three models best represents how equity sensitivity influences attitudes and behaviors.

Results suggested that equity sensitivity did not affect perceptions of distributive justice. Results also suggested that equity sensitivity did not have any reliable interactive effects with perceptions of distributive justice to explain reactions to perceptions of distributive justice. However, additive effects were found for

productivity in both tasks. The discussion focuses on three potential explanations for the discrepancy between the expected and obtained results. The first explanation contends that the theory was not fairly tested. The second explanation contends that equity sensitivity theory is inaccurate about the true nature of benevolents and entitlements. The third explanation contends that the current measurement of equity sensitivity is not really measuring sensitivity to equity. It is argued that the latter two explanations are the most plausible.

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CHAPTER I

INTRODUCTION

Whenever an individual engages in any type of exchange, he or she will inevitably form some evaluation about the fairness of the exchange. Someone may evaluate a given exchange as fair and wish to continue with the exchange while someone else may evaluate a given exchange as unfair and wish to end the exchange, or alter the conditions of the exchange in some way. Similarly, individuals in organizations form evaluations about the fairness of their exchange with their organization. This evaluation has consequences for the individual's behavior within the organization. Those who see their exchange with an organization as unfair may decrease their efforts or leave the organization. Those who see their exchange with an organization as fair will likely maintain (or even increase) their efforts and remain with the organization. Hence, an individual's perception of how equitably he or she is treated by an organization is germane to understanding behavior within an organizational context.

Research has indicated that perceptions of equitable treatment are related to other variables, such as productivity, quality of work output, and job satisfaction (e.g., Adams, 1963; 1965; Adams & Rosenbaum, 1962; Berkowitz, Fraser, Treasure & Cochran, 1987; Greenberg, 1988; Lawler & O'Gara, 1967). Adams' (1963; 1965). Equity theory contends that individuals estimate how equitably they are treated by an organization by evaluating their inputs to the organization against the outcomes they receive from the organization. Individuals are hypothesized to compare this outcome/input (O/I) ratio to internal standards of equity and to the O/I ratio of a

“Comparison Other.” This “Comparison Other” may be another individual, or even the individual at another point in time. Adams contended that individuals were most satisfied when a state of equity was present. This involved their O/I ratio being equal to the O/I ratio of the Comparison Other. Low satisfaction was hypothesized to follow from under-equity and low to moderate satisfaction was hypothesized to follow from over-equity. Generally, Adams’ theory has been well supported; however, research has indicated that the predictive validity of the theory can be improved via incorporation of various individual difference variables (e.g., Brockner & Adsit, 1986; Tornow, 1971; Vecchio, 1981; Weick, Bougon, & Maruyama, 1976).

Huseman, Hatfield, & Miles (1985) formulated an individual difference variable related to equity theory termed equity sensitivity (a.k.a., sensitivity to equity). This variable was designed to improve the predictive validity of equity theory. Since the seminal study in 1985, research on equity sensitivity has burgeoned and the construct has undergone some revision (see King, Miles, & Day, 1993). According to current theory and research, individuals can be classified, in terms of equity sensitivity, as benevolents, equity sensitives, or entitleds. Benevolents are hypothesized to be relationship-oriented and to focus on maximizing their inputs to an exchange or relationship. Equity sensitives are hypothesized to adhere to the traditional norm of equity. Entitleds are hypothesized to focus on maximizing their outcomes from an exchange or relationship. The construct is currently well-accepted and recent research has expanded the scope of inquiry to include consequence variables like organizational commitment (O’Neill & Mone, 1998) and organizational citizenship behavior (OCB) (Konovsky & Organ, 1996).

It has been demonstrated that equity sensitivity is associated with certain attitudes and behaviors of import to an organization (e.g., organizational commitment). However, a major question, which the extant research has left unanswered, concerns the mechanism (or mechanisms) through which equity sensitivity affects these attitudes and behaviors. As such, the question this study seeks to begin to answer is: how does equity sensitivity influence attitudes and behaviors? Said differently, when an individual is in a given work environment, where does equity sensitivity have an effect? Does equity sensitivity affect perceptions of the environment, reactions to perceptions of the environment, or both?

The current literature suggests three potential models by which equity sensitivity could influence attitudes and behaviors. Before outlining the three models, it is necessary to establish a more basic model for how conditions of equity influence attitudes and behaviors. The basic model (found below in Figure 1.1) adopted here begins with the objective conditions of equity within the environment. These conditions include things such as compensation, work performed, and working conditions. The next step in the model involves perception of the conditions of equity within the environment. Once perceptions of the equity conditions are formed, the individual reacts to his or her perceptions of the equity conditions. These reactions encompass both attitudes and behaviors. Within this model, perceptions are regarded as a mediating variable which determines reactions to the environment. Said differently, individuals do not react to the objective equity conditions within their environment directly. Instead, they react to their perceptions of equity conditions

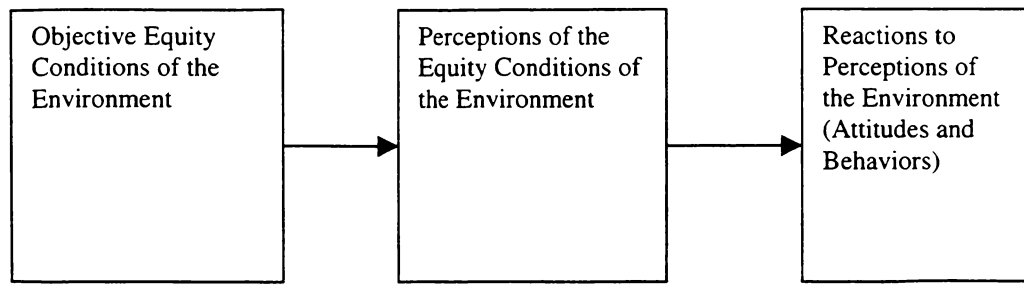


FIGURE 1.1

MODEL OF EQUITY CONDITIONS AND HOW THEY
AFFECT ATTITUDES AND BEHAVIORS

within their environment (see Field & Abelson, 1982; Forehand & Gilmer, 1964; James, Hater, Gent, & Bruni, 1978; James & James, 1989; James & Jones, 1974 for similar models).

The three models to be discussed are based on the above model in which objective equity conditions affect perceptions of equity, which, in turn, affect attitudes and behaviors. These three models incorporate equity sensitivity in various ways. The first of the models to be investigated is referred to as the Perceptions Only model. In this model, equity sensitivity has an interactive effect on perceptions of equity conditions. Thus, equity sensitivity influences perceptions of equity conditions by interacting with the objective equity conditions. Once perception takes place, the individual reacts (as Adams originally suggested) so as to restore or maintain a state of equity. The Perceptions Only model is shown in Figure 1.2.

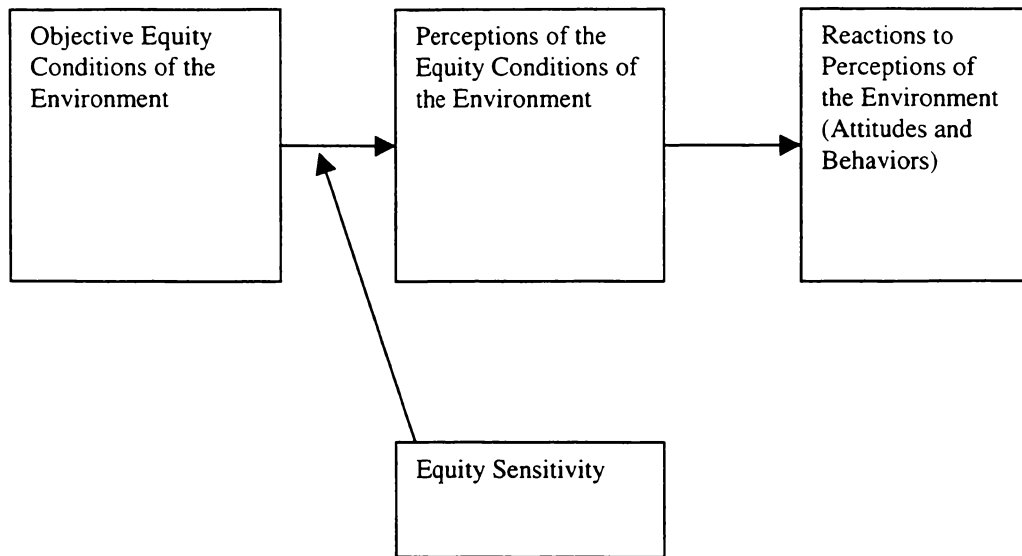


FIGURE 1.2

PERCEPTIONS ONLY MODEL

The second model is referred to as the Reactions Only model. In this model, equity sensitivity moderates reactions to perceptions of the equity conditions of the environment. Thus, all individuals (regardless of equity sensitivity) would see the equity conditions within their environments unaffected by equity sensitivity. However, from this point, equity sensitivity would moderate how they reacted to the perceived equity conditions. The Reactions Only model is shown in Figure 1.3.

The third model is referred to here as the Perceptions and Reactions model. In this model, equity sensitivity interactively affects both perceptions of equity and reactions to equity in a given work environment. Thus, equity sensitivity moderates

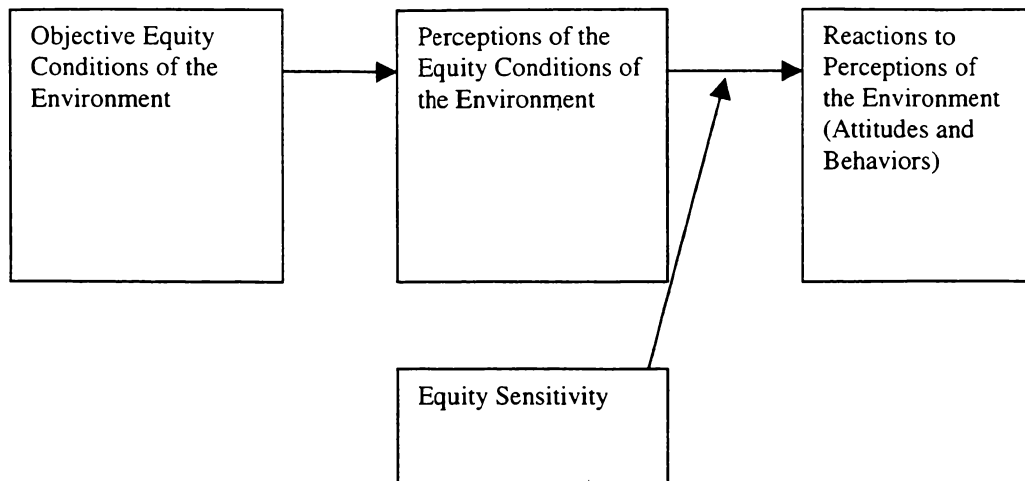


FIGURE 1.3

REACTIONS ONLY MODEL

both perceptions of the equity conditions of the environment and reactions to perceptions of the equity conditions of the environment. The Perceptions and Reactions model is shown in Figure 1.4.

The goal of this study is to begin to address the question: how does equity sensitivity influence attitudes and behaviors? Beginning to answer this question requires a study which examines equity sensitivity and its relationship to attitudes and behaviors relevant to an organization. A study of this nature will add to the literature on equity sensitivity and begin to answer major questions in the existing theory of equity sensitivity. An enhanced understanding of the process will also be useful for more applied purposes such as interventions designed to change perceptions of psychological and organizational climate and personnel selection practices.

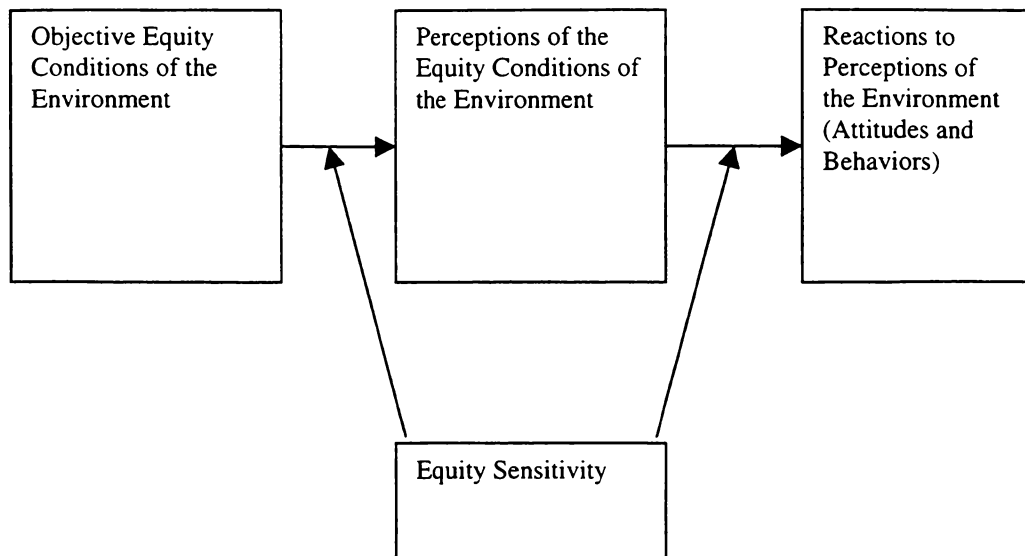


FIGURE 1.4

PERCEPTIONS AND REACTIONS MODEL

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a historical overview of the equity sensitivity construct. This is necessary since the conceptualization of the construct has changed since the seminal study was published in 1985. This overview will begin by briefly reviewing Adams' (1963; 1965) equity theory since the equity sensitivity construct builds on Adams' equity theory. Studies showing the importance of individual differences in equity theory will then be reviewed since these studies represent precursors to the equity sensitivity construct. After covering the history and research of the equity sensitivity construct, the current state of research on equity sensitivity will be summarized and areas for both improvement and advancement will be noted. From there, the hypotheses of this study will be presented and their rationale will be given.

Equity Theory

Adams' (1963; 1965) equity theory contends that when an individual engages in an exchange, he or she may perceive that exchange as either fair or unfair. The exchange relationship between an employee and an employer may also be perceived as fair or unfair. Equity theory was intended to account for perceptions of equity (and inequity) in employer – employee relationships; however, its principles are hypothesized to extend to other types of relationships as well (e.g., friendships). According to Adams' theory, there are two key individuals who must be considered when determining equity. The first, the Person, refers to the individual for whom equity does or does not exist. The second, the Other, refers to the individual, or possibly the group, utilized by the Person as a referent for comparison. The Other is

often referred to as the Comparison Other. The Other does not necessarily have to be a particular individual. The Other could be the Person in his or her former job or a group of individuals (with similar skills) that the Person uses for comparison. The focal point of this comparison is the outcome/input (O/I) ratio. When individuals make these comparisons, they are comparing their O/I ratio to the O/I ratio of the comparison other. This examination of equity centers around questions such as: Am I receiving outcomes from the organization commensurate with my inputs? Are the outcomes I am receiving from the organization fair when compared with the outcomes Other(s) is (are) receiving?

Equity theory is based partly on Festinger's (1957) dissonance theory (Adams, 1963; 1965; Adams & Rosenbaum, 1962; Lawler & O'Gara, 1967). The incorporation of the Comparison Other marks one of the major characteristics which distinguish equity theory from dissonance theory. In Festinger's (1957) theory of cognitive dissonance, individuals experience tension when two perceptions are in disagreement with one another. For example, an individual with the two perceptions (a) I am working hard and (b) I am receiving nice rewards would not experience much tension about his or her work situation. However, an individual with the two perceptions (a) I am working hard and (b) I am not receiving any nice rewards would experience tension (cognitive dissonance) regarding his or her work situation. Equity theory extends dissonance theory in that other individuals and their effects are incorporated into the theory. Within equity theory, an individual with the two perceptions (a) I am working hard and not receiving many rewards and (b) My

coworker is not working hard and is receiving nice rewards would experience tension caused by perceptions of under-reward inequity.

Inputs can include education, experience, training, intelligence, skill, job tenure (i.e., seniority), age, sex, ethnic background, social status, effort, appearance, health, possessions, and even characteristics of one's spouse. An employee can perceive these as inputs; however, an employer may not think of them as inputs.

Adams (1963; 1965) hypothesized that inputs could be described in terms of two characteristics: recognition and relevance. An individual could recognize a potential input as such; however, this potential input may or may not have relevance to the exchange. It is only when the potential input has relevance to the exchange that it truly becomes an input.

Outcomes are also important in Adams' (1963; 1965) equity theory. Outcomes can include pay, intrinsic rewards, quality supervision, seniority and fringe benefits, job status, and perquisites of all types. Outcomes of a more negative nature can include monotonous or repetitive work, poor job security, or poor working conditions. Outcomes are similar to inputs in that they can be described in terms of recognition and relevance. When variables are classified as inputs or outcomes, this does not imply that they are independent. In fact, inputs and outcomes should be correlated, but imperfectly. Adams (1963; 1965) hypothesized that there were well-established norms regarding appropriate correlations between inputs and outcomes. These norms were established by the Other (i.e., the correlation between inputs and outcomes obtained by the Other should also be obtained by the Person).

Adams (1965; p. 280) defined inequity as follows: “inequity exists for Person whenever he perceives that the ratio of his outcomes to inputs and the ratio of Other’s outcomes to inputs are unequal.” Perceptions of inequity are hypothesized to be relative, not absolute, in nature. Therefore, absolute quantities of Person’s inputs and outcomes are less important than the relative quantities of Person’s inputs and outcomes and Other’s inputs and outcomes. However, absolute values of inputs and outcomes and internal standards of equity are important considerations (see Pritchard, 1969). Gross deviations from equity, in absolute terms, will have consequences despite observation of Comparison Others. Regarding the effects of inequity, Adams (1963; 1965) put forth two hypotheses. First, inequity in an individual creates tension proportional to the amount of inequity. Second, this tension motivates the individual to reduce it, and the strength of this motivation is proportional to the amount of tension (and inequity). These hypotheses have received strong support (see Goodman & Friedman, 1971).

Adams (1965) outlined six responses an individual could utilize to reduce perceived inequity. The first response involved Person altering his or her inputs. This could entail increasing inputs by obtaining additional education and/or training or exerting additional effort. This could also entail decreasing inputs by reducing effort. Adams (1963) hypothesized that effort was the input most amenable to reduction. The second response involved Person altering his or her outcomes. This could result in Person asking for increased compensation or additional benefits. This response could also include decreasing compensation, if a strong sense of overpayment inequity were felt. The third response involved Person cognitively distorting his or her inputs and

outcomes. Examples of this could include Person changing his or her attitudes about relevant inputs and outcomes (e.g., seniority is not a relevant input; office size is not a relevant outcome) in order to eliminate tension created by the perceived inequity. The fourth response involved Person leaving the situation. While turnover and absenteeism are obvious examples, other withdrawal behaviors (like daydreaming) are also relevant. The fifth response involved Person acting on the Other. Efforts could be made by Person for the Other to change his or her inputs or outcomes or leave the situation. The sixth response involved Person changing the referent used for comparison. Research has examined these reactions and predictors of these reactions in terms of both equity theory (e.g., Lawler & O'Gara, 1967) and equity sensitivity theory (e.g., Patrick & Jackson, 1991).

In reviewing the research on equity theory, several points come to the forefront. First, the theory is generally accurate in its predictions. Individuals do compare their O/I ratios to the O/I ratios of others, and perceptions of equity and inequity have both attitudinal and behavioral consequences. Second, inputs and outcomes can take many different forms. While the majority of equity theory research uses effort as the only input and money as the only outcome, there are many possible inputs and many possible outcomes which may comprise an individual's O/I ratio. Finally, the research on equity theory has generated just as many questions as it has attempted to answer. One of these unresolved issues concerns the role of individual differences in equity theory.

Individual Differences in Equity Theory Research

Equity theory enjoyed immense popularity as a research topic for many years after its introduction. However, beginning in the early 1980's, reviews of equity theory indicated that a major weakness of the theory was its lack of incorporation of individual difference variables and how these variables might affect the predictions of equity theory (e.g., Major & Deaux, 1982; Miner, 1980; Mowday, 1983; 1987; 1991). Even before these reviews, empirical studies were beginning to demonstrate improved prediction of equity theory through incorporation of individual differences (e.g., Weick et al., 1976).

Andrews (1967) conducted one of the first studies examining individual differences in equity theory. Andrews examined the effect of previous wage experience on quality and quantity of work in various payment conditions. Andrews grouped subjects into conditions of low, medium, and high previous wage experience, based on earnings in jobs previous to the experiment. The experimental payment conditions represented small underpayment, equitable payment, and large overpayment. Results from the underpayment condition indicated that individuals with high previous wage experience exhibited high quantity of work and low quality of work. Individuals with low previous wage experience exhibited low quantity of work and high quality of work. These results suggested that individuals with high previous wage experience were more likely to perceive underpayment inequity and behave so as to reduce the tension associated with this underpayment inequity. These individuals used the strategy of sacrificing quality to increase quantity and hence

increase payment. Andrews (1967) suggested that these results had theoretical implications for incorporation of individual differences into equity theory.

Lawler and O’Gara (1967) examined scales from the California Personality Inventory (CPI) (Gough, 1957) and self-reported need for money as individual difference variables relevant to equity theory. Their study examined how these variables might affect choice of a given inequity-reduction tactic (see Adams, 1965). Subjects were divided into an equitable payment group and an underpayment group. CPI scales designed to measure poise, ascendancy, and self-assurance were consistently related to productivity. Subjects high in traits like poise and self-assurance were less likely to increase productivity (and hence sacrifice quality) as a means of reducing inequity. CPI scales designed to measure socialization, maturity, and responsibility were consistently related to work quality. Subjects high in traits like maturity and responsibility demonstrated high-quality work regardless of their payment condition. Finally, self-reported need for money was positively and highly correlated with productivity $r = .46$, ($p < .05$) as a means of inequity-reduction. This study demonstrated that individual differences did operate within the context of equity theory.

Tornow (1971) conducted another early study examining individual differences in equity theory. According to Tornow (1971), one of the major weaknesses of equity theory was the ambiguity of input versus outcome variables. This point has been made by other researchers as well (e.g., Pritchard, 1969; Weick, 1966). Some aspects of a work setting (e.g., job challenge, demanding schedules) may be perceived as either inputs or outcomes. Job complexity is another example.

One individual may see having a complex job as an outcome and enjoy the intellectual stimulation that a complex job offers. However, another individual may see having a complex job as an input and regret the strain and challenge inherent in a complex job. Tornow (1971) developed a measure, called the Tornow Input-Outcome Checklist (TIOC), which assessed perceptions of ambiguous job elements as inputs or outcomes. Individuals perceiving ambiguous job elements primarily as inputs were labeled Type I and those perceiving ambiguous job elements primarily as outcomes were labeled Type O. Research involved in questionnaire development revealed that people did indeed differ in whether they perceived ambiguous job characteristics as inputs or outcomes. However, the more rigorous test of the measure was whether hypotheses of equity theory would be differentially predictive of Type I versus Type O individuals.

While not all results reached statistical significance, they were generally supportive of this new individual difference variable and its implications for both attitudes and behaviors relevant to equity theory. Regarding attitudes, under-rewarded Type I individuals perceived greater under-reward than under-rewarded Type O individuals. Also, over-rewarded Type I individuals perceived less over-reward than over-rewarded Type O individuals. There were behavioral consequences as well. In the hourly payment condition, both under-rewarded and over-rewarded Type I individuals showed lower productivity than Type O individuals. Several conclusions can be drawn from Tornow's (1971) study. First, there are individual differences in whether people perceive aspects of a work situation as inputs or outcomes. Second, these individual differences affect how equity theory applies to different individuals.

For example, over-reward inequity is more easily reached for Type O individuals than Type I individuals, in the same work setting. Conversely, under-reward inequity is more easily reached for Type I individuals than Type O individuals, in the same work setting.

Research by Weick et al. (1976) explored how other individual differences interact with equity theory. Weick et al. (1976) examined the effect of differing cultural histories on responses to scenarios designed to measure reactions to inequity. They hypothesized several reasons (based on the culture of the Netherlands) for why Dutch individuals would react differently to inequity than American individuals. First, effort is not seen as a relevant input to one's job in the Netherlands. Second, the Dutch place a high value on personal independence which discourages making social comparisons with others. Third, a belief in inconspicuous consumption makes money a less important outcome to the Dutch. Finally, having the family as the dominant reference group discourages social comparisons with co-workers. Weick et al. (1976) had Dutch and American respondents complete questionnaires regarding hypothetical work scenarios. Their results were summarized in the form of propositions regarding decisions about equity. One proposition reported that Dutch individuals preferred high inputs for the self, regardless of outcomes, while Americans preferred high outcomes for the self, regardless of inputs. Another proposition reported that the Dutch were less concerned with Comparison equity (having the same O/I ratio as a co-worker) than the Americans. Both of these propositions are consistent with the cultural differences noted earlier between the Dutch and the Americans. It is evident,

from this study, that individual differences in attitudes can affect the applicability of equity theory to different individuals.

Research by Vecchio (1981) examined moral maturity (see Kohlberg, 1963; 1968) and its relationship to equity theory. Kohlberg's model of moral maturity includes three stages. The lowest stage, premoral, involves moral behavior guided by the consequences of one's actions. The middle stage, conventional, involves moral behavior based on a desire to please one's family and peers. The highest stage, principled, involves moral behavior based on one's own moral principles, with little guidance from family or peers. This study examined the relationship of moral maturity to responses to overpayment inequity. Results indicated that, within the overpayment condition, more morally mature individuals decreased their quantity of output (i.e., interview sheets completed per minute) while less morally mature individuals did not show such a reduction. These results suggest that moral maturity is positively correlated with a desire to maintain equity. Stated differently, moral maturity is an individual difference variable associated with individuals seeking to restore equity in inequitable situations, at least in an overpayment condition.

Research has also examined gender as a variable which influences equity theory (Brockner & Adsit, 1986). Brockner and Adsit (1986) conducted a field study of three business referral groups and examined perceptions of equity and satisfaction with the groups. Their results suggested that the equity – satisfaction relationship was more pronounced for male than for female club members. Interestingly, their results also demonstrated that the equity – satisfaction relationship was strongest in predominantly male groups and weakest in predominantly female groups. This

suggests that there are also environmental influences on equity theory. While gender is more of an individual difference factor than an individual difference variable, this study nonetheless demonstrated that individual differences (like gender) do affect equity theory predictions.

Research by Griffeth, Vecchio, and Logan (1989) examined interpersonal attraction as a moderator of equity theory predictions. Their lab experiment used attitude similarity as a proxy for interpersonal attraction. As expected, their results indicated that the form of equity (over or under-compensation) and the level of interpersonal attraction influenced both task performance and intentions related to future performance. In the overcompensation condition, an interpersonally attractive referent other heightened perceptions of overcompensation and led to higher quality (i.e., detection of errors) on the proofreading task. Griffeth et al. (1989) note that several lines of empirical research indicate that individuals differ in terms of reactions to equity and inequity. They cite equity sensitivity as another variable worthy of further investigation as a moderator of reactions to equity and inequity.

Adams' (1963; 1965) equity theory has stimulated vast amounts of research and has gained wide acceptance as a viable theory (Goodman & Friedman, 1971; Greenberg, 1990). However, one criticism of this theory is its lack of incorporation of individual differences (e.g., Major & Deaux, 1982; Miner, 1980; Mowday, 1983). Several studies have found that there are individual differences which do affect the nature of equity theory predictions. However, the individual difference variables investigated in these studies do not specifically build on equity theory. The equity sensitivity construct represents a useful addition to the equity theory literature

because it specifically builds upon equity theory as formulated by Adams (1963; 1965).

The Equity Sensitivity Construct: Early Theory

Previous theory and research related to equity theory (e.g., Adams, 1963; 1965) suggested that all individuals consistently conformed to the norm of equity (see Carrell & Ditttrich, 1978). By contrast, the equity sensitivity construct built on previous research regarding individual differences and their relevance to equity theory (e.g., Tornow, 1971; Weick et al., 1976) and broke with this tradition of assuming a universal norm of equity. Equity sensitivity theory suggested that the norm of equity was not universal and that different individuals possessed varying levels of sensitivity to equity (Huseman et al., 1985; Huseman, Hatfield, & Miles, 1987). Individuals with different levels of sensitivity to equity were hypothesized to exhibit different relationships between variables like perceptions of equity and job satisfaction (Huseman et al., 1985; Huseman et al., 1987).

Early theoretical writings on equity sensitivity contended that different individuals had different preferences for equity and O/I ratios. Some individuals were thought to prefer that their O/I ratio be less than that of the comparison other. These individuals wanted to contribute more to an exchange or relationship than they received from it. Individuals with this particular orientation were labeled “benevolents” (Huseman et al., 1987; p. 223). Benevolents were hypothesized to be altruistic and to be “givers” (Huseman et al., 1987; p. 225). Others were thought to prefer that their O/I ratio be equal to the comparison other. These individuals followed the traditional pattern of equity theory and were hypothesized to be sensitive

to both overpayment and underpayment inequity. Individuals with this particular orientation were labeled “equity sensitives” (Huseman et al., 1987; p. 223). Finally, a third group of individuals was thought to prefer that their O/I ratio be greater than that of the comparison other. These individuals wanted to get more from an exchange or relationship than they gave to it. Individuals with this particular orientation were labeled “entitleds” (Huseman et al., 1987; p. 223). Entitleds were hypothesized to be exploitative and to be “getters” (Huseman et al., 1987; p. 225). These groups were hypothesized as lying on a continuum of equity preferences, despite the fact that they were conceptualized as three separate groups. Early equity sensitivity theory assumed that perceptions of equity conditions within a given environment were not affected by equity sensitivity. This is suggested by the following quote from one of the original theoretical articles on equity sensitivity, “...individuals react in consistent but individually different ways to both perceived equity and inequity...” (Huseman et al., 1987; p. 223). Hence, early equity sensitivity theory was aligned with the Reactions Only model in which perceptions are not affected by equity sensitivity, but reactions to these perceptions are affected by equity sensitivity.

Equity theory (Adams, 1963; 1965) predicted differences in job satisfaction between individuals who perceived that they were under-rewarded, equitably rewarded, and over-rewarded. Individuals who perceived that they were under-rewarded were predicted to experience low job satisfaction. Individuals who perceived that they were equitably rewarded were predicted to experience high job satisfaction. Individuals who perceived that they were over-rewarded were predicted to experience moderate to low job satisfaction. Equity theory assumed that all

individuals would exhibit this inverted-U shaped relationship between equity perceptions and job satisfaction.

By contrast, early equity sensitivity theory contended that the relationship between perceptions of equity and job satisfaction would be moderated by the equity sensitivity of the individual (Huseman et al., 1985; 1987). This is aligned with the Reactions Only model. Benevolents were predicted to exhibit a negative and linear relationship between equity perceptions and job satisfaction. For benevolents, under-reward was predicted to lead to high job satisfaction, equitable reward was predicted to lead to moderate job satisfaction, and over-reward was predicted to lead to low job satisfaction. Equity sensitives were predicted to exhibit the traditional inverted-U pattern of the relationship between equity perceptions and job satisfaction. For equity sensitives, under-reward was predicted to lead to low job satisfaction, equitable-reward was predicted to lead to high job satisfaction, and over-reward was predicted to lead to low to moderate job satisfaction. Entitleds were predicted to exhibit a positive and linear relationship between equity perceptions and job satisfaction. For entitleds, under-reward was predicted to lead to low job satisfaction, equitable-reward was predicted to lead to moderate job satisfaction, and over-reward was predicted to lead to high job satisfaction. In short, equity sensitivity was predicted to moderate the relationship between perceptions of equity and job satisfaction. However, perceptions of equity were assumed to be unaffected by the equity sensitivity of the individual. This is consistent with the Reactions Only model.

Whether or not individuals of differing equity sensitivity perceived their shared environment similarly was not addressed by early equity sensitivity theory.

That is, early theoretical writings suggested that only reactions, and not perceptions, would differ between individuals. This stands in opposition to extensive research, in the areas of personality (e.g., Baumeister, Smart, & Boden, 1996; James, 1998; Taylor & Brown, 1988), leadership (e.g., Meindl, 1990; Meindl & Ehrlich, 1987; Meindl, Ehrlich, & Dukerich, 1985) and equity theory (e.g., Tornow, 1971; Vecchio, 1981) indicating that individual differences do affect perceptions of the environment. Unfortunately, equity sensitivity research has proceeded without addressing this crucial theoretical question and many researchers have assumed the Reactions Only model of equity sensitivity.

Early theory on equity sensitivity can be summarized by a few simple propositions. First, there is not a universal norm of preferences for equity; in fact, there are individual differences in sensitivity to equity with preferences for O/I ratios spanning a wide range. Individuals preferring a state of under-reward were termed benevolents, individuals preferring a state of over-reward were termed entitleds, and individuals preferring a state of equitable reward were termed equity sensitives. Second, the relationship between equity perceptions and job satisfaction only follows the inverted-U shaped pattern (which Adams hypothesized) for equity sensitives. Benevolents were hypothesized to exhibit a negative linear relationship and entitleds were hypothesized to exhibit a positive linear relationship. Finally, early equity sensitivity theory suggested that the appropriate model for how equity sensitivity affects attitudes and behaviors was the Reactions Only model.

The Equity Sensitivity Construct: Early Research

The seminal study of equity sensitivity examined equity perceptions and equity sensitivity and their relationship to job satisfaction (Huseman et al., 1985). This study surveyed managers and various professionals from a variety of organizations. Individuals were surveyed regarding their perceptions of equity and their job satisfaction, they also completed the scale used to measure equity sensitivity, the Equity Sensitivity Instrument (ESI; see King & Miles, 1994 for a review of the ESI). Conceptual cut scores were used to place the individuals into equity sensitivity categories (benevolents, equity sensitives, and entitlements) and equity perceptions categories (under-rewarded, equitably rewarded, and over-rewarded) and differences in job satisfaction were examined. The results were supportive of several tenets of the early theory of equity sensitivity.

The results indicated that scores on the ESI (King & Miles, 1994) spanned the maximum possible range, from a low of 0 through a high of 50 ($M = 30.57$, $SD = 6.24$). This supported the contention that there were individual differences in sensitivity to equity. There were also differences between job satisfaction scores for equity sensitivity groups within equity perceptions categories which were supportive of the theory. Among individuals who perceived that they were under-rewarded, benevolents had a mean satisfaction score of 5.3, which was significantly higher than the mean scores for equity sensitives and entitlements, which were 4.9 and 4.8, respectively. The greater satisfaction of benevolents, among individuals who perceived that they were under-rewarded, supports the concept of benevolents as altruistic and preferring to contribute more to relationships than they receive. Among

individuals who perceived that they were equitably-rewarded, entitlements had a mean satisfaction score of 5.2, which was significantly lower than the mean scores for equity sensitives and benevolents, which were 5.7 and 5.6, respectively. This supports the notion of entitlements preferring exchanges or relationships where they receive more than they contribute and being dissatisfied with exchanges or relationships where this is not the case. Among individuals who perceived that they were over-rewarded, benevolents had a mean satisfaction score of 5.7, which was significantly higher than the mean satisfaction score for equity sensitives, which was 5.2. The benevolents did not have a significantly higher satisfaction score than the entitlements, which was 5.3. This result was unexpected and suggested that some theoretical adjustments were needed.

There were also differences between job satisfaction scores for equity perceptions categories within equity sensitivity groups which were supportive of the theory. Equity sensitives who perceived that they were equitably rewarded had a mean satisfaction score of 5.7. This was significantly higher than the mean satisfaction scores for equity sensitives who perceived that they were over-rewarded and under-rewarded, which were 5.2 and 4.9, respectively. This result was supportive of the conceptualization of equity sensitives. Entitlements who perceived that they were over-rewarded had a mean satisfaction score of 5.3, which was significantly higher than the mean satisfaction score for entitlements who perceived that they were under-rewarded, which was 4.8. This result was supportive of the conceptualization of entitlements. Benevolents who perceived that they were over-rewarded had a mean satisfaction score of 5.7, which was significantly higher than the mean satisfaction

score of benevolents who perceived that they were under-rewarded, which was 5.3. This was unexpected, since it was hypothesized that benevolents preferred situations of under-reward.

While these results generally supported the predictions of equity sensitivity, the results for benevolents did not support equity sensitivity theory as it was conceptualized at that time. Benevolents exhibited increasing levels of job satisfaction as perceptions of equity went from under-rewarded to equitably-rewarded to over-rewarded. Thus, both entitlements and benevolents exhibited positive and linear relationships between perceptions of reward and job satisfaction.

While this study offered an initial test of equity sensitivity theory, it did have some limitations. The primary limitation concerns its failure to explore the mechanism or mechanisms by which equity sensitivity affects attitudes and behaviors. The researchers did mention that equity sensitivity had the potential to affect perceptions of a work situation, "...the impact of individual differences on perceptions of and reactions to inequity" (Huseman et al., 1985; p. 1055). However, this study surveyed individuals from a variety of work situations without controlling for objective equity conditions. Therefore, the researchers assume that equity sensitivity does not affect perceptions of the equity conditions of an individual's work situation. It could be the case that equity sensitivity also affects perceptions of equity conditions. For example, benevolents may be more likely than entitlements to perceive a given work situation as one of equitable reward or over-reward due to equity sensitivity affecting their perceptions of equity conditions. Benevolents could behave (to some extent) in accordance with Adams' theory by expressing higher satisfaction

in a situation of under-reward than equity sensitives and entitlements because they perceive more equitable reward. Given this scenario, it could be the case that equity sensitivity is simply a variable which affects perceptions of equity. From that point, individuals may behave in accordance with Adams' theory.

Nonetheless, Huseman et al. (1985; p. 1063) seem to subscribe to the Reactions Only model, stating "...and this degree of sensitivity has important implications for their reactions to being rewarded at work." It could be the case that the Perceptions and Reactions model is the most accurate model of equity sensitivity influence. Nonetheless, Huseman et al. (1985) simply examined perceptions of equity and how equity sensitivity moderates the relationship of these perceptions to satisfaction. Regardless of this, the study represented an initial test of equity sensitivity theory and the results were supportive of equity sensitivity affecting individuals' attitudes about their work environments.

Miles, Hatfield, and Huseman (1989) examined equity sensitivity in a hypothetical work environment. Their research involved undergraduate students responding to two hypothetical scenarios involving coding questionnaires and interviewing clients. Dependent variables included perceptions of fair inputs and outcomes, O/I ratios, and thresholds for anger and guilt. Results were partially supportive of early equity sensitivity theory. Benevolents reported significantly higher preferred input scores than equity sensitives and entitlements in both scenarios. When asked how many questionnaires they would code per hour, benevolents reported a mean of 42.6 while equity sensitives and entitlements reported means of 39.4 and 39.1, respectively. When asked how many clients they would interview,

benevolents reported a mean of 28.9 while equity sensitives and entitlements both reported means of 27.4. There were no significant differences in preferred levels of outcomes. Results were also supportive of differences in preferred O/I ratios between equity sensitivity groups. For the coding scenario, the ratio was determined by the cost per questionnaire coded. Here, benevolents had a mean preferred ratio of \$.096 while equity sensitives and entitlements both had a mean preferred ratio of \$.108. For the interviewing scenario, the ratio was determined by the cost per interview. Here, benevolents had a mean preferred ratio of \$60.47 while equity sensitives and entitlements had mean preferred ratios of \$68.71 and \$70.04, respectively. Results for differences in anger and guilt thresholds were not significant.

Several conclusions can be drawn from this study. First, in both scenarios, benevolents preferred higher inputs than equity sensitives and entitlements. This is supportive of benevolents preferring high inputs in a work setting. Second, in both scenarios, benevolents preferred lower O/I ratios than equity sensitives and entitlements. This pattern is similar to the one for input level in that benevolents seemed to represent one group and equity sensitives and entitlements seemed to represent another. Like the Huseman et al. (1985) study, the results of this study were generally, but not totally, supportive of early equity sensitivity theory.

While the Miles et al. (1989) study offers an interesting test of predictions of equity sensitivity theory, it has some weaknesses. As in the Huseman et al. (1985) study, the theoretical model of equity sensitivity influence is not explicitly specified. However, it appears that the researchers were operating under the assumptions of the Reactions Only model. This is supported by the following, "...findings continue to

support the notion of the potential usefulness of the equity sensitivity construct for investigating reactions to equity/inequity and performance in the work place” (Miles et al., 1989; p. 587). Here again, this assumption leaves open the Perceptions Only model and the Perceptions and Reactions model as alternative explanations for the results.

Patrick and Jackson (1991) examined equity sensitivity and its relationship to various possible inequity-reduction tactics (see Adams, 1965). They noted that of the six frequently cited tactics, four are active while two are passive. The tactics of altering inputs, altering outcomes, acting on the comparison other, and leaving the field are active. The tactics of distorting one’s inputs and outcomes and changing the comparison other are passive. Their research addressed the question: Will individuals of different equity sensitivity use different strategies to react to inequity? It was hypothesized that benevolents would tend to use passive reactions to under-reward while entitlements would tend to use active reactions to under-reward. It was also hypothesized that benevolents would tend to use active reactions to over-reward while entitlements would tend to use passive reactions to over-reward. Equity sensitives were predicted to use various reactions to under- and over-reward. A student sample and a sample of fast food employees were used in this research. Participants responded to surveys regarding reactions they would use in situations of over- and under-reward. Two different versions of the under-reward and over-reward scenarios were used. The students were presented with scenarios (similar to those used in earlier equity sensitivity research) involving coding questionnaires and interviewing

clients. The fast food employees were presented with a scenario involving an hourly position in another fast food restaurant.

The results were partially supportive of the hypotheses. While the vast majority of cell means were in the predicted direction, few reached statistical significance. For students responding to the under-reward scenario, three of the twelve tactics showed significant group differences and all were supportive of the hypotheses. For students responding to the over-reward scenario, six of the twelve tactics showed significant group differences and five of the six were supportive of the hypotheses. For employees responding to the under-reward scenario, two of the six tactics showed significant group differences and both were supportive. For employees responding to the over-reward scenario, two of the six tactics showed significant group differences, but neither were supportive of the hypotheses. In short, there were weak, but significant, between-group differences in inequity-reduction tactics. When there were significant differences, ten out of thirteen were supportive of the hypotheses.

These results suggest that an individual's equity sensitivity is associated with preferred methods of inequity reduction. Generally, benevolents preferred active inequity reduction tactics in an over-reward situation and passive tactics in an under-reward situation. Entitleds were found to prefer passive tactics in an over-reward situation and active tactics in an under-reward situation. This study is an important addition to the equity sensitivity literature; however, constraints present in a real work setting preclude drawing firm conclusions about how equity sensitivity might relate to inequity-reduction tactics in an organization.

Patrick and Jackson are unclear as to the theoretical model underlying equity sensitivity influence. Early in their paper, they state "...Adams ignores the possibility that factors such as individual differences or situations could alter perceptions of equity or inequity" (Patrick & Jackson, 1991; p. 1093). However, the results are discussed entirely in terms of reactions to perceptions of equity or inequity. Yet late in their paper, perceptions as part of a model of equity sensitivity influence are mentioned again, "...employers who receive such requests should attempt to assess whether perceived or real inequity is their basis" (Patrick & Jackson, 1991; p. 1102). It could be the case that individuals are actually reacting to the scenarios (at least partially) in accordance with Adams' theory. For example, benevolents could be more likely to perceive the over-reward scenario as over-reward than entitlements. From this point, benevolents could have felt more strongly compelled to restore equity, thereby resorting to active tactics. Additionally, entitlements could be more likely to perceive the under-reward scenario as under-reward than benevolents. From this point, entitlements could have felt more strongly compelled to restore equity, thereby resorting to active tactics. Restoring equity is qualitatively different from actively pursuing differential O/I ratios.

The Equity Sensitivity Construct: Modern Theory

While early research was generally supportive of the equity sensitivity construct, it was clear that some adjustments were needed to improve the accuracy of the theory. An important study by King, Miles, and Day (1993) was instrumental in bringing about these adjustments. King et al. (1993) pointed out that in the original Huseman et al. (1985) study, benevolents expressed higher satisfaction in the over-

reward condition than in the under-reward condition. This did not fit with the theory of benevolents as actually preferring a state of under-reward and disliking a state of over-reward. King et al. (1993) concluded that it is likely the case that benevolents and entitlements are different in terms of tolerances for under-reward and over-reward, instead of actually preferring states of under- and over-reward, respectively. King et al. (1993) also redefined entitlements in terms of their being more focused on outcomes than inputs. They contended that this focus on outcomes was the cause of their greater tolerance for over-reward.

King et al. (1993) conducted a study similar to the original Huseman et al. (1985) study in order to empirically test these new definitions. Subjects were assigned to one of two conditions, under-reward or over-reward. Perceptions of satisfaction within the conditions served as the dependent variable and scores on the ESI served as the independent variable. Results supported the redefinition of benevolents as having a higher tolerance for under-reward instead of actually preferring it. In the under-reward condition, benevolents and equity sensitives had mean satisfaction scores of 2.79 and 2.52, respectively. These were both significantly higher than the mean score for the entitlements, which was 2.16. In the over-reward condition, benevolents and entitlements had mean scores of 3.87 and 4.03, respectively. These were both significantly higher than the mean score for equity sensitives, which was 3.52. Benevolents expressed the highest satisfaction of the equity sensitivity groups when under-rewarded and the second highest satisfaction when over-rewarded. In fact, they were not significantly different from the entitlements in terms of mean satisfaction in the

over-reward condition. These results supported the revised definitions of benevolents and entitlements in terms of tolerances for under-reward and over-reward.

In this study, King et al. (1993) took a different approach to theoretical models of equity sensitivity influence. Here, they seemed to adopt the Perceptions and Reactions model, as evidenced by the following, "...an individual has a unique sensitivity to equity that influences perceptions of equity (or inequity) and likewise influences reactions to perceived inequity." (King et al., 1993; p. 302). While the researchers seem to switch to the Perceptions and Reactions model, it is not discussed at length and is an untested theoretical assumption.

The Equity Sensitivity Construct: Modern Research

Since the King et al. (1993) revisions, research has incorporated the revised conceptualizations of benevolents and entitlements and expanded the scope of inquiry to examine how equity sensitivity impacts other variables. King et al. (1993) conducted the first empirical study using the revised definitions of benevolents and entitlements. They conducted a field study with bank employees to further test their revised definitions. They also hypothesized that benevolents and entitlements could be distinguished based on exchange ideologies (see Eisenberger, Huntington, Hutchison, & Sowa, 1986). Benevolents were hypothesized to have an input-focused exchange ideology and entitlements were hypothesized to have a more outcome-focused exchange ideology. They also investigated differences in importance placed on pay versus work itself and perceptions of distributive justice and job satisfaction.

The results were supportive of the new hypotheses. Benevolents had a more input-focused exchange ideology while entitlements had a more outcome-focused

ideology. Differences in valued work outcomes were also found. Benevolents placed more importance on work itself while entitlements placed more importance on pay. It was suggested that exchange ideologies could be viewed as a partial explanation for these results. Benevolents placed greater importance on work itself, as a valued outcome, since enjoyment of the actual work associated with a job is representative of an input-focused orientation. Entitlements placed greater importance on pay, as a valued outcome, since enjoyment of the pay associated with a job is representative of an outcome-focused exchange orientation.

Evidence from this study can be used to support the argument that equity sensitivity impacts perceptions of a work situation. If individuals of differing equity sensitivity place differing value on work-related outcomes like pay and work itself, this could lead to differential perceptions of the equity conditions of a given work situation. For example, if a benevolent and an entitled were in a work situation where they were both well-paid for dull and repetitive work, it seems likely that their perceptions of equity conditions would differ. The benevolent (placing high value on the work itself, and relatively low value on pay) would be likely to see the situation as one of under-reward while the entitled (placing high value on pay, and relatively low value on the work itself) would be likely to see the situation as one of equity, or even over-reward.

To further support their revised definitions, King et al. (1993) examined the correlations between perceptions of distributive justice (see Greenberg, 1987) and job satisfaction for benevolents and entitlements. They hypothesized that neither benevolents nor entitlements would have correlations between distributive justice and job satisfaction

different from the correlations found for equity sensitives. Similarity of correlations would support the hypothesis that tolerances, and not preferences, were behind the differences between benevolents and entitleds. Stated differently, no equity sensitivity group actually prefers injustice in the distribution of organizational rewards; it is simply the case that some groups (i.e., benevolents) are more tolerant of injustices than others (i.e., entitleds). King et al. (1993) found support for this hypothesis. The correlations between distributive justice and job satisfaction were not significantly different for any of the three groups. This study represents a substantial contribution to the equity sensitivity literature. Not only were the definitions of benevolents and entitleds revised, but new variables were also examined and results were supportive of hypotheses.

Miles, Hatfield, and Huseman (1994) examined the three equity sensitivity groups and their preferences for different types of outcomes from a work situation. Miles et al. (1994) surveyed employed individuals regarding twenty possible outcomes from a work situation (e.g., sense of accomplishment; recognition for good work). Subjects rated these outcomes in terms of importance and chose five outcomes (out of the twenty) which would be most important in an ideal job. Factor analysis of the ratings of the twenty outcomes revealed several different factors representing types of outcomes. These factors included extrinsic tangible outcomes (e.g., pay, fringe benefits, job security), extrinsic intangible outcomes (e.g., a feeling of belonging, appreciation from others), intrinsic outcomes (e.g., sense of accomplishment, a feeling of achievement), and advancement/status outcomes (e.g., status, making important decisions).

Results were supportive of differences in importance placed on various types of outcomes by different equity sensitivity groups. For extrinsic tangible outcomes (e.g., pay), there were significant differences between all three groups. The mean entitled score for extrinsic tangible outcomes was 4.08, the mean equity sensitive score was 3.95, and the mean benevolent score was 3.83. For extrinsic intangible outcomes (e.g., a feeling of belonging), there were no significant differences. For intrinsic outcomes (e.g., a feeling of achievement), there were significant differences between entitlements and benevolents. The mean entitled score for intrinsic outcomes was 4.34, the mean equity sensitive score was 4.37, and the mean benevolent score was 4.41. Basically, entitlements demonstrated the highest preference for extrinsic tangible outcomes while benevolents had the highest preference for intrinsic outcomes. This is congruent with equity sensitivity theory and its conceptualization of entitlements as outcome-focused and placing high importance on pay and similar rewards, and benevolents as input-focused and placing high importance on work itself and similar rewards. This study can be used as further support for equity sensitivity affecting perceptions of the equity of a work situation. For example, if individuals of differing equity sensitivity are in a work situation which, objectively, has high extrinsic tangible outcomes and low intrinsic outcomes, entitlements would be likely to perceive the equity conditions of the situation more favorably than benevolents.

Research by Konovsky and Organ (1996) examined equity sensitivity and its relationship to organizational citizenship behavior (OCB). Equity sensitivity was one of three dispositional variables examined. Agreeableness and Conscientiousness, two of the Big Five factors of personality (see Barrick & Mount, 1991; Digman, 1990),

were also included in the study. Equity sensitivity was included in this study due to the strong theoretical basis on which to predict a relationship with OCB. Benevolents, in the service of maximizing inputs, were hypothesized to be likely to go beyond formal job duties. Conversely, entitlements, with a strong focus on outcomes, were hypothesized to be unlikely to engage in behaviors not formally rewarded by organizational incentive systems. Equity sensitives were hypothesized to be likely to proffer OCB when they felt that a fair exchange demanded it; however, they would be less likely than benevolents to engage in OCB.

This study was conducted with a large sample of hospital employees and used supervisory ratings of OCB as criteria. All five forms of OCB (see Organ, 1988) were measured in the study: courtesy, civic virtue, compliance, altruism, and sportsmanship. The results were not supportive of a relationship between equity sensitivity and OCB. On a global level, attitudes (e.g., perceptions of fairness and satisfaction with supervision) were found to be more predictive of four forms of OCB (courtesy, civic virtue, sportsmanship, and altruism) than dispositions. For the compliance form of OCB, dispositions were more predictive than attitudes. However, equity sensitivity had a negligible effect in terms of dispositions which did predict OCB.

Research by O'Neill and Mone (1998) examined equity sensitivity and three outcome variables (i.e., job satisfaction, organizational commitment, and intentions to leave). They hypothesized that the relationships between self-efficacy (see Bandura, 1982; Stajkovic & Luthans, 1998) and the three outcome variables would be moderated by equity sensitivity. A diverse sample of employees (e.g., physicians,

nurses, and laboratory technicians) in a health care organization were surveyed. Results suggested that equity sensitivity moderated the relationship between self-efficacy and two of the three outcome variables, job satisfaction and intentions to leave. Benevolents exhibited a negative relationship between self-efficacy and job satisfaction such that as self-efficacy increased, job satisfaction decreased. Entitleds exhibited roughly equal job satisfaction at all levels of self-efficacy. In a similar fashion, benevolents exhibited a positive relationship between self-efficacy and intentions to leave such that as self-efficacy increased, intentions to leave increased as well. Entitleds exhibited roughly equal intentions to leave at all levels of self-efficacy. The results of this study suggest that equity sensitivity does affect perceptions of organizational variables which could be used by individuals to determine equity (e.g., job satisfaction). However, this study does not specifically address the issue of equity sensitivity influence with regard to perceptions of equity and (or) reactions to perceptions of equity.

Research by Mudrack, Mason, and Stepanski (1999) investigated relationships between equity sensitivity and both personality and attitudinal variables related to business ethics. Mudrack et al. (1999) expected that benevolents would be more likely than entitleds to behave ethically in various business situations. Personality variables examined included Machiavellianism (see Christie & Geis, 1970), Protestant work ethic (PWE) (see Furnham, 1990; Weber, 1958), and locus of control (see Rotter, 1966). Attitudinal variables investigated included views on ethically questionable behavior which might benefit the self (see Jones, 1990; Mudrack, 1993), views on ethically questionable behavior which might benefit the organization

(Froelich & Kottke, 1991), and views regarding corporate social responsibility.

Hypotheses were tested via two separate phases of survey research to assess robustness of the results.

Results indicated that Machiavellianism was negatively related to scores on the ESI (i.e., benevolents were less Machiavellian than entitlements) and this was replicated in the second sample. Results also revealed that scores on the ESI were positively correlated with the work component of the PWE scale ($r = .23, p < .01$). This suggests that benevolents believe that hard work is rewarded with general personal advancement. Mudrack et al. (1999) also found a relationship between benevolence and right wing authoritarianism (RWA) ($r = .30, p < .001$) (see Altemeyer, 1988). Results also suggested that benevolents were proponents of corporate social responsibility and were unlikely to engage in ethically questionable behaviors to benefit themselves. No consistent relationship was found between equity sensitivity and the likelihood of engaging in ethically questionable activities to benefit one's organization. Mudrack et al. (1999) seem to assume the Perceptions and Reactions model of equity sensitivity influence; however, it is not explicitly addressed or tested empirically.

Research by Sauley and Bedeian (2000) developed a new measure of equity sensitivity called the Equity Preferences Questionnaire (EPQ). This new measure was designed specifically to measure the equity sensitivity construct while avoiding some weaknesses of the ESI. This new measure is based on the revised conceptualizations of benevolents, equity sensitives, and entitlements (see King et al., 1993) and has evidence of content and construct validity and a strong unidimensional factor

structure (see Sauley & Bedeian, 2000). The new measure is also continuous, and hence avoids the problems associated with trichotomization of the old measure. Research with the new measure (using respondent reactions to work scenarios) found it to be predictive of overall job satisfaction and pay satisfaction. The model of influence (i.e., Perceptions Only, Reactions Only, or Perceptions and Reactions) was not incorporated into the testing.

Summary of Equity Sensitivity Research

One of the most consistent findings from equity sensitivity research is simply that there are individual differences in sensitivity to equity. A large percentage of the range of the scale is consistently used by respondents (e.g., Huseman et al., 1985; King, et al., 1993). The improvement in the predictive validity of equity theory found when incorporating other individual difference variables (e.g., Vecchio, 1981) can also be used to support this contention. Given the well-supported construct validity of the measures of equity sensitivity (see King & Miles, 1994; Sauley & Bedeian, 2000), the contention that there are individual differences in sensitivity to equity is strongly supported.

It has also been established that the equity sensitivity of an individual is related to variables used to form equity perceptions and job satisfaction. Equity sensitivity is also related to other variables like exchange orientation and relationship preferences. Equity sensitivity has also been shown to be related to inequity-reduction strategies originally hypothesized by Adams (1965). Finally, equity sensitivity has been found to be related to important organizational variables such as Machiavellianism, locus of control, and beliefs regarding ethical behavior and

corporate social responsibility. In short, equity sensitivity has been shown to affect important attitudes and behaviors in work-related settings.

While equity sensitivity has been shown to be related to attitudes and behaviors which are important in organizational settings, the theory behind its influence is still vague and untested. Few researchers explicitly state how equity sensitivity operates to influence attitudes and behaviors. Instead, some briefly mention that equity sensitivity affects only reactions to equity (Huseman et al., 1985; 1987) or that it affects both perceptions and reactions (e.g., King et al., 1993). Some even seem to adopt different models of influence within the same study (e.g., Patrick & Jackson, 1991). Hence, the important question regarding equity sensitivity and its influence that needs to be addressed is: does equity sensitivity affect perceptions only, reactions only, or both perceptions and reactions?

Hypotheses

The primary goal of this study is to empirically identify how equity sensitivity affects attitudes and behaviors. Before outlining specific hypotheses, it is necessary to outline a specific model and support it with past theory and research. The model where equity sensitivity interactively affects both perceptions and reactions is the most likely explanation of how equity sensitivity influences attitudes and behaviors in a work situation. Three somewhat separate lines of argument can be advanced to support this model. The first line of argument concerns the fact that both perceptions and reactions are affected by equity sensitivity. The second line of argument concerns the contention that the effect is interactive at both points. The third line of argument concerns the specific outcome variables related to justice perceptions.

Equity Sensitivity Affects Both Perceptions and Reactions

There are several reasons for concluding that the Perceptions and Reactions model is the best explanation of how equity sensitivity affects attitudes and behaviors in a work setting. First, there is substantial evidence that suggests that individual differences affect perceptions of the environment and environmental events. Research on individual differences in equity theory has suggested that different individuals (Type I versus Type O) consider different aspects of a work environment to be outcomes or inputs (see Huseman et al., 1987; Tornow, 1971). A Type I individual may see having a complex job as a hassle to be dealt with and hence expect to be compensated for such a burden. However, a Type O individual may see having a complex job as a benefit and feel rewarded by having a job which is complex and challenging. In short, individual differences (i.e., Type I versus Type O) affect which aspects of a given work situation are seen as inputs and which are seen as outcomes. This differential perception of inputs and outcomes should affect perceptions of equity conditions.

Research on equity sensitivity suggests that individuals of differing equity sensitivity place different levels of importance on different potential outcomes from a work situation (e.g., King et al., 1993; Miles et al., 1994). Benevolents tend to place a high value and importance on more intrinsic job outcomes (e.g., a feeling of achievement). Entitleds tend to place a high value and importance on more extrinsic and tangible job outcomes (e.g., pay). This differential valuation of outcomes could lead to individuals of differing equity sensitivity perceiving the equity conditions of a shared environment differently. Suppose that an entitled and a benevolent were both

working together in a work environment which consisted of dull and repetitive work, but outstanding pay. The entitled, placing a high importance on pay and a low importance on intrinsic rewards, would likely perceive the situation as equitable (or possibly even over-reward). However, the benevolent, placing a lower importance on pay and a higher importance on intrinsic rewards, would likely perceive the situation as one of under-reward.

There is also research demonstrating the effect of various individual differences on perceptions of the environment. A thorough review of this literature is beyond the scope of this paper. However, some of the findings more closely related to the present study are reviewed here. Leadership research has demonstrated support for an individual difference variable termed Romance of Leadership (Miendl, 1990) which influences perceptions of the environment. Individuals with a high Romance of Leadership tend to attribute more credit (and blame) to organizational leaders than individuals with a low Romance of Leadership (e.g., Miendl, 1990; Miendl & Ehrlich, 1987; Miendl, Ehrlich, & Dukerich, 1985). Essentially, individual differences (i.e., Romance of Leadership) can affect perceptions of leadership behaviors.

This phenomenon of individual differences affecting perceptions of the environment has also been demonstrated in personality research. Individuals with different levels of Achievement Motivation (AM) and Fear of Failure (FF) tend to view achievement-related situations differently (e.g., James, 1998). Individuals high in AM tend to frame achievement-related situations as opportunities and feel little threat to their self-esteem regardless of their performance. However, individuals high

in FF tend to frame achievement-related situations as risks to their self-esteem and reputation. There is substantial evidence that many individual difference variables can affect perceptions of the environment and environmental events, and equity sensitivity seems likely to have this effect as well.

Equity sensitivity is also expected to affect reactions to a work environment. This is an assumption under which most equity sensitivity research has operated and there is support for it. To begin with, it seems unlikely that differential perception of the environment could be the sole explanation for the effects of equity sensitivity which have been found in past research. Huseman et al. (1985) found empirical support for this contention. In their study, individuals of differing equity sensitivity exhibited different levels of satisfaction in response to similar perceptions of equity. Said differently, individuals perceiving various states of equitable and inequitable reward expressed different levels of satisfaction based on their equity sensitivity.

King et al. (1993) also found empirical support for the contention that equity sensitivity affects reactions to a work environment. They performed a manipulation check in their first study and found that individuals responded as expected to the manipulation (i.e., respondents accurately assessed who was getting a “better deal”) (King et al., 1993; p. 306). However, individuals then reacted differently to the manipulation (i.e., expressed different levels of job satisfaction) and these reactions were moderated by equity sensitivity. Equity sensitivity is expected to moderate both perceptions of equity conditions and reactions to perceptions of equity conditions.

An Interactive Effect for Equity Sensitivity

It is hypothesized that equity sensitivity will have interactive effects on both perceptions of equity conditions and reactions to these perceptions. This hypothesis of equity sensitivity as a moderator variable, and not just a variable which explains incremental variance, lies in the nature of the equity sensitivity construct and its measurement. The equity sensitivity construct is a continuous variable with three separate categories within which individuals can be grouped. Thus, scores on any measure of equity sensitivity are continuous; however, at a deeper level than the scores exist three separate viewpoints regarding exchange relationships and how they should be carried out. The theory and research regarding equity sensitivity both suggest that benevolents and entitlements will perceive equity conditions differently. Entitlements will be more likely to perceive underpayment inequity and benevolents will be more likely to perceive overpayment inequity.

The theory and research regarding equity sensitivity also suggests that benevolents and entitlements will react to their perceptions of equity conditions differently. Benevolents will be more tolerant of under-reward while entitlements will be less tolerant of under-reward. In short, the nature of the equity sensitivity variable (i.e., its being continuous but having two separate poles which are, to some extent, opposed to one another) dictates that its effect is one of moderation instead of additivity.

Choice of Outcome Variables

Four outcome variables are going to be examined in this study. These outcome variables represent two commonly investigated behavioral variables (i.e.,

productivity and quality) and two commonly investigated attitudinal variables (i.e., job satisfaction and pay satisfaction).

Behavioral Outcomes: Productivity

Research in the realm of both equity theory (Adams, 1963; 1965; Adams & Rosenbaum, 1962) and equity sensitivity (Miles et al., 1989) supports the inclusion of productivity as an outcome variable in the model. Adams (1963; 1965) hypothesized that an individual could use increased productivity (in a piece rate payment situation) as a mechanism to alleviate a sense of underpayment inequity or decreased productivity (in a piece rate situation) as a mechanism to alleviate a sense of overpayment inequity. While Adams advanced this hypothesis in the context of piece rate work, it is also quite plausible that decreased productivity (or increased productivity) could serve as a mechanism to restore equity in the context of hourly wages as well. Research by Adams and Rosenbaum (1962) supported the role of changes in productivity as a means of inequity reduction in both hourly and piece-rate payment conditions. The use of productivity changes as a path to resolution of inequity has also been supported by other researchers (e.g., Andrews, 1967; Goodman & Friedman, 1969; Lawler & O’Gara, 1967). Additionally, Miles et al. (1989) found that benevolents were more productive (in terms of measured intentions) than equity sensitives and entitlements. Hence, it is expected that productivity will be related to perceptions of distributive justice. It is also expected that the relationship between perceptions of distributive justice and objective productivity will be moderated by equity sensitivity. Greater benevolence will be associated with greater productivity, given the same level of perceived distributive justice.

Behavioral Outcomes: Quality

Research in the realm of both equity theory (Adams, 1963; 1965; Adams & Rosenbaum, 1962) and equity sensitivity (Huseman et al., 1987) supports the inclusion of quality in the model. Adams (1963; 1965) hypothesized that an individual could alter the quality of his or her work as a mechanism to alleviate a sense of inequity (overpayment or underpayment). Research by Adams and Rosenbaum (1962) supported the role of changes in quality as a means of inequity reduction. Huseman et al. (1987) hypothesized that quality would be affected by equity sensitivity. They hypothesized that, given a piece rate payment situation, entitlements would exhibit high quantity, but low quality, work. They also hypothesized that benevolents would produce high-quality work under either a salary or a wage payment condition. Finally, they hypothesized that given equitable rewards under a piece rate system, benevolents would produce the highest quality work. Hence, it is expected that quality will be related to perceptions of distributive justice. It is also expected that the relationship between perceptions of distributive justice and quality will be moderated by equity sensitivity. Greater benevolence will be associated with higher quality, given the same level of perceived distributive justice.

Attitudinal Outcomes: Task Satisfaction

Research in both equity theory (Adams, 1963; 1965) and equity sensitivity (e.g., Huseman et al., 1985; 1987) supports the inclusion of job satisfaction in the model. Huseman et al. (1987) hypothesized that equity sensitivity would moderate the relationship between perceptions of distributive justice and job satisfaction. This hypothesis has received empirical support by both Huseman et al. (1985) and King et

al. (1993). It is expected that job satisfaction will be related to perceptions of distributive justice. It is also expected that the relationship between perceptions of distributive justice and job satisfaction will be moderated by equity sensitivity. Greater benevolence will be associated with more job satisfaction, given the same level of perceived distributive justice.

Attitudinal Outcomes: Pay Satisfaction

Pay represents one of the most salient outcome variables in equity (Adams, 1963; 1965) and equity sensitivity (Huseman et al., 1987) research. Said differently, having the perception that outcomes are being fairly distributed almost requires a sense of satisfaction with one's pay. This hypothesis has received empirical support. Sweeney and McFarlin (1993) found perceptions of distributive justice to be related to satisfaction with pay. Other studies have replicated this relationship between perceptions of distributive justice and satisfaction with pay (see Berkowitz et al., 1987; Folger & Konovsky, 1989; Konovsky, Folger, & Cropanzano, 1987). Perceptions of distributive justice should be related to satisfaction with pay since pay represents an important outcome in an employment setting. It is also expected that the relationship between perceptions of distributive justice and satisfaction with pay will be moderated by equity sensitivity. Greater benevolence will be associated with greater pay satisfaction, given the same level of perceived distributive justice.

Hypotheses Related to the Objective Environment – Perceptions Portion of the Model

Hypothesis 1: Equity sensitivity will moderate the relationship between the objective work environment and perceptions of distributive justice.

Hypotheses Related to the Perceptions – Reactions Portion of the Model

Hypothesis 2a: Perceptions of distributive justice will be positively related to productivity.

Hypothesis 2b: Equity sensitivity will moderate the relationship between perceptions of distributive justice and productivity.

Hypothesis 3a: Perceptions of distributive justice will be positively related to quality.

Hypothesis 3b: Equity sensitivity will moderate the relationship between perceptions of distributive justice and quality.

Hypothesis 4a: Perceptions of distributive justice will be positively related to task satisfaction.

Hypothesis 4b: Equity sensitivity will moderate the relationship between perceptions of distributive justice and task satisfaction.

Hypothesis 5a: Perceptions of distributive justice will be positively related to pay satisfaction.

Hypothesis 5b: Equity sensitivity will moderate the relationship between perceptions of distributive justice and pay satisfaction.

CHAPTER III

METHOD

Overview

This study used a controlled lab experiment to test the hypotheses. The primary reason for the use of an experiment involved problems in using a field study to answer the research question. In order to effectively answer the question posed here, “objective” equity conditions had to be either controlled or established for all individuals. If objective equity conditions were not either controlled or established, different equity conditions for different individuals could serve as an alternative explanation for any differential perceptions or reactions. I know of no precedent in the equity or equity sensitivity literature in which a field study was conducted where objective equity was measured and/or statistically controlled. This is understandable. Individuals assessing equity conditions consider a large number of variables as both inputs and outputs. Also, the weighting strategies of these inputs and outputs are unknown and could differ widely between different individuals. Any measurement (and statistical control) of objective equity conditions within a field study would be crude, at best, since the link between objective equity and perceived equity involves so many possible variables and possible weighting strategies. Therefore, instead of measuring and controlling objective equity, this study established objective equity within a lab experiment.

This study was designed such that the entire range of equity sensitivity would be represented within each of three equity conditions. Objective equity was established by manipulating the workload of the subjects. Subjects performed two

separate tasks and the workload for the first task constituted the equity manipulation. While all subjects were paid equally, some subjects had a larger workload (in the first task) than others. Subjects worked independently on both experimental tasks, but there were two subjects working in the lab together (beginning the first experimental task at the same time) and the amount of work to be done was noticeable for both subjects. The first experimental task involved taking grocery items and entering their UPC codes into a spreadsheet. In the equitable condition, both subjects were given the same amount of grocery items to transcribe into a spreadsheet (i.e., 70 items each). In the inequitable condition, one subject was given 100 items and another was given 50 items. The subject having to code 50 items was considered to be in the over-equity condition (i.e., short for overpayment inequity) while the subject having to code 100 items was considered to be in the under-equity condition (i.e., short for underpayment inequity). This 50 – 100 item split was pilot tested to ensure that the inequity conditions were felt as such.

The second task was an error-checking test of UPC codes. Both subjects received identical tests. As soon as a subject was finished with the first task, he or she was given the second task. The subjects were given exactly 10 minutes to work on the second task and determine whether or not each code was entered accurately. Subjects were asked to check the codes sequentially and were given an amount of codes to check to ensure that no one finished in the allotted time.

The first task represented the equity condition manipulation. Subjects experienced one of three types of equity conditions based on the amount of work they had to complete in the first task. Criterion measures for the first task were items

entered per minute (a measure of productivity) and percentage of codes entered accurately (a measure of quality).

Criterion measures for the second task were number of codes checked for accuracy (a measure of productivity) and percentage of codes checked correctly (a measure of quality).

Demand characteristics are a serious risk in a study of this nature and the research was designed to minimize any negative effects of demand characteristics. Announcements were made in undergraduate classes about an opportunity to participate in research and make money for participation. Those interested were told that they would be participating in two separate research projects and would be paid at the completion of the second project. The first project required them to complete some individual difference measures as part of a study to examine the measures and how individuals respond to them. After completing this first project, participants signed up for a time slot for the second project. They were told that the second project was a study of information processing and clerical tasks and how task order can affect information processing and work behaviors and attitudes toward tasks.

After completing the two tasks which constituted the second research project, the subjects were asked to complete the attitudinal criterion measures. They were told that the criterion measures were given to examine attitudes toward the tasks.

Subjects

Students at a large southeastern university were used as the subject pool for this study. Students were recruited from a variety of undergraduate classes. The sample consisted of 234 participants evenly distributed among three equity

conditions. Participants ranged in age from 18 to 48 years. The mean age of the sample was 20.6 years ($SD = 2.6$). The sample consisted of freshman (3.8%), sophomores (45.7%), juniors (37.2%), and seniors (13.2%). The sample was 48% female and 52% male. The sample was 74.8% Caucasian, 20.1% African American, .4% Native American, and 3.4% Asian American. The remaining 1.3% of the sample endorsed “Other” when asked about their ethnicity.

Procedure

As they were recruited, subjects were asked to complete four individual difference measures (i.e., the Equity Sensitivity Instrument, the Multi-factor Work Ethic scale, a five-factor measure of personality, and the Equity Preferences Questionnaire) under the auspices of a project investigating individual difference measures. After completing the measures, subjects scheduled a time period during which to participate in the second research project. This was described as research examining information processing and how task order can affect information processing and work behaviors and attitudes toward tasks.

All participants were paid \$ 18.00 and performed the task in the same working conditions. UPC codes were explained to the participants before participation in the second research project to ensure that all participants understood the task. Then the following script was read to participants before they began the task:

[Thanks for agreeing to help with this project. The purpose of this research is to examine information processing and task order and how they can affect work performance and attitudes. The two of you will first be entering the UPC codes of groceries into spreadsheets. You should take items from your boxes

and enter the UPC code for each item into the excel spreadsheet. You should enter one UPC code per cell. Once you have added the code of an item to the spreadsheet, you can put it into the empty box. You must finish your boxes completely before moving on to the next task. After finishing the items in the boxes, you will each work on an error checking task for 10 minutes. Both of you will be paid \$ 18.00 for your work. Are there any questions before we begin?] *[Any questions were answered and both participants were assigned their boxes to work on for the task session.]*

After each subject finished with his or her boxes, he or she was given the second task (checking the accuracy of UPC codes). Subjects were given exactly ten minutes to work on this task. None finished. After this second task, participants completed a questionnaire used to measure (a) perceptions of distributive justice, (b) overall task satisfaction and (c) pay satisfaction. Just before leaving the laboratory, subjects were asked: “Do you have any work experience which you thought helped prepare you for this work?” Participants responding in the affirmative were asked to quantify, in terms of months or years, how much experience they had. Measures of productivity and quality of performance were obtained from the experimental materials (i.e., computer spreadsheets).

Measures

Equity Sensitivity. The Equity Sensitivity Instrument (ESI; see King & Miles, 1994 for a review of psychometric properties) was one of the instruments used to measure the equity sensitivity of the participants. This questionnaire contains five items. In each of the five items, respondents have two choices: a choice representing a

benevolent response and a choice representing an entitled response. Respondents are asked to distribute ten points between the two choices "...by giving the most points to the choice that is *most* like you and the *fewest* points to the choice that is *least* like you" (see King & Miles, 1994; p. 142). The beginning of the scale prompts respondents to put themselves in the context of an organization by saying "In any organization I might work for:" An example of an item from the measure is, "It would be more important for me to: _____ A. Get from the organization _____ B. Give to the organization" (King & Miles, 1994; p. 142). Scores on the ESI can range from 0 to 50, with higher scores representing benevolence, lower scores representing entitlement, and middle scores representing equity sensitivity. The ESI is presented in Figure 3.1.

The Equity Preferences Questionnaire (EPQ) was also administered to measure the equity sensitivity of the participants. This questionnaire contains sixteen items. In each of the sixteen items, respondents use a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). An example of an item from the measure is, "I prefer to do as little as possible at work while getting as much as I can from my employer." (Sauley & Bedeian, 2000; p. 894). Scores on the EPQ can range from 16 to 80, with higher scores representing benevolence and lower scores representing entitlement. While the EPQ is a new measure, it has solid evidence of content and construct validity, as reported by Sauley and Bedeian (2000). The EPQ is presented in Figure 3.2.

The questions below ask what you'd like for your relationship to be with *any* organization for which you might work. On each question, *divide* 10 points between the two choices (choice A and choice B) by giving the most points to the choice that is *most* like you and the fewest points to the choice that is *least* like you. You can, if you'd like, give the same number of points to both choices (for example, 5 points to choice A and 5 points to choice B). And you can use zeroes if you'd like.

Just *be sure* to allocate *all 10* points per questions between each pair of possible responses.

In any organization I might work for:

1. It would be more important for me to:
_____ A. Get from the organization
_____ B. Give to the organization
2. It would be more important for me to:
_____ A. Help others
_____ B. Watch out for my own good
3. I would be more concerned about:
_____ A. What I received from the organization
_____ B. What I contributed to the organization
4. The hard work I would do should:
_____ A. Benefit the organization
_____ B. Benefit me
5. My personal philosophy in dealing with the organization would be:
_____ A. If I don't look out for myself, nobody else will
_____ B. It's better for me to give than to receive

To score the instrument, sum the points allocated to the benevolent response (i.e., items 1B, 2A, 3B, 4A, and 5B). Possible score range 0 – 50.

FIGURE 3.1

EQUITY SENSITIVITY INSTRUMENT

This questionnaire contains a series of work-related statements. Please circle the alternative that best represents your opinion to the right of each item. For example, if you strongly agree with the item number one in the questionnaire you would circle SA to the right of the item. This questionnaire contains 16 items. Please read each statement carefully. For each statement circle the response that best represents your belief or opinion.

1. I prefer to do as little as possible at work while getting as much as I can from my employer.
2. I am most satisfied at work when I have to do as little as possible.
3. When I am at my job, I think of ways to get out of work.
4. If I could get away with it, I would try to work just a little bit slower than the boss expects.
5. It is really satisfying to me when I can get something for nothing at work.
6. It is the smart employee who gets as much as he/she can while giving as little as possible in return.
7. Employees who are more concerned about what they can get from their employer rather than what they can give to their employer are the wise ones.
8. When I have completed my task for the day, I help out other employees who have yet to complete their tasks.
9. Even if I received low wages and poor benefits from my employer, I would still try to do my best at my job.
10. If I had to work hard all day at my job, I would probably quit.
11. I feel obligated to do more than I am paid to do at work.
12. At work, my greatest concern is whether or not I am doing the best job I can.
13. A job which requires me to be busy during the day is better than a job which allows me a lot of loafing.
14. At work, I feel uneasy when there is little work for me to do.
15. I would become very dissatisfied with my job if I had little or no work to do.
16. All other things being equal, it is better to have a job with a lot of duties and responsibilities than one with few duties and responsibilities.

The response scale is strongly disagree (1) to strongly agree (5).

FIGURE 3.2

EQUITY PREFERENCES QUESTIONNAIRE

Distributive Justice. Perceptions of distributive justice were measured by three items assessing the fairness with which the workload was distributed (these three items are referred to as workload justice). This measure was used for several reasons. The high rate of pay (\$ 18.00 for roughly 1 hour of work) necessary to induce subject participation led to range restriction on a distributive justice measure assessing pay justice. A measure assessing workload justice also focuses attention on a factor which actually differs between subjects, as opposed to pay, which does not. The workload justice items are presented in Figure 3.3. The pay justice items are presented in Figure 3.4.

Attitudinal Reactions to the Equity Condition. Attitudinal reactions comprise task satisfaction and pay satisfaction. Task satisfaction was measured with items adapted from the Overall Job Satisfaction scale of the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979; Seashore, Lawler, Mirvis, & Cammann, 1982). This scale contains three items which assess general job satisfaction. Respondents use a seven-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (7). An example of an item from this questionnaire is “All in all, I was satisfied with the experience.” Item wording was changed to refer to a work situation in the past, as opposed to one in the present. The task satisfaction items are presented in Figure 3.5.

Pay Satisfaction was measured with items adapted from the Pay Satisfaction scale of the Michigan Organizational Assessment Questionnaire (Cammann et al.,

Please respond to the following items about the fairness of your experience within the experiment. Please complete all of the items.

1. To what extent was the workload fairly distributed between you and your partner?
2. To what extent was the work to be done fairly distributed considering the amount which you and your partner had to do?
3. To what extent were you treated fairly in terms of the distribution of work to do between you and your partner?

All items use a five-point Likert scale with the following anchors:

- 1 if you believe that you had much less work than your partner
- 2 if you believe that you had somewhat less work than your partner
- 3 if you believe that you had the same amount of work as your partner
- 4 if you believe that you had somewhat more work than your partner
- 5 if you believe that you had much more work than your partner

FIGURE 3.3

WORKLOAD JUSTICE QUESTIONNAIRE

Please respond to the following items based on your work experience transcribing the UPC codes and checking for errors in the UPC codes. Please complete all of the items.

1. To what extent were you fairly rewarded considering the responsibilities you had?
2. To what extent were you fairly rewarded for the amount of effort that you put forth?
3. To what extent were you fairly rewarded for the work that you completed?
4. To what extent were you fairly rewarded for any stresses and strains which were part of the work that you completed?

All items use a five-point Likert scale with the following anchors:

- 1 if you believe that you were very under-rewarded.
- 2 if you believe that you were somewhat under-rewarded.
- 3 if you believe that you were rewarded fairly.
- 4 if you believe that you were somewhat over-rewarded.
- 5 if you believe that you were very over-rewarded.

FIGURE 3.4

PAY JUSTICE QUESTIONNAIRE

Please respond to the following items based on your work experience transcribing the UPC codes and checking for errors in the UPC codes. Please complete all of the items.

1. All in all, I was satisfied with the experience.
2. In general, I didn't like the experience.
3. In general, I liked working on the tasks.

The response scale is as follows:

Strongly disagree = 1
Disagree = 2
Slightly disagree = 3
Neither agree nor disagree = 4
Slightly agree = 5
Agree = 6
Strongly agree = 7

FIGURE 3.5

TASK SATISFACTION QUESTIONNAIRE

1979; see also Seashore et al., 1982). This scale contains three items which assess pay satisfaction. Respondents use a seven-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (7) for the first two items and a seven-point Likert scale ranging from “very dissatisfied” (1) to “very satisfied” (7) for the third item. An example of an item from this questionnaire is “I am very happy with the amount of money I made.” Item wording was changed to refer to a work situation in the past, as opposed to one in the present. The pay satisfaction items are presented in Figure 3.6.

Behavioral Reactions to the Equity Condition. Behavioral reactions included task productivity and quality. Both of these variables consisted of objective indices of productivity and quality based on both experimental tasks. The measure of productivity for the first task was codes entered per minute to accommodate the fact that some subjects transcribed more items than others. The measure of quality for the first task was the percentage of codes entered correctly. The measure of productivity for the second task was the number of items checked. The measure of quality for the second task was the percentage of items checked correctly.

Data Analysis

Data analysis was executed in two separate stages. The first stage used moderated multiple regression. The dependent variable was perceptions of workload justice. The independent variables were equity condition, equity sensitivity, and the interaction of equity condition with equity sensitivity.

Please respond to the following items based on your work experience transcribing the UPC codes and checking for errors in the UPC codes. Please complete all of the items.

1. I am very happy with the amount of money I made.
2. Considering the effort I put into the work, I am very satisfied with my pay.
3. How satisfied are you with the amount of pay you received?

For items 1 and 2, the response scale is as follows:

Strongly disagree = 1
Disagree = 2
Slightly disagree = 3
Neither agree nor disagree = 4
Slightly agree = 5
Agree = 6
Strongly agree = 7

For item 3, the response scale is as follows:

Very dissatisfied = 1
Dissatisfied = 2
Slightly dissatisfied = 3
Neither satisfied nor dissatisfied = 4
Slightly satisfied = 5
Satisfied = 6
Very satisfied = 7

FIGURE 3.6

PAY SATISFACTION QUESTIONNAIRE

The second stage of data analysis also used moderated multiple regression. There were six dependent variables: productivity (task 1), productivity (task 2), quality (task 1), quality (task 2), task satisfaction, and pay satisfaction. The independent variables were perceptions of workload justice, equity sensitivity, and the interaction of perceptions of workload justice with equity sensitivity.

Power Analysis

A power analysis was conducted to determine the sample size needed to detect the effects predicted in the hypotheses. Past equity and equity sensitivity research was examined to help determine probable effect sizes (e.g., Adams & Rosenbaum, 1962; Greenberg, 1988; Huseman et al., 1985; Miles et al., 1989; O'Neill & Mone, 1998; Sauley & Bedeian, 2000). The equity and equity sensitivity research conducted to date has used vastly different research methods and approaches across studies. No study has used the approach this study used (i.e., a lab experiment which manipulated equity via amount of work to be completed). For example, some studies have used responses to paper scenarios of work situations (e.g., Miles et al., 1989; Sauley & Bedeian, 2000) while other studies have examined equity sensitivity in a field setting (O'Neill & Mone, 1998). It is also the case that much of the past research (e.g., Adams & Rosenbaum, 1962) does not provide all of the necessary information for estimating effect sizes. Because of the diversity of research methods used in past equity sensitivity research and the lack of information provided in some of the past studies, the power analysis involved a combination of empirical estimation and careful, and conservative, judgment. It is oftentimes the case that power analysis must incorporate human judgment (Murphy & Myors, 1998).

In terms of the effect size expected for the effect of equity sensitivity on productivity, the Miles et al. (1989) study was judged to be the only relevant indicator for this relationship. This study indicated an estimated effect size of percentage of variance accounted for (PV) = .05 (see Murphy & Myors, 1998 for formulae used to compute all effect sizes). There is currently no research on the effect of equity sensitivity on quality of work output. However, productivity (which is essentially a quantifiable output) should be related to equity sensitivity in a way similar to quality (which is also a quantifiable output). Therefore the same effect size is assumed for productivity and quality.

In terms of the effect size expected for the effect of equity sensitivity on job satisfaction and pay satisfaction, several studies were consulted (e.g., Huseman et al., 1985; O'Neill & Mone, 1998; Sauley & Bedeian, 2000). These studies showed a range of effect sizes, some of the lowest being $PV = .03$ (e.g., Huseman et al., 1985) while some of the highest were $PV = .07$ (e.g., O'Neill & Mone, 1998; Sauley & Bedeian, 2000). The Huseman et al. study likely represents an underestimate since job satisfaction was measured with a one-item questionnaire, the reliability of which was not reported. The estimate of $PV = .05$ represents a conservative estimate of effect size for equity sensitivity on pay satisfaction and job satisfaction.

In terms of the effect size expected for the effect of equity condition on productivity and quality, several studies were consulted (e.g., Adams & Rosnebaum, 1962; Andrews, 1967; Goodman & Friedman, 1969; Greenberg, 1988; Lawler & O'Gara, 1967). It is important to point out that these studies manipulated equity conditions in a variety of ways (e.g., via payment; via office size), none of which

involve the method used in this study. Many of these studies did not provide sufficient information to estimate effect sizes empirically; however, certain conclusions could be drawn. There were some effects for equity conditions on productivity and/or quality which were exceptionally large (see Greenberg, 1988 or Lawler & O'Gara, 1967). Even the smallest effects were small or moderate in size (see Andrews, 1967 or Goodman & Friedman, 1969). Therefore, the estimate of $PV = .05$ represents a conservative estimate of effect size for equity condition on productivity and quality.

In terms of the effect size expected for the effect of equity condition on job satisfaction and pay satisfaction, several studies were consulted (e.g., Berkowitz et al., 1987; Huseman et al., 1985; Sauley & Bedeian, 2000). These studies also showed a range of effect sizes, ranging from $PV = .04$ (e.g., Huseman et al., 1985) to $PV = .24$ and $PV = .48$ (both from Sauley & Bedeian, 2000). The Huseman et al. study likely represents an underestimate since job satisfaction was measured with a one-item questionnaire, the reliability of which was not reported. It is also expected that these exceptionally large estimates from Sauley and Bedeian are partially due to demand characteristics associated with their experimental methodology (i.e., responses to hypothetical work scenarios). The estimate of $PV = .05$ represents a conservative estimate of effect size for equity condition on pay and job satisfaction.

In terms of the effect size expected for the interaction of equity condition and equity sensitivity, two studies were consulted (i.e., O'Neill & Mone, 1998; Sauley & Bedeian, 2000). One study (O'Neill & Mone, 1998) examined the interaction of equity sensitivity with self-efficacy in the prediction of job satisfaction and found the

PV to be .03. This is believed to be an underestimate of the effect size expected for the interaction of equity condition and equity sensitivity since it is based on equity sensitivity and self-efficacy. It is expected that differences in equity conditions will exacerbate the effect of equity sensitivity (on all four outcome variables) to a much greater degree than differences in self-efficacy. This is expected because equity sensitivity and equity conditions have a stronger theoretical relationship suggestive of interaction than equity sensitivity and self-efficacy. Sauley and Bedeian examined the interaction of equity sensitivity with equity conditions and found non-significant effects for the interaction. However, this study involved subjects responding to hypothetical scenarios of work conditions. It is likely that conditions of inequity need to be more strongly felt by participants for them to interact with equity sensitivity. The estimate of $PV = .05$ represents a conservative estimate of effect size for the interaction of equity condition and equity sensitivity in this study. These effect size estimates require a sample size of 209 to achieve a level of power of .80.

Pilot Testing

Pilot testing was conducted to determine the effectiveness of the equity manipulation. The question the pilot testing investigated was: How large does the differential between subjects need to be (in terms of items to be transcribed in the first task) for a state of inequity to be felt? The pilot testing began with a 50 – 100 split. Subjects in this pilot testing were treated just as normal experimental subjects. The equity manipulation of a 50 – 100 split was effective; therefore, these subjects were included in the final data analysis.

CHAPTER IV

RESULTS

This chapter provides information pertinent to several aspects of the results. First, evidence from a confirmatory factor analysis is presented to demonstrate the discriminant validity of the predictor and criterion variables. Second, scale reliabilities and descriptive statistics are reported. Third, evidence from tests of experimental order-effects is presented for both the predictor and the criterion variables. Fourth, the issue of the need to control for extraneous variables is addressed. Fifth, evidence of the effectiveness of the equity conditions manipulation is presented. Finally, results from the hypothesis testing are presented and summarized.

Evidence of Discriminant Validity of Predictor and Criterion Variables

A confirmatory factor analysis for the measurement model was conducted using AMOS 3.6 structural equation modeling software (Arbuckle, 1997) to examine the discriminant validity of the measures used in the study. A model was examined in which the two measures of equity sensitivity and the four attitudinal variables (workload justice, pay justice, task satisfaction, and pay satisfaction) were correlated with one another. The Chi Square statistic for this model was significant; however, this was expected due to sample size ($\chi^2(512, n = 234) = 970.02, p = .000$). The GFI for this model was .80 and the CFI was .88, indicating modest fit. The RMSEA was .06. The standardized regression weights from this analysis are reported in Table 4.1. The correlations among the factors are reported in Table 4.2. The weights are

Table 4.1

Standardized Regression Weights for Confirmatory Factor Analysis of StudyVariables

Items	Hypothesized Factors					
	EPQ	ESI	WJ	PJ	PS	JS
EPQ 1	.72					
EPQ 2	.68					
EPQ 3	.67					
EPQ 4	.61					
EPQ 5	.58					
EPQ 6	.58					
EPQ 7	.56					
EPQ 8	.30					
EPQ 9	.51					
EPQ 10	.48					
EPQ 11	.47					
EPQ 12	.47					
EPQ 13	.59					
EPQ 14	.47					
EPQ 15	.56					
EPQ 16	.59					
ESI 1		.62				
ESI 2		.69				
ESI 3		.72				
ESI 4		.69				
ESI 5		.76				
Workload Justice 1			.95			
Workload Justice 2			.97			
Workload Justice 3			.95			
Pay Justice 1				.77		
Pay Justice 2				.86		
Pay Justice 3				.87		
Pay Justice 4				.76		
Pay Satisfaction 1					.95	
Pay Satisfaction 2					.87	
Pay Satisfaction 3					.52	
Task Satisfaction 1						.78
Task Satisfaction 2						.85
Task Satisfaction 3						.87

N = 234.

Table 4.2

Correlation Matrix from the Confirmatory Factor Analysis of Study Variables

Variable	1	2	3	4	5	6
1. Equity Preferences Questionnaire						
2. Equity Sensitivity Instrument	.32					
3. Workload Justice	-.10	-.02				
4. Pay Justice	.07	-.12	-.10			
5. Task Satisfaction	.14	.22	-.15	.14		
6. Pay Satisfaction	.04	.03	-.13	.34	.29	

N = 234.

generally supportive of sound measurement of the constructs and discriminant validity.

Scale Reliabilities

All measures showed satisfactory psychometric properties. The estimates of internal consistency were as follows: Equity Sensitivity Instrument ($\alpha = .82$), Equity Preferences Questionnaire ($\alpha = .87$), workload justice ($\alpha = .97$), pay justice ($\alpha = .88$), task satisfaction ($\alpha = .87$), and pay satisfaction ($\alpha = .81$). Descriptive statistics are reported in Table 4.3.

Table 4.3

Study Variable Means, Standard Deviations, and Correlations

Variable	M	SD	1	2	3	4	5
1. Age	20.56	2.63					
2. Class			.44***				
3. Race			.12	-.04			
4. Sex			.06	.01	.13		
5. Work Experience	11.68	19.1	.23***	-.04	.12	.03	
6. Equity Preferences	60.5	8.6	.13	.22**	-.09	.21**	.09
7. Equity Sensitivity	28.4	6.3	.23***	.09	.10	.28***	.09
8. Workload Justice	9.1	3.2	-.01	-.05	-.04	-.11	.14*
9. Pay Justice	15.4	2.8	-.09	-.04	-.18**	-.03	-.04
10. Task Satisfaction	16.7	3.2	-.06	-.01	.01	.09	.02
11. Pay Satisfaction	18.9	2.7	-.15*	-.03	-.07	-.01	-.13*
12. Productivity (Task 1)	5.5	1.0	.02	.17**	-.11	.21**	.12
13. Quality (Task 1)	97	3.3	.04	.09	.05	.01	.06
14. Productivity (Task 2)	139	28.5	.00	.09	.04	.15*	.02
15. Quality (Task 2)	98	2.3	-.07	.09	-.02	.09	-.07
* p < .05 ** p < .01 *** p < .001							

Note 1. The Means and Standard Deviations for class, race, and sex are not reported.

The frequencies for these variables are given in the Sample section of Chapter III.

Note 2. Work experience is quantified in months.

Note 3. N = 234

Table 4.3 continued

Variable	6	7	8	9	10	11	12
7. Equity Sensitivity	.27***						
8. Workload Justice	-.09	-.01					
9. Pay Justice	.07	-.10	-.11				
10. Task Satisfaction	.13*	.19**	-.14*	.15*			
11. Pay Satisfaction	.07	.02	-.12	.35***	.30***		
12. Productivity (Task 1)	.29***	.15*	.14*	.08	-.02	-.06	
13. Quality (Task 1)	.12	-.01	-.22**	.06	.11	.03	.04
14. Productivity (Task 2)	.14*	.12	.12	.11	.14*	.01	.53***
15. Quality (Task 2)	-.02	.11	-.11	.09	.07	.24**	.04
* p < .05 ** p < .01 *** p < .001							

Table 4.3 continued

Variable	13	14	15
14. Productivity (Task 2)	-.05		
15. Quality (Task 2)	.23**	-.09	
* p < .05 ** p < .01 *** p < .001			

Scale Order Effects

Both predictor and attitudinal criterion variables were tested for experimental scale order-effects. The predictor variables, the EPQ and the ESI, were administered as two of four scales to be completed in one set (all measuring individual difference variables). The other two scales were a five-factor measure of personality and a work ethic questionnaire. The four scales were counterbalanced for order with the constraint that the two measures of equity sensitivity had to be separated by one of the other two measures. This was done to minimize common method bias due to similarity of item content between the two measures of equity sensitivity. To test for order effects, a one-way ANOVA was conducted in which the independent variable was predictor variable order and the dependent variable was the scale score. The personality measure and the work ethic measure were both represented with composite scores. The ANOVA revealed no significant differences in scale scores as a result of the order of administration. The results for this ANOVA are presented in Table 4.4.

Table 4.4

Analysis of Variance for Order Effects in the Individual Difference Variables

Source	df	MS _B	MS _W	F
Big Five	230	133.54	134.20	1.00
Work Ethic	223	158.36	348.88	.45
Equity Sensitivity	233	13.10	40.33	.33
Equity Preferences	233	73.06	73.21	1.00

Note. df differ due to missing data on the personality and work ethic measures.

The four scales measuring attitudinal criterion variables were also counterbalanced with the constraint that the two measures of distributive justice had to be separated by one of the other two measures. This was done to minimize common method bias due to similarity of item content between the two measures of distributive justice. To test for order effects, a one-way ANOVA was conducted in which the independent variable was criterion variable order and the dependent variable was criterion scale score. The results of this analysis are presented in Table 4.5. The results of these analyses indicated that there was a significant order effect for the task satisfaction scale. Further analysis of means revealed that the mean for task satisfaction in scale order number three was lower than in the other seven possible

Table 4.5

Analysis of Variance for Order Effects in the Attitudinal Criterion Variables

Source	df	MS _B	MS _w	F
Workload Justice	233	9.19	10.50	.875
Pay Justice	233	8.70	8.06	1.08
Task Satisfaction	233	34.37	9.27	3.71**
Pay Satisfaction	233	6.30	7.14	.88

** $p < .01$

orders. Scale order three was as follows: (1) Workload Justice, (2) Task Satisfaction, (3) Pay Justice, and (4) Pay Satisfaction. Tukey's Honestly Significant Difference (HSD) and Least Significant Difference (LSD) analyses revealed that task satisfaction in scale order three was significantly different from task satisfaction in scale orders one, four, and six.

In scale order three, task satisfaction comes before pay satisfaction; however, in scale orders one, four, and six, task satisfaction comes after pay satisfaction and is significantly higher. One possible explanation for the order effect is that completing the pay satisfaction scale first primes the participants to consider their lucrative payment and thus increases task satisfaction. However, a strong (and reliable) effect of this nature should cause significant differences between all four order conditions where task satisfaction precedes pay satisfaction and all four order conditions where pay satisfaction precedes task satisfaction; such was not the case in the present study.

Regression Models with Control Variables

As reported in Table 4.3, there were significant correlations between demographic variables and some of the variables involved in the hypothesis testing. In all cases in which any demographic variable correlated with any variable involved in a hypothesis test, regression models were computed with and without controlling for the demographic variable(s). The regression models which controlled for the demographic variables entered the demographic variables in Step 1 and (beginning with Step 2) enter the other variables as they would normally be entered for the hypothesis testing. In most cases, the regression models which included the control variables were not substantively different (in terms of hypothesis testing results) from the regression models which did not include the control variables. Given the result of an order-effect for the task satisfaction scale, a regression model controlling for criterion variable order was also analyzed. This model was not substantively different from the regression model which did not control for criterion variable order. The results of these regression models can be found in Appendix 1.

Given these negligible effects, the decision was made to use the regression models without the control variables. This allows for a more coherent reporting of the results and enables readers to compare regression models directly without the extraneous influence of control variables included in only certain models.

Effects of Equity Conditions on Study Variables

A necessary preliminary step in a study of this nature is to determine the effect of the different equity conditions on the study variables. While this study was primarily concerned with the effects of equity sensitivity as an individual difference

variable, equity theory contends that the objective equity conditions should also affect the study variables. To test for these effects, one-way ANOVAs were conducted in which the independent variable was equity condition and the dependent variables were the scale scores for equity sensitivity, the attitudinal measures, and quantitative values for behavioral speed and accuracy variables. The results of these analyses are presented in Table 4.6. The analyses indicated that equity sensitivity was distributed evenly between the three equity conditions. This is an important assumption to check when randomization is used to distributed individuals of differing equity sensitivity between the equity conditions. The analyses also indicated that equity conditions had a significant effect on perceptions of workload justice, productivity in the first task, productivity in the second task, and quality in the first task. The means and standard deviations of the study variables within equity conditions are given in Table 4.7.

Inspection of means revealed that the equity conditions had the expected effect on perceptions of workload justice. The scale midpoint, 9, represents the perception of a perfectly even distribution of work (equity). The scale low point, 3, represents the perception of having much less work than one's partner (strong over-equity). The scale high point, 15, represents the perception of having much more work than one's partner (strong under-equity). Individuals in the equitable condition reported a mean of 9.27. Individuals in the under-equity condition reported a mean of 12.26. Individuals in the over-equity condition reported a mean of 5.69. Thus, the ANOVA results for perceptions of workload justice support the expected effect of the equity manipulations.

Table 4.6

Analysis of Variance for Equity Conditions on the Study Variables

Source	df	MS _B	MS _w	F
Equity Preferences Questionnaire	233	147.40	72.56	2.03
Equity Sensitivity Instrument	233	17.34	39.70	.44
Workload Justice	233	842.47	3.26	258.51***
Pay Justice	233	13.85	8.03	1.73
Task Satisfaction	233	22.78	9.91	2.30
Pay Satisfaction	233	13.50	7.06	1.91
Productivity (Task 1)	233	14.03	.99	14.22***
Productivity (Task 2)	233	4159.89	784.18	5.31**
Quality (Task 1)	233	47.31	10.37	4.56*
Quality (Task 2)	233	3.31	5.28	.63

* p < .05 ** p < .01 *** p < .001

Table 4.7

Means and Standard Deviations of Study Variables Within Equity Conditions

Variable	Under-equity	Equity	Over-equity
Equity Preferences	60.77 (7.67)	59.05 (9.14)	61.77 (8.67)
Equity Sensitivity	28.81 (6.16)	28.51 (7.08)	27.88 (5.58)
Workload Justice	12.3 (2.00)	9.3 (1.26)	5.7 (2.05)
Pay Justice	15.5 (2.83)	14.9 (2.80)	15.8 (2.87)
Task Satisfaction	16.3 (3.44)	16.5 (3.38)	17.3 (2.55)
Pay Satisfaction	18.8 (2.83)	18.6 (2.76)	19.4 (2.36)
Productivity (Task 1)	6.0 (1.13)	5.3 (1.0)	5.3 (.84)
Productivity (Task 2)	145.2 (27.60)	141.4 (28.06)	131.1 (28.35)
Quality (Task 1)	96.7 (3.5)	97.6 (2.8)	98.2 (3.3)
Quality (Task 2)	97.6 (2.44)	97.7 (2.10)	98.0 (2.34)

Note 1. Standard deviations are in parentheses.

Note 2. N = 78 per equity condition.

Equity condition also had an effect on productivity in the first task. Participants in the under-equity condition had a mean of 6.0 UPC codes transcribed per minute while participants in the over-equity and equitable conditions both had means of 5.3. Participants with more items to enter (i.e., under-equity) worked at a faster pace. This finding is especially interesting when quality in the first task is also considered. For quality in the first task, participants in the under-equity condition had a mean of 96.7 percent of the UPC codes transcribed correctly while participants in the over-equity and equitable conditions had means of 98.2 % and 97.6 %, respectively. Thus, participants in the under-equity condition appeared to sacrifice quality and work at a faster pace while participants in the over-equity condition appeared to enhance quality and work at a slower pace. This quantity – quality trade-off has been found repeatedly in past equity research (e.g., Adams, 1963; Andrews, 1967; Goodman & Friedman, 1969; Lawler & O’Gara, 1967; Vecchio, 1981).

The analyses also revealed mean differences in productivity in the second task. Participants in the under-equity condition had a mean of 145.2 UPC codes checked for accuracy, while participants in the over-equity condition had a mean of 131.1, and participants in the equitable condition had a mean of 141.4. There were no significant differences in the quality of performance in the second task. It might be expected that individuals in the over-equity condition would sacrifice speed to enhance quality on the second task; however, the results do not support this expectation.

Hypothesis Testing: Perceptions of Equity

Hypothesis 1 concerned the effect of equity sensitivity on the relationship between the objective work environment and perceptions of distributive justice. The objective work environment was modeled with two effects code variables. The first effect compared the under-equity condition to the equity condition. The second effect compared the over-equity condition to the equity condition. Perceptions of distributive justice were based on perceptions of the fairness with which the workload was distributed (i.e., workload justice). Analyses pertaining to perceptions of pay justice without control variables can be found in Appendix 2. Analyses pertaining to perceptions of pay justice with control variables can be found in Appendix 3.

Within this study, the two measures of equity sensitivity correlated at .27. Because of this, they must be regarded as showing little convergent validity. The newest measure, the EPQ, seems to have better construct validity than the ESI (see Sauley & Bedeian, 2000). Because of this, the results will primarily be concerned with the EPQ used to represent equity sensitivity. However, results will also be reported concerning the ESI. Results referring only to equity sensitivity refer to the EPQ. Use of the ESI will be mentioned explicitly.

The first hypothesis was tested using hierarchical moderated regression. In Step 1, perceptions of workload justice were regressed onto the two effects-code variables representing the objective equity environment. As reported in Table 4.8, Step 1 resulted in an R^2 of .69 ($p = .000$) ($\beta_1 = .81$, $p = .000$) ($\beta_2 = -.86$, $p = .000$). In Step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of

Table 4.8

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Perceptions of Workload Justice

Predictor variable	<u>Workload Justice</u>			
	β	ΔR^2	R^2	p
Step 1		.69	.69	.000
Equity Condition 1 (EC1) (under-equity and equity)	.81			.000
Equity Condition 2 (EC2) (over-equity and equity)	-.86			.000
Step 2		.00	.69	.217
Equity Sensitivity (ES)	-.05			.217
Step 3		.01	.70	.158
EC1 * ES	.05			.883
EC2 * ES	-.51			.094
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.00 ($p = .217$) ($\beta = -.05$, $p = .217$). In step 3, the interactions of equity sensitivity with the two variables representing the equity environment were added to the model. This resulted in an increase in R^2 of .01 ($p = .158$) ($\beta_4 = .05$, $p = .883$) ($\beta_5 = -.51$, $p = .094$). These results indicate that the equity environment had a significant effect on perceptions of workload justice, explaining 69% of the variance. However, equity sensitivity did not have an additive effect on perceptions of workload justice. Equity sensitivity also did not moderate the effects of the equity environment on perceptions of workload justice, contrary to Hypothesis 1.

Hypothesis 1 was also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .69 ($p = .000$) ($\beta_1 = .81$, $p = .000$) ($\beta_2 = -.86$, $p = .000$). Step 2 resulted in an increase in R^2 of .00 ($p = .082$) ($\beta = -.06$, $p = .082$). Step 3 resulted in an increase in R^2 of .00 ($p = .650$) ($\beta_4 = -.19$, $p = .354$) ($\beta_5 = .12$, $p = .563$). These results were essentially the same as those obtained using the EPQ, indicating no support for equity sensitivity moderating perceptions of workload justice.

Hypothesis Testing: Reactions to Equity

Hypotheses 2a and 2b involved the effect of equity sensitivity on the relationship between perceptions of distributive justice and productivity in the first task. This hypothesis was tested using hierarchical moderated regression. In step 1, productivity in the first task was regressed onto perceptions of workload justice. As reported in Table 4.9, this resulted in an R^2 of .02 ($p = .038$) ($\beta = .14$, $p = .038$);

Table 4.9

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice: Productivity (Task 1)

Predictor variable	<u>Productivity (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.02	.02	.038
Workload Justice (WJ)	.14			.038
Step 2		.09	.11	.000
Equity Sensitivity (ES)	.30			.000
Step 3		.00	.11	.752
WJ * ES	.15			.752
N = 234				

Note: The beta weights reported in this Table are values upon entry.

supporting Hypothesis 2a. In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .09 ($p = .000$) ($\beta = .30, p = .000$). In step 3, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .752$) ($\beta = .15, p = .752$). These results indicate that perceptions of workload justice had a significant but relatively small effect on productivity in the first task, explaining 2% of the variance. Equity sensitivity had an additive effect on productivity in the first task, explaining 9% of the variance. The direction of the equity sensitivity relationship indicated that greater benevolence was associated with greater productivity. However, equity sensitivity did not moderate the effect of perceptions of workload justice on productivity in the first task. Thus, hypothesis 2a received some support and hypothesis 2b received no support in these analyses.

This hypothesis was also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .02 ($p = .038$) ($\beta = .14, p = .038$). Step 2 resulted in an increase in R^2 of .02 ($p = .021$) ($\beta = .15, p = .021$). Step 3 resulted in an increase in R^2 of .00 ($p = .316$) ($\beta = .36, p = .316$). These results indicate some support for hypothesis 2a and no support for hypothesis 2b.

Hypotheses 2a and 2b were also tested via productivity in the second task. This hypothesis was tested using hierarchical moderated regression. In step 1, productivity in the second task was regressed onto perceptions of workload justice. As reported in Table 4.10, this resulted in an R^2 of .02 ($p = .066$) ($\beta = .12, p = .066$).

Table 4.10

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice: Productivity (Task 2)

<u>Productivity (Task 2)</u>				
Predictor variable	β	ΔR^2	R^2	p
Step 1		.02	.02	.066
Workload Justice (WJ)	.12			.066
Step 2		.02	.04	.018
Equity Sensitivity (ES)	.15			.018
Step 3		.01	.04	.277
WJ * ES	-.53			.277
N = 234				

Note: The beta weights reported in this Table are values upon entry.

In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .02 ($p = .018$) ($\beta = .15$, $p = .018$). In step 3, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .277$) ($\beta = -.53$, $p = .277$). The results suggest that perceptions of workload justice had a marginal, albeit non-significant, effect on productivity in the second task. Equity sensitivity had a small additive effect on productivity in the second task, explaining 2% of the variance and indicating that greater benevolence was associated with greater productivity. Equity sensitivity did not moderate the effect of perceptions of workload justice on productivity in the second task. These results do not support Hypotheses 2a or 2b.

Hypotheses 2a and 2b regarding productivity in the second task were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .02 ($p = .066$) ($\beta = .12$, $p = .066$). Step 2 resulted in an increase in R^2 of .02 ($p = .060$) ($\beta = .12$, $p = .060$). Step 3 resulted in an increase in R^2 of .01 ($p = .171$) ($\beta = .50$, $p = .171$). These analyses indicated that equity sensitivity did not have an additive effect on productivity in the second task. Equity sensitivity also did not have an interactive effect with perceptions of workload justice in accounting for variance in productivity on the second task.

Hypotheses 3a and 3b involved the effect of equity sensitivity on the relationship between perceptions of distributive justice and quality in the first task. This hypothesis was tested using hierarchical moderated regression. In step 1, quality

in the first task was regressed onto perceptions of workload justice. As reported in Table 4.11, this resulted in an R^2 of .05 ($p = .001$) ($\beta = -.22$, $p = .001$); supporting Hypothesis 3a. In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .108$) ($\beta = .10$, $p = .108$). In step 3, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .161$) ($\beta = .68$, $p = .161$). The results indicate that workload justice had a significant effect on quality in the first task, explaining 5% of the variance. Individuals who perceived that they had less work than their partners exhibited higher quality. Equity sensitivity did not have an additive effect on quality in the first task. Equity sensitivity also did not moderate the effect of perceptions of workload justice on quality in the first task. These results provide some support for Hypothesis 3a and no support for Hypothesis 3b.

Hypotheses 3a and 3b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .05 ($p = .001$) ($\beta = -.22$, $p = .001$). Step 2 resulted in an increase in R^2 of .00 ($p = .867$) ($\beta = -.01$, $p = .867$). Step 3 resulted in an increase in R^2 of .00 ($p = .525$) ($\beta = .23$, $p = .525$). Here again, equity sensitivity did not have an additive effect. Equity sensitivity also did not have an interactive effect with perceptions of workload justice in explaining quality in the first task.

Table 4.11

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice: Quality (Task 1)

<u>Quality (Task 1)</u>				
Predictor variable	β	ΔR^2	R^2	p
Step 1		.05	.05	.001
Workload Justice (WJ)	-.22			.001
Step 2		.01	.06	.108
Equity Sensitivity (ES)	.10			.108
Step 3		.01	.07	.161
WJ * ES	.68			.161
N = 234				

Note: The beta weights reported in this Table are values upon entry.

Hypotheses 3a and 3b were also tested via quality in the second task. This hypothesis was tested using hierarchical moderated regression. In step 1, quality in the second task was regressed onto perceptions of workload justice. As reported in Table 4.12, this resulted in an R^2 of .01 ($p = .111$) ($\beta = -.11$, $p = .111$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .672$) ($\beta = -.03$, $p = .672$). In step 3, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .02 ($p = .033$) ($\beta = -1.06$, $p = .033$). These results indicated that perceptions of workload justice did not have an effect on quality in the second task and equity sensitivity did not have an additive effect on quality in the second task. However, equity sensitivity moderated the effect of workload justice on quality to explain 2% of the variance in quality in the second task. The nature of the interaction is depicted in Figure 4.1. This interaction was graphed by using values 1 SD above and below the sample mean of the EPQ to represent benevolents and entitleds, respectively. Values 1 SD above and below the mean of workload justice were used to represent the perceptions of greater and lesser workload, respectively. The interaction suggests that, among individuals who felt that they had more work than their partners, more benevolent individuals exhibited lower quality work. Among individuals who felt that they had less work than their partners, more entitled individuals exhibited lower quality work. These results show an interactive relationship; however, the nature of the interaction does not correspond to theoretical predictions.

Table 4.12

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice: Quality (Task 2)

Predictor variable	<u>Quality (Task 2)</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.111
Workload Justice (WJ)	-.11			.111
Step 2		.00	.01	.672
Equity Sensitivity (ES)	-.03			.672
Step 3		.02	.03	.033
WJ * ES	-1.06			.033
N = 234				

Note: The beta weights reported in this Table are values upon entry.

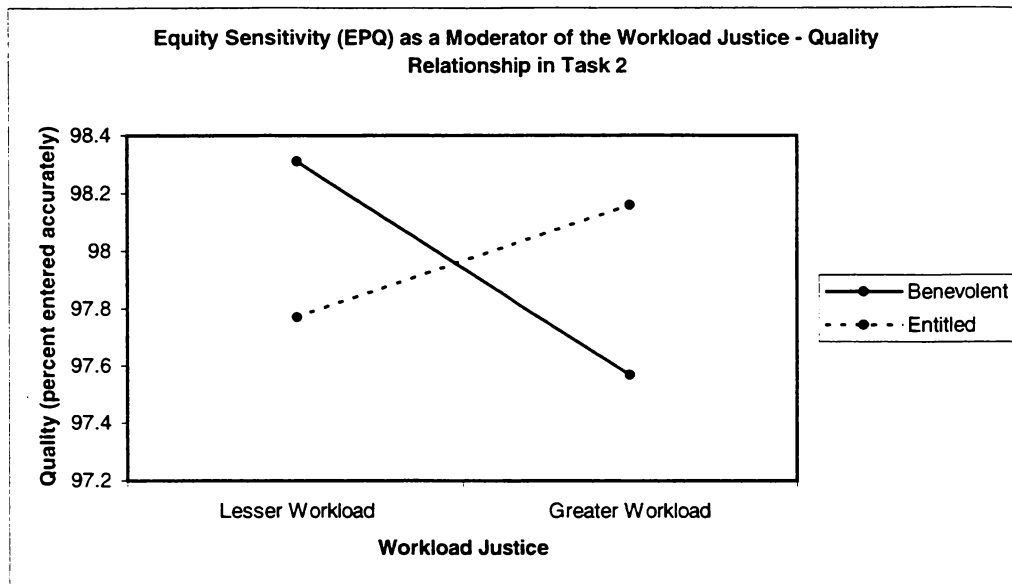


FIGURE 4.1

EQUITY SENSITIVITY (EPQ) AS A MODERATOR OF THE
WORKLOAD JUSTICE – QUALITY RELATIONSHIP
IN TASK 2

Hypotheses 3a and 3b regarding quality in task 2 were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .01 ($p = .111$) ($\beta = -.11$, $p = .111$). Step 2 resulted in an increase in R^2 of .01 ($p = .092$) ($\beta = .11$, $p = .092$). Step 3 resulted in an increase in R^2 of .00 ($p = .620$) ($\beta = .18$, $p = .620$). Here, equity sensitivity did not have an additive effect. Equity sensitivity also did not have an interactive effect with perceptions of workload justice on quality in the second task.

Hypotheses 4a and 4b involved the effect of equity sensitivity on the relationship between perceptions of distributive justice and task satisfaction. This hypothesis was tested using hierarchical moderated regression. In step 1, task satisfaction was regressed onto perceptions of workload justice. As reported in Table 4.13, this resulted in an R^2 of .02 ($p = .031$) ($\beta = -.14$, $p = .031$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .068$) ($\beta = .12$, $p = .068$). In step 3, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .679$) ($\beta = -.20$, $p = .679$). These results indicate that perceptions of workload justice had a small effect on task satisfaction, equity sensitivity did not have an additive effect on task satisfaction, and equity sensitivity did not interact with perceptions of workload justice to explain variance in task satisfaction. These results provide some support for hypothesis 4a and no support for hypothesis 4b.

Hypotheses 4a and 4b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .02 ($p = .031$) ($\beta =$

Table 4.13

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice: Task Satisfaction

Predictor variable	<u>Task Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.02	.02	.031
Workload Justice (WJ)	-.14			.031
Step 2		.01	.03	.068
Equity Sensitivity (ES)	.12			.068
Step 3		.00	.04	.679
WJ * ES	-.20			.679
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.14, $p = .031$). Step 2 resulted in an increase in R^2 of .03 ($p = .004$) ($\beta = .19$, $p = .004$).

Step 3 resulted in an increase in R^2 of .00 ($p = .924$) ($\beta = -.03$, $p = .924$). In these analyses, equity sensitivity had a significant additive effect on task satisfaction, explaining 3% of the variance. However, equity sensitivity did not interact with perceptions of workload justice to affect task satisfaction, contrary to Hypothesis 4b.

Hypotheses 5a and 5b involved the effect of equity sensitivity on the relationship between perceptions of distributive justice and pay satisfaction. This hypothesis was tested using hierarchical moderated regression. In step 1, pay satisfaction was regressed onto perceptions of workload justice. As reported in Table 4.14, this resulted in an R^2 of .01 ($p = .068$) ($\beta = -.12$, $p = .068$); failing to support Hypothesis 5a. In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .402$) ($\beta = .06$, $p = .402$). In step 3, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .03 ($p = .012$) ($\beta = -1.24$, $p = .012$). Perceptions of workload justice did not have an effect on pay satisfaction. Equity sensitivity did not have an additive effect on pay satisfaction. However, equity sensitivity did interact with perceptions of workload justice to explain 3% of the variance in pay satisfaction. The nature of the interaction is depicted in Figure 4.2. This interaction was graphed by using values 1 SD above and below the sample mean of the EPQ to represent benevolents and entitlements, respectively. Values 1 SD above and below the mean of workload justice were used to represent the perceptions of greater and lesser

Table 4.14

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice: Pay Satisfaction

<u>Pay Satisfaction</u>				
Predictor variable	β	ΔR^2	R^2	p
Step 1		.01	.01	.068
Workload Justice (WJ)	-.12			.068
Step 2		.00	.02	.402
Equity Sensitivity (ES)	.06			.402
Step 3		.03	.04	.012
WJ * ES	-1.24			.012
N = 234				

Note: The beta weights reported in this Table are values upon entry.

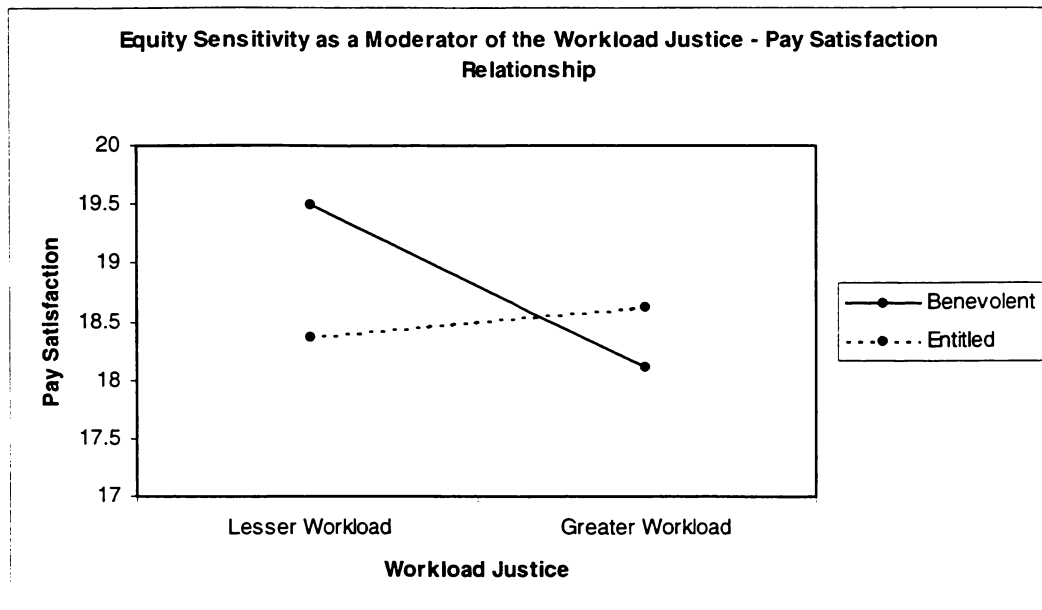


FIGURE 4.2

EQUITY SENSITIVITY (EPQ) AS A MODERATOR OF THE
WORKLOAD JUSTICE – PAY SATISFACTION RELATIONSHIP

workload. The interaction suggests that, among individuals who felt that they had more work than their partners, more benevolent individuals expressed lower pay satisfaction than more entitled individuals. Among individuals who felt that they had less work than their partners, more benevolent individuals expressed higher pay satisfaction than more entitled individuals. These results show an interactive relationship; however, the nature of the interaction does not correspond to theoretical predictions.

Hypotheses 5a and 5b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .01 ($p = .068$) ($\beta = -.12$, $p = .068$). Step 2 resulted in an increase in R^2 of .00 ($p = .805$) ($\beta = .02$, $p = .805$). Step 3 resulted in an increase in R^2 of .00 ($p = .875$) ($\beta = .06$, $p = .875$). Here, equity sensitivity did not have an additive effect on pay satisfaction. Equity sensitivity also did not have an interactive effect with perceptions of workload justice on pay satisfaction.

Summary of Results

A summary of the results is provided in Figure 4.3. This summary only applies to perceptions of workload justice and equity sensitivity measured with the EPQ. Several trends are apparent from examining the summary. First, equity conditions had a substantial effect on perceptions of workload justice; however, equity sensitivity had neither an additive nor an interactive effect (with equity conditions) in explaining variance in perceptions of workload justice. Second, perceptions of workload justice did not significantly affect some of the reactions

Criterion	Equity Conditions (EC)	Equity Sensitivity (ES)	(EC) (ES)
Perceptions of Workload Justice	.69***	.00	.01

* p < .05. ** p < .01. *** p < .001

N = 234

Criterion	Perceptions of Workload Justice (WJ)	Equity Sensitivity (ES)	(WJ) (ES)
Productivity (task 1)	.02*	.09***	.00
Productivity (task 2)	.02	.02*	.01
Quality (task 1)	.05**	.01	.01
Quality (task 2)	.01	.00	.02*
Task Satisfaction	.02*	.01	.00
Pay Satisfaction	.01	.00	.03*

* p < .05. ** p < .01. *** p < .001

N = 234

Note: Workload Justice and EPQ only. R² values are given in the cells.

FIGURE 4.3

SUMMARY OF RESULTS FROM HYPOTHESIS TESTING

which past research has found to be linked to perceptions of distributive justice (i.e., productivity in the second task, quality in the second task, pay satisfaction). While equity sensitivity had significant additive effects on productivity in both tasks, it was not associated with quality, task satisfaction, or pay satisfaction. Finally, equity sensitivity had interactive relationships with perceptions of workload justice in predicting both quality in the second task and pay satisfaction; however, the nature of these interactions was not in accordance with predictions from equity sensitivity theory. These issues will be elaborated upon in the next chapter.

CHAPTER V

DISCUSSION

The extant literature on equity sensitivity has not established a coherent and empirically supported model of equity sensitivity influence. The purpose of this study was to establish such a model. After examining the relevant theory and research, a two-part model of equity sensitivity influence was developed. In the first part of this model, equity sensitivity was hypothesized to moderate the relationship between objective equity conditions and perceptions of equity. In the second part of this model, equity sensitivity was hypothesized to moderate the relationship between perceptions of equity and reactions to equity conditions. This model was tested in a lab study which experimentally manipulated objective equity conditions and measured multiple reactions to perceptions of equity conditions.

The results of the study did not support the hypothesized model of equity sensitivity influence. Equity sensitivity did not interact with objective equity conditions to affect perceptions of workload justice, and equity sensitivity only interacted twice (given six possible opportunities) with perceptions of workload justice to affect reactions. Moreover, the two interactions did not correspond to equity sensitivity theory. These results raise questions about the nature of equity sensitivity and how equity sensitivity affects other variables related to equity theory. The first section of this chapter will discuss the obtained results of the study. The second subsequent section will focus on three issues pertinent to the discrepancy between the expected results and the obtained results. The first issue regards whether participants in the experiment were faced with a strong situation which could mask any effects of

equity sensitivity (Mischel, 1968). The second issue regards the accuracy of equity sensitivity theory in terms of expected interactive versus additive effects. The third issue regards whether the current measure of equity sensitivity actually assesses a general work ethic, as opposed to the intended construct.

The Model of Equity Sensitivity Influence: Obtained Results

The results of the present study do not support the hypothesized model of equity sensitivity influence. Equity sensitivity did not affect perceptions of workload justice in any way, and equity sensitivity only interacted twice (given six possible opportunities) with perceptions of workload justice to affect reactions. Moreover, the two interactions did not correspond to equity sensitivity theory. These results were not expected and hence several issues regarding the obtained results need to be discussed. Specifically, this section will discuss the results of the experiment regarding interactive and additive effects of equity sensitivity.

As noted, equity sensitivity only moderated the relationship between perceptions of workload justice and two reactions (quality in the second task and pay satisfaction). Given that there were six opportunities in this study for equity sensitivity to moderate the relationship between perceptions of workload justice and reactions, this is not viewed as strong evidence for equity sensitivity having any sort of reliable interactive effect with perceptions of workload justice. In addition to the interactive hypothesis being “supported” in only two of six tests, neither interaction corresponded to theoretical predictions. That is, among individuals who felt that they had more work than their partners (under-equity condition), more benevolent individuals exhibited lower quality work in the second task and lower pay

satisfaction. This is contrary to the theoretical prediction that entitlements would have lower quality and satisfaction. Similarly, among individuals who felt that they had less work than their partners (over-equity condition), more entitled individuals exhibited lower quality work in the second task and lower pay satisfaction. This does not correspond to predictions of equity sensitivity theory, which suggests that benevolents would have lower quality and satisfaction in an over-equity condition.

Evidence from supplemental analyses is also relevant to the issue of the reliability of the interactions. First, neither interaction was replicated when the ESI was used to represent equity sensitivity. Second, neither interaction was replicated when pay justice was used to represent perceptions of distributive justice. Finally, the interaction found in predicting quality in the second task was not replicated when relevant control variables were included in the regression model. Considering the totality of the results, the interactive effects for equity sensitivity on reactions to equity should be regarded as tentative and lacking convincing support.

While the interactive findings are questionable, equity sensitivity did have reliable additive effects on productivity in both tasks. In both cases, greater benevolence was associated with greater productivity. This is an important finding as this is the first study of equity sensitivity in which actual productivity was measured. In an earlier study, Miles et al. (1989) examined intentions of productivity (via hypothetical work scenarios), and also found greater benevolence to be associated with greater productivity. This finding of additive effects on productivity now needs to be replicated in organizational settings where an individual's productivity can be reasonably linked to effort (e.g., piece work scenarios) to determine whether or not

this finding extends beyond the lab. Two possible explanations for the unexpected additive effects of equity sensitivity on productivity will be discussed in more detail in the next section.

The Model of Equity Sensitivity Influence: Expected Versus Obtained Results

The results of this study present an interesting dilemma. Prior equity sensitivity research has been plagued by certain weaknesses. Specifically, some research has used participants responding to hypothetical vignettes describing work situations (e.g., King et al., 1993; Miles et al., 1989; Patrick & Jackson, 1991; Sauley & Bedeian, 2000). This type of research lacks external validity since participants are not faced with a real work situation and real work criteria are not examined. This type of research is also susceptible to common method variance in that participants may rely on cues from the vignettes to help determine responses to questionnaires and may be overly concerned with the consistency of their responses.

Other equity sensitivity research has only studied the relationship of equity sensitivity to attitudes toward work situations (e.g., Huseman et al., 1985; King et al., 1993; Miles et al., 1994; O'Neill & Mone, 1998), excluding important criteria like productivity and quality. This type of research neglects important variables and is also subject to common method variance in that participants may be overly sensitive to appearing consistent and distort their responses accordingly.

There has not been any research which compensates for these weaknesses. This study was designed to establish a model of equity sensitivity influence while compensating for some weaknesses of past research. It controlled objective equity conditions in a situation where real tasks were completed and multiple behavioral and

attitudinal reactions were assessed. However, this study found little support for the predictions of equity sensitivity theory. The question is: why is there a discrepancy between the expected and obtained results?

In this section, three explanations are brought to bear on the discrepancy between the expected and obtained results. These three explanations can be summarized as: (a) the present test of the theory was unfair; (b) equity sensitivity theory is inaccurate with regard to interactive versus additive effects; and (c) equity sensitivity is not measured appropriately. The first explanation concerns the strength of the situation (see Mischel, 1968) and whether it reduced or eliminated effects of equity sensitivity as an individual dispositional effect. The question being addressed is: are the obtained results different from the expected results because the theory was not fairly tested? The second explanation concerns the accuracy of equity sensitivity theory and whether it needs to be modified. The question being addressed is: are the obtained results different from the expected results because equity sensitivity theory is inaccurate in derived predictions? The third explanation concerns the measurement of equity sensitivity and the relationship of the EPQ to a general work ethic. The question being addressed is: are the obtained results different from the expected results because the EPQ is measuring a general work ethic? In the following paragraphs, each of these explanations is discussed and the plausibility of each is evaluated.

Was the Theory Fairly Tested?

The present experiment simulated a real work situation, controlled objective equity conditions, and measured real work behaviors and attitudes. This seems like a

legitimate method to test predictions of a theory of equity sensitivity. However, some researchers may contend that participants in the study were presented with a “strong” situation that masked any potential effects of equity sensitivity; hence, the experiment was an unfair test of equity sensitivity theory.

Mischel (1968) contended that most situations could be classified as either “strong” or “weak.” Strong situations were environments in which situational pressures (e.g., group or societal norms) influenced behavior to the exclusion of individual differences. Weak situations were environments with no real pressure on individuals to act in a certain way and with the potential for individual differences to influence behavior. One example of a strong situation would be an individual (as part of a larger unit) performing military drills. Military drills involve behaviors which are precisely prescribed and deviation from the norm is frowned upon. One example of a weak situation would be an individual attending college. Making one’s way through college requires a minimum of prescribed behaviors. Individuals are free to determine how their time will be allotted between attending class, studying, working, socializing, and a host of other activities. Individual differences can be expected to affect behavior in a college environment; however, individual differences are not expected to have any appreciable effect on behavior in a military drill.

Several arguments could be put forth that might suggest that participants were faced with a strong situation. First, an argument could be made that the lack of ambiguity in the experimental situation precluded equity sensitivity from affecting perceptions of workload justice (i.e., the first part of the model was not fairly tested). Arguments could also contend that demand characteristics and the high rate of

payment precluded equity sensitivity from affecting reactions to perceptions of workload justice (i.e., the second part of the model was not fairly tested). Finally, the brief time frame during which participants were engaged in the tasks could also have weakened or eliminated any effects which equity sensitivity might have had.

As noted, the first argument concerns the strength (or lack of ambiguity) of the environment in which equity sensitivity theory was tested. Research in psychological climate (e.g., James & McIntyre, 1996), leadership (e.g., Miendl, 1990; Miendl & Ehrlich, 1987) and personality (e.g., James, 1998; Taylor & Brown, 1988) suggests that various individual differences can and do affect perceptions. However, there is a lack of evidence for equity sensitivity affecting perceptions of workload justice in this experiment. The sources cited supporting individual differences affecting perceptions involve rather weak (ambiguous) situations. That is, James and McIntyre (1996) discussed achieving tenure in a university setting. Miendl (1990) discussed perceptions of leadership in an organizational setting. James (1998) discussed achievement-related situations such as school and work. These could be considered weak situations where individual differences could reasonably be expected to affect perceptions (c.f., Mischel, 1968).

The experiment may have presented participants with a strong (unambiguous) situation where equity sensitivity could not affect perceptions because participants in the experiment knew exactly how much work had to be done and how much they would be paid for their efforts. Relations with coworkers were superficial and there was no supervision given in terms of quality or productivity standards. Also, the situation had no real temporal element in that participants were only engaged for the

duration of the experiment. Everything was held constant in the experiment except for the workload, and perceptions of distributive justice were based solely on the distribution of that workload. When participants completed the measure of workload justice, there may have been little opportunity for equity sensitivity to affect perceptions. Participants either perceived a perfectly equal distribution of work or a very (and uniformly) unequal distribution of work. This lack of ambiguity could represent a strong situation that precluded equity sensitivity from having an effect on perceptions of the situation.

Similarly, the second argument that participants were faced with a strong situation concerns demand characteristics which could be present in a lab study where work performance is assessed. It is likely that participants quickly realized that their task performance was going to be evaluated. This knowledge of impending evaluation could have led participants to adopt a schema of “maximum,” as opposed to “typical” performance (see Sackett, Zedeck, & Fogli, 1988). Instead of actively considering the fairness of the distribution of work and attempting to compensate for any perceived inequities (through changes in productivity, quality, or attitudes toward the work), participants may have felt compelled to perform to the best of their ability (to appear competent) regardless of how the workload was distributed. This would lessen any effects which equity sensitivity might have on reactions to perceptions of workload justice.

The third argument that participants were faced with a strong situation concerns the high rate of payment. This could also have led participants to adopt a “maximum” performance schema (Sackett et al., 1988). Instead of actively

considering the fairness of the distribution of work and attempting to compensate for any inequities, participants may have felt compelled to perform to the best of their ability (due to the high rate of payment) regardless of how the workload was distributed. This also would lessen any effects which equity sensitivity might have on reactions to perceptions of workload justice.

The final argument for a strong situation contends that participants were not engaged in the experimental setting for a long enough period of time for equity sensitivity to have any effects. Most participants were finished with both experimental tasks and the questionnaires within one hour. It could be the case that working under conditions of inequity for a very short period of time (i.e., less than one hour) could be experienced differently than working under conditions of inequity for longer periods of time (days or even years). It could be the case that equity sensitivity would have larger effects given individuals (perhaps in an organizational context) working under conditions of inequity over the course of time. In short, the laboratory environment represented a controlled situation. The duration of inequity was also controlled to the extent that very few participants experienced it for more than one hour. Given this, it should be noted that equity sensitivity may show larger effects given a longer time frame.

Thus, a strong situation could have reduced or eliminated effects of equity sensitivity on perceptions and on reactions. However, there is also evidence against this strong situation argument. Regarding perceptions of workload justice, theory suggests that equity sensitivity would affect how much of a difference is perceived between the workloads. Consider the 100 – 50 item split used in the first task. Given

benevolents' focus on inputs and greater tolerance for under-reward (see King et al., 1993), highly benevolent individuals with 100 items to transcribe (under-equity condition) would be hypothesized to perceive a relatively small difference in the workload between them and their partner. Highly entitled individuals with 100 items to transcribe would be hypothesized to perceive a relatively large difference in the workload between them and their partner. Similarly, highly benevolent individuals with only 50 items to transcribe (over-equity condition) would be hypothesized to perceive a relatively large difference in the workload between them and their partner, and highly entitled individuals with 50 items to transcribe would be hypothesized to perceive a relatively small difference in the workload between them and their partner. Thus, the theory suggests that there should have been differential perceptions.

In the present study, the standard deviations for perceptions of workload justice in fact demonstrated variation in perceptions of workload justice within all three equity conditions; yet the variance was not related to equity sensitivity. Thus, arguments against the experiment being a fair test of the first part of the equity sensitivity model might have merit and should be considered in future research. However, the theoretical contentions of King et al., (1993) and the standard deviations of 2.00 or greater for under-equity and over-equity conditions suggest that the experiment was in fact a fair test of the theory. Therefore, a model of equity sensitivity influence including an effect of equity sensitivity on perceptions of distributive justice does not appear viable at this time.

Regarding the issue of reactions to workload justice, theory suggests that equity sensitivity would affect reactions as long as under-reward inequity was

experienced. Specifically, entitlements were expected to react especially harshly (i.e., sharply reduced productivity, quality, task satisfaction and pay satisfaction) to perceptions of having a greater workload in this experiment, while more benevolent individuals were expected to show relatively small decrements in productivity, quality, etc.. As noted, in no cases was there a reliable moderated relationship between perceptions of workload justice and reactions. Thus, while arguments against the experiment being a fair test of the second part of the equity sensitivity model may have merit, a model of equity sensitivity influence including interactive effects of equity sensitivity on reactions does not appear viable at this time. In short, the strong situation argument contending that equity sensitivity theory was not fairly tested may deserve additional research, but it is not currently seen as a suitable explanation for the discrepancy between the expected and obtained results.

Is Equity Sensitivity Theory Accurate about Benevolents and Entitleds?

The second possible explanation for the discrepancy between the expected and obtained results contends that the theory may be incorrect. That is, the interaction expected in the objective environment – perceptions of workload justice portion of the model is a fan-shaped interaction, as displayed in Figure 5.1. This hypothetical interaction is based primarily on research indicating that individuals of different equity sensitivity evaluate their work environments differently due to desires for different outcomes from work (e.g., King et al., 1993; Miles et al., 1994).

Specifically, benevolents are thought to be focused on intrinsic rewards and enjoyment from work itself while entitlements are thought to be focused on extrinsic rewards and enjoyment from attaining maximum outcomes from work. Given these

differential bases for evaluation of work environments, individuals of different equity sensitivity are expected to perceive the same environment differently in terms of distributive justice.

In Figure 5.1, a scale value of 3 represents the perception of much less work than one's partner, 9 represents the perception of the same amount of work as one's partner, and 15 represents the perception of much more work than one's partner. The theoretical prediction is that in the condition of over-equity (objectively less work than one's partner), benevolents would perceive much less work, equity sensitives would perceive somewhat less work, and entitleds would perceive a little less work. In the condition of equity, all individuals would perceive an equal distribution of

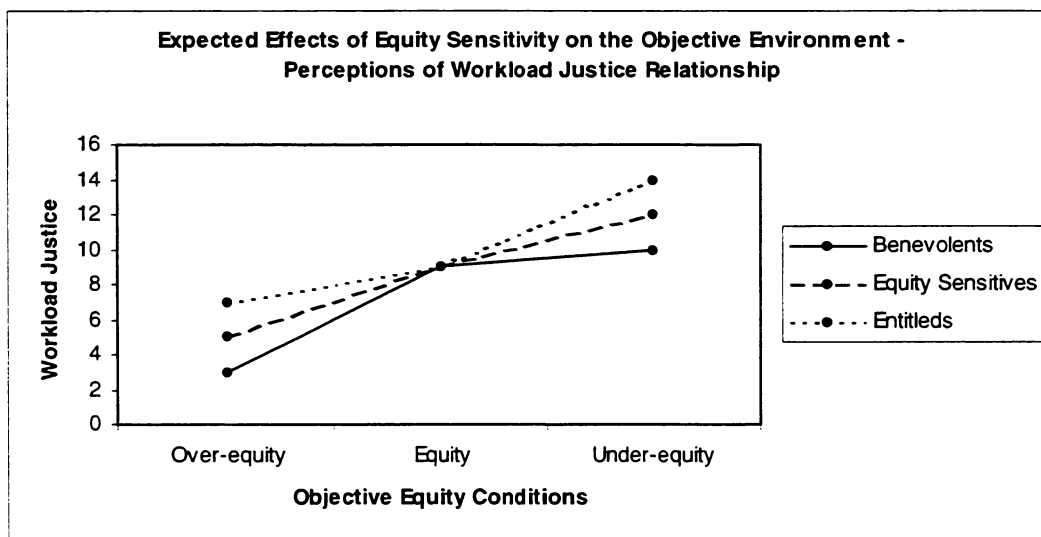


FIGURE 5.1

EXPECTED EFFECTS OF EQUITY SENSITIVITY ON THE
OBJECTIVE ENVIRONMENT – PERCEPTIONS OF WORKLOAD
JUSTICE RELATIONSHIP

work. In the condition of under-equity (objectively more work than one's partner), benevolents would perceive a little more work, equity sensitives would perceive somewhat more work, and entitlements would perceive much more work. As noted earlier, this interaction was not found. In fact, in the present study, equity sensitivity had no effect, interactive or additive, on perceptions of workload justice.

The interaction expected in the perceptions of workload justice – reactions portion of the model is also a fan-shaped interaction, as displayed in Figure 5.2. This interaction is based primarily on research indicating that individuals of different equity sensitivity have different tolerances for under-reward (e.g., King et al., 1993). Specifically, benevolents are thought to be relatively tolerant of under-reward, equity sensitives are thought to be somewhat less tolerant of under-reward, and entitlements are thought to be quite intolerant of under-reward (King et al., 1993).

In sum, the hypothesized interactive effects for both parts of the model seem consistent with current theory. Individuals of differing equity sensitivity valuing different types of work outcomes (e.g., King et al., 1993; Miles et al., 1994) suggests interactive effects for the first part of the model. Similarly, individuals of differing equity sensitivity having differential tolerances for under-reward (King et al., 1993) suggests interactive effects for the second part of the model.

However, other research findings suggest an additive effect, rather than interactive effects. Specifically, the higher inputs for benevolents found by Miles et al. (1989) suggest that equity sensitivity has an additive effect on productivity and quality. The input versus outcome-focused exchange ideologies found by King et al.

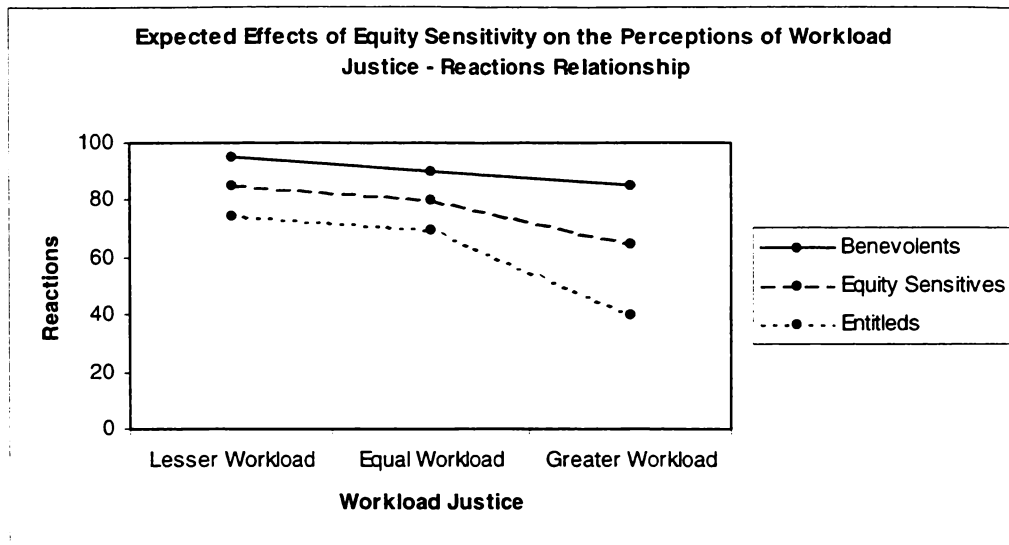


FIGURE 5.2

EXPECTED EFFECTS OF EQUITY SENSITIVITY ON THE PERCEPTIONS OF WORKLOAD JUSTICE – REACTIONS RELATIONSHIP

(1993) also suggest that equity sensitivity has additive effects on reactions to perceptions of distributive justice. This is because a focus on inputs (outcomes) would be likely to lead to higher (lower) levels of productivity and quality at all levels of perceived distributive justice. O’Neill and Mone (1998) found a correlation between equity sensitivity and organizational commitment such that greater benevolence was associated with greater organizational commitment. This also suggests an additive effect on behaviors and attitudes. In short, there is a growing amount of evidence for additive effects of equity sensitivity on reactions to perceptions of distributive justice.

Parsimoniously integrating the major themes of these findings leads to a description of benevolents as individuals who work hard and contribute to an organization simply because it is enjoyable for them to do so. Entitleds can be described as individuals who work less hard and contribute less to an organization because they derive less enjoyment from working hard and contributing to an organization. This integrated view of equity sensitivity espouses working hard and contributing as the primary point of difference between benevolents and entitleds. Given this integrated view, differential preferences for work outcomes can be viewed as an artifact of more salient attitudes (and behaviors) based on working hard and contributing to an organization. This new conceptualization of equity sensitivity fits well with a model where equity sensitivity does not affect perceptions of distributive justice and additively affects certain behavioral reactions (e.g., productivity) and certain attitudinal reactions (e.g., task satisfaction).

In this regard, it is important to note that past theory on equity sensitivity has not taken a clear stance on two issues: (a) influence on perceptions of distributive justice versus reactions to perceptions of distributive justice and (b) additive versus interactive effects for equity sensitivity. The results of this experiment suggest a more parsimonious theory of equity sensitivity. With this theoretical adjustment, a theory of equity sensitivity having additive effects on reactions is more coherent than a theory of equity sensitivity having interactive effects on perceptions of and reactions to distributive justice. When reviewing the results of this experiment and re-examining findings from past equity sensitivity research, equity sensitivity could more appropriately be described as an individual difference variable which represents

the desire (or lack thereof) to contribute to an organization for the simple pleasure derived from contributing. This new conceptualization requires a new look at the current measurement of the equity sensitivity construct to determine what (if anything) is being measured beyond an intrinsic desire to contribute to an organization.

Is the EPQ Measuring a General Work Ethic?

The measurement of equity sensitivity is the third explanation for the discrepancy between the expected and the obtained results. Some items in the EPQ do, in fact, seem to be measuring a general work ethic, as opposed to equity sensitivity. Consider the following items from the EPQ: “When I have completed my task for the day, I help out other employees who have yet to complete their tasks.” “At work, I feel uneasy when there is little work for me to do.” “If I had to work hard all day at my job, I would probably quit.” These items seem to be measuring an ethos of hard work for the sake of hard work. Of course, a correlation between the EPQ and a measure of work ethic would be expected, given the nature of the equity sensitivity construct. Benevolents’ desire for high inputs and intrinsic rewards from a work environment suggest overlap between the two constructs. However, a problem arises when the EPQ is a measure of general work ethic more than a measure of equity sensitivity. This issue of construct validity needs to be examined in future research.

What would results from the lab study look like if the EPQ was actually a measure of general work ethic? The results would likely show no effect for equity sensitivity on perceptions of workload justice. The results would also probably show positive additive effects for equity sensitivity on behavioral variables like

productivity and quality, with either small or non-existent effects for attitudinal variables like task and pay satisfaction, similar to the results of the present study. That is, in the present study there were additive effects for equity sensitivity on productivity in both tasks. While additive effects for equity sensitivity on quality were not found, this could be due to range restriction on quality in both tasks. Equity sensitivity was not associated with either task satisfaction or pay satisfaction.

The nature of much research is that more questions are raised than answered. This study is no exception. The results of this study suggest that equity sensitivity can be described as a general work ethic of high contributions to an organization and enjoyment from making high contributions. A re-examination of past equity sensitivity findings (in which the majority of the evidence suggests additive effects for equity sensitivity) also suggests that equity sensitivity can be described as a general work ethic. Finally, inspection of the items in the EPQ reveals that equity sensitivity, as measured, can be described as a general work ethic. In short, several lines of evidence point to equity sensitivity simply being an individual difference variable with roughly the same nexus as a general work ethic. In terms of the three explanations for the discrepancy between the expected and obtained results, it seems that the latter two are the most compelling. The theory may be inaccurate, and equity sensitivity should be expected to have additive effects on some reactions to equity conditions, instead of interactive effects on perceptions of and reactions to equity conditions. Also, the measurement of equity sensitivity may be inaccurate. The EPQ appears to really measure a general work ethic. Given this, it seems that future research should attempt to demonstrate how the equity sensitivity construct adds to

the organizational science literature beyond serving as an alternative measure of a general work ethic.

Limitations

There are several limitations to this study which should be considered in the interpretation of the results. One assumption of the study concerned the mediating effect which perceptions of workload justice were thought to have on the reactions. The analyses of mediation are reported in Appendix 4. Evidence of mediation was meager. This suggests two possibilities. First, perhaps the process by which individuals form perceptions of fairness and subsequently react to these perceptions is more complicated than initially thought. Second, perhaps the strength of the situation distorted the effects of mediation via perceptions of workload justice. The general model whereby individuals react to their perceptions of a situation (as opposed to the objective situation) seems well-accepted and has been used in a wide variety of research areas. Hence, this section focuses again on how the strength of the situation may have lessened or eliminated mediation via perceptions of workload justice.

This study examined work performance in the context of a laboratory. It could be that demand characteristics associated with a lab experiment examining work performance trigger a schema of “maximum,” as opposed to “typical” performance (see Sackett, Zedeck, & Fogli, 1988). Instead of actively considering the fairness of the distribution of work and attempting to compensate for any inequities through changes in productivity, quality, or attitudes toward the work, participants felt compelled to perform to the best of their ability regardless of how the workload was

distributed. This would reduce or eliminate mediation by perceptions of workload justice.

This study also used a high rate of payment (roughly \$ 18.00 per hour). This high rate of payment was necessary to induce subject participation and to help ensure a sample with a representative amount of entitlements. This high rate of payment could also have triggered a schema of “maximum” performance (see Sackett et al., 1988). Instead of actively considering the fairness of the distribution of work and attempting to compensate for any inequities, participants were well aware of the high payment and felt compelled to perform to the best of their ability regardless of how the workload was distributed. This high payment effect could have led to poor mediation with or without the additional influence of demand characteristics associated with a lab study of work performance. Research will always involve trade-offs. In the present case, a lab study was deemed the only realistic way to control the objective equity conditions and hence provided the best methodology for answering the question posed in this research. The high rate of payment was also necessary to induce subject participation.

When explaining the lack of mediation, the demand characteristics and the high rate of payment are seen as the best explanations. When explaining the discrepancy between the expected and obtained results, inaccurate theory and inaccurate measurement are seen as the best explanations. This may initially seem capricious; however, there are two different phenomena to be explained. Perceptions of workload justice did not mediate the effect of the equity conditions on the reactions. Whether equity sensitivity theory predicts additive or interactive effects

and the construct currently measured by the EPQ simply do not make sense as explanations for a lack of mediation by perceptions of workload justice. Participants ignoring the distribution of work and working at maximum effort due to evaluation apprehension or high payment do make sense as tentative explanations for lack of mediation.

Does lack of support for the underlying model of mediation via perceptions of distributive justice invalidate the hypothesis tests? It is argued here that it does not. The hypotheses tested concerned the effect of equity sensitivity on (a) relationships between the objective environment and perceptions of workload justice and (b) relationships between perceptions of workload justice and reactions to perceptions of workload justice. The hypotheses are not dependent on full or partial mediation via perceptions of workload justice. Findings which suggest that equity sensitivity does not affect perceptions of workload justice are important to the advancement of equity sensitivity theory regardless of whether or not perceptions of workload justice mediate the relationship between equity conditions and reactions. Also, findings which suggest that equity sensitivity does not affect reactions to perceptions of workload justice in any reliable way (excepting the additive effects on productivity) are important to the advancement of equity sensitivity theory regardless of whether or not perceptions of workload justice mediate the relationship between equity conditions and reactions. While the lack of mediation is relevant and suggests areas for future research, it does not invalidate the findings. Future research might explore alternative models of how equity conditions affect hypothesized reactions to equity conditions.

Despite possible limitations, there are also several strengths of this study. First, the manipulation of the workload was successful. Participants displayed accurate knowledge regarding whether their workload was equal to, less than, or greater than their partner's workload. Second, using a laboratory experiment enabled accurate measurement of actual work performance. This use of real work performance and the measurement of productivity and quality (in two separate tasks) represents a needed extension of equity sensitivity research. Finally, using a lab experiment (as opposed to a field study) enabled a test of the model of equity sensitivity influence where objective equity conditions could be controlled. While lab experiments may sometimes lack strength in generalizability and realism, they do enable precise control and measurement (see McGrath, 1982), two features needed in any test of an equity sensitivity influence model at this juncture.

Future Research

There are several avenues for future research on the equity sensitivity construct. Replication of the major findings of this study in different settings is needed. Testing a model of equity sensitivity influence in an organizational setting would be difficult, but not impossible. A reasonable test of the model would have to control for both inputs and outcomes. However, certain jobs (like some in the military) where employees enter at the same time and are well-matched in terms of inputs (i.e., prior experience, training) and outcomes (i.e., pay, supervision) could serve as a useful replication and extension of the findings of this study. A more organizationally-focused study could examine equity sensitivity in a more ambiguous environment (i.e., present participants with a weak situation).

The additive effects found between equity sensitivity and productivity are promising. The notion that individuals with greater benevolence work harder has some theoretical support and was empirically supported in this study. However, the robustness of this finding is an unresolved issue. Is there a positive relationship between benevolence and productivity in settings outside of the lab? If there is a relationship, how large is the effect? Questions like these are worthy of additional research.

Perhaps the most important area for new research involves the measurement of equity sensitivity. This experiment tested predictions of equity sensitivity theory in a lab where objective equity was controlled and multiple reactions to perceptions of distributive justice were examined. The results of the experiment are much more consistent with the description of equity sensitivity as a measure of general work ethic than as a measure of individual differences in sensitivity to equity. Inspection of the items of the EPQ suggests that many of them are, in fact, measuring a general attitude embracing hard work for the sake of hard work as opposed to individual differences in sensitivity to equity. Thus, the central question raised by this study is: what, if anything, does the equity sensitivity construct contribute to organizational science? Future research should hypothesize about what sets equity sensitivity apart from a general work ethic and demonstrate its unique contribution.

One avenue for demonstrating a unique contribution of equity sensitivity involves expanding the content domain of the construct to be more inclusive of how individuals actually experience fairness in an organizational context. Since it was built upon equity theory (Adams, 1963; 1965), equity sensitivity is biased toward a

consideration of only distributive justice (i.e., the fairness of the distribution of outcomes). However, equity and inequity can also be felt within the realm of procedural justice (i.e., the fairness of the procedures used to determine outcomes) (Lind & Tyler, 1988; Thibaut & Walker, 1975). Also, equity and inequity can be felt within the realm of interactional justice (i.e., the fairness with which individuals are treated by their supervisors) (see Bies, 1987; see also Moorman, 1991). Research has shown these different forms of justice to be related to different outcome variables (e.g., Alexander & Ruderman, 1987; Folger & Konovsky, 1989; Sweeney & McFarlin, 1993). For example, Sweeney and McFarlin (1993) found that perceptions of procedural justice were predictive of organizational commitment and evaluation of supervisors while perceptions of distributive justice were predictive of pay satisfaction and job satisfaction.

It seems reasonable to believe that there are meaningful individual differences in sensitivity to both procedural and interactional justice. Two potential items for assessing sensitivity to procedural justice are as follows: "Sometimes an organization must use procedures that seem unfair in the interests of time and resources." "I would be very dissatisfied working for an organization that did not give top priority to a fair and just resolution of all disagreements." Two potential items for assessing sensitivity to interactional justice are as follows: "Managers and supervisors may not always be able to treat employees with sensitivity due to the demands of their jobs." "The most important part of being a manager is earning the respect and admiration of all employees." Perhaps a unidimensional focus on sensitivity to distributive justice is partially to blame for the current similarities between equity sensitivity and a general

work ethic. It could be the case that expansion of the construct will lead to a more coherent theory of equity sensitivity which sets it apart from general work ethic.

Conclusions

There are a few summary conclusions that can be drawn from this study. First, the results revealed very little support for the hypothesized model of equity sensitivity influence. Three potential explanations for the discrepancy between the expected and obtained results were discussed. Until future research suggests otherwise, the notion that the predictions were not supported due to the strength of the situation is not seen as a valid reason for the discrepancy between the expected and obtained results.

Several different lines of evidence point to equity sensitivity simply being an individual difference variable equivalent to a general work ethic. Given this, future research should attempt to demonstrate how the equity sensitivity construct adds to the organizational science literature beyond serving as an alternative measure of work ethic. Currently, extension of the domain of the equity sensitivity construct to encompass more completely how equity and inequity are experienced in an organization seems to be the best avenue for demonstrating a unique contribution of equity sensitivity.

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APPENDICES

APPENDIX 1

REGRESSION MODELS WITH CONTROL VARIABLES

Hypothesis 1 concerned the effect of equity sensitivity on the relationship between the objective work environment and perceptions of workload justice. The control variables included were class, sex, and work experience. In step 1, perceptions of workload justice were regressed onto the three control variables. As reported in Table A1 – 1, this resulted in an R^2 of .03 ($p = .047$). In step 2, the two effects-code variables representing the objective equity environment were added to the model. This resulted in an increase in R^2 of .67 ($p = .000$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .357$). In step 4, the interactions of equity sensitivity with the two variables representing the equity environment were added to the model. This resulted in an increase in R^2 of .01 ($p = .064$). These results indicate that the inclusion of the control variables had very little effect in tests of hypothesis 1.

Hypothesis 1 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, sex, and work experience. Step 1 resulted in an R^2 of .03 ($p = .052$) ($\beta_1 = -.03$, $p = .623$) ($\beta_2 = -.11$, $p = .080$) ($\beta_3 = .15$, $p = .028$). Step 2 resulted in an increase in R^2 of .67 ($p = .000$) ($\beta_4 = .79$, $p = .000$) ($\beta_5 = -.85$, $p = .000$). Step 3 resulted in an increase in R^2 of .00 ($p =$

Table A1 - 1

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on Perceptions of Workload Justice Controlling for Class, Sex, and Work Experience

Predictor variable	<u>Workload Justice</u>			
	β	ΔR^2	R^2	p
Step 1		.03	.03	.047
Class	-.04			.497
Sex	-.12			.076
Work Experience	.14			.034
Step 2		.67	.71	.000
Equity Condition 1 (EC1) (under-equity and equity)	.79			.000
Equity Condition 2 (EC2) (over-equity and equity)	-.85			.000
Step 3		.00	.71	.357
Equity Sensitivity (ES)	-.04			.357
Step 4		.01	.72	.064
EC1 * ES	-.11			.726
EC2 * ES	-.52			.080
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.125) ($\beta = -.06$, $p = .125$). Step 4 resulted in an increase in R^2 of .00 ($p = .703$) ($\beta_7 = -.13$, $p = .530$) ($\beta_8 = -.01$, $p = .947$). These results were essentially the same as those obtained using the EPQ, indicating no support for equity sensitivity moderating perceptions of workload justice.

Hypotheses 2a and 2b involved the effect of equity sensitivity on the relationship between perceptions of distributive justice and productivity in the first task. In step 1, productivity in the first task was regressed onto the three control variables, class, sex, and work experience. As reported in Table A1 – 2, this resulted in an R^2 of .09 ($p = .000$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .02 ($p = .014$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .05 ($p = .000$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .561$). Excepting the smaller (9% versus 5%) additive effect of equity sensitivity when using the control variables, these results indicate that the inclusion of the control variables had very little effect in tests of hypothesis 2.

This hypothesis was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables here were age, sex, and work experience. Step 1 resulted in an R^2 of .06 ($p = .003$) ($\beta_1 = -.02$, $p = .819$) ($\beta_2 = .21$, p

Table A1 – 2

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Class, Sex, and Work Experience:
Productivity (Task 1)

Predictor variable	<u>Productivity (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.09	.09	.000
Class	.18			.006
Sex	.21			.001
Work Experience	.12			.055
Step 2		.02	.11	.014
Workload Justice (WJ)	.16			.014
Step 3		.05	.16	.000
Equity Sensitivity (ES)	.23			.000
Step 4		.00	.16	.561
WJ * ES	.27			.561
N = 234				

Note: The beta weights reported in this Table are values upon entry.

= .001) ($\beta_3 = .12$, $p = .074$). Step 2 resulted in an increase in R^2 of .02 ($p = .023$) ($\beta = .15$, $p = .023$). Step 3 resulted in an increase in R^2 of .01 ($p = .170$) ($\beta = .09$, $p = .170$). Step 4 resulted in an increase in R^2 of .01 ($p = .174$) ($\beta = .49$, $p = .174$). These results indicate that the inclusion of the control variables had very little effect.

Hypotheses 2a and 2b were also tested via productivity in the second task. In step 1, productivity in the second task was regressed onto the control variables class, sex, and work experience. As reported in Table A1 – 3, this resulted in an R^2 of .03 ($p = .082$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .02 ($p = .031$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .095$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .389$). When including the control variables in tests of this hypothesis, the additive effect of equity sensitivity becomes non-significant. Other than this, the results suggest that the inclusion of the control variables had a small effect on tests of hypothesis 2 in the second task.

Hypotheses 2a and 2b were also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, sex, and work experience. Step 1 resulted in an R^2 of .02 ($p = .169$) ($\beta_1 = -.01$, $p = .855$)

Table A1 – 3

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Class, Sex, and Work Experience:
Productivity (Task 2)

Predictor variable	<u>Productivity (Task 2)</u>			
	β	ΔR^2	R^2	p
Step 1		.03	.03	.082
Class	.08			.195
Sex	.14			.028
Work Experience	.02			.726
Step 2		.02	.05	.031
Workload Justice (WJ)	.14			.031
Step 3		.01	.06	.095
Equity Sensitivity (ES)	.11			.095
Step 4		.00	.06	.389
WJ * ES	-.42			.389
N = 234				

Note: The beta weights reported in this Table are values upon entry.

($\beta_2 = .15$, $p = .027$) ($\beta_3 = .02$, $p = .738$). Step 2 resulted in an increase in R^2 of .02 ($p = .037$) ($\beta = .14$, $p = .037$). Step 3 resulted in an increase in R^2 of .01 ($p = .188$) ($\beta = .09$, $p = .188$). Step 4 resulted in an increase in R^2 of .01 ($p = .126$) ($\beta = .56$, $p = .126$). These analyses indicated that inclusion of the control variables had little effect.

Hypotheses 3a and 3b involved the effect of equity sensitivity on the relationship between perceptions of workload justice and quality in the first task. In step 1, quality in the first task was regressed onto the control variables class, sex, and work experience. As reported in Table A1 – 4, this resulted in an R^2 of .01 ($p = .463$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .05 ($p = .001$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .190$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .192$). The results of these analyses indicate that inclusion of the control variables had little effect on tests of hypothesis 3 in the first task.

Hypotheses 3a and 3b were also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, sex, and work experience. Step 1 resulted in an R^2 of .00 ($p = .831$) ($\beta_1 = .02$, $p = .736$) ($\beta_2 = .01$, $p = .897$) ($\beta_3 = .05$, $p = .451$). Step 2 resulted in an increase in R^2 of .05 ($p =$

Table A1 – 4

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Class, Sex, and Work Experience:
Quality (Task 1)

Predictor variable	<u>Quality (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.463
Class	.09			.180
Sex	.01			.896
Work Experience	.06			.364
Step 2		.05	.06	.001
Workload Justice (WJ)	-.23			.001
Step 3		.01	.07	.190
Equity Sensitivity (ES)	.09			.190
Step 4		.01	.08	.192
WJ * ES	.64			.192
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.001) ($\beta = -.23$, $p = .001$). Step 3 resulted in an increase in R^2 of .00 ($p = .773$) ($\beta = -.02$, $p = .773$). Step 4 resulted in an increase in R^2 of .00 ($p = .470$) ($\beta = .26$, $p = .470$). Here again, the inclusion of the control variables had little effect on the results.

Hypotheses 3a and 3b were also tested via quality in the second task. In step 1, quality in the second task was regressed onto the control variables class, sex, and work experience. As reported in Table A1 – 5, this resulted in an R^2 of .02 ($p = .191$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .01 ($p = .208$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .366$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .02 ($p = .056$). When the control variables are used in tests of hypothesis 3 in the second task, the interaction of equity sensitivity with perceptions of workload justice becomes non-significant. Besides the interaction becoming non-significant, including the control variables had little effect on the results.

Hypotheses 3a and 3b were also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, sex, and work experience. Step 1 resulted in an R^2 of .02 ($p = .275$) ($\beta_1 = -.06$, $p = .381$) ($\beta_2 = .10$, $p = .138$) ($\beta_3 = -.06$, $p = .407$). Step 2 resulted in an increase in R^2 of .01 ($p = .180$) ($\beta = -.09$, $p = .180$). Step 3 resulted in an increase in R^2 of .01 ($p = .087$) ($\beta =$

Table A1 – 5

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Class, Sex, and Work Experience:
Quality (Task 2)

Predictor variable	Quality (Task 2)			
	β	ΔR^2	R^2	p
Step 1		.02	.02	.191
Class	.08			.201
Sex	.09			.153
Work Experience	-.07			.312
Step 2		.01	.03	.208
Workload Justice (WJ)	-.08			.208
Step 3		.00	.03	.366
Equity Sensitivity (ES)	-.06			.366
Step 4		.02	.05	.056
WJ * ES	-.96			.056
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.12, $p = .087$). Step 4 resulted in an increase in R^2 of .00 ($p = .617$) ($\beta = .18$, $p = .617$). These results indicated that including the control variables had little effect on the results.

Hypotheses 4a and 4b involved the effect of equity sensitivity on the relationship between perceptions of workload justice and task satisfaction. In step 1, task satisfaction was regressed onto the control variables class, sex, and work experience. As reported in Table A1 – 6, this resulted in an R^2 of .01 ($p = .592$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .02 ($p = .037$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .094$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .694$). These analyses indicate that the inclusion of the control variables had very little effect in tests of hypothesis 4.

Hypotheses 4a and 4b were also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, sex, and work experience. Step 1 resulted in an increase in R^2 of .01 ($p = .404$) ($\beta_1 = -.07$, $p = .312$) ($\beta_2 = .09$, $p = .167$) ($\beta_3 = .04$, $p = .601$). Step 2 resulted in an increase in R^2 of .02 ($p = .034$) ($\beta = -.14$, $p = .034$). Step 3 resulted in an increase in R^2 of .04 ($p =$

Table A1 – 6

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Class, Sex, and Work Experience:
Task Satisfaction

Predictor variable	<u>Task Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.592
Class	-.01			.900
Sex	.09			.183
Work Experience	.02			.769
Step 2		.02	.03	.037
Workload Justice (WJ)	-.14			.037
Step 3		.01	.04	.094
Equity Sensitivity (ES)	.12			.094
Step 4		.00	.04	.694
WJ * ES	-.20			.694
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.003) ($\beta = .20$, $p = .003$). Step 4 resulted in an increase in R^2 of .00 ($p = .978$) ($\beta = -.01$, $p = .978$). These analyses indicate that the results change very little with the inclusion of the control variables.

Hypotheses 5a and 5b involved the effect of equity sensitivity on the relationship between perceptions of workload justice and pay satisfaction. In step 1, pay satisfaction was regressed onto age, class, sex, and work experience. As reported in Table A1 – 7, this resulted in an R^2 of .03 ($p = .096$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .01 ($p = .102$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .212$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .03 ($p = .014$). These analyses indicate that inclusion of the control variables had little effect on testing hypothesis 5.

Hypotheses 5a and 5b were also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, sex, and work experience. Step 1 resulted in an R^2 of .03 ($p = .052$) ($\beta_1 = -.13$, $p = .058$) ($\beta_2 = .00$, $p = .945$) ($\beta_3 = -.01$, $p = .121$). Step 2 resulted in an increase in R^2 of .01 ($p = .099$) ($\beta = -.11$, $p = .099$). Step 3 resulted in an increase in R^2 of .00 ($p = .346$) ($\beta = .07$, $p = .346$). Step 4 resulted in an increase in R^2 of .00 ($p = .987$) ($\beta = .01$, $p = .987$).

Table A1 – 7

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Age, Class, Sex, and Work
Experience: Pay Satisfaction

Predictor variable	<u>Pay Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.03	.03	.096
Age	-.14			.061
Class	.03			.666
Sex	.01			.941
Work Experience	-.10			.144
Step 2		.01	.05	.102
Workload Justice (WJ)	-.11			.102
Step 3		.01	.05	.212
Equity Sensitivity (ES)	.09			.212
Step 4		.03	.08	.014
WJ * ES	-1.21			.014
N = 234				

Note: The beta weights reported in this Table are values upon entry.

These analyses indicate that the results do not change appreciably with the inclusion of the control variables.

As stated earlier, there was an order effect for placement of the task satisfaction questionnaire; hence, a regression model controlling for the order of the questionnaire was examined. In step 1, task satisfaction was regressed onto the control variable for questionnaire order. As reported in Table A1 – 8, this resulted in an R^2 of .00 ($p = .638$). In step 2, perceptions of workload justice were added to the model. This resulted in an increase in R^2 of .02 ($p = .028$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .069$). In step 4, the interaction of equity sensitivity with perceptions of workload justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .683$). These analyses indicate that the inclusion of the control variable for scale order had very little effect in tests of hypothesis 4.

Hypotheses 4a and 4b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an increase in R^2 of .00 ($p = .638$) ($\beta = .03$, $p = .638$). Step 2 resulted in an increase in R^2 of .02 ($p = .028$) ($\beta = -.14$, $p = .028$). Step 3 resulted in an increase in R^2 of .03 ($p = .004$) ($\beta = .19$, $p = .004$). Step 4 resulted in an increase in R^2 of .00 ($p = .892$) ($\beta = -.05$, $p = .892$). These analyses indicate that the inclusion of the control variable for scale order had very little effect in tests of hypothesis 4.

Table A1 – 8

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Workload Justice Controlling for Scale Order

Predictor variable	<u>Task Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.00	.00	.638
Scale Order	.03			.638
Step 2		.02	.02	.028
Workload Justice (WJ)	-.14			.028
Step 3		.01	.04	.069
Equity Sensitivity (ES)	.12			.069
Step 4		.00	.04	.683
WJ * ES	-.20			.683
N = 234				

Note: The beta weights reported in this Table are values upon entry.

APPENDIX 2

RESULTS FOR PAY JUSTICE WITHOUT CONTROL VARIABLES

The hypotheses were also examined with pay justice, instead of workload justice. Hypothesis 1 concerned the effect of equity sensitivity on the relationship between the objective environment and perceptions of distributive justice. In step 1, perceptions of pay justice were regressed onto the two effects-code variables representing the objective equity environment. As reported in Table A2 – 1, Step 1 resulted in an R^2 of .02 ($p = .181$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .399$). In step 3, the interactions of equity sensitivity with the two variables representing the equity environment were added to the model. This resulted in an increase in R^2 of .04 ($p = .007$). These results indicate that the equity environment had a non-significant effect on perceptions of pay justice. Equity sensitivity also had a non-significant additive effect on perceptions of pay justice. However, equity sensitivity did moderate the effects of the equity environment on perceptions of pay justice. The interaction is depicted in Figure A2 – 1. This interaction was graphed by using values 1 SD above and below the sample mean of the EPQ to represent benevolents and entitlements, respectively. The two inequity conditions were used to represent the objective equity conditions. The nature of the interaction is such that benevolents in the over-equity condition perceive greater pay

Table A2 – 1

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Perceptions of Pay Justice

Predictor variable	<u>Pay Justice</u>			
	β	ΔR^2	R^2	p
Step 1		.02	.02	.181
Equity Condition 1 (EC1) (under-equity and equity)	.03			.672
Equity Condition 2 (EC2) (over-equity and equity)	.10			.177
Step 2		.00	.02	.399
Equity Sensitivity (ES)	.06			.399
Step 3		.04	.06	.007
EC1 * ES	-1.64			.004
EC2 * ES	1.46			.007
N = 234				

Note: The beta weights reported in this Table are values upon entry.

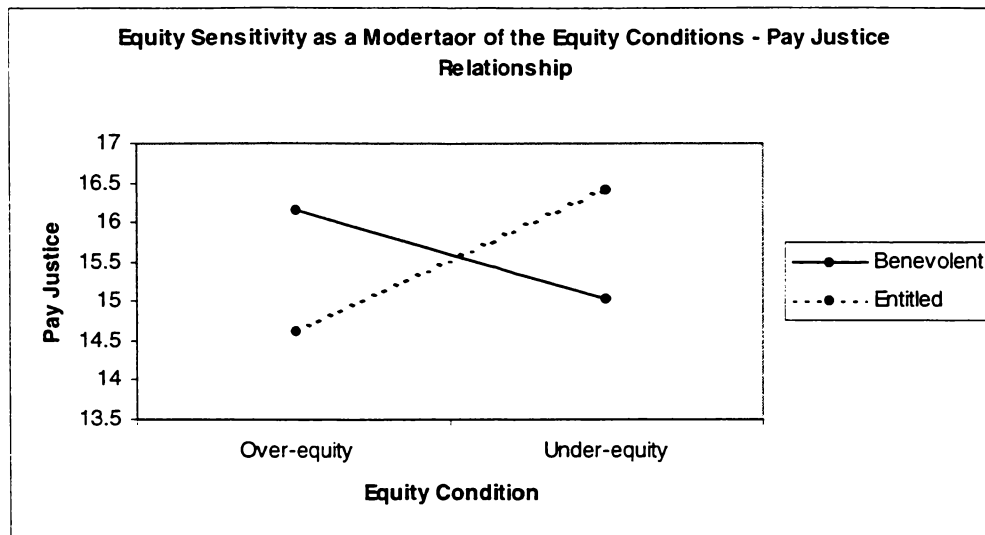


FIGURE A2 – 1

EQUITY SENSITIVITY (EPQ) AS A MODERATOR OF THE
EQUITY CONDITIONS – PAY JUSTICE RELATIONSHIP

justice than entitlements in the over-equity condition; however, benevolents in the under-equity condition perceive less pay justice than entitlements in the under-equity condition. In short, there is an interactive effect; however, it does not fit with equity sensitivity theory.

Hypothesis 1 (with pay justice) was also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .02 ($p = .181$) ($\beta_1 = .03$, $p = .672$) ($\beta_2 = .10$, $p = .177$). Step 2 resulted in an increase in R^2 of .01 ($p = .158$) ($\beta = -.09$, $p = .158$). Step 3 resulted in an increase in R^2 of .00 ($p = .946$) ($\beta_4 = -.02$, $p = .951$) ($\beta_5 = .11$, $p = .764$).

Hypotheses 2a and 2b involved the effect of equity sensitivity on the relationship between perceptions of distributive justice and productivity in the first task. In step 1, productivity in the first task was regressed onto perceptions of pay justice. As reported in Table A2 – 2, this resulted in an R^2 of .01 ($p = .204$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .08 ($p = .000$). In step 3, the interaction of equity sensitivity with perceptions of pay justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .550$). These results indicate that perceptions of pay justice had a non-significant effect on productivity in the first task. Equity sensitivity had an additive effect on productivity in the first task, explaining 8% of the variance. The direction of the equity sensitivity relationship indicated that greater benevolence was associated with greater

Table A2 – 2

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice: Productivity (Task 1)

Predictor variable	<u>Productivity (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.204
Pay Justice (PJ)	.08			.204
Step 2		.08	.09	.000
Equity Sensitivity (ES)	.28			.000
Step 3		.00	.09	.550
PJ * ES	-.37			.550
N = 234				

Note: The beta weights reported in this Table are values upon entry.

productivity. Equity sensitivity did not moderate the effect of perceptions of pay justice on productivity in the first task. Thus, hypotheses 2a and 2b received no support in these analyses.

This hypothesis was also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .01 ($p = .204$) ($\beta = .08$, $p = .204$). Step 2 resulted in an increase in R^2 of .02 ($p = .017$) ($\beta = .16$, $p = .017$). Step 3 resulted in an increase in R^2 of .00 ($p = .349$) ($\beta = -.41$, $p = .349$). Thus, hypotheses 2a and 2b received no support in these analyses.

Hypotheses 2a and 2b were also tested via productivity in the second task. In step 1, productivity in the second task was regressed onto perceptions of pay justice. As reported in Table A2 – 3, this resulted in an R^2 of .01 ($p = .085$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .02 ($p = .039$). In step 3, the interaction of equity sensitivity with perceptions of pay justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .124$). The results indicate that perceptions of pay justice had a non-significant effect on productivity in the second task. Equity sensitivity had a small additive effect on productivity in the second task, explaining 2% of the variance and indicating that greater benevolence was associated with greater productivity. Equity sensitivity did not moderate the effect of perceptions of pay justice on productivity in the second task. These results do not support Hypotheses 2a and 2b.

Hypotheses 2a and 2b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .01 ($p = .085$) ($\beta =$

Table A2 – 3

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice: Productivity (Task 2)

Predictor variable	<u>Productivity (Task 2)</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.085
Pay Justice (PJ)	.11			.085
Step 2		.02	.03	.039
Equity Sensitivity (ES)	.14			.039
Step 3		.01	.04	.124
PJ * ES	-.97			.124
N = 234				

Note: The beta weights reported in this Table are values upon entry.

.11, $p = .085$). Step 2 resulted in an increase in R^2 of .02 ($p = .043$) ($\beta = .13$, $p = .043$). Step 3 resulted in an increase in R^2 of .01 ($p = .074$) ($\beta = -.77$, $p = .074$). Thus, hypotheses 2a and 2b received no support in these analyses.

Hypotheses 3a and 3b involved the effect of equity sensitivity on the relationship between perceptions of pay justice and quality. In step 1, quality in the first task was regressed onto perceptions of pay justice. As reported in Table A2 – 4, this resulted in an R^2 of .00 ($p = .378$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .071$). In step 3, the interaction of equity sensitivity with perceptions of pay justice was added to the model. This resulted in an increase in R^2 of .02 ($p = .054$). The results indicate that perceptions of pay justice had a non-significant effect on quality in the first task. Equity sensitivity did not have an additive effect on quality in the first task. Equity sensitivity also did not moderate the effect of perceptions of pay justice on quality in the first task. Thus, hypotheses 3a and 3b received no support in these analyses.

Hypotheses 3a and 3b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .00 ($p = .378$) ($\beta = .06$, $p = .378$). Step 2 resulted in an increase in R^2 of .00 ($p = .970$) ($\beta = -.00$, $p = .970$). Step 3 resulted in an increase in R^2 of .02 ($p = .034$) ($\beta = .93$, $p = .034$). Thus, hypothesis 2a received no support in these analyses. However, equity sensitivity did have an interactive effect with perceptions of pay justice in explaining quality in the

Table A2 – 4

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice: Quality (Task 1)

Predictor variable	<u>Quality (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.00	.00	.378
Pay Justice (PJ)	.06			.378
Step 2		.01	.02	.071
Equity Sensitivity (ES)	.12			.071
Step 3		.02	.03	.054
PJ * ES	1.22			.054
N = 234				

Note: The beta weights reported in this Table are values upon entry.

first task. The nature of the interaction is depicted in Figure A2 – 2. This interaction was graphed by using values 1 SD above and below the sample mean of the ESI to represent benevolents and entitleds, respectively. Values 1 SD above and below the mean of pay justice were used to represent the perceptions of over-equity and under-equity, respectively. The interaction suggests that more benevolent individuals who felt under-equity exhibited lower quality on the first task while more entitled individuals who felt under-equity exhibited higher quality. It also suggests that more benevolent individuals who felt over-equity exhibited higher quality on the first task while more entitled individuals who felt over-equity exhibited lower quality.

Hypotheses 3a and 3b were also tested via quality in the second task. In step 1, quality in the second task was regressed onto perceptions of pay justice. As reported in Table A2 – 5, this resulted in an R^2 of .01 ($p = .172$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .708$). In step 3, the interaction of equity sensitivity with perceptions of pay justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .114$). The results indicate that perceptions of pay justice had a non-significant effect on quality in the second task. Equity sensitivity did not have an additive effect on quality in the second task. Equity sensitivity also did not moderate the effect of perceptions of pay justice on quality in the second task. Thus, hypotheses 3a and 3b received no support in these analyses.

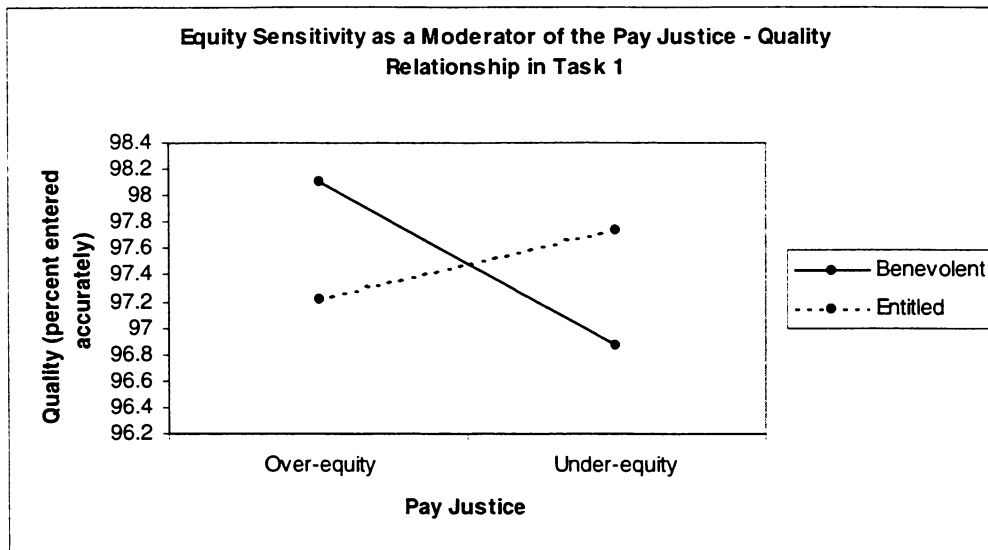


FIGURE A2 – 2

EQUITY SENSITIVITY (ESI) AS A MODERATOR OF THE
PAY JUSTICE – QUALITY RELATIONSHIP IN TASK 1

Table A2 – 5

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice: Quality (Task 2)

Predictor variable	<u>Quality (Task 2)</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.172
Pay Justice (PJ)	.09			.172
Step 2		.00	.01	.708
Equity Sensitivity (ES)	-.03			.708
Step 3		.01	.02	.114
PJ * ES	1.01			.114
N = 234				

Note: The beta weights reported in this Table are values upon entry.

Hypotheses 3a and 3b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .01 ($p = .172$) ($\beta = .09$, $p = .172$). Step 2 resulted in an increase in R^2 of .02 ($p = .065$) ($\beta = .12$, $p = .065$). Step 3 resulted in an increase in R^2 of .00 ($p = .750$) ($\beta = -.14$, $p = .750$). Thus, hypotheses 3a and 3b received no support in these analyses.

Hypotheses 4a and 4b involved the effect of equity sensitivity on the relationship between perceptions of pay justice and task satisfaction. In step 1, task satisfaction was regressed onto perceptions of pay justice. As reported in Table A2 – 6, this resulted in an R^2 of .02 ($p = .024$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .02 ($p = .063$). In step 3, the interaction of equity sensitivity with perceptions of pay justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .926$). These results indicate that perceptions of pay justice had a small effect on task satisfaction; equity sensitivity did not have an additive effect on task satisfaction; and equity sensitivity did not interact with perceptions of pay justice to explain variance in task satisfaction. These results provide some support for hypothesis 4a and no support for hypothesis 4b.

Hypotheses 4a and 4b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .02 ($p = .024$) ($\beta = .15$, $p = .024$). Step 2 resulted in an increase in R^2 of .04 ($p = .002$) ($\beta = .20$, $p = .002$). Step 3 resulted in an increase in R^2 of .00 ($p = .918$) ($\beta = -.04$, $p = .918$). In these

Table A2 – 6

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice: Task Satisfaction

Predictor variable	<u>Task Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.02	.02	.024
Pay Justice (PJ)	.15			.024
Step 2		.02	.04	.063
Equity Sensitivity (ES)	.12			.063
Step 3		.00	.04	.926
PJ * ES	-.06			.926
N = 234				

Note: The beta weights reported in this Table are values upon entry.

analyses, equity sensitivity had a significant additive effect on task satisfaction, explaining 4% of the variance. However, perceptions of pay justice had a small effect on task satisfaction and equity sensitivity did not interact with perceptions of pay justice to affect task satisfaction.

Hypotheses 5a and 5b involved the effect of equity sensitivity on the relationship between perceptions of pay justice and pay satisfaction. In step 1, pay satisfaction was regressed onto perceptions of pay justice. As reported in Table A2 – 7, this resulted in an R^2 of .12 ($p = .000$). In step 2, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .512$). In step 3, the interaction of equity sensitivity with perceptions of pay justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .952$). The results indicate that perceptions of pay justice had a significant effect on pay satisfaction. Equity sensitivity did not have an additive effect on pay satisfaction. Equity sensitivity also did not interact with perceptions of pay justice to explain variance in pay satisfaction.

Hypotheses 5a and 5b were also tested using the ESI. The analyses were conducted in exactly the same fashion. Step 1 resulted in an R^2 of .12 ($p = .000$) ($\beta = .35$, $p = .000$). Step 2 resulted in an increase in R^2 of .00 ($p = .402$) ($\beta = .05$, $p = .402$). Step 3 resulted in an increase in R^2 of .00 ($p = .298$) ($\beta = .43$, $p = .298$). In these analyses, perceptions of pay justice had a significant effect on pay satisfaction. Equity sensitivity did not have an additive effect on perceptions of pay justice. Equity

Table A2 – 7

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice: Pay Satisfaction

Predictor variable	<u>Pay Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.12	.12	.000
Pay Justice (PJ)	.35			.000
Step 2		.00	.13	.512
Equity Sensitivity (ES)	.04			.512
Step 3		.00	.13	.952
PJ * ES	.04			.952
N = 234				

Note: The beta weights reported in this Table are values upon entry.

sensitivity also did not interact with perceptions of pay justice to explain variance in pay satisfaction.

APPENDIX 3

RESULTS FOR PAY JUSTICE WITH CONTROL VARIABLES

The first hypothesis was also examined controlling for class, race, and sex. In step 1, perceptions of pay justice were regressed onto class, race, and sex. As reported in Table A3 – 1, this resulted in an R^2 of .03 ($p = .051$). In step 2, the two effects-code variables representing the objective equity environment were added to the model. This resulted in an increase in R^2 of .01 ($p = .264$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .353$). In step 4, the interactions of equity sensitivity with the two variables representing the equity environment were added to the model. This resulted in an increase in R^2 of .04 ($p = .008$). These results are not appreciably different from those in the model without the control variables.

Hypothesis 1 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, race, and sex. Step 1 resulted in an R^2 of .04 ($p = .039$) ($\beta_1 = -.07$, $p = .299$) ($\beta_2 = -.17$, $p = .012$) ($\beta_3 = -.01$, $p = .881$). Step 2 resulted in an increase in R^2 of .01 ($p = .282$) ($\beta_4 = .01$, $p = .948$) ($\beta_5 = .10$, $p = .177$). Step 3 resulted in an increase in R^2 of .00 ($p = .348$) ($\beta_6 = -.07$, $p = .348$). Step 4 resulted in an increase in R^2 of .00 ($p = .922$) ($\beta_7 = -.00$, $p = .992$) ($\beta_8 = .13$, $p = .743$). These results were similar to those found using the EPQ; however, there was no interaction between equity sensitivity and equity conditions.

Table A3 – 1

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Perceptions of Pay Justice Controlling for Class, Race, and Sex

Predictor variable	<u>Pay Justice</u>			
	β	ΔR^2	R^2	p
Step 1		.03	.03	.051
Class	-.05			.471
Race	-.18			.008
Sex	-.01			.856
Step 2		.01	.04	.264
Equity Condition 1 (EC1) (under-equity and equity)	.01			.921
Equity Condition 2 (EC2) (over-equity and equity)	.10			.171
Step 3		.00	.05	.353
Equity Sensitivity (ES)	.06			.353
Step 4		.04	.09	.008
EC1 * ES	-1.59			.005
EC2 * ES	1.45			.006
N = 234				

Note: The beta weights reported in this Table are values upon entry.

The second hypothesis was also examined controlling for class, race, and sex. In step 1, productivity in the first task was regressed onto class, race, and sex. As reported in Table A3 – 2, this resulted in an R^2 of .09 ($p = .000$). In step 2, perceptions of pay justice were added to the model. This resulted in an increase in R^2 of .01 ($p = .228$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .04 ($p = .002$). In step 4, the interaction of equity sensitivity with pay justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .547$). Except for a smaller additive effect for equity sensitivity, these results are not appreciably different from those in the model without the control variables.

Hypothesis 2 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, class, race, and sex. Step 1 resulted in an R^2 of .09 ($p = .000$) ($\beta_1 = -.06$, $p = .401$) ($\beta_2 = .19$, $p = .007$) ($\beta_3 = -.12$, $p = .057$) ($\beta_4 = .23$, $p = .000$). Step 2 resulted in an increase in R^2 of .01 ($p = .245$) ($\beta = .08$, $p = .245$). Step 3 resulted in an increase in R^2 of .01 ($p = .091$) ($\beta = .11$, $p = .091$). Step 4 resulted in an increase in R^2 of .01 ($p = .134$) ($\beta = -.65$, $p = .134$). These results were similar to those found using the EPQ; however, there was no additive effect for equity sensitivity.

Table A3 – 2

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice Controlling for Class, Race, and Sex: Productivity (Task 1)

Predictor variable	<u>Productivity (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.09	.09	.000
Class	.17			.009
Race	-.13			.041
Sex	.23			.000
Step 2		.01	.10	.228
Pay Justice (PJ)	.08			.228
Step 3		.04	.14	.002
Equity Sensitivity (ES)	.21			.002
Step 4		.00	.14	.547
PJ * ES	-.36			.547
N = 234				

Note: The beta weights reported in this Table are values upon entry.

The second hypothesis was also tested via productivity in the second task. It was examined controlling for class, race, and sex. In step 1, productivity in the second task was regressed onto class, race, and sex. As reported in Table A3 – 3, this resulted in an R^2 of .03 ($p = .079$). In step 2, perceptions of pay justice were added to the model. This resulted in an increase in R^2 of .02 ($p = .048$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .148$). In step 4, the interaction of equity sensitivity with pay justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .102$). With the control variables, the effect of pay justice becomes significant and the additive effect of equity sensitivity becomes non-significant.

Hypothesis 2 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, race, and sex. Step 1 resulted in an R^2 of .02 ($p = .165$) ($\beta_1 = -.01$, $p = .878$) ($\beta_2 = .03$, $p = .683$) ($\beta_3 = .14$, $p = .031$). Step 2 resulted in an increase in R^2 of .02 ($p = .057$) ($\beta = .13$, $p = .057$). Step 3 resulted in an increase in R^2 of .01 ($p = .143$) ($\beta = .10$, $p = .143$). Step 4 resulted in an increase in R^2 of .01 ($p = .070$) ($\beta = -.80$, $p = .070$). These results were similar to those found using the EPQ.

Table A3 – 3

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice Controlling for Class, Race, and Sex: Productivity (Task 2)

Predictor variable	<u>Productivity (Task 2)</u>			
	β	ΔR^2	R^2	p
Step 1		.03	.03	.079
Class	.09			.193
Race	.03			.651
Sex	.14			.033
Step 2		.02	.05	.048
Pay Justice (PJ)	.13			.048
Step 3		.01	.05	.148
Equity Sensitivity (ES)	.10			.148
Step 4		.01	.07	.102
PJ * ES	-1.03			.102
N = 234				

Note: The beta weights reported in this Table are values upon entry.

The third hypothesis was also examined controlling for class, race, and sex. In step 1, quality in the first task was regressed onto class, race, and sex. As reported in Table A3 – 4, this resulted in an R^2 of .01 ($p = .507$). In step 2, perceptions of pay justice were added to the model. This resulted in an increase in R^2 of .01 ($p = .276$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .103$). In step 4, the interaction of equity sensitivity with pay justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .067$). These results are not appreciably different from those in the model without the control variables.

Hypothesis 3 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, race, and sex. Step 1 resulted in an R^2 of .00 ($p = .866$) ($\beta_1 = .03$, $p = .654$) ($\beta_2 = .04$, $p = .516$) ($\beta_3 = .00$, $p = .949$). Step 2 resulted in an increase in R^2 of .01 ($p = .292$) ($\beta = .07$, $p = .292$). Step 3 resulted in an increase in R^2 of .00 ($p = .792$) ($\beta = -.02$, $p = .792$). Step 4 resulted in an increase in R^2 of .03 ($p = .016$) ($\beta = 1.08$, $p = .016$). These results were similar to those found without the control variables.

Table A3 – 4

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice Controlling for Class, Race, and Sex: Quality (Task 1)

Predictor variable	<u>Quality (Task 1)</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.507
Class	.09			.180
Race	.05			.444
Sex	.00			.951
Step 2		.01	.02	.276
Pay Justice (PJ)	.07			.276
Step 3		.01	.03	.103
Equity Sensitivity (ES)	.11			.103
Step 4		.01	.04	.067
PJ * ES	1.17			.067
N = 234				

Note: The beta weights reported in this Table are values upon entry.

The third hypothesis was also examined controlling for class, race, and sex. In step 1, quality in the second task was regressed onto class, race, and sex. As reported in Table A3 – 5, this resulted in an R^2 of .02 ($p = .265$). In step 2, perceptions of pay justice were added to the model. This resulted in an increase in R^2 of .01 ($p = .159$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .286$). In step 4, the interaction of equity sensitivity with pay justice was added to the model. This resulted in an increase in R^2 of .01 ($p = .121$). These results are not appreciably different from those in the model without the control variables.

Hypothesis 3 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, race, and sex. Step 1 resulted in an R^2 of .02 ($p = .338$) ($\beta_1 = -.07$, $p = .298$) ($\beta_2 = -.03$, $p = .668$) ($\beta_3 = .10$, $p = .131$). Step 2 resulted in an increase in R^2 of .01 ($p = .203$) ($\beta = .09$, $p = .203$). Step 3 resulted in an increase in R^2 of .01 ($p = .077$) ($\beta = .12$, $p = .077$). Step 4 resulted in an increase in R^2 of .00 ($p = .526$) ($\beta = -.28$, $p = .526$). These results were similar to those found using the EPQ.

Table A3 – 5

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice Controlling for Class, Race, and Sex: Quality (Task 2)

Predictor variable	<u>Quality (Task 2)</u>			
	β	ΔR^2	R^2	p
Step 1		.02	.02	.265
Class	.09			.196
Race	-.03			.624
Sex	.10			.148
Step 2		.01	.03	.159
Pay Justice (PJ)	.09			.159
Step 3		.01	.03	.286
Equity Sensitivity (ES)	-.07			.286
Step 4		.01	.03	.121
PJ * ES	.10			.121
N = 234				

Note: The beta weights reported in this Table are values upon entry.

The fourth hypothesis was also examined controlling for class, race, and sex. In step 1, task satisfaction was regressed onto class, race, and sex. As reported in Table A3 – 6, this resulted in an R^2 of .01 ($p = .610$). In step 2, perceptions of pay justice were added to the model. This resulted in an increase in R^2 of .02 ($p = .020$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .01 ($p = .089$). In step 4, the interaction of equity sensitivity with pay justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .915$). These results are not appreciably different from those in the model without the control variables.

Hypothesis 3 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, race, and sex. Step 1 resulted in an R^2 of .01 ($p = .446$) ($\beta_1 = -.06$, $p = .354$) ($\beta_2 = .01$, $p = .883$) ($\beta_3 = .09$, $p = .173$). Step 2 resulted in an increase in R^2 of .02 ($p = .023$) ($\beta = .15$, $p = .023$). Step 3 resulted in an increase in R^2 of .04 ($p = .002$) ($\beta = .21$, $p = .002$). Step 4 resulted in an increase in R^2 of .00 ($p = .725$) ($\beta = -.15$, $p = .725$). These results were similar to those found without the control variables.

Table A3 – 6

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice Controlling for Class, Race, and Sex: Task Satisfaction

Predictor variable	<u>Task Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.01	.01	.610
Class	-.01			.893
Race	.00			.969
Sex	.09			.185
Step 2		.02	.03	.020
Pay Justice (PJ)	.16			.020
Step 3		.01	.04	.089
Equity Sensitivity (ES)	.12			.089
Step 4		.00	.04	.915
PJ * ES	-.07			.915
N = 234				

Note: The beta weights reported in this Table are values upon entry.

The fifth hypothesis was also examined controlling for age, class, race, sex, and work experience. In step 1, pay satisfaction was regressed onto age, class, race, sex, and work experience. As reported in Table A3 – 7, this resulted in an R^2 of .04 ($p = .142$). In step 2, perceptions of pay justice were added to the model. This resulted in an increase in R^2 of .11 ($p = .000$). In step 3, equity sensitivity was added to the model. This resulted in an increase in R^2 of .00 ($p = .340$). In step 4, the interaction of equity sensitivity with pay justice was added to the model. This resulted in an increase in R^2 of .00 ($p = .866$). These results are not appreciably different from those in the model without the control variables.

Hypothesis 3 was also tested using the ESI. The analyses were conducted in exactly the same fashion; however, the control variables were age, race, sex, and work experience. Step 1 resulted in an R^2 of .04 ($p = .086$) ($\beta_1 = -.12$, $p = .068$) ($\beta_2 = -.04$, $p = .503$) ($\beta_3 = .01$, $p = .883$) ($\beta_4 = -.10$, $p = .140$). Step 2 resulted in an increase in R^2 of .11 ($p = .000$) ($\beta = .34$, $p = .000$). Step 3 resulted in an increase in R^2 of .01 ($p = .172$) ($\beta = .09$, $p = .172$). Step 4 resulted in an increase in R^2 of .00 ($p = .591$) ($\beta = .23$, $p = .591$). These results were similar to those found without the control variables.

Table A3 – 7

Hierarchical Regression Results for the Moderating Effect of Equity Sensitivity on
Reactions to Pay Justice Controlling for Class, Race, and Sex: Pay Satisfaction

Predictor variable	<u>Pay Satisfaction</u>			
	β	ΔR^2	R^2	p
Step 1		.04	.04	.142
Age	-.14			.074
Class	.03			.710
Race	-.04			.527
Sex	.01			.882
Work Experience	-.10			.161
Step 2		.11	.15	.000
Pay Justice (PJ)	.34			.000
Step 3		.00	.15	.340
Equity Sensitivity (ES)	.06			.340
Step 4		.00	.15	.866
PJ * ES	-.10			.866
N = 234				

Note: The beta weights reported in this Table are values upon entry.

APPENDIX 4

MEDIATION ANALYSES

The first test performed in this analysis involved the relationship between the independent variable (equity conditions) and the mediator (perceptions of workload justice). Perceptions of workload justice were regressed onto equity conditions. As reported in Table A4 – 1, this resulted in an R^2 of .69 ($p = .000$) ($\beta_1 = .81$, $p = .000$) ($\beta_2 = -.86$, $p = .000$). This indicates a strong relationship between the equity conditions and perceptions of workload justice.

Table A4 – 1

Mediation Analysis: The Effect of Equity Conditions on Perceptions of Workload Justice

Predictor variable	<u>Workload Justice</u>		
	β	R^2	p
		.69	.000
Equity Condition 1 (under-equity and equity)	.81		.000
Equity Condition 2 (over-equity and equity)	-.86		.000
N = 234			

The next test concerned the relationship between perceptions of workload justice and productivity in the first task. Productivity in the first task was regressed onto perceptions of workload justice. As reported in Table A4 – 2, this test resulted in an R^2 of .02 ($p = .038$) ($\beta = .14$, $p = .038$). This indicates a weak, yet significant, relationship between perceptions of workload justice and productivity in the first task.

The final test involved the relationship between (a) perceptions of workload justice and equity conditions and (b) productivity in the first task. In step 1, productivity in the first task was regressed onto perceptions of workload justice. As reported in Table A4 – 3, this resulted in an R^2 of .02 ($p = .038$) ($\beta = -.31$, $p = .005$). In step 2, equity conditions were added to the model. This resulted in an increase in R^2 of .12 ($p = .000$) ($\beta_2 = .63$, $p = .000$) ($\beta_3 = -.46$, $p = .000$). This strong relationship between equity conditions and productivity in the first task (with perceptions of workload justice included in the model) suggests that perceptions of workload justice did not mediate the effect of equity conditions on productivity in the first task.

Table A4 – 2

Mediation Analysis: The Effect of Perceptions of Workload Justice on Productivity in the First Task

Predictor variable	Productivity (Task 1)		
	β	R^2	p
		.02	.038
Workload Justice	.14		.038
N = 234			

Table A4 – 3

Mediation Analysis: The Effect of Perceptions of Workload Justice and Equity
Conditions on Productivity in the First Task

Predictor variable	<u>Productivity (Task 1)</u>			
	β	R^2	ΔR^2	p
Step 1		.02	.02	.038
Workload Justice	-.31			.005
Step 2		.14	.12	.000
Equity Condition 1 (under-equity and equity)	.63			.000
Equity Condition 2 (over-equity and equity)	-.46			.000
N = 234				

Note: The beta weights reported in this Table are from the simultaneous estimation regression model with Steps 1 and 2 together.

The next mediation analysis concerned the relationship between perceptions of workload justice and productivity in the second task. Productivity in the second task was regressed onto perceptions of workload justice. As reported in Table A4 – 4, this test resulted in an R^2 of .02 ($p = .066$) ($\beta = .12$, $p = .066$). This indicates a non-significant relationship between perceptions of workload justice and productivity in

the second task. This suggests that perceptions of workload justice do not mediate the relationship between equity conditions and productivity in the second task.

The final test involved the relationship between (a) perceptions of workload justice and equity conditions and (b) productivity in the second task. In step 1, productivity in the second task was regressed onto perceptions of workload justice. As reported in Table A4 – 5, this resulted in an R^2 of .02 ($p = .066$) ($\beta = -.16$, $p = .163$). In step 2, equity conditions were added to the model. This resulted in an increase in R^2 of .04 ($p = .012$) ($\beta_2 = .30$, $p = .012$) ($\beta_3 = -.37$, $p = .003$). This strong relationship between equity conditions and productivity in the second task indicates that perceptions of workload justice did not mediate the effect of equity conditions on productivity in the second task.

Table A4 – 4

Mediation Analysis: The Effect of Perceptions of Workload Justice on Productivity in the Second Task

Predictor variable	<u>Productivity (Task 2)</u>		
	β	R^2	p
		.02	.066
Workload Justice	.12		.066
N = 234			

Table A4 – 5

Mediation Analysis: The Effect of Perceptions of Workload Justice and Equity
Conditions on Productivity in the Second Task

Predictor variable	<u>Productivity (Task 2)</u>			
	β	R^2	ΔR^2	p
Step 1		.02	.02	.066
Workload Justice	-.16			.163
Step 2		.05	.04	.012
Equity Condition 1 (under-equity and equity)	.30			.012
Equity Condition 2 (over-equity and equity)	-.37			.003
N = 234				

Note: The beta weights reported in this Table are from the simultaneous estimation regression model with Steps 1 and 2 together.

The next mediation analysis concerned the relationship between perceptions of workload justice and quality in the first task. Quality in the first task was regressed onto perceptions of workload justice. As reported in Table A4 – 6, this test resulted in an R^2 of .05 ($p = .001$) ($\beta = -.22$, $p = .001$). This indicates a fairly strong relationship between perceptions of workload justice and quality in the first task.

The final test involved the relationship between (a) perceptions of workload justice and equity conditions and (b) quality in the first task. In step 1, quality in the first task was regressed onto perceptions of workload justice. As reported in Table A4 – 7, this resulted in an R^2 of .05 ($p = .001$) ($\beta = -.18$, $p = .119$). In step 2, equity conditions were added to the model. This resulted in an increase in R^2 of .00 ($p = .853$) ($\beta_2 = -.06$, $p = .624$) ($\beta_3 = .03$, $p = .814$). The beta weight for perceptions of workload justice becoming non-significant in the final model indicates that perceptions of workload justice did not mediate the effect of equity conditions on quality in the first task.

Table A4 – 6

Mediation Analysis: The Effect of Perceptions of Workload Justice on Quality in the First Task

Predictor variable	<u>Quality (Task 1)</u>		
	β	R^2	p
		.05	.001
Workload Justice	-.22		.001

N = 234

Table A4 – 7

Mediation Analysis: The Effect of Perceptions of Workload Justice and Equity
Conditions on Quality in the First Task

Predictor variable	<u>Quality (Task 1)</u>			
	β	R^2	ΔR^2	p
Step 1		.05	.05	.001
Workload Justice	-.18			.119
Step 2		.05	.00	.853
Equity Condition 1 (under-equity and equity)	-.06			.624
Equity Condition 2 (over-equity and equity)	.03			.814

N = 234

Note: The beta weights reported in this Table are from the simultaneous estimation regression model with Steps 1 and 2 together.

The next mediation analysis concerned the relationship between perceptions of workload justice and quality in the second task. Quality in the second task was regressed onto perceptions of workload justice. As reported in Table A4 – 8, this test resulted in an R^2 of .01 ($p = .111$) ($\beta = -.11$, $p = .111$). This indicates a non-significant relationship between perceptions of workload justice and quality in the second task.

The final test to determine mediation involved the relationship between (a) perceptions of workload justice and equity conditions and (b) quality in the second task. In step 1, quality in the second task was regressed onto perceptions of workload justice. As reported in Table A4 – 9, this resulted in an R^2 of .01 ($p = .111$) ($\beta = -.15$, $p = .203$). In step 2, equity conditions were added to the model. This resulted in an increase in R^2 of .00 ($p = .843$) ($\beta_2 = .07$, $p = .577$) ($\beta_3 = -.05$, $p = .722$). This indicates that perceptions of workload justice did not mediate the effect of equity conditions on quality in the second task.

Table A4 – 8

Mediation Analysis: The Effect of Perceptions of Workload Justice on Quality in the Second Task

Predictor variable	<u>Quality (Task 2)</u>		
	β	R^2	p
		.01	.111
Workload Justice	-.11		.111

N = 234

Table A4 – 9

Mediation Analysis: The Effect of Perceptions of Workload Justice and Equity
Conditions on Quality in the Second Task

Predictor variable	<u>Quality (Task 2)</u>			
	β	R^2	ΔR^2	p
Step 1		.01	.01	.111
Workload Justice	-.15			.203
Step 2		.01	.00	.843
Equity Condition 1 (under-equity and equity)	.07			.577
Equity Condition 2 (over-equity and equity)	-.05			.722

N = 234

Note: The beta weights reported in this Table are from the simultaneous estimation regression model with Steps 1 and 2 together.

The next mediation analysis concerned the relationship between the perceptions of workload justice and task satisfaction. Task satisfaction was regressed onto perceptions of workload justice. As reported in Table A4 – 10, this test resulted in an R^2 of .02 ($p = .031$) ($\beta = -.14$, $p = .031$). This indicates a small, but significant, relationship between perceptions of workload justice and task satisfaction.

The final test involved the relationship between (a) perceptions of workload justice and equity conditions and (b) task satisfaction. In step 1, task satisfaction was regressed onto perceptions of workload justice. As reported in Table A4 – 11, this resulted in an R^2 of .02 ($p = .031$) ($\beta = -.10$, $p = .400$). In step 2, equity conditions were added to the model. This resulted in an increase in R^2 of .00 ($p = .740$) ($\beta_2 = -.02$, $p = .849$) ($\beta_3 = .07$, $p = .553$). The beta weight for perceptions of workload justice becoming non-significant in the final model indicates that perceptions of workload justice did not mediate the effect of equity conditions on task satisfaction.

Table A4 – 10

Mediation Analysis: The Effect of Perceptions of Workload Justice on Task Satisfaction

Predictor variable	<u>Task Satisfaction</u>		
	β	R^2	p
		.02	.031
Workload Justice	-.14		.031

N = 234

Table A4 – 11

Mediation Analysis: The Effect of Perceptions of Workload Justice and EquityConditions on Task Satisfaction

Predictor variable	<u>Task Satisfaction</u>			
	β	R^2	ΔR^2	p
Step 1		.02	.02	.031
Workload Justice	-.10			.400
Step 2		.02	.00	.740
Equity Condition 1 (under-equity and equity)	-.02			.849
Equity Condition 2 (over-equity and equity)	.07			.553

N = 234

Note: The beta weights reported in this Table are from the simultaneous estimation regression model with Steps 1 and 2 together.

The next mediation analysis concerned the relationship between the perceptions of workload justice and pay satisfaction. Pay satisfaction was regressed onto perceptions of workload justice. As reported in Table A4 – 12, this test resulted in an R^2 of .01 ($p = .068$) ($\beta = -.12$, $p = .068$). This indicates a non-significant, relationship between perceptions of workload justice and pay satisfaction.

The final test involved the relationship between (a) perceptions of workload justice and equity conditions and (b) pay satisfaction. In step 1, pay satisfaction was regressed onto perceptions of workload justice. As reported in Table A4 – 13, this resulted in an R^2 of .01 ($p = .068$) ($\beta = -.14$, $p = .249$). In step 2, equity conditions were added to the model. This resulted in an increase in R^2 of .01 ($p = .404$) ($\beta_2 = .07$, $p = .541$) ($\beta_3 = .03$, $p = .839$). This indicates that perceptions of workload justice did not mediate the effect of equity conditions on pay satisfaction.

Table A4 – 12

Mediation Analysis: The Effect of Perceptions of Workload Justice on Pay

Satisfaction

Predictor variable	<u>Pay Satisfaction</u>		
	β	R^2	p
		.01	.068
Workload Justice	-.12		.068
N = 234			

Table A4 – 13

Mediation Analysis: The Effect of Perceptions of Workload Justice and EquityConditions on Pay Satisfaction

Predictor variable	<u>Pay Satisfaction</u>			
	β	R^2	ΔR^2	p
Step 1		.01	.01	.068
Workload Justice	-.14			.249
Step 2		.02	.01	.404
Equity Condition 1 (under-equity and equity)	.07			.541
Equity Condition 2 (over-equity and equity)	.03			.839
N = 234				

Note: The beta weights reported in this Table are from the simultaneous estimation regression model with Steps 1 and 2 together.

VITA

William C. Roedder III (Chad) was born on November 9, 1973 in Mobile Alabama. He grew up in Mobile and graduated from St. Paul's Episcopal School in 1992 and entered Birmingham-Southern College. He graduated from Birmingham-Southern College in 1996 with a Bachelor of Science degree in Psychology. From there, he entered the Industrial and Organizational Psychology Program at the University of Tennessee. Here, he pursued a double major in Industrial and Organizational Psychology and Management. He also spent one year on an internship working with the Employee Selection Group at GTE (now Verizon) in Dallas Texas. He graduated from the University of Tennessee in August of 2001 and is currently working with Jeanneret & Associates, a management consulting firm in Houston Texas.