An Experiment Examining the Relationship of Affect, Equity, and Equity Sensitivity, With Organizational Citizenship Behaviors

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(ABSTRACT)

This study employed an experimental design intended to be an analog to the workplace to simultaneously examine the affect orientation and equity theory explanations of OCBs, which were evaluated as prosocial behaviors. Participants were 188 undergraduates. Participants’ dispositional variables were measured at time 1, and at time 2, participants experienced an equity manipulation and were given the opportunity to perform prosocial behaviors. Results indicated a distinction between the decision to help and helping effort, which has not been thoroughly examined in literature on OCBs. Results revealed that the threshold for the decision to help was raised by inequity, yet once the decision had been made, affect and personality variables affected effort of helping. Implications for research and practice are discussed.
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Introduction

Throughout a given work week, there are many instances of helping behaviors performed by employees that, “are neither explicitly required nor contractually rewarded” (Farh, Podsakoff, & Organ, 1990, p. 704). Such “organizational citizenship” behaviors are discretionary in nature, aimed at helping others, valued by the organization, and are not part of an employee’s formal job description (Organ, 1988b). Citizenship behaviors “include any of those gestures…that lubricate the social machinery of the organization but that do not directly inhere in the usual notion of task performance” (Organ & Bateman, 1983, p. 588).

OCBs are an essential element of organizational effectiveness. Katz and Kahn (1966) noted that one of three ways that individual employees contribute to organizational effectiveness is by conducting themselves in ways that supersede role requirements, including spontaneous behaviors that are cooperative in nature and, “not specified by role prescriptions but which facilitate the accomplishment of organizational goals” (p. 338). As examples of behaviors that go beyond the established framework of an individual’s role, Katz and Kahn discuss the importance of cooperative interrelations amongst coworkers, employee willingness to protect the organization against peril and to promote a good reputation of it in the community, employee offering of constructive suggestions for improvement of the organization and finally, employee initiative to increase his/her education and skills, so that he/she can be a better worker. Katz and Kahn emphasize that if employees take on a perfunctory role and operate solely within the framework of their job description, the organization be a very “fragile social system” (p. 338), and hence will not have the resources necessary in their workforce to be stable and effective. Kickul and Lester (2001) support that, “companies must find creative and innovative ways to increase levels of efficiency, lower costs, and improve processes throughout the entire
organization” (p. 191-192), and one means of meeting these goals is through having a core of employees who consistently perform organizational citizenship behaviors. Thus, OCBs play an integral role in optimal organizational functioning.

Although the investigation of the antecedents of OCBs has yielded a plethora of research, there have been rather equivocal findings regarding the strengths of various predictors and causal antecedents. As seen in Table 1, a variety of constructs have been explored in relation to prediction of OCBs. The overall objective of this paper is to examine perceptions of equity and affective orientation as causal explanations of OCBs. I have chosen to focus on the contribution of the aforementioned equity and affect orientation because the majority of studies implicate these two causes, thereby suggesting their importance in understanding and predicting OCBs (see Table 1).

**Organizational Citizenship Behaviors**

Organ (1988a) describes five types of OCBs that uniquely contribute to increasing organizational effectiveness, namely, altruism, conscientiousness, sportsmanship, courtesy and civic virtue. In the organizational setting, altruistic behaviors are those performed with the intent of assisting another employee with work-related assignments or problems. Simply, Organ (1988a) calls them “helping” behaviors (p. 8). Their spontaneity leads to efficiency in organizations through eliminating the frustration engendered in, and time and productivity wasted by, an employee attempting to solve the problem using traditional means (e.g., wading through reference manuals for answers, relaying the concern to the supervisor). Organ (1988a) describes another type of helping behavior that extends from the organization towards outsiders and includes spontaneous acts of kindness towards customers, suppliers, or the community. Such acts might lead to a more congenial relationship with such parties, and hence, more profits
for the organization. As stated, Organ (1988a) uses the term altruism to refer to a general class of helping behaviors, but altruism may have a very different meaning from simple prosocial behaviors. Since it is prosocial behaviors and not altruism itself that is the interest of this paper, I will use the term altruism when referring to Organ’s work, but my interest is not in altruism, but in prosocial or helping behaviors.

The second type of OCB that Organ (1988a) discusses is conscientiousness and it represents the degree to which employees perform their in-role assignments at levels above and beyond what is stipulated as the minimum expectation of their jobs. Examples of behavioral domains that reflect conscientiousness include, work attendance and punctuality, conservation of resources, and prescribing to the organizational policies and rules.

Sportsmanship, or more correctly, sports-personship, is an employee’s proclivity to refrain from complaining or arguing about issues related to work, or some grievance experienced at work. Organ (1988a) maintains that this results in organization effectiveness through enabling employees to have more vigor in dealing with their personal matters, and hence allowing supervisors (those who usually hear employees’ grievances) to re-allocate the time that would have been spent dealing with an employees’ concern, to other organizational concerns.

 Courtesy includes those actions like, “‘touching base’ with those parties whose work would be affected by one’s decisions or commitments. Advance notice, reminders, passing along information, consultation, briefing, all suggest the intrinsic quality of Courtesy’” (p. 12). Organ (1988a) draws a clear distinction between altruism and courtesy in that altruism is for situations where a problem already exists, and courtesy represents forethought to aid in preventing a future problem. Thus, if employees have insight into possible effects of certain actions and plan for contingencies, efficiency can be bolstered.
Civic virtue revolves around employee interest and involvement in issues pertinent to the organization. Examples of employee civic virtue behaviors include, “attending meetings, reading the intramural mail, discussing issues on personal time, voting…and ‘speaking up’” (p. 13). Yet, because such behaviors remove employees from solely focusing on their day-to-day work, there is a short term loss of organizational efficiency (Organ, 1988a). However, in the long run, civic virtue increases efficiency through the effects that it has on employee regard for the organization as a whole. Through getting employees well-informed in the overall life of the organization and having them participate in organizational relevant activities, employees will likely feel more attached to and valued by the organization, and their increased knowledge may allow them to make more informed future decisions.

**OCBs versus Contextual Performance**

As traditionally defined, the OCB construct is dependent upon the ability to distinguish between in-role and extra-role behaviors. However, the boundary between OCBs from job requirements is vague at best, and instead, is a matter of subjective interpretation. For example, how would an employee view attendance at a company picnic? Is attendance at the picnic truly a voluntary extra-role behavior or is attendance in-role behavior because the employee knows that his/her supervisor expects all subordinates to attend? Further, this conceptualization may vary not only between employees and their supervisors, but also within the domain of different jobs, departments, and companies. Brief and Motowildo (1986) suggest that prosocial organizational behaviors include both in-role and extra-role behaviors and as an example of the former, the researchers cite employees in the health field, and retail sales associates, whose formal job specifications require them to be cooperative and helpful to others. However, again, this notion may not be shared by all employees in these fields.
The construct of contextual performance avoids the aforementioned vagary of OCBs; there is not a distinction between in-role and out of role behaviors. Instead, contextual performance represents a facet of one’s overall contribution to the organization, or a portion of one’s overall job performance (Motowildo, Borman, & Schmidt, 1997). Such behaviors, Motowildo et al. suggest, combine to form an aggregate which, “represents the net worth of that individual’s behavior to the organization,” (p. 74), or the overall utility of that individual’s behavior to the accomplishment of organizational goals. The researchers assert that from this perspective, job performance becomes unidimensional because it is based on the ‘aggregate contribution value’ (p. 75) of each employee. However, Motowildo et al. argue that an employee’s overall behavioral repertoire at work consists of a myriad of behaviors that need clarification. They draw a distinction between behaviors that represent task performance and contextual performance. Concerning the former are behaviors that, “consists of activities that transform raw materials into the goods and services that are the organization’s products.” (p. 75). On the other hand, contextual performance represents behaviors that do not, “contribute through the organization’s core technical processes but…maintain the broader organizational, social, and psychological environment in which the technical core must function,” (p. 75) and this is the basis for their contribution to the organization. As examples of contextual performance behaviors, Motowildo et al. suggest:

activities such as helping and cooperating with others; following organizational rules and procedures even when personally inconvenient; endorsing, supporting, and defending organizational objectives; persisting with extra enthusiasm when necessary to complete own tasks successfully; and volunteering to carry out task activities that are not normally part of the job. (p. 76)
This description of contextual performance behaviors shares many characteristics in common with the components of OCBs described by Organ (1988a) above. However, Motowildo (2000) stresses that although there may be similarities in behavioral manifestations of both terms, there are important distinctions that verify having separate labels for them.

Motowildo states that the distinction is rooted first in that they arose to answer different questions. Motowildo states that:

the term OCB emerged as an answer first to the question: How does job satisfaction affect individual behavior in ways that are important for organizational effectiveness?

Then, to the question: What do managers want their subordinates to do but cannot require them to do? (p. 117)

Motowildo contrasted this with contextual performance, which he stated was the answer to the question, “What part of the performance domain is being relatively neglected by selection practice? …How is that part different from the part that selection research and practice does tend to focus on” (p. 117)? As argued by Motowildo et al. (1997), contextual performance is included within the job performance domain, whereas OCBs are not. This inclusion of contextual performance as part of an employee’s job performance is beneficial empirically, as it avoids the aforementioned issues of deciphering between in-role and extra-role performance. When an employee’s job performance is viewed as his/her overall contribution to the organization, contextual performance merely represents one means for the employee to contribute to accomplishment of organizational objectives.

In looking at how contextual performance is defined, as an aggregate of behavior, it is evident that another important distinction between contextual performance and OCBs arises due to how the dimensionality of both terms is theoretically conceptualized. Research by LePine,
Erez, and Johnson (2002) above, found evidence supporting the conceptualization of OCBs with a latent construct model, where each dimension shares common variance with other dimensions that represents the construct, and thus each dimension is an imperfect indicator of the overarching construct. However, Motowildo (2000) argues that contextual performance is best represented by an aggregate construct model where, “contextual performance is the algebraic sum of the contribution values of behavioral episodes representing all the dimensions that are a part of contextual performance” (p. 122). Thus, although both constructs share the same underlying theme, it is appropriate to distinguish between them.

In another vein, LePine et al. (2002) argue that the critical theoretical distinction between contextual performance and OCBs is based on whether or not the behavior is formally rewarded. The researchers insist that since OCBs are discretionary in nature, they are not performed with expectation of compensation, while acts of contextual performance tend to fall within the domain of overall work performance, and hence are compensated work activities. However, this emphasis on compensation is logically indefensible. As discussed above, the manner in which an employee and the organization view OCBs has implications for whether the helping behaviors are considered in-role, and hence compensated. OCBs may be rewarded through a variety of means: better hours, a nicer office, a raise, stock options, extra vacation days, etc. It cannot be argued that OCBs are not rewarded, and thus, this should not serve as the basis for differentiating between them and contextual performance.

Despite similarities and distinctions between contextual performance and OCBs that are evident in the literature, it is not my objective to draw a line of disparity between these two constructs. In fact, I very well could have made contextual performance the focal dependent variable in my study, but I chose OCBs as a matter of preference. As supported by Motowildo
(2000), the key overlapping variable between contextual performance and OCBs is that both can be subsumed under the label of helping behaviors that are performed by employees towards others. Viewing both contextual performance and OCBs as specific forms of overarching helping or prosocial behaviors, justifies extending the results of research on predictors of helping behaviors to both constructs. My focus in this paper is not on the distinction between OCBs and contextual performance, but on causes of helping behaviors that benefit organizational functioning; a criterion that underlies both OCBs and contextual performance.

**Antecedents of Organizational Citizenship Behaviors**

Numerous studies have implicated job satisfaction as a direct antecedent of OCBs (e.g., Bateman & Organ, 1983; Smith, Organ & Near, 1983; Williams & Anderson, 1991). However, the presumption made by most researchers is that the causes of OCBs stem from two causal antecedents (e.g., George, 1991; Schnake, Cochhran & Dumler, 1995) whose effects have been measured indirectly through job satisfaction attitude measures. One causal antecedent is based on the effects of trait affectivity, whereas the second causal antecedent is based on equity theory. From either the trait affectivity model or the equity model, job satisfaction is considered an outcome variable, like OCBs, not a causal antecedent of OCBs. There may well be a reciprocal causal relationship between job satisfaction and OCBs, but that issue is beyond the scope of the current study.

**Affect Orientation**

Clark and Isen (1982) argue that affective states, whether positive or negative in nature, “are important determinants of people’s impressions of their world and of their behavior” (p.78). In general, people in positive feeling states tend to view the world more positively, or have an
improved social outlook and they act so as to reflect this (Brief & Motowildo, 1986; Carlson, Charlin, & Miller, 1988). They also strive to maintain their positive affect (Clark & Isen, 1982), a process generally known as mood maintenance. Further, positive affective states lead people to perform prosocial gestures (Clark & Isen, 1982; Carlson, Charlin, & Miller, 1988). Prosocial gestures are performed with the intent of helping or benefiting another person (Brief & Motowildo, 1986). Brief and Motowildo (1986) used the term prosocial organizational behaviors to reflect behaviors that workers perform towards other employees or the organization with the intent of benefiting them and are, “vital for organizational survival, yet difficult or impossible to prescribe as part of an individual’s formal job and role requirements” (p. 710). Given the similarity between the definitions of OCBs and prosocial behaviors, it follows that the affect explanation of prosocial behaviors extends to the explanation of OCBs, suggesting that people who experience positive affect at work would perform OCBs. Carlson et al. (1988) suggested that positive mood states prime people to perform prosocial behaviors:

people store material in memory in part on the basis of its affective tone. Consequently, a good mood state is hypothesized to function as a cue that temporarily increases the likelihood that positive cognitions will be generated in response to a subsequent stimulus. (p. 211)

Carlson et al. used meta-analytic techniques on 34 studies to investigate six hypotheses concerning the relationship between positive mood and prosocial behavior. These six hypothesis were termed, focus of attention, objective self-awareness, separate processes, social outlook, mood maintenance, and concomitance.

Carlson et al.(1988) found support for the focus of attention hypothesis, which suggests that when people focus on being the recipient of good fortune, they are more likely to perform
prosocial behaviors when they think about others’ being the beneficiary of good fortune (Carlson et al., 1988). Potential explanations suggested by the researchers included, social comparison and a need to restore equity with the comparison other, and the notion of priming, in which experiencing good fortune primes people with pleasant cognitions that serve to encourage helping.

Carlson et al. (1988) also found support for the separate processes hypothesis, which is based on the notion that there are separate centers in the brain for both reward and punishment, and that in regards to helpfulness, there are thus separate and mutually inhibitory encouragers; either being in a good or bad mood. In addition, the social outlook hypothesis was supported which, as alluded to above by Clark and Isen (1982), suggests that a positive event increases the likelihood of one being prosocial if the act of being prosocial leads one to cognitively perceive the world in more positive light (Carlson et al., 1988).

Results of Carlson et al. also supported the mood maintenance hypothesis, which postulates that those experiencing a positive mood will seek to do acts that prolong their positive mood state, like helping behaviors. The researchers also found that a moderate level of positive affectivity was essential for performing prosocial acts. Support of the mood maintenance hypothesis challenges the aforementioned concomitance hypothesis, which does not emphasize positive affect or mood maintenance as the encourager of helping (Carlson et al., 1988). The concomitance hypothesis suggests that, “increased benevolence is a psychological by-product of other effects of good mood (such as increased liking for others, priming processes, or a feeling of emotional advantage that should be shared equitably with others)” (p. 214). Thus, in this meta-analysis, this hypothesis received partial support because although mood was indeed an
important factor, evidence was also found for the importance of the social outlook and focus of attention hypotheses (Carlson et al., 1988).

Meanwhile, support was not found for the **objective self-awareness hypothesis**, which, is based on the notion that when one sees oneself as the entity of attention, one strives to match certain ideals, (like being helpful), in order to avoid the negative affect associated with falling short of an ideal comparison.

Overall, Carlson et al. (1988) concluded that pleasant mood states lead to a heightened need for positive reinforcement. Self focus may be enhanced by either objective self awareness, or by focusing on receiving something good, and this may encourage helpfulness in an attempt to obtain positive reinforcement (Carlson et al., 1988). In contrast, if a helping task itself is envisioned as a positively reinforcing act, one’s realization of this and the cognitive consequences, like improved social outlook, play an important role in encouraging prosocial behavior. Carlson et al. emphasized the absence of negative factors (like guilt or envy) as an essential element for maximizing the likelihood of prosocial behavior, because negative factors disrupt the motivational processes for prosocial acts.

The trait affectivity model readily explains the relationship between job satisfaction and OCBs. Organ (1988b) stressed that job satisfaction measures are “based on the techniques of attitude scale construction” (p. 550), which includes items or scales that measure affect toward the target. Thus, it follows that trait affectivity is a common cause of both job satisfaction and OCBs. The problem in the OCB literature is that job satisfaction measures are used more frequently than direct assessments of trait affectivity (See Table 1) to predict behavior. However, job satisfaction measures are only proxy measures for affect orientation, and measurement confounds in job satisfaction measures (e.g., cognitive or belief components of the
attitude measure) may separately influence the relationship between job satisfaction and OCBs. One goal of this research project is to directly assess the contribution of affect orientation in determining OCBs by directly measuring affect orientation.

As argued by Weiss, (2002), an attitude and affect should not be thought of as identical constructs. An attitude, like job satisfaction, is “an evaluation or evaluative judgment made with regard to an attitudinal object, and evaluation is not synonymous with affect” (p. 175). Thus, job satisfaction is not purely affect, but is a global evaluation of an object made from beliefs and affect about that object. Weiss further contends that the causes of global attitudes about an object (or evaluative judgments about the object) may be different from the causes of affect and the causes of beliefs about the object, so they should not be treated as the same, but should be investigated separately. Weiss emphasizes that beliefs and affect about an object contribute separately to the global evaluation of the object (hence, need not be the same) and also have different implications for behaviors that result from the evaluation. Weiss maintains that when we look at a behavioral performance measure (i.e., OCBs), we need to examine the different implications of the evaluation (the attitude), the beliefs, and affect in regards to behavior.

Research by Schleicher, Greguras, and Watt, (2004), operated within this theoretical framework and showed through 2 studies that Affect Cognitive Consistency (in regards to Job satisfaction) moderated the relationship between Job Satisfaction and performance. Participants completed both the Overall Job satisfaction Scale (OJS) and the Minnesota Satisfaction Questionnaire (MSQ), which the researchers chose as being more affectively and cognitively oriented, respectively. Higher consistency between affect and cognition led to a significantly greater relationship between these combined satisfaction measures and performance. Thus, the results from Schleicher et al. parallel Weiss’s contention that when measuring satisfaction, we must
realize that it is a global attitude that consists of an affective and belief component which much both be measured, because individuals may fall at different places on the continuum of each. Thus, both the affect and the beliefs about the object of interest may be in different directions, and Schleicher et al. suggest that it is the consistency between these attitude components that best affects the relationship between the attitude and the behavior.

In the current study, while I realize that participants may have different feelings and beliefs about the equity manipulation (thus differentially affecting their evaluative attitude towards it) I am not measuring either of these at the time of the equity manipulation. While I understand the importance of determining the influence of each attitude component, the design of the experiment prohibits this examination (i.e., any questionnaire would cue the participants that I am interested in studying their reaction to the equity manipulation).

It is important to emphasize that I am focusing on positive mood as a trait, not as a state, as an important determinant of OCBs. As can be seen in Table 1, this position is supported by a variety of research that has explored the relationship between trait positive affectivity and OCBs. However, there is not complete consensus that research should focus on trait affectivity as opposed to state affectivity. George (1991) found that positive mood state accounted for unique variance in both altruism and customer service above that explained by fairness cognitions. Further, in their conceptual discussion of the relationship between positive mood and spontaneous organizational behaviors, (which includes aspects of prosocial and organizational citizenship behaviors) George and Brief (1992) argue that, “positive mood at work is a direct antecedent of organizational spontaneity” (p. 314) and in their model, it is mood state that holds primary importance, not the trait. However, in discussing *causes* of positive mood state at work, the researchers argue that positive affectivity, “is an enduring personality trait that predisposes
people to experience positive emotions and moods as well as to have a positive outlook and orientation” (p. 318). Thus, trait affectivity is the underlying stable mechanism behind the behavioral manifestation of prosocial behaviors and for the purposes of this paper, I have chosen to focus on trait affectivity as opposed to state affectivity.

In characterizing a person’s affective orientation, “two dominant dimensions consistently emerge in studies of affective structure” (Watson, Clark, & Tellegen, 1988, p. 1063) and these dimensions have commonly been termed positive and negative affect. As Watson, Clark, and Tellegen (1988) suggest:

although the terms Positive Affect and Negative Affect might suggest that these two mood factors are opposites (that is, strongly negatively correlated), they have in fact emerged as highly distinctive dimensions that can be meaningfully represented as orthogonal dimensions in factor analytic studies of affect. (p. 1063)

Thus, it is not the case that a person must be either/or in regards to positive or negative affect, but in fact, can be represented on both dimensions. High positive affectivity is characterized by descriptors like enthusiasm, lots of energy, and excitement; where as low positive affectivity is represented by descriptors like sadness and sluggishness. Meanwhile, high negative affectivity is represented by distress, displeasure, and nervousness; whereas low negative affectivity is represented by calmness (Watson et al., 1988). Thus, it is a person’s relative standing on both dimensions that affects their likelihood of performing prosocial behaviors. Given the above discussion, it appears that those who are characterized as high on positive affectivity and low on negative affectivity are most likely to perform prosocial tasks and those low on positive affectivity and high on negative affectivity least likely to perform prosocial tasks.
Mood restoration. A review of the relative effectiveness of 250 mood induction procedure (MIP) studies by Gerrards-Hesse, Spies, and Hesse, (1994), found in the laboratory, “the Film/Story and Gift MIPs to be the most effective in inducing an elated mood state” (p. 67). For the purposes of this study, I am interested in the effects of elated mood induction caused by a film. As suggested by Gerrards-Hesse et al., the underlying assumption for mood induction by a film is that the person’s mood will be automatically changed in regards to the “emotional quality of the film one sees” (p. 57). Thus, if it is desirable to put a person in a good mood, it would be beneficial to show them a comical film. As discussed above, people strive to maintain a positive mood (Clark & Isen, 1982; Carlson et al., 1988). Therefore, it follows that if a positively affective oriented person is put in a negative mood, they will seek to restore their positive mood. One way of doing this, and becoming elated, is through watching films that leads to elation. Thus, when a positively affective oriented person is put in a negative mood, he/she will seek to restore his/her positive mood by watching an elation-inducing film over performing a prosocial behavior.

Equity Theory

As mentioned earlier, the second theoretical approach to OCBs is based on social comparison processes (Moorman, 1993; Organ & Konovsky, 1989; Williams & Anderson, 1991). Specifically, social comparisons in regards to equitable treatment by the organization (Organ, 1988b) which are reflected in an employee’s job satisfaction.

In the workplace setting, exchange relationships are commonplace between the employee and the organization which provides ample opportunities for feelings of inequity to arise. Adams (1965) states that, “a distinguishing characteristic of exchange processes is that their resultants have the potentiality of being perceived as just or unjust” (p. 268).
As argued by Huseman, Hatfield, and Miles (1987), equity theory can be condensed into four premises. First, people compare their ratio of outcomes/inputs with the ratio of outcomes/inputs of a comparison other, which can either be one’s internal standards or another party. Second, if this comparison process yields unequal ratios of outcomes/inputs, then inequity is experienced. Naturally, “the magnitude of the inequity experienced will be a monotonically increasing function of the size of the discrepancy between the ratios of outcomes to inputs” (Adams, 1965, p. 281). Perception of inequity results in feelings of dissatisfaction with the exchange (Adams, 1965), leading to lower job satisfaction. Third, feelings of distress arise from inequity, with the amount of distress also monotonically increasing with the amount of inequity (whether from underreward or overreward) (Huseman et. al, 1987). Fourth, this distress will result in tension which the person will be motivated to eliminate. The greater the distress and the resulting tension, the greater the person’s motivation to reduce it. This leads to behaviors geared at equity restoration (Adams, 1965; Huseman et al., 1987). Examples include, “altering or cognitively distorting inputs or outcomes, acting on or changing the comparison other, or terminating the relationship” (Huseman et. al, 1987, p. 222).

As his/ her inputs to the relationship with the organization, the employee contributes such things as his/her, “education, intelligence, experience, training, skill, seniority, age, sex, ethnic background, social status, and, of course the effort he expends on the job” (Adams, 1965, pp. 276-277). The employee has expectations for receiving outcomes from the exchange relationship which include, “pay, rewards intrinsic to the job, satisfying supervision, seniority benefits, fringe benefits, job status and status symbols, and a variety of formally and informally sanctioned perquisites” (p. 278).
In an organizational setting, both the employee and the organization must acknowledge the existence of and appraise the value and utility of, both the inputs and outcomes to the exchange in question. In regards to the terms of a fair exchange, Blau (1964) states that, “common norms develop in societies that stipulate fair rates of exchange between social benefits and the returns individuals deserve for the investments made to produce these benefits” (p. 155). Further, these norms are a function of the social group that a person is embedded in, so that the person looks to others to compare investments and rewards. Thus, employees at the same company, within the same department, with the same job title, would comprise a social group of similar individuals, who would likely compare ratios of outcomes to inputs within their group (Blau, 1964).

As was stated earlier, depending on the nature of the discrepancy in the ratio, an individual may decide to either increase or decrease his/her inputs, and which inputs to change (Adams, 1965). In reality, however, not all inputs are equally susceptible to being altered. As Leventhal (1976) maintains, a person, “usually chooses from among a limited set of response options although none of these alternatives may be completely satisfactory from the standpoint of maintaining fairness” (p. 226). The person must take into account the potential costs and risks of changing their inputs as well as the degree of control that they have over doing so. For example, increasing quantity or quality of input is directly based on the employee’s skills and ability. Thus, altering these inputs may not be under the employees’ direct control. In a similar vein, if an employee wants to reduce his/her inputs, he/she may not want to overtly be less productive in terms of quantity or quality, because these actions might result in that employee’s demotion, lay-off, or other penalty (Schnake et al., 1995).
Overall, social comparison processes regarding an employee’s perception of equitable treatment by the organization will have an impact on the employee’s satisfaction with his/her job, and thus, proclivity towards engaging in OCBs. The second goal of this research project is to assess equity explanation of OCBs.

_Equity sensitivity._ Although equity theory is a nomothetic theory, people are differentially sensitive to equity situations, or what Huseman, Hatfield, and Miles (1985, 1987) call equity sensitivity. Huseman et al. (1987), suggest that, “individuals react in consistent but individually different ways to both perceived equity and inequity because they have different preferences for (i.e., are differentially sensitive to) equity” (p. 223). The researchers argue that equity sensitivity is best represented as a continuum marked by three classes of people: Benevolents, Equity Sensitives and Entitleds. Benevolents, or the givers, prefer their ratio of outcomes/inputs to be less than the ratio of outcome/inputs of whomever they compare their ratio with, whether it is an internal standard or another party. Entitleds, or the takers, desire their ratio of outcome/inputs to surpass the ratio of outcome/inputs of whomever they compare with. Equity Sensitives desire that their outcome/input ratio equal the ratio of their comparison party. (Huseman et al., 1985, 1987). Huseman et al., (1987) conducted a field study to explore the validity of the equity sensitivity construct. Results supported the existence of three classes of people with respect to equity sensitivity. Equity sensitive individuals tended to conform to the standard predictions of Equity Theory through showing the highest job satisfaction when they were equitably rewarded. The Benevolents and Entitleds however, did not conform to traditional Equity Theory predictions. Rather the behaviors of Benevolents and Entitleds were more consistent with expectancy theory predictions. Both of these classes of people displayed positive, linear relationships between level of reward and job satisfaction. The researchers argued that, “equity
sensitivity seems to be the clarifying perspective which resolves the conflict between equity and expectancy theories” (p. 1062), because this individual difference variable allows there to be differential perceptions of and reactions to, inequity.

The construct of Equity Sensitivity proposed by Huseman et al., (1985, 1987) has numerous implications for the relationship between employees and the organization. Equity sensitivity affects how a person perceives ‘ambiguous job elements’ with respect to whether or not they fall into the categories of inputs or outcomes. Therefore, this affects how an employee evaluates ratios of both his/her and another’s outcomes/inputs (Huseman et al., 1987). Also, because equity sensitivity is, “an individual difference variable…[it] is proposed to moderate relationships between an individual’s perceptions of equity and organizational outcomes such as job satisfaction, quantity and quality of work, absenteeism, and turnover” (p. 231). This argument also extends to organizational citizenship behaviors. Theoretically, then, equity sensitivity will moderate the equity theory explanation of OCBs in that entitleds will be the least likely to emit OCBs, and benevolents will be the most likely to emit OCBs.

Kickul and Lester (2001) investigated the moderating capacity of equity sensitivity for how employees reacted to psychological contract breach of intrinsic and extrinsic outcomes, in regards to their negative affect towards the organization, job satisfaction, and four types of organizational citizenship behaviors, namely, interpersonal helping, individual initiative, personal industry, and loyal boosterism. Kickul and Lester drew on an existing body of research to define a psychological contract as being an employee’s perception of what the organization will provide for the employee’s services. As with equity theory, a perception is made of what outcomes should come from which inputs, and a breach occurs when, “the employee believes that he/she has been treated unfairly” or denied expected outcomes (p. 192).
In their study, intrinsic outcome promises included outcome aspects of the job itself, namely, autonomy & control, and growth & development, while extrinsic outcome promises related to actually doing the job, including organizational rewards, and organizational benefits (Kickul & Lester, 2001). The researchers found support for the moderating role of equity sensitivity. For both the two extrinsic and two intrinsic outcome dimensions of the psychological contract breach, equity sensitivity moderated employee negative affect towards the organization, and also moderated the relationship between both the intrinsic outcome dimensions of psychological contract breach, with job satisfaction. Finally, Equity sensitivity also moderated the relationship between the intrinsic outcome dimension of autonomy and control and the OCB types of personal industry and loyal boosterism.

Further analyses between benevolents and the entitleds revealed differences in their responses to high and low amounts of psychological contract breach of extrinsic and intrinsic outcome promises. Overall, entitled individuals appeared to react more negatively when there were breaches of extrinsic outcomes, like organizational rewards and benefits, while benevolents reacted more when there were breaches of intrinsic outcomes like autonomy and control.

*Equity and Affectivity*

Moorman (1993) tested the equity explanation versus the affective state explanation of OCBs by comparing the extent to which cognitive versus affective measures of job satisfaction was differentially related to OCBs. The Minnesota Satisfaction Questionnaire (MSQ) was used as the cognitively-based measure of job satisfaction, and the Brayfield-Rothe Job Satisfaction Scale was used as the affective measure of job satisfaction. Moorman found that the dimension of the MSQ most directly related to cognitive perceptions of equity (i.e., MSQ-Extrinsic) was more strongly related to OCBs than the affective-oriented Brayfield-Rothe scale. Furthermore,
the MSQ-Extrinsic dimension contributed unique variance to the prediction of OCBs beyond the Brayfield-Rothe scale, but Brayfield-Rothe scale did not contribute unique variance beyond the MSQ-Extrinsic scale. Moorman (1993) concluded that his results showed greater support for the equity explanation of OCBs than the affective state explanation.

Organ and Konovsky (1989) also investigated the influence of affective versus cognitive components of job satisfaction on predicting OCB. Employees reported their overall state of affect at work during the previous six months through the PANAS and their cognitive appraisals of their job. It is important to note that affectivity was actually measured here, as opposed to just using a job satisfaction measure as a proxy for affectivity at work. The researchers measured OCB with two dimensions, namely altruism and compliance. Results showed that cognitive appraisal of work provided unique variance in the altruism and compliance measures of OCB, and that affect scales were not linked with either OCB factor when cognitions were controlled for. Also, it was pay cognitions, not cognitions about the job itself that accounted for the strength of the cognitive measure. Results that the cognitive component of satisfaction was more predictive than the affective component again supports the hypotheses that OCBs reflect voluntary choices and that OCBs are not just the behavioral expression of emotion expression. The fact that pay cognitions were most important might suggest that employees decide to engage in OCB as a type of social exchange with the organization possibly due to perceptions of equity and trust (from good pay).

Williams and Anderson (1991) extended the research by splitting OCBs into two dimensions; behaviors that benefit specific individuals (OCBI) and behaviors which benefit the organization as a whole (OCBO). Employees were given a questionnaire that measured their affective and cognitive dimensions of job satisfaction. Regression results showed that the amount
of variance accounted for in both OCBO and OCBI was significant for the cognitive components of job satisfaction. When the affective job satisfaction scales were entered into the equation, there was no change in the incremental variance for the two OCB scales. Further, intrinsic job cognitions accounted for significant variance in OCBI, but extrinsic job cognitions accounted for significant variance in OCBO. These results did not change when the affective variables were added.

Organ and Ryan (1995) conducted a meta-analysis of 55 studies to elucidate the relationship between attitudinal variables, namely job satisfaction, commitment, perceptions of fairness, and leader supportiveness, as well as that of dispositional variables, namely, conscientiousness, agreeableness, and positive and negative affectivity, on the display of OCBs. Further, tenure and gender were investigated for potential moderating effects on the aforementioned variables as well as self report versus other report measures of the OCB criterion. Articles were selected from a literature review of four major journals based on the criterion that OCB was measured in an aggregate way and that the attitudinal and dispositional variables were also measured globally. The majority of the studies analyzed for the meta-analysis used the two factor approach to measuring OCB, namely Altruism and Compliance, so that was done here as well. Global measures of satisfaction, fairness, and commitment were used, however, separate analysis was conducted for affective and continuance commitment as well.

In regards to the Altruism and Compliance factors of OCB, the attitudes of satisfaction, fairness, commitment and leader supportiveness all displayed similar relationships with OCB. Since both fairness and satisfaction were shown here to contribute uniquely to both OCB dimensions, with no evidence of either being a mediator, it may be true that both attitudes have significant effects and that both need to be separately measured.
In terms of dispositions, including positive and negative affectivity, the effects were not nearly as strong as with satisfaction or with any of the other attitudes, except for the disposition of conscientiousness, which predicted compliance almost as well as the aforementioned attitudinal measures. In terms of moderators, using self reports as opposed to other ratings of OCB displayed the greatest effects, as opposed to tenure and gender, especially with satisfaction.

It is interesting that when fairness and affect were measured separately from job satisfaction, fairness had a stronger effect than affect, casting further doubt on the results of OCB studies that use job satisfaction as measures of affect orientation. Konovsky and Organ (1996), investigated whether the relationship between dispositions and work attitudes, and the relationship between dispositions and OCB could account for the link of work attitudes to OCB, which would render this link spurious as considered by Organ and Lingl (1995). Subjects were 402 hospital employees from multiple departments, in south central U.S. Each employee completed survey measures of dispositional factors of agreeableness and conscientiousness, as well as measures of the job attitudes of equity and a combined supervisor satisfaction/fairness. In this study, the measure of employees’ satisfaction/fairness with their supervisor represented employees’ global measure of satisfaction with their job and organizational fairness, due to the belief that one’s perception of fairness and satisfaction with supervisor accounts for a great deal of global satisfaction. Supervisors provided ratings of employee’s display of the five dimensions of OCB, namely altruism, general compliance, courtesy, civic virtue, and sportsmanship. Results of hierarchical regression showed that the fairness/satisfaction variable was able to account for significant variance in OCB above and beyond dispositions. This is consistent with the above argument that job satisfaction may partially reflect an employee’s satisfaction with the degree of equity in his/her relationship with the organization (Adams, 1965). While the fairness/
satisfaction attitude showed significant relationships with each of the five dimensions of OCB, it was the dispositions, especially Conscientiousness, which yielded variance in the General Compliance factor of OCB beyond that of attitudes. Conscientiousness was shown to be significantly correlated with the fairness/satisfaction attitude measure, providing insight that the relationship between fairness/satisfaction and general compliance might be spurious since conscientiousness is correlated with general compliance and fairness/satisfaction. This is similar to the finding of Organ and Lingl (1995) above.

The inclusion of the above research is not to set the stage for a discussion on which theory of OCBs is stronger. While the above studies suggest that perceptions of equity have a stronger influence on OCBs than do affective states, it is not my objective to determine or argue which theory is superior. Instead, the above research was included to provide an overview of the empirical support from field studies for affect theory and equity theory, in regards to explaining OCBs, and then use this as a spring board into a discussion about why experimental research is needed in this area.

There are enough methodological concerns about previous research that prevents firm conclusions about the strength of the trait affectivity and equity explanations. For example, the majority of studies on OCBs have made use of multiple self-reported measures, which raises concerns about common method bias (e.g., Schnake et al., 1995; Williams & Anderson, 1991; Konovsky & Organ, 1996). Another concern is that the measurement of OCBs is typically obtained from supervisors which raises issues about the degree of awareness that each supervisor has of employees’ citizenship behaviors (e.g., Organ & Konovsky, 1989; Smith, et al., 1983; Williams & Anderson, 1991; Moorman, 1993; Schnake, et al., 1995; Konovsky & Organ, 1996). Further, to the extent that certain employees may purposefully strive to enhance their display of
OCBs in their supervisor’s presence, this may render spurious any relationship found between the investigated antecedent and employee display of OCB (Organ & Konovsky, 1989; Konovsky & Organ, 1996). As such, there may not be a distinction between in-role and extra-role behaviors, with organizational citizenship behaviors overlapping with in-role behaviors and hence not being accurately measured (Wagner & Rush, 2000). Also, many of these studies have been based on employees working within the health sector, who, by their nature, might be more helpful than the average worker and hence not a representative sample (Organ & Konovsky, 1989; Wagner & Rush 2000). The underlying prosocial nature of health-sector employees could potentially confound the relationship between the investigated antecedents and these employees’ display of OCBs. Therefore, a primary interest of the current study is to overcome such methodological barriers present in the literature, in order to more cleanly investigate whether a strong trait affectivity explanation of OCBs can be produced.

As with research on any construct, concerns with operationalization and methodology posit limitations on the interpretation of the research. Yet another issue arises due to how OCBs are conceptualized and measured, in regards to their dimensionality. As with the aforementioned confines set by inadequacies in methodology, portrayal of OCBs as either a unidimensional or multidimensional construct has differential implications for theory and interpretation of research.

*The Dimensionality of OCBs*

When investigating the relationship between various predictors and OCBs, the question arises whether it is more appropriate to treat OCBs as an overarching global entity or to partition it into dimensions reflecting those proposed by Organ (1988a). A researcher must consider whether the construct of OCBs should be envisioned, defined, and operationalized as an all-inclusive construct, like personality, or divided into its constituent dimensions, as personality can...
be subdivided into the dimensions of extraversion, agreeableness, conscientiousness, openness to experience, and neuroticism. This conceptualization of the construct of OCBs has important implications for theory and also for the interpretation of results. For example, will a predictor of OCBs equivalently relate to each dimension of OCBs, or just to the inclusive construct?

LePine, Erez, and Johnson (2002) argue that, “construct validity…requires a definition that clearly specifies what a measure of it should and should not reflect and, thus, should also convey information about its dimensionality” (p. 54). The researchers also emphasize that the proposed model of how the dimensions of OCBs relate to one another and to OCBs as a global construct has very important implications for the results of measuring these dimensions.

LePine et al. (2002), describe two models of envisioning and measuring OCBs; either as a “latent” model or as an “aggregate” model (p. 54). The authors suggest that, “if OCB conformed to a “latent” model, each dimension would be a manifestation of OCB, and measures of the dimensions would include some variance reflecting OCB, other systematic variance not related to OCB, and error variance” (p. 54). Here, the model specifies OCBs as the overarching construct that causes the behaviors evidenced in the dimensions. In regards to an aggregate model, LePine et al. suggest that, “OCB would be formed as a mathematical function of the dimensions. …each of the dimensions would be part of the OCB construct. OCB would exist to the extent that systematic variance from each dimension (common as well as specific) would be captured and added (or perhaps multiplied) together” (p. 54). The difference here, as compared with the latent model, is that the dimensions are combined together to represent a person’s standing on the overall construct. In their meta-analysis, the researchers sought to determine which model best represented OCBs.
LePine, et al. (2002) examined the OCB literature and used techniques of meta analysis to assess the degree to which OCBs could be represented by either of the aforementioned models, and also to investigate the relationships amongst its dimensions, as well as amongst its dimensions and predictors. While a variety of taxonomies have been proposed that describe and provide labels for behaviors similar to, or overlapping with OCBs have been proposed, the researchers only included studies in their meta analysis that implicated the five dimension framework of OCBs outlined by Organ (1988a) and described above. This was done due to the theoretical and empirical support that Organ (1988a) framework has received, as well as its decisive operationalization, and also because, “it is highly difficult to confidently map behavioral elements from another framework onto Organ’s five dimensions” (p. 56).

LePine, et al. (2002) found that, except for sportsmanship, the dimensions were highly correlated with one another and that they had modest relationships with satisfaction, commitment, fairness, leader support and conscientiousness. Thus, despite the fact that OCB dimensions have received a lot of attention, LePine et al. argue that empirically, the dimensions aren’t reasonably distinguishable, share similar relationships with commonly measured predictors, and are in essence, equal indicators of OCB.

LePine et al. (2002) also found that measures of global OCB yielded either equivalent or surpassing relationships with predictors than did measures of OCB dimensions. Thus, in regards to envisioning OCBs as a latent model or as an aggregate model, LePine et al. suggest that it is more appropriate to envision OCB as a latent construct with the dimensions merely representing behavioral ways that OCBs can be typified. LePine at al. further suggest that, “Organ’s (1988[a]) five dimensions should be thought of as somewhat imperfect indicators of the same underlying construct” (p. 61) and hence that theory and research should not be aimed at teasing
apart OCBs into specific dimensions, but instead, should focus on OCBs as a one-dimensional latent construct. Therefore, OCBs will be measured as a global construct in the current study.

**Overview**

The objective of the current study is to simultaneously examine the affect orientation and social comparison explanations of OCBs in order to see if a strong trait affectivity explanation can be produced. The current study employs an experimental design, which will assist in overcoming various methodological concerns of previous correlational research, providing more confidence in the results. The critical advantage of the experimental design is that it allows for greater internal validity than field research. A key assumption of the experiment is that OCBs are a form of prosocial behavior, and as such, those factors that elicit prosocial behaviors in a laboratory experiment will function in much the same way as causes that elicit OCBs in organizational settings. The current study is advantageous in that it allows for the clear delineation between in-role and extra-role behaviors and their interpretation and measurement as such. This will overcome a limitation of previous field studies, where the line between in-role and extra-role behavior is not as clear (e.g., Wagner & Rush, 2000). In an experimental setting, recruited research subjects know that they are expected to perform certain tasks. Thus, research subjects are aware of what constitutes their role in the experiment. Any additional behavioral requests will be seen as ‘extra-role’ and thus discretionary.

The experiment will occur in two phases separated by a time span of a few weeks. During phase one, participants in this experiment will complete affect orientation and equity sensitivity measures as well as a personality measure. The purpose of the latter measure is to serve as a “distracter measure” and to obtain scores for each participant on conscientiousness, which will be controlled for. During phase two, the participants will be exposed to an equity manipulation,
and they will then be presented with the opportunity to perform a prosocial behavior. The fundamental issues of the experiment are to evaluate the contributions of both affect and equity perceptions as causes of prosocial behavior, to examine the extent to which equity sensitivity moderates the equity explanation of prosocial behavior, and to examine whether mood restoration serves to mediate the relationship between trait affectivity and prosocial behavior.

**Hypotheses**

The hypotheses are stated separately for both the affect orientation and equity explanations of OCBs.

**Affectivity Hypothesis 1:** Trait affectivity will affect people’s display of prosocial behaviors. Positive (negative) affect will be positively (negatively) related to the amount of prosocial behaviors.

**Affectivity Hypothesis 1a:** When examined simultaneously, both positive and negative affect will explain variance in prosocial behaviors. The combination of high positive affectivity and low negative affectivity will produce the most prosocial behavior, whereas the combination of low positive affectivity and high negative affectivity will produce the least amount of prosocial behavior.

**Affect Hypothesis 2:** There will be an interaction between Equity Condition and Trait Affectivity such that in unfair situation, individuals who are high on positive trait affectivity will choose to watch a funny video over performing a prosocial behavior, in order to restore their positive mood.

**Equity Hypothesis 1:** Equitably treated people will perform more prosocial behaviors then those treated inequitably.
Equity Hypothesis 2: Equity sensitivity will moderate the occurrence of prosocial behaviors.

Equity Hypothesis 2a: In what is ostensibly a fair situation, Entitleds will exhibit less prosocial behaviors than Benevolents and Equity Sensitives.

Equity Hypothesis 2b: In what is ostensibly an unfair situation, Benevolents will exhibit more prosocial behaviors than Entitleds and Equity Sensitives.

Method

Participants

A total of 188 undergraduate students from Virginia Tech were recruited to participate in this study. Only students age 18 or older were recruited. The students participated in order to earn 3 points of extra credit for a psychology class that they were enrolled in that makes use of extra credit provided through the Sona System (the Psychology Department’s online Experiment Management System). The participants were informed that the research project would consume approximately 2-3 hrs of their time.

Phase 1

Procedure. The participants were blind to the true nature of the study. Instead they were informed that the research study was aimed at evaluating how personality relates to judgments about causes and corrective action for juvenile delinquents’ behavior. This cover story was speculated to be face valid, given that the task that the participants were asked to complete was related to this “purpose” and to psychology in general.

The study was publicly advertised to students by information posted on the Psychology Department’s online Experiment Management System (SONA System), and by a brief description provided by a researcher in numerous psychology classes. The participants were able
to register for time slots for this study using the SONA system. In these advertisements, participants were informed that the experiment would take place in two phases and would consume approximately two to three hours of their time. They were informed that phase one was designated by their completion of three online measures at a computer of their choice, and that it was worth one extra credit point, and that phase two would consist of an experimental task at a location in Williams Hall, and was worth up to two extra credit points. They were told that phase two would occur approximately two weeks after phase one. Participants were told that receiving any extra credit would be contingent upon them completing both phases. Participants were also told that they would receive their informed consent form at the start of the second phase.

Using a computer of their choice, each participant was directed to a website on the Sona System that had three measures for them to fill out.

*Individual Difference Measures.* Trait Affectivity was operationalized through participants’ score on the Positive and Negative Affect Scale, or PANAS. The PANAS has two scales, one measuring Positive Affectivity (PA) and the other measuring Negative Affectivity (NA). There are ten descriptor terms for each scale. For the PA, these descriptors are, “attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong, and active” (p. 1064; Watson, Clark & Tellegen, 1988). For the NA, the descriptors are, “distressed, upset…hostile, irritable…scared, afraid…ashamed, guilty…nervous, jittery” (p. 1064). Respondents are presented with the aforementioned twenty descriptors that represent the PA and NA scales. The test instructions ask respondents to, “Indicate to what extent you generally feel this way, that is, how you feel on the average” (p. 1070). For the purpose of this study, since I am investigating Trait Affectivity, participants were told in the directions to use a 5-point likert scale to respond,
with an anchor of 1 representing “very slightly or not at all” to an anchor of 5 representing “extremely.” Cronbach’s coefficient alpha for the PA scale is typically in the upper .80’s, and in the mid-80’s for the NA scale. The PANAS measure is included as Appendix A.

Equity Sensitivity was operationalized through respondents’ score on the Equity Sensitivity Instrument (ESI) (King & Miles, 1994). For each of five items, respondents were asked to indicate their agreement between two statements by distributing a total of ten points amongst the two statements. One statement reflects an “entitled response” while the other statement reflects a “benevolent response.” At one extreme, entitled individuals want their outcomes to surpass their inputs, while benevolent individuals want their inputs to surpass their outcomes. Directly in the middle are those who just want inputs to equal outcomes, and they are termed equity sensitive. An example 2-response statement is, “In any organization I might work for, it would be more important for me to: (a) get from the organization, (b) give to the organization.” This example reflects the entitleds and benevolent choice, respectively. In order to score this measure, one point is given for each benevolent response. Historically, a score of less then 29 is considered entitled, and a score higher then 32 benevolent. Scores from 29-32 are the middle, or the equity sensitive category (Huseman et al., 1985). For the current study, equity sensitivity scores were treated as a continuous variable in the analyses. When describing the results of the analyses, participants will be categorized using the traditional equity sensitivity cut-offs. This measure is included as Appendix B.

Personality was operationalized through respondents’ scores on five dimensions of a 50-item test of the International Personality Item Pool (IPIP). This test assesses each of the five dimensions of the big five personality factors, namely, openness to new experiences, conscientiousness, extraversion, agreeableness and neuroticism. This measure was included as a
filler measure to distract the participants from focusing solely on the relevance of the affectivity and the equity sensitivity measures to the research study. The IPIP was developed from a pool of 1252 items, with each scale containing around 10 items. The scales were developed to be parallel measures of constructs that other, less public scales were designed to measure. Such scales are the NEO-PI-R, 16PF, TCI, CPI, and HPI. Examples of scale items are, “Am not interested in other people’s problems,” and “Pay attention to details,” and “Have a soft heart,” and “Use difficult words,” and “Do not have a good imagination.” In regards to validity, the scales have correlations of .60 to .75 with the original scales that they were designed to be parallel to, and when these values are corrected for scale unreliability, they become .85 and .95, respectively (Goldberg, 1999). This measure is included as Appendix C.

**Phase 2**

Upon arriving at the lab, each participant was greeted by an experimenter who was blind to the hypotheses of the study, but not blind to the independent and dependent variables. It is important to note that these experimenters underwent a rigorous training regime in which they become experts at delivering scripts to the participants to safeguard against their inadvertently cueing participants with words, expressions, or gestures.

The experimenter brought the participants (maximum 3 at a time) into one room and conducted the informed consent process. A copy of the informed consent form is included as Appendix D. Following the collection of consent forms, each participant was brought to a separate research room. There, they were asked to read through case studies of five juvenile delinquents and to respond to each case study in regards to: (a) what aspects of childhood may have contributed to the delinquent’s behavior, and (b) a correction officer, specifically, what they believe is the appropriate intervention or course of action needed to be taken towards the
The participants were told that they had to write at least one page for each case study and that they would have 1 hour to work on the task, and that the researcher would return only at that time to collect their responses. This helped to guarantee that all participants were putting in the same amount of work (in regards to length and time). These case studies, along with instructions for their administration, can be found in Appendix E.

Following their completion of this task, each participant experienced an equity manipulation and then each participant was given an opportunity to perform a prosocial behavior, to watch a video of funny TV-clips, or to do a personal activity. The experimenter then ended the experimental session and debriefed each participant. The debriefing form and procedure differed depending upon which condition each group of participants was in. Specifically, participants in the equity and control groups received one form/procedure (included as Appendix F) and the participants in the inequity condition received another form/procedure (included as Appendix G).

**Equity Manipulation.** There were three levels of the equity manipulation; an equity condition, an inequity condition and a neutral condition or control condition. In the inequity condition, following the participants’ completion of the aforementioned task, the experimenter stated to each participant, “Thank you for your participation in this experiment. The psychology department has asked that I read you this statement: The department anticipates many experiments during the fall semester, and there is concern that there will not be enough participants for all the studies. Therefore, the department has asked us to give only one extra credit point for the lab phase of this study, instead of the intended 2 extra credit points for the lab phase. Therefore, you will receive a total of two extra credit points instead of three; one point is for filling out the questionnaires online, and the second is for what you did in the lab today.”
In the fair condition, following the participants’ completion of the aforementioned task, the experimenter stated to each participant, “Thank you for your participation in this experiment. We just want to remind you that you will be receiving three extra credit points for your participation, as was promised. One extra credit point is for when you filled out the questionnaires online, and the other two extra credit points are for what you did in the lab today.”

In the neutral or control condition, following the participants’ completion of the aforementioned task, the experimenter stated to each participant, “Thank you for your participation in this experiment,” and did not make any reference to the extra credit points. The purpose of this neutral condition was to establish a control for the equity manipulation. A second reason was that it serves as the baseline for the relationship between trait affectivity and prosocial behavior, independent of the equity manipulation.

A pilot study was conducted to validate the equity manipulation. A total of 21 undergraduate students were recruited from a psychology class at a large south eastern university. The participants participated in order to accrue two extra credit point hours for their psychology class. As in the formal study, the experimenters were blind to the hypotheses and the participants were blind to the true nature of the study. Only the protocol from Phase 2 was pilot tested, because this is where the equity manipulation is induced. The participants were provided with the cover story that was discussed above. Each group was assigned to either the equity condition or the inequity condition. The control condition was not included in the pilot study. A total of 4 participants experienced the equity condition and the remaining 17 experienced the inequity condition. This disproportion in allocation of participants to the two conditions was done because the equity condition did not pose many threats to believability, whereas the
inequity condition did. I decided that it was far more important to use as many participants as possible to assess the believability and impact of the inequity condition.

The participants followed the same procedure outlined above, from first filling out their informed consent form, getting a number for identification, and then completing the responses to the five vignettes. Then, depending on whether they were in the equity or the inequity condition, the participants were read the respective scripts concerning the extra credit that they would receive. Immediately after, the participants in each condition were given feedback forms to assess the strength of the equity manipulation (included as Appendices H and I, for the equity and inequity conditions, respectively). Participants were then debriefed using forms in Appendices J and K, for the equity and inequity conditions, respectively. It was stressed to the participants that it is important that they do not disclose the details of the experiment to anyone.

The pilot study provided essential information regarding the effectiveness of the equity manipulation and the optimal length of the experimental task for achieving inequity and equity sensitivity effects. In regards to the equity condition, participants’ responses clearly showed that they felt equitably treated (see sample responses in Appendix L). From the first 4 trials of the inequity manipulation (and the 4 trials of the equity condition), it became clear that if the experimenters did not specify an exact length of time that the participants had to work on the experimental task, then there would be a wide range of time it took participants to finish the task. Total task time across these trials ranged from 25 minutes to 78 minutes, which naturally affected each participant’s perception of how much work they did, and thus, how equitably they felt they had been treated. Thus, time on task became a variable that I realized was important to hold constant. For the next 9 trials, I changed the task requirements so that all participants had to work for one hour, and all had to write at least one full page for each of the 5 case studies. This
required amount of time and effort definitely showed differential effects of the inequity manipulation in the sample (see sample responses on the inequity feedback form in Appendix M). Using the one hour task, there was variability in the degree to which participants were upset. I then explored the effects of increasing the required time on the task to 90 mins, but this proved to be too strong of a manipulation, as all participants stated that they were very upset by the inequity. It appeared that the 90 mins was too strong of an inequity manipulation, thereby likely overwhelming effects due to trait affectivity and equity sensitivity. Overall I am confident that the equity and inequity manipulations work, that the task is appropriate, and that the time of 1 hour to complete the task is the optimal time for the equity manipulation.

**Dependent Variable** After the participants finished the task and were exposed to the equity condition, the experimenter in each condition said to the participants, “The experiment is over, but I need you to stay here for approximately 15 minutes while I read through your responses and make sure that you have addressed the questions.” The experimenter then motioned to a TV/VCR unit in each participant’s room and said, “While you wait, feel free to watch a video of funny TV clips, the tape is in the VCR, or to do your homework.” The experimenter then motioned to a table that had a binder with 60 copies of the first page of completed Wonderlic measures, and said, “Or you can help me score some test data I have collected from another study. It would really help me out if you scored some of these tests. Let me show you how to score them.” The experimenter then instructed the participant on how to score the first page of the Wonderlic, and then left the room for 15 minutes. It is important to note that each individual Wonderlic measure was in a plastic sheet protector to protect against the participants writing on the actual measures. Each participant was provided with a separate scoring sheet that he/she could score the measures on. This was done so that the same 60
Wonderlic measures could be presented to every participant. Further, note that the Wonderlic measures had different answers on them, because they were filled out by different subjects during another study. The prosocial dependent variables were the amount of minutes of the funny video that the participant watched, and the number of Wonderlic tests the participant scored to completion. It takes approximately 30 seconds to score the first page of the Wonderlic, so the expected range of scores is from zero to approximately 30. At the end of each session, the experimenter removed any written on scoring sheets, replaced them with new ones, and closed the Wonderlic binder (if it had been opened). This was done so as to avoid cueing the subsequent participants that others had scored measures.

At the conclusion of the experiment, the experimenters were given a form to ascertain what they knew about the nature of the experiment. This form appears as Appendix N.

**Analyses.** For trait affectivity, I will first test the effects of both affect dimensions on prosocial behavior. Specifically, to test Hypotheses 1, I will compute the bivariate correlations between positive trait affectivity and prosocial behavior and between negative trait affectivity and prosocial behavior. I expect positive trait affectivity to have a positive relationship with prosocial behavior and negative trait affectivity to have a negative relationship with prosocial behavior. To test Hypothesis 1a, I will use multiple regression analysis in which prosocial behavior will be regressed on both trait affectivity dimensions simultaneously. Please note that conscientiousness will be controlled for in all analyses. From this regression, I will examine if both trait affectivity dimensions contribute unique variance to the display of prosocial behavior. In the event that only one dimension contributes unique variance, I will drop the non-significant dimension from further analyses. Prior to making any decision about not including a trait affectivity dimension, I will use moderated regression analyses to ensure that the affect
dimension that does not contribute variance to the prediction of prosocial behaviors, does not interact with the equity manipulation in the prediction of prosocial behaviors.

In the event that both dimensions of trait affectivity contribute unique variance to the display of prosocial behavior, I will form a composite score of these two dimensions to represent overall trait affectivity. To do this, I will reverse score each participant’s responses on the negative trait affectivity scale. The composite score for trait affectivity will allow the test of the equity hypotheses using seven sources of variance instead of the fourteen sources of variance needed if positive and negative affectivity are treated as separate dimensions.

The overall analytic design for evaluating the trait affectivity hypothesis with equity sensitivity and the equity manipulation is mixed factor moderated regression. Specifically, trait affectivity and equity sensitivity are measured as continuous variables and equity condition is measured as an experimental variable. There will be a simultaneously entry of all three variables into the regression equation. Mixed factor moderated regression analysis will yield results for three main effects, three 2-way interactions, and one 3-way interaction. In the regression analyses, the equity manipulation requires two effect-coded vectors to represent the three conditions, and further necessitates five regression weights to represent the three 2-way interactions, and two regression weights to represent the 3-way interaction.

Support for the trait affectivity hypothesis (Affectivity Hypothesis 1) will occur if there is a significant main effect for trait affectivity.

Support for the equity condition hypothesis (Equity Hypothesis 1) will be found if there is a significant main effect for equity condition. To further test Equity Hypothesis 1, \textit{a priori} mean comparisons (on amount of prosocial behaviors) will be conducted to determine which equity conditions produced the equity main effect. A significant 2-way interaction between
equity sensitivity and the equity manipulation will support equity sensitivity as a moderator, as proposed in hypotheses 2a and 2b. If the 2-way interaction is significant, simple effects analysis will be performed to specify the form of this interaction.

In general, I expect prosocial behavior to be a function of all three variables under examination. Both trait affectivity and equity will affect the amount of prosocial behaviors, and equity sensitivity will moderate the equity effect.

Results

Descriptive Statistics for Prosocial Behavior

Descriptive statistics for the two dependent variables (i.e., prosocial behavior and TV watching), as well as within-condition means and standard deviations for the individual difference measures, appear in Table 2. TV watching is presented as the percentage of people who watched the clip because in 40 out 43 cases the participant watched the entire clip. Prosocial behavior exhibited a strong positive skew in each condition. The overall skewness statistic for prosocial behavior was 1.83 with a .18 standard error. The skewness was caused by the fact that 125 of 188 participants (or 66.5%) did not exhibit any prosocial behaviors (i.e., score any measures). A log transformation of the prosocial behavior measure was used to reduce the skewness problem. This transformation consisted of calculating a log (prosocial behavior + .1). The descriptive statistics, including the skewness statistics for the log transformed prosocial behaviors appear in Table 3. In the total sample of participants, all analyses of the prosocial behavior measure used the log transformation of the number of tests scored.

Prosocial Behavior Hypotheses

Prior to running any analyses, missing data for each measure was imputed with the mean rating of the participant on the relevant measure. That is, if a participant had a missing value in a
measure, the participant’s mean rating was calculated for that measure, and this mean value was
substituted for the participant’s missing value. Table 4 presents the intercorrelation matrix
between PA, NA, and equity sensitivity, and the correlation of each of these variables with the
Big Five traits and prosocial behaviors. The coefficient $\alpha$ for each of these measures is greater
than .80, and these reliability estimates are consistent with previous research (e.g., Watson et al.,
1988; King & Miles, 1994). Table 5 presents the intercorrelation matrix for the Big Five traits,
and the correlation between each Big Five trait and prosocial behaviors. The coefficient $\alpha$ for
each Big Five trait scale is also provided, and they indicate a robust level of internal consistency
for each factor in this sample.

As seen in Table 4, PA and NA were not related to prosocial behavior. Thus, support was
not found for Affect Hypothesis 1. To examine Affect Hypothesis 1a, multiple regression
analyses were conducted in which prosocial behavior was regressed on both PA and NA to
determine if affectivity scales jointly predicted prosocial behaviors (see Table 6). The results
indicated that neither PA nor NA affected prosocial behavior as main effects or as an interaction.
Finally, a composite of these two variables for each participant was calculated, by reverse
scoring each NA item score and summing these with the PA item scores. Prosocial behavior was
then regressed on this PA/NA composite, yielding $\Delta R^2 = .00$, $F(1, 186) = .22$, $p > .05$, which
again indicates that affectivity did not explain variance in prosocial behaviors when using the
entire sample.

However, before dropping all affectivity variables from further analyses, within cell
correlations of PA and NA with prosocial behavior were examined (See Table 7). Although not
significant, I choose to retain NA in subsequent analyses because in the control condition, the
correlation between NA and prosocial behavior was in the predicted direction.
Equity Hypothesis 1 predicted that the inequity condition would perform fewer prosocial behaviors than the equity condition. Levene’s test for equality of variances was significant ($p < .01$), so the $t$-value was estimated assuming unequal variances. The one-tailed contrast was a significant ($t(127.1) = 1.79, p < .05$), indicating a mean difference between prosocial behavior in the equity ($M = 4.43$) and the inequity ($M = 3.34$) conditions. Although the mean differences involving the control group were not predicted, $t$-tests were used to compare the control condition with both the equity and the inequity conditions (two-tailed significance tests were used). The control and equity condition did not differ on the amount of prosocial behavior. Levene’s test was significant for the comparison between the control group and the inequity group. The $t$-value assuming unequal variances approached significance, ($t(112.6) = 1.75, p < .10$), with the control group mean ($M = 6.98$) being higher than and the inequity group mean ($M = 3.34$).

Effect sizes were computed for each comparison (Cohen, 1988). Since variances were not homogeneous for the equity and inequity conditions and for the control and inequity conditions, a pooled variance estimate was used with these two effect sizes. Overall, for the mean difference between the equity and inequity condition, $d = .31$, supporting the equity prediction that the perceived unfairness would reduce prosocial behaviors. Not surprisingly, the effect size for the control and inequity conditions, $d = .32$, was similar to that seen when comparing the equity and inequity conditions. Furthermore, the effect size for control and equity was negligible, or $d = .02$. Although a priori predictions were not made regarding the control group, the pattern of findings is consistent with equity theory.

Equity Hypothesis 2 predicted that Equity Sensitivity would moderate the equity effect. Equity Sensitivity was not related to prosocial behaviors (See Table 4). Multiple regression
analyses were used to test for moderation. In these regression analyses, the equity manipulation was entered as two effect-coded vectors (one represented by 1, -1, 0, and the other by 1, 1, -2), and the 2-way interaction between equity sensitivity and condition also required two vectors (see Table 8). As is evident from Table 8, Equity Hypothesis 2 was not supported because the 2-way interaction between equity sensitivity and condition was not significant, and the examination of the within cell correlations for equity sensitivity showed negligible relationships within each condition.

Finally, to assess the effects of NA and the equity manipulation on prosocial behavior a mixed factor multiple regression analysis was conducted in which prosocial behavior was regressed on NA and equity condition and these results appear in Table 9. None of the effects were significant, although the effect size for the NA x Equity Condition interaction was not trivial ($\Delta R^2 = .03$).

In conclusion, analyses of the prosocial behaviors only supported equity hypothesis 1, indicating that unfair treatment diminished the average amount of helping behavior. The affect orientation hypotheses and equity sensitivity hypothesis were not supported. However, closer examination of the data indicated that exploratory analyses were warranted. In particular, it appeared that the lower amount of helping behavior in the inequity condition was more driven by the fact that fewer participants were likely to help in the inequity condition, but that the helpers in the inequity condition did not necessarily exert less effort than helpers in the equity condition. Specifically, in the control condition, 37.9% helped, versus 40.0% in the equity condition versus only 23.1% in the inequity condition. A Chi-square test for independence indicated a significant difference in participation rates by condition, $\chi^2 (2, N=188) = 4.91, p < .01$. As might be
expected, it appeared that the inequity of condition raised the threshold regarding the decision to help in the inequity condition.

To determine whether this helping decision threshold was affected by the individual difference variables, a 3 (Equity Condition) X 2 (Helper vs. Non-helper) MANOVA was conducted with PA, NA, equity sensitivity, and the Big 5 factors as the dependent variables (see Table 10). MANOVA creates a composite of all dependent variables of interest and sees whether independent variables (here, condition and helpers vs. non-helpers) can explain variance in them, (i.e., whether there is a difference between groups in the dependent variables).

There was a weak effect for the interaction between condition and helpers and that this effect was driven by NA, Neuroticism, and Openness. Within cell means for these individual difference variables appear in Table 11. The cause of the weak interaction differs for each variable, and the patterns of means do not provide clear insights into why the individual differences distinguish helpers from non-helpers.

*Analyses Involving Only the Helpers*

The reality is that 125/188 participants did not exhibit any helping behaviors. As such, it is possible that relationships that are reliably occurring in the sample of helpers are obfuscated by the inclusion of the large non-helper sample. Therefore, I conducted a series of exploratory analyses using just the sample of helpers. Dropping the non-helpers from the sample eliminated the skewness problem for the distribution of prosocial behaviors, so the raw scores for prosocial behavior were analyzed for the sample of helpers (See Table 12). Also, as a result of the reduced sample size and accompanying reduction in power, all statistical analyses were evaluated for significance at the $p < .10$ level.
To test for mean differences in prosocial behavior, $t$-test contrasts were made between each pair of conditions. Although the variances between the conditions was significantly different and the sample sizes differed, these contrasts will still be robust indicators of mean differences, which is not necessarily true for ANOVA and accompanying post hoc tests (Hays, 1994; George & Mallery, 2001). The logic of equity hypothesis 1 was predicated on the assumption that unfairly treated participants would exert less effort helping when compared to the participants in the equity condition. However, there was no need to conduct a test of statistical significance because the inequity group ($M = 14.47$) scored more measures then the equity group ($M = 11.08$), which was opposite the predicted direction ($d = .63$).

For contrasts between the control and both the equity and inequity conditions, two-tailed $t$-tests were used. Levene’s statistic for the contrast between the control and the equity condition was significant, ($p < .001$) thus equal variances were not assumed. This contrast was significant ($t(28.5) = 2.71, p < .05, d = .80$), with the control condition ($M = 18.41$) performing more prosocial behaviors then the equity condition ($M = 11.08$). Although the control group helpers scored more measures than the inequity group helpers, the difference was not significant, ($t(28.9) = 1.44, p > .10, d = .45$).

The results for the comparison between the inequity group and the equity group are important because it clarifies the prior support for equity hypothesis 1. In the full sample, the equity group scored more measures on average than the inequity group, however, this effect is totally driven by the lower percentage of helpers in the inequity condition as compared to the equity condition. Within the helping sample, helpers in the inequity conditioned worked harder than helpers in the equity condition.
The pattern of results comparing the control group to the inequity group is more consistent with equity theory. Recall that in the full sample the effect size for the control group and inequity group \( (d = .32) \) was virtually identical to the effect size for the equity group and inequity group \( (d = .31) \). The effect between the control group and the inequity group is consistent with equity theory, in that, difference in helping behavior was caused by both a lower helping rate and less helping effort in the inequity condition relative to the control condition.

Since the analyses of the helper sample clarified the interpretation of the findings regarding equity hypothesis 1, I decided to test the other hypotheses using only the helper sample. First, I examined the affect hypothesis by examining the bivariate correlations between PA and NA and prosocial behavior using one-tailed significance tests. Only NA predicted prosocial behavior \( (r = -.26) \). I also regressed prosocial behavior on PA and NA (see Table 13). Again, only NA predicted prosocial behavior. Finally, I regressed prosocial behaviors on a composite of PA/NA and this composite failed to significantly predict prosocial behaviors \( (\Delta R^2 = .03, F(1, 61) = 1.99, p > .10) \). Therefore, PA was dropped from subsequent analyses of the helper sample.

Next, multiple regression analyses were conducted to test whether or not equity sensitivity acted as a moderator of the effect of equity on prosocial behaviors. Although the overall change in \( R^2 \) is not significant for the interaction between equity sensitivity and condition, this interaction accounted for 6.3% of the variance in prosocial behaviors (See Table 14). The pattern of the interaction was such that in the equity sensitivity was inversely related to prosocial behavior equity \( (r = -.34) \) and inequity conditions \( (r = -.29) \), but equity sensitivity was positively related to prosocial behavior in the control condition \( (r = .25) \). A negative relationship
with equity sensitivity indicates that helpers who perceive themselves as more entitled expended more effort helping, which is opposite the predicted direction.

In the next analysis, NA was added to the model, and these results are presented in Table 15. Results of the regression analysis revealed a significant $R^2$ for the main effects entered in Step 1, $R^2 = .19, p < .05$. This effect was driven by both the equity condition, ($\Delta R^2 = .12, p < .05$), and by NA ($B = -.30, t(61) = -1.74, p < .10$). Neither the two-way interactions, nor the three-way interaction were significant. Although not significant, the three 2-way interactions accounted for over 9% of the variance in helping behaviors.

The Condition X NA and the Condition X Equity Sensitivity interactions deserve further exploration. Two regression analyses were run in which the condition, equity sensitivity, and NA were entered in Step 1, and in Step 2, either the Condition X NA interaction was entered, or the Condition X Equity Sensitivity interaction was entered. For Step 3 of each of these analyses, the 2-way interaction that was not entered at Step 2 was then entered. The results for $\Delta R^2$ at each step for each of these analyses appear in Table 16. Both of these analyses indicated that these two interactions accounted for $\Delta R^2 = .092$, whereas above, when all three 2-way interactions were entered, $\Delta R^2 = .094$. Thus, together, these interactions account for the bulk of the variance of the two-way interactions. When looking at results from the analyses that reversed the order of entry, it is apparent that each interaction captures approximately the same amount of variance in prosocial behavior.

As discussed above, the pattern of within cell correlations for equity sensitivity is consistent with the Equity Hypothesis 2 only in the control condition, i.e., benevolents expended more effort helping than entitleds. As to the Condition X NA interaction, this interaction was caused by the fact that NA predicts prosocial behavior only in the inequity ($r = -.56, p < .01$, 1-
tailed), and the control conditions ($r = -.36, p < .05, 1$-tailed). Both these relationship are in the expected direction. NA had a negligible relationship with prosocial behavior ($r = -.01, p > .10, 1$-tailed) in the equity condition.

The final exploratory analysis examined the relationships between the Big Five traits and prosocial behaviors within each condition (See Table 17). All correlations were tested using a two-tailed test at $p < .10$. The most interesting findings were in the equity condition, where Agreeableness ($r = .44$) and Conscientiousness ($r = .35$) significantly predicted helping effort. In the inequity condition, only Neuroticism significantly predicted prosocial behavior ($r = .39$), and no relationships were significant in the control condition.

**Summary of Results for Prosocial Behavior**

Results from the full sample did not provide support for an affect orientation explanation of prosocial behaviors, nor did they suggest a role for equity sensitivity as moderator of prosocial behaviors. The only reliable results from the full sample were that those in the inequity group helped less in terms of the average amount of tests scored than those in the other conditions, and that the inequity manipulation lowered the percentage of helpers relative to the other conditions.

*Clarifying the Equity Effects.* However, restricting analyses to just the sample of helpers provided further clarification of the effect of unfairness on prosocial behaviors. More specifically, inconsistent with equity theory, the fewer helpers in the inequity condition worked harder than the helpers in the equity condition. Closer inspection of the distribution of helping behaviors suggests that an intrinsic/extrinsic motivation effect (Deci, 1972) was triggered in the equity condition. The number of measures scored in the equity condition ranged from one to 25 whereas the range in the control condition was from two to 33. Also, eight of the 22 helpers in the control condition scored more than 25 tests. Together, this pattern of data resulted in the
control condition scoring significantly more tests than the equity condition when restricted to the helper sample. Equity theory cannot explain this pattern of data and the associated mean difference, but intrinsic/extrinsic motivation can explain both.

Deci (1972) suggested that as a function of Cognitive Evaluation Theory (CET), a person’s perception of why he/she is performing an activity is a critical factor to that individual’s decision to perform a task. When a person believes that he/she is solely in control of the decision to perform a behavior, and that he/she is making that decision based on the inherent rewards of performing the behavior, then the person views that the locus of causality for performing the behavior is within. Thus, the person is intrinsically motivated due to feelings of autonomy. However, when external rewards are made salient, the person reappraises the decision to perform the task as being controlled by the environment. Thus, the locus of causality for performing the behavior is outside the person, and behavior results as a function of extrinsic motivation (Deci, Benware, & Landy, 1974; Notz, 1975). This shift from intrinsic to extrinsic motivation can result in a reduction of motivation to perform a task (Deci et al., 1974) and subsequent reduction in effort. Indeed, Deci et al. (1974) suggest that there is an inverse relationship between the quantity of extrinsic rewards and the level of intrinsic motivation. More recently, Self Determination Theory (SDT) has been proposed to more thoroughly represent intrinsic and extrinsic motivation (Gagne & Deci, 2005). SDT shares in common with CET the basic distinction between intrinsic and extrinsic motivation, or, that intrinsically motivated behavior results from an inherent interest in the behavior, while extrinsic motivation is necessary for behaviors that are not naturally interesting and thus, require some form of instrumentality (Gagne & Deci, 2005). However, contrary to CET which posits that extrinsic motivation is always based on external control, SDT suggests that within the domain of extrinsic motivation, the regulation of behavior
may vary between controlled (classic extrinsic motivation) and autonomous motivation, based on whether a person has integrated the regulation of the behavior into his/her values and goals (Gagne & Deci, 2005). However, in regards to the present study, because scoring measures was a one-time helping behavior, it is unlikely that participants integrated the regulation of this behavior into their values or self identity. Thus, it is most plausible that the instrumentality of the equity manipulation primed classic controlled extrinsic motivation in these participants. Indeed, SDT posits that prosocial behaviors will be a function of autonomous motivation and that presence of rewards may undermine such autonomy leading to a reduction in prosocial behavior (p. 351).

Overall, in the current study, the key factor in the equity manipulation was that subjects were reminded that they would receive the promised extra credit for participation. Making the external reward salient in the equity condition likely undermined participants’ sense of control over the decision to help, thus reducing their autonomous motivation to help. Due to the unintended confounding manipulation of autonomous intrinsic/extrinsic motivation, the hypotheses regarding prosocial behavior should not be interpreted using the data on prosocial behavior from the equity condition. The argument that equity manipulation tapped a causal agent other than fairness perceptions is supported by the within cell correlations between the Big Five traits and prosocial behavior. In the equity condition, prosocial behavior was positively related to Conscientiousness and Agreeableness. In contrast, the strongest Big Five predictor in the control and inequity conditions was Neuroticism—more anxious participants scored more tests.

Fortunately, the inclusion of the control group, where there was no mention of the promised extra credit, serves as an appropriate comparison group to the inequity condition. Once again, it is important to note that the variance for prosocial behavior was much larger for the
control condition than for the inequity condition, in both the full sample and the sample restricted to just helpers. In comparing the control condition to the inequity condition, it is clear that the raised helping threshold in the inequity condition had two effects on prosocial behaviors. First, the inequity manipulations impacted those who would have expended only a small amount of effort helping. This conclusion is based on the observation that scores for prosocial behaviors in the control condition ranged from two to 33, but only ranged from nine to 22 in the inequity condition. Six helpers in the control condition scored fewer than nine tests, implying that those participants in the inequity condition who may have rendered a small amount of assistance, decided not to help due to the unfairness of the situation. Second, the inequity effect lowered the resulting effort levels of those who did help as indicated by the lower (although not significantly different) mean score on prosocial behaviors in the inequity condition ($M =14.47$) relative to the control condition ($M=18.41$). This pattern of findings is consistent with the equity theory explanation of prosocial behavior.

Affect Orientation. Although no support was found for the affective trait explanation of helping in the full sample, the predicted effect of NA was supported within the helper sample. Assuming that relationships within the equity condition should not be interpreted in relation to the predictions, the NA explanation of prosocial behavior was supported because NA was inversely related to helping effort in both the inequity condition ($r = -.56$) and in the control condition ($r = -.36$). Beyond this effect, state affect orientation did not impact prosocial behavior. Most surprising is that PA was not related to number of tests scored either in the full sample or the sample of helpers, and that neither PA nor NA distinguished helpers from non-helpers in the inequity condition.
Equity Sensitivity. There was little support for equity sensitivity as a moderator of the effects of equity perceptions on prosocial behavior. The only evidence of moderation was found within the helper sample, but the interaction pattern was inconsistent with equity hypothesis 2. The relationship between equity sensitivity and prosocial behavior was in the predicted direction only for the control condition, but the relationship was weak.

Mood Restoration Hypothesis

While 63 participants chose to perform a prosocial behavior during the 15-minute wait period, 43 other participants choose to watch a funny video clip during this time. Since 40/43 of these participants watched TV for the entire 15 minutes, TV watching was treated as a dichotomous variable, and thus, participants either watched TV or didn’t watch TV. Point biserial bivariate correlations between TV watching and the individual difference variables are presented in Table 18. The correlations between the individual difference variables and TV watching were weak, with the exception of Neuroticism ($r = .20, p < .01$).

Affect hypothesis 2 predicted that there would be an interaction between equity condition and trait affectivity such that in unfair situation, individuals who are high on positive trait affectivity would choose to watch a funny video over performing a prosocial behavior, in order to restore their positive mood. A logistic regression analyses was performed to test this hypothesis (see Table 19). The Chi-square tests for each step and for the overall model at each step were not significant, suggesting that neither the main effects (PA and condition) nor their interaction, significantly explained variance in TV watching. This is further evidenced by the observation that none of the -2 Log likelihood indicators for any of the models were significant. The -2 Log likelihood is an indicator of how well the model fits the data. It is similar to $SS_{\text{regression}}$ in a traditional ANOVA table, in that it reflects the variance that the model captures. A
perfect fit is indicated by a value of “0” (George & Mallery, 2001). Examination of the coefficients for the predictors in each step reveals that they also failed to reach significance. Overall, mood restoration for those in the inequity condition and high on PA was not supported in this study.

As was the done with prosocial behavior data, I examined potential causes of the decision to watch the video-clip. A 3 (equity condition) X 2 (TV watchers vs. Non-TV watchers) MANOVA was conducted with PA, NA, equity sensitivity, and the Big-5 factors as the dependent variables and results appear in Table 20. The MANOVA did not indicate any significant differences between the groups on a linear combination of the dependent variables. Thus, the individual difference variables examined in this study did not account for participants’ decision to watch TV.

Next, I examined relationships between TV watching and the individual difference variables, for just those who watched TV. Considering that the sample size was quite small (\(n = 43\)), I used \(p < .10\) as the Type I error rate. Within cell point biserial bivariate correlations appear in Table 21, with the correlation between TV watching and PA measured with a 1-tailed test, and the rest with 2-tailed tests. As is evident, none of the correlations were significant.

In conclusion, in the full sample, the only effect for TV watching was that Neuroticism was a significant predictor \((r = .20, p < .01, 2\text{-tailed})\), participants who were more anxious by nature were more likely to watch TV. There was no support for the mood restoration hypothesis, and no individual difference correlated with TV watching within the conditions.

Discussion

The overarching purpose of this study was to use an experimental design to simultaneously examine the affect orientation and social comparison explanations of OCBs. The
experiment was intended to be an analog to a workplace setting, and OCBs were evaluated as a more general form of helping behaviors, or prosocial behaviors. Organizational dynamics are inherently complex. Within the workplace, exchange relationships are commonplace between the employee and the organization which provides ample opportunities for equity or inequity to be made salient. Indeed, employees are constantly operating within the framework of exchange; they are providing inputs such as education, skills, long-hours and hard work, in exchange for outcomes like pay, promotions, seniority, and fringe benefits (Adams, 1965). In the workplace, exchange relationships are presumably commonly discussed amongst employees and between supervisors and employees. Thus, employees are often provided with information regarding the equity or inequity of their ratio of outcomes to inputs. In the present study, the participants simulated employees in the sense that they provided an input (i.e., hard-work on a writing-intensive task) in exchange for a desired outcome (i.e., extra credit towards a class). The experimenter parallels the supervisor, who made the ratio of the exchange salient (through the equity or inequity manipulation). Prosocial behaviors paralleled OCBs, in that the decision to perform them as an additional input was under participants’ complete control and discretion.

Given my belief that the psychological processes associated with OCBs could be simulated in the laboratory, I decided to use an experimental design in order to enhance internal validity relative to that typically found in field studies. Furthermore, the use of an experimental design allowed for clear separation of in-role and extra-role behaviors, which is difficult to achieve in field settings.

*Interpretation of Full Sample Results*

*Affect Orientation.* Overall, in the full sample, the effect of NA was weak and there was no reliable effect attributable to PA. These findings stand in contrast to the research that argues
that affective states impact prosocial behavior (e.g., Clark & Isen, 1982; Brief & Motowildo, 1986; Carlson et al., 1988; Watson et al., 1988). Further, my results are in contrast to Watson et al.’s (1988) argument that a person’s relative standing on both PA and NA dimensions contributes to their likelihood of engaging in prosocial behaviors. Previous research has consistently related NA and PA to prosocial behaviors (e.g., Clark & Isen, 1982; Carlson, Charlin, & Miller, 1988). However, the lack of findings for trait affectivity in the overall sample must be qualified by the reality that most of the interesting findings in this study occurred within the sample of participants who engaged in prosocial behaviors.

A corollary to the trait affect explanation of prosocial behavior was the notion that subjects in the inequity condition would engage in mood restoration as opposed to rendering assistance. Subjects were given the option to watch a humorous video instead of helping because it is well established that watching funny TV-clips is an excellent method for restoring mood (Gerrards-Hesse, Spies, & Hesse, 1994). However, subjects in the inequity condition were no more likely to watch the video than subjects in the other conditions. As such, the mood restoration hypothesis was not supported. However, participants were not forced to choose between helping or watching the videotape while they waited for the experimenter to return. As such, it is possible that participants in the inequity condition restored PA in an alternative fashion, such as by listening to music or calling a friend. In retrospect, it is clear that my experimental design only allowed conclusions regarding the validity of the mood restoration explanation if the hypothesis had been supported. Lack of support for my prediction cannot be used to argue against the mood restoration hypothesis.

Equity Theory. As for the equity theory predictions, in the overall sample, equity affected mean levels of prosocial behaviors, yet the pattern of effects was complex. Although the
mean level of prosocial behavior was lower for the inequity group versus the equity group, this effect was caused only by a lower percentage of helping participants in the inequity condition. In terms of effort, counter to equity theory, helpers in the inequity condition worked *harder* than helpers in the equity condition. However, it was argued above that the equity condition manipulation was confounded with a classic intrinsic/extrinsic motivation effect. It was further argued that the control group was a better comparison group for the inequity condition in terms of testing equity theory. Equity theory predictions were supported in that the inequity group had a lower helping rate and expended less effort helping than the control group (Adams, 1965).

Finally, equity sensitivity did not moderate the equity effects in the predicted direction. In this vein, results in the full sample indicated null effects for equity sensitivity as a moderator of prosocial behaviors and as a critical individual difference variable. This finding is in disagreement with research by Huseman, Hatfield and Miles (1985, 1987) who maintain that there *are* individual differences in how people evaluate their ratio of outcomes to inputs, and that this evaluation renders clear consequences on their behavior.

*Implications from Helping Sample*

Exploratory analyses revealed that the large percentage of non-helpers in the full sample obfuscated reliable prosocial behavior effects in the helping sample. Reexamination of the hypotheses within the helper sample revealed interesting results. As opposed to reporting results as a formal test of each of these hypotheses, I will present the results in relation to supporting or not supporting the affect orientation and equity explanations of prosocial behavior.

*Affect Orientation.* In regards to affect orientation, within the total helper sample, NA predicted the level of effort expended by helpers such those who were lower on NA performed more prosocial behaviors. Further, although Equity X NA interaction was not significant, it did
explain around 6% of the variance in prosocial behaviors. The interaction was driven by the aforementioned problematic equity condition, where the correlation between NA and prosocial behavior was close to zero. In the other two conditions, NA was related to prosocial behavior in the predicted manner, with those low on NA expending greater effort helping. As such, for the control condition and the inequity condition, the affect orientation hypothesis was supported in the sense that once a decision to help was made, the amount of effort expended appeared to be determined by NA.

George and Brief (1992) maintain that low NA, “merely signals the absence of a tendency to experience negative moods, feel distressed, view conditions negatively” (p. 319). The inequity manipulation likely resulted in the saliency of negative feelings and thus, those who helped needed to be less likely to be affected by this negative situation, i.e., needed to be lower on NA. In support, Clark and Isen (1982) argue that induced feeling states are most likely to affect behavior in the environment that a person attends to immediately following the feeling-state saliency. Participants with lower NA were better able to accept that their ratio of outcomes to inputs had just been decreased.

However, it is interesting that NA did not affect the decision to render assistance in the inequity condition as indicated by the fact that the mean NA levels of helpers and non-helpers were similar. The logic regarding why NA is related to prosocial behavior within the helper sample also suggests that the decision to render assistance should be related to NA. A potential reason for this lack of support for affectivity variables being related to the decision to help is that affectivity was measured as a trait and not a state. It has been argued that mood state is the proximal determinant of prosocial behavior (George, 1991; George & Brief, 1992). Possibly, mood state is what drives the decision to help, and overall affective disposition is what guides
how much helping. Overall, the fact that NA strongly predicted the amount of prosocial behaviors in the helper sample indicates that perhaps the absence of trait NA is a more potent predictor of prosocial behavior than the presence of trait PA. Future research should seek additional clarification of this state versus trait issue, and should also examine what specific helping behaviors are driven by low trait NA.

_Equity Theory._ As argued above, the findings in the equity condition are confounded with intrinsic/extrinsic motivation processes, and hence, do not provide a clear framework for interpreting the effects of equity on helping behaviors. In light of this problem, I decided to interpret the equity effects by comparing only the participants in the inequity and control conditions. It was found that fewer participants helped in the inequity condition versus the control condition, and those who helped in the inequity condition expended less effort than helpers in the control condition.

These results are consistent with equity theory. In inequitable situations, equity theory postulates that the saliency of unfair exchange will result in feelings of tension and distress, which will be remedied by an accompanying withholding of inputs (Adams, 1965; Huseman et al., 1987). In the present study, this input took the form of prosocial behaviors, which participants had complete control over the decision to perform. Leventhal (1976) argued that when people are deciding upon inputs to change in an exchange relationship, they not only take into account the control that they have over changing the inputs, but also the costs and risks associated with altering them. In the present study, participants in the inequity group could have gotten angry and just left during the 15 minutes, or demanded that their data be withdrawn from the study, but they were probably unsure if these reactions would have resulted in them losing all credit, or another aversive penalty (Schnake et al., 1995). However, an action that they had
complete control over with no associated risks was the decision to score tests, and how many tests to score. Thus, scoring measures was a likely input to withhold/alter for participants in the inequity group, and in comparison with the control group, they did.

However, while it is clear that fewer participants in the inequity group helped out and helped at a reduced effort in comparison with the control group, the reality is the effort expended by those in the inequity group was still impressive, i.e., the minimum effort level of participants was at a moderate rate and some participants worked at a high rate. Intuitively, this differential rate of responding to inequity should have been explainable by equity sensitivity, specifically with benevolents preferring their ratio of outcomes to inputs to be smaller then entitleds (Huseman et al., 1985, 1987). However, this was not the case in the inequity group as equity sensitivity had a negative relationship with prosocial behaviors, suggesting that those who are more entitled performed more prosocial behaviors. This finding is opposite what would have been predicted and challenging to explain, but plausibly indicates that entitled individuals are more anxious, and in the inequity condition (which conceivably induced additional stress), these participants performed more prosocial behaviors in an effort to reduce their anxiety. This suggestion is supported by the fact that higher levels of Neuroticism were significantly related to prosocial behavior in the inequity condition (discussed below).

Meanwhile, in the control condition, equity sensitivity was positively associated with prosocial behaviors, indicating that benevolents helped out more then entitleds as predicted. Perhaps equity sensitivity is only a valid predictor of prosocial behavior in completely neutral situations, and not when inequity is made salient. However, this notion is not intuitive because in order for the construct to even exist, people need to have individual differences in how they respond to the presence of inequity (Huseman et al., 1985, 1987). Thus, it does not make sense
that construct is less potent when inequity was made salient. The above differential effects for equity sensitivity in the inequity and control conditions challenge the importance of equity sensitivity as an important construct regarding the effects of fairness perceptions. Alternatively, it may be a psychometric problem associated with the equity sensitivity measure.

The results of the present study suggest avenues for research in regards to more fully explaining the relationship between equity theory and prosocial behavior. The design of the current study clouded the interpretations from the equity condition. As such, it would be beneficial to examine if the saliency of equity affects prosocial behavior in a manner different from inducing an intrinsic/extrinsic motivation shift. Future replication could resolve this issue through using a 2 (Intrinsic vs. Extrinsic motivation) X 2 (Equity Saliency vs. Control) paradigm. The challenge to such a study would be creating a salient perception of distributive fairness (i.e., the Equity Saliency) that is independent of the intrinsic / extrinsic motivation manipulation. That is, how can distributive justice perceptions be made salient without mentioning extrinsic rewards? If this problem can be resolved with the manipulations, then such a study would better clarify the role of intrinsic / extrinsic motivation as a determinant of OCBs.

In another vein, future research needs to directly investigate what affects the threshold for helping, and further, what levels of equity manipulation render the aforementioned effects. Again, only 34% of the sample decided to help, which raises the issue whether other psychological variables impact the decision to render assistance. Intuitively, the expectation would be that the decision to help is affected by dispositions, but I only found weak and inconsistent evidence to this effect. Perhaps other aspects of the situation are impacting psychological processes. Regardless, it is clear that more research is needed on the decision to help.
The Big Five

Although the Big Five Personality Factors were not intended to be focal points of this study, depending on condition, Conscientiousness, Agreeableness, and Neuroticism emerged as predictors of the level of effort expended by helpers. Specifically, in the equity group, both Conscientiousness and Agreeableness significantly predicted the effort of helpers, and lend credence to the argument that the equity manipulation reduced intrinsic motivation. That is, it is likely that people who are high on Conscientiousness and Agreeableness, can maintain effort in the face of decreased intrinsic motivation. Konovsky and Organ (1996) found that Conscientiousness yielded variance in the General Compliance factor of OCB beyond that of attitudes (i.e., equity with the job and satisfaction/fairness with supervisor). Together, this evidence suggests that the antecedent causes of prosocial behaviors, and by extension OCBs, involve more than just perceptions of fairness and affect orientation.

This notion of an inherent desire to help and to please others strongly parallels the finding that in both the control and inequity conditions, higher levels of Neuroticism were associated with prosocial behaviors. Plausibly, these people are implicitly more anxious in new environments, (like the experimental setting), and they are driven to do acts that not only reduce their anxiety, but also allow them to feel like they “fit in.” If participants high on Neuroticism were just motivated to reduce their anxiety, they could have chosen to distract themselves by listening to music or by calling a friend, but instead, they chose to perform an act that explicitly benefited another person, suggesting that they desired to feel accepted. This process was conceivably augmented in the inequity condition, as the manipulation likely made these participants feel more anxious, and thus, they still helped at a moderate to high level to reduce
their feelings of distress and to ensure that the experimenter liked them. Future research could elucidate the role that anxiety plays in regards to performing prosocial behaviors.

**Implications for OCB**

Understanding the antecedents of OCBs is important because OCBs are an essential element of organizational effectiveness and allow for increased fluidity in organizational functioning and utilization of resources (Katz & Kahn, 1966; Organ & Bateman, 1983; Smith, Organ & Near, 1983; Netemeyer, Boles, McKee & McMurrian, 1997). Thus, if organizations are to encourage OCBs, there must be insights into situational and individual difference variables that cause people to go above task requirements and thus, engage in OCBs (Neuman & Kickul, 1998). The current study used an experimental analog to study the affect orientation and equity theory antecedents of OCBs. In this analog, the dependent variable was prosocial behavior, and such an approach is justified because OCBs can be readily conceptualized as a context specific form of prosocial behaviors (Brief & Motowildo, 1986).

Although the interpretation of the results of the study are limited somewhat by the lack of helping on the part of many participants and by the problems associated with the equity condition manipulation, I believe that there are areas where generalizations can be made with confidence. I’ve organized these generalizations around two issues, the decision to help and the effort expended by helpers. Also, the results of the current study raise issues for the future direction of OCB research

*The decision to render help.* That which I am most confident about generalizing in regards to the decision to help is that attendant perceptions of the unfairness of the situation lowers the likelihood that an employee renders OCBs. In essence, employees naturally vary in terms of their willingness to help, and each individual has a helping threshold point where OCB
behaviors are triggered. Inequity perceptions appear to raise the helping threshold, thereby reducing the number of employees willing to engage in OCBs. However, future research needs to address the factors that elucidate the decision to help. Intuitively, the Big Five trait of Conscientiousness would be a likely candidate for the helping decision; yet, helpers and non-helpers did not differ on level of conscientiousness, nor was conscientiousness an important predictor in either the control or the inequity conditions. Possibly, those who were high on conscientiousness put forth a high degree of effort on the experimental task (e.g., through writing more pages or higher quality responses) and hence, did not feel like they needed to contribute any more effort through helping. Future research could attempt to control for task-effort and perceptions of task difficulty to investigate this effect.

To my knowledge, the literature on OCBs has not clearly differentiated between predictors pertaining to the decision to help and predictors related to helping effort. However, a newer avenue of research has examined the relationship between personal needs/motives and the decision to engage in OCBs. Conceptualizing the decision to perform OCBs as functional, Penner, Midili and Kegelmeyer (1997) suggest that awareness of needs or motives that are important to employees provides information that can be used to elicit helping behavior in ways that supersede the effects of an employees’ affect or cognition about their job. Research by Rioux and Penner (2001) investigated personal motives as an impetus behind the decision to engage in OCBs. Results indicated that two of the three dimensions of the Citizenship Motives Scale (namely Organizational Concern (OC) and Prosocial Values (PV)) were differentially correlated with the 5 dimensions of OCBs. Further, to varying degrees, all three dimensions (now including Impression Management) accounted for unique and significant variance in dimensions of OCBs, above that of various predictors, namely, other oriented empathy and
helpfulness (subsumed under “Prosocial personality”), distributive justice, procedural justice, and positive mood. Additional research by Finkelstein and Penner (2004) replicated the above findings in regards to PV and OC predicting person-oriented and organization-oriented OCBs, respectively. Thus, there may be specific motives or other variables underlying the decision to help and future research should be aimed at clarifying this issue and in regards to the specific forms of OCBs affected.

Effort expended by helpers. Willingness to expend effort on OCBs is almost certainly closely related to the actual production of OCBs. The implication of this latter relationship is that when faced with an unfair situation, those employees whose willingness to help remains above their thresholds for engaging in OCBs, will expend more than trivial levels of helping effort.

Although the results of the full sample do not lend any support to the affect orientation position, the results of the helping sample are consistent with predictions for NA. When rendering assistance, it is likely that the amount of effort expended by an employee is in part a function of trait levels of NA.

The above conclusions have clear implications for organizations attempting to establish a norm of rendering OCBs. First, the organization should attempt to limit perceptions of unfairness (Adams, 1965). Obviously, there are many mechanisms through which this can be accomplished. One means involves supervisors understanding the distinction between distributive and procedural justice. Within the workplace, distributive justice is concerned with the organization’s allotment of rewards or overall compensation to the employee (e.g., pay, bonuses, promotion, seniority, and vacation days) while procedural justice is more focused on how the rewards are determined and allotted by the organization (Organ, 1988a; Folger & Konovsky, 1989). Research has indicated that infractions on both forms of justice render differential effects
on employees’ behavior in the workplace. For example, Greenberg (1990) found that when employee pay was temporarily reduced by 15% (distributive injustice), the theft rate amongst employees significantly increased relative to controls. However, when an in depth rationale was provided for the pay reduction (procedural justice), and this rationale was delivered in a respectful and considerate manner, theft rates were less pronounced. Greenburg argued that, “the use of adequately reasoned explanations offered with interpersonal sensitivity tends to mitigate the negative effects associated with the information itself” (p. 566). Thus, organizations are encouraged to explain the basis for all reward-related decisions, especially potentially inequitable decisions, in a sensitive and respectful manner, in order to reduce employees’ negative feelings and subsequent reactions (Folger & Konovsky, 1989; Greenberg, 1988; Greenberg, 1990). Thus, the effects of an inequitable decision can be drastically ameliorated when a thorough explanation is provided. The other recommendation for the development of a norm of reciprocity in an organization is for the organization to design a selection system that screens out applicants high on NA, assuming NA is not related to task performance. As discussed above, although NA did not appear to affect the decision to help, it did affect effort of helping. Plausibly, low levels of trait NA shields people from experiencing negative mood states, leading to more OCBs (George, 1991; George & Brief, 1992; Organ & Ryan, 1995).

**Future Research Directions.** A bulk of the literature on OCBs has focused on affect orientation and equity perceptions as causal antecedents. The current study lends some support to both of these positions. However, the apparent inadvertent manipulation of intrinsic motivation in the equity condition raises the possibility that affect orientation and equity perceptions are not sufficient to explain OCBs. The implication of the results of this study is that factors that make external rewards salient to an employee will reduce OCBs. Konovsky and Pugh (1994) suggest
that in the realm of economic exchanges, or rather when the details of distributive justice are
made salient, the extrinsic explanations for behavior undermine the development and influence
of more intrinsically based explanations of behavior (i.e., trust in the supervisor and commitment
to the organization). The researchers argue that making procedural justice salient will encourage
the prominence of a relational contract between the employee and the organization, which will
foster more intrinsically motivated behaviors. As such, a manager attempting to foster more
OCBs should probably engage in a strategy that emphasizes OCBs for the sake of facilitating a
relational contract as opposed to emphasizing OCBs as a way to improve profits or other
extrinsic rewards (Neuman & Kickul, 1998). Future research could address this issue.

In regards to dispositions, the lack of effects for PA is the most surprising result.
Research has consistently found that PA is related to OCBs. However, as argued above, research
on OCBs has typically used job satisfaction as a proxy measure for PA. As argued by Weiss
(2002), an attitude and affect should not be thought of as identical constructs because an attitude,
like job satisfaction, is a global evaluation of an object made from beliefs and affect about that
object. Weiss emphasizes that beliefs and affect about an object contribute separately to the
global evaluation of the object (hence, need not be the same) and also have different implications
for behaviors that result from the evaluation. Weiss maintains that when we look at a behavioral
performance measure (i.e., OCBs), we need to examine the different implications of the
evaluation (the attitude), i.e., both the beliefs and affect in regards to behavior. Thus, typical
research on OCBs has often confounded the cognitions with affect when studying OCBs. The
results of the current study indicate that when the measure of PA is not contaminated, PA will
not be seen as an important determinant of OCBs. Thus, although a positive relationship
between job satisfaction and OCBs has consistently been found (e.g., Bateman & Organ, 1983;
Organ & Ryan, 1995), PA may not necessarily be driving this effect. Further, Schleicher, Greguras, and Watt, (2004), argue that consistency between affect and cognition in regards to job satisfaction is what drives the relationship between satisfaction measures and performance. Thus, in regards to OCBs, field research should endeavor to parcel out job cognitions (i.e., fairness and expectancies) and examine them in the relation to effects of actual PA and not rely on job satisfaction as a proxy measure for saying that employees who are happier perform more OCBs.

In regards to NA, as mentioned above, research should endeavor to parcel out the effects of mood state versus mood trait on OCBs (George, 1991; George & Brief, 1992; Organ & Ryan, 1995). Further, it would be beneficial to see if specific facets of NA render effects on OCBs. Lee and Allen (2002) have suggested that affect has a hierarchical structure ranging from discrete states and emotions, to global PA and NA, and that level of affect measurement may effect variance explainable in OCBs. Lee and Allen found that while facets of PA failed to predict OCBs above the effects of global PA, specific facets of NA did predict OCBs over and above global NA. More specific examination of underlying features of NA would elucidate a more comprehensive relationship between NA and OCBs.

Additionally, future research on OCBs needs to address the Big Five factors as potential causes of OCBs, or at least as predictors of OCBs. In regards to Neuroticism, it is intuitively appealing to argue that anxious people are more likely to want to please others. Therefore, a relationship between Neuroticism and OCBs, as found in the inequity and control conditions, is possible. However, more work is needed, both in terms of laying the theoretical foundation for this notion, and testing resultant predictions. In regards to Agreeableness and Conscientiousness, the current study only found support for these factors in the equity condition. Previous research (e.g., Organ & Konovsky, 1989; Smith et al., 1983; and Organ & Lingl, 1995) has suggested that
these two personality factors may be differently associated with specific facets of OCBs, namely the Altruism and Compliance dimensions, respectively. In the current study, individual facets of OCBs were not examined, as OCBs were investigated under the more global construct of prosocial behavior. Thus, it may be the case that the effects of Agreeableness and Conscientiousness may vary as a function of the specific type of helping behavior, and also as a function of contextual variables (i.e., equity of the situation). Also, in the sense that intrinsic motivation appears to have a possible role in determining OCBs, it is interesting that Agreeableness and Conscientiousness may be the best predictors of OCBs when intrinsic motivation is low.

In this vein, research by Neuman and Kickul, (1998) found that Conscientiousness and Agreeableness had direct significant positive relationships with all 5 dimensions of OCBs, and further, found that covenantal contract partially mediated the relationship between these personality factors and OCBs. Neuman and Kickul defined covenantal contract as a “relational contract” (as opposed to an exchange or transactional contract) between the employee and the organization, “with an emphasis on trust, mutuality and shared values” in addition to employee loyalty and involvement with the organization (p. 266). Plausibly, such an underlying relational covenant between the employee and the organization is what determines an employees’ intrinsic motivation to help the organization and when the terms of such a contract are transformed into a transactional contract, this is what leads to extrinsic motivation (Konovsky & Pugh, 1994). Indeed, future research could examine how personality factors and the development of a relational contract affect OCBs, and the effects that equitable and inequitable situations have on this relationship.
Moreover, another aspect of personality that may be investigated in regards to explaining variance in OCB that is not accounted for by affect, equity, or job satisfaction, is a helping personality (Penner, Midili, & Kegelmeyer, 1997). Penner et al. (1997) suggest that there may be a “prosocial personality orientation—an enduring predisposition to feel concern about the welfare of other people, to think about their best interests, and to engage in actions on their behalf” (p. 121). Penner et al. cite research that indicates that both factors on the Prosocial Personality Battery, namely Other-oriented Empathy and Helping, account for unique variance in the Altruism dimension of OCBs after both mood and job satisfaction, and separately, organizational justice. Further, the factor of Other–oriented Empathy has been found to account for variance in the OCB dimension of Conscientiousness, after these respective factors. Plausibly, such a prosocial personality factor may be responsible for the decision to help. Future research could address this issue in relation to OCBs.

Finally, a matter that was not discussed in this paper but which deserves examination is the episodic versus the persistent display of OCBs. Penner et al. (1997) have argued that research should address predictors of the sustained display of OCBs. Penner et al. discuss a theoretical model that implicates the variables of, motives, prosocial orientation, mood on the job, job attitudes, and organizational values, as being intercorrelated and as functioning in tangent to predict episodic displays of OCBs. The researchers suggest that, “if workers consistently engage in OCBs, they will come to see that as part of their role within the organization” and thus, overtime, will generate an identity based on helping, which will then serve as the primary basis for them to continue performing OCBs in an effort to maintain their identity (p. 126). However, while Finkelstein and Penner (2004) found support that role identity and motives (specifically Prosocial Values and Organizational Concern) are strong predictors of OCBs, they only found
partial support for role identity as a mediator of the motive-OCB relationship. In fact, supplementary analyses revealed that motives strongly mediated the relationship between role-identity and OCBs. Thus, future research could elucidate how the variables investigated in the present study, namely affect, equity and personality, interact with motives and role identity in relation to OCBs, and whether these variables render both immediate and long-term effects on OCBs.

Conclusion

Although the present study revealed several interesting results, limitations need to be considered. The unforeseen confounding of the equity manipulation with an intrinsic/extrinsic motivation shift at first appeared to be a limitation, but in retrospect, it appears to have been fortuitous. Obviously, replication is needed, but as mentioned above fuller understanding of the antecedents of OCBs may require the inclusion of the intrinsic motivation construct.

The larger problem was that 66% of the sample did not help. In retrospect, it would have been beneficial to restrict what the participants could bring with them into the experiment room. There were no limitations; thus participants engaged in many other activities including speaking on the phone, listening to music, and doing homework. Limiting what participants could do in the free session likely would have increased the number of participants who rendered assistance.

However, the lack of helping on the part of subjects made salient the issue of what drives the helping decision. It was noted above that field research on OCBs should focus more on the decision to render aid. In the same vein, any replication of this study also should be designed to uncover the potential causes of the decision not to help, beyond that which is explained by perceptions of unfairness.
The experiment was run over a four week period, which provided time for participants to talk to others about the manipulation. During de-briefing it was stressed to all participants that they should not discuss the study with others, no subjects indicated that they knew the inequity manipulation was a rouse.

Finally, the research assistants were blind to the hypotheses but they were not blind to the conditions. To counter potential biases, the research assistants received extensive training in delivering their scripts, and they were required to read the script to the subjects. Follow-up debriefing with the research assistants revealed that they remained blind to the hypotheses throughout the duration of the study, and they were unable to specify the psychological variables of interest in the study.

In spite of the aforementioned limitations, I believe that the current study contributes to the literature on OCBs in important ways. For one, the interesting results of this experiment indicate that the examination of OCBs should not be confined to the field. Indeed, this study shows that the antecedents of OCBs can be fruitfully examined/ manipulated in a laboratory setting, where there is a clear delineation between in-role and extra-role behaviors, and greater internal validity then in the field. In this vein, the results of this study highlight a distinction between the decision to help and helping effort, and suggest an avenue for future research in regards to the former. Additionally, the results of the current study indicate that past research on the antecedents of OCBs may have neglected the role that NA and motivation play in determining OCBs and call for more research to this end. Overall, this study suggests that there is a threshold for the decision to help that is increased in the presence of inequity. Once this threshold has been reached, however, affective and personality variables affect effort of helping behaviors.
References


Appendix A: The PANAS

Instructions for Administering the PANAS items

The scale below has 20 words that represent different feelings and emotions. Carefully read each item, and consider to what extent you generally feel that way, that is, how much you feel that way on average. Use the following 5-point scale to represent your average feeling for each item, and select the number that corresponds to the number on the scale for each item. Please answer as honestly as possible. Your responses will be kept in strict confidence.

1  2  3  4  5
Very slightly  a little  moderately  quite a bit  extremely
Or not at all

1) Interested
2) Distressed
3) Excited
4) Upset
5) Strong
6) Guilty
7) Scared
8) Hostile
9) Enthusiastic
10) Proud
11) Irritable
12) Alert
13) Ashamed
14) Inspired
15) Nervous
16) Determined
17) Attentive
18) Jittery
19) Active
20) Afraid
Appendix B: The ESI

Instructions for Administering the ESI

HOW YOU FEEL ABOUT ORGANIZATIONS IN GENERAL

The questions on this inventory 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 answers (A and 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 answers. You may use zeros if you’d like.

Just be sure to use all 10 points on each question. Place your points into the blank next to each letter.

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
Appendix C: The IPIP

Instructions for Administering the IPIP items

On the following pages, there are phrases describing people’s behaviors. Please use the rating scale below to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully.

Response Options
1: Very Inaccurate
2: Moderately Inaccurate
3: Neither Inaccurate nor Accurate
4: Moderately Accurate
5: Very Accurate

1) Am the life of the party
2) Feel little concern for others.
3) Am always prepared.
4) Get stressed out easily.
5) Have a rich vocabulary.
6) Don’t talk a lot.
7) Am interested in people.
8) Leave my belongings around.
9) Am relaxed most of the time.
10) Have difficulty understanding abstract ideas.
11) Feel comfortable around people.
12) Insult people.
13) Pay attention to details.
14) Worry about things.
15) Have a vivid imagination.
16) Keep in the background.
17) Sympathize with others’ feelings.
18) Make a mess of things.
19) Seldom feel blue.
20) Am not interested in abstract ideas.
21) Start conversations.
22) Am not interested in other people’s problems.
23) Get chores done right away.
24) Am easily disturbed.
25) Have excellent ideas.
26) Have little to say.
27) Have a soft heart.
28) Often forget to put things back in their proper place.
29) Get upset easily.
30) Do not have a good imagination.
31) Talk to a lot of different people at parties.
32) Am not really interested in others.
33) Like order.
34) Change my mood a lot.
35) Am quick to understand things.
36) Don’t like to draw attention to myself.
37) Take time out for others.
38) Shirk my duties.
39) Have frequent mood swings.
40) Use difficult words.
41) Don’t mind being the center of attention.
42) Feel others’ emotions.
43) Follow a schedule.
44) Get irritated easily.
45) Spend time reflecting on things.
46) Am quiet around strangers.
47) Make people feel at ease.
48) Am exacting in my work.
49) Often feel blue.
50) Am full of ideas.
Appendix D: Informed Consent Form

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

INFORMED CONSENT DOCUMENT:
Adult Consent Form

STUDY TITLE: Exploring the Relationship between Personality and Judgments about Corrective Action for Juvenile Delinquents

PRINCIPAL INVESTIGATOR: Julie Kalanick, Dept. of Psychology

Purpose of the Study
The research study is aimed at evaluating how personality variables relate to judgments about corrective action for juvenile delinquents.

Approximately 120 undergraduate students from Virginia Tech will be recruited for this experiment, which will take approximately 2-3 hours of your time. Please note that only students age 18 or older are eligible to participate in this study.

This study is being conducted by Julie Kalanick who is a graduate student in Virginia Tech’s Industrial/Organizational Psychology program. If you have any questions about this study, please feel free to contact any of the following individuals:

Julie Kalanick: (540) 250-2632 or juliek2@vt.edu
Dr. Neil Hauenstein: (540) 231-5716 or nhauen@vt.edu
Dr. Jack Finney, Chair Psychology Department: (540) 231-6670
Dr. David Harrison, Chair HSC: (540) 231-4422
Dr. David Moore, Chair IRB: (540) 231-4991 or moored@vt.edu

Procedure to be Followed
A link to this study was posted online using Sona Systems, the Department of Psychology’s online Experiment Management System. During phase one of the study, you used the Sona System to fill out three measures and provided your contact information. This should have taken approximately one hour of your time. You were then contacted and asked to schedule a timeslot to come to Williams Hall to complete phase two.

You are being given a copy of this informed consent form to sign. Then, you will be provided with five concise vignettes to read, which are anonymous case studies describing various offenses of juvenile delinquents. You will be asked to first write what you believe may have caused the person’s current behavior, and second, to envision yourself as a correction officer and to write what you believe is the appropriate intervention or course of action needed to be taken towards each delinquent. Your goal as the correction officer will be to suitably reprimand the delinquent and to educate the delinquent on the inappropriateness of his/her actions, and to assist the delinquent in engaging in more socially acceptable ways of behavior. You will be given 1 hour to do this task, and are required to write at least one page for each of the five case studies. Phase two will take approximately two hours of your time.
Anonymity of Subjects
The results of this study will be kept strictly confidential. The information you provide will have your name removed and a number will be used to identify you when we look at the information you have provided. The information obtained in this project may be used for scientific or educational purposes. It may be presented at scientific meetings and/or published and reproduced in professional journals, books, or used for any other purpose that Virginia Tech’s Department of Psychology considers proper in the interest of education, dissemination of knowledge, or research. However, information collected will not be presented in any manner that will identify you or anyone else by name.

Discomforts and Risks from Participating in This Study
There should be no more than minimal risks to you from participation in this study. There may be portions of this study where you may experience mild emotional distress or anxiety. However, any anxiety experienced should be transitory and should only last for a brief period of time. We are required by the institutional review board (who oversees the informed consent process) to inform you that in the extremely unlikely case that you desire professional counseling due to the effects of this study, we will put you in touch with a university counselor.

Benefits of the Project
The personal benefit of this study is that it exposures you to various measures that you may encounter in various job selection test batteries. Further, you will explore your personal views regarding understanding the behavior of, and suggesting corrective action for, juvenile delinquents.

Freedom to Withdraw
Your participation in this study is completely voluntary. If you choose to participate, you may withdraw from the study at any time without penalty. You do not have to answer any questions that make you feel uncomfortable. You may stop answering questions at any time you choose.

Compensation
You may earn up to three extra credit points towards a Psychology class you are enrolled in, that is listed on the Sona System. Note that if you choose not to participate, there may be other opportunities to accrue extra-credit points from other studies, or activities.

Subject Permission
I have read and understand the description of the study. I have had an opportunity to ask questions and to have them answered. I hereby acknowledge the above and give my voluntary consent for participation in this study. I further understand that I may withdraw at any time without penalty. I understand that I can have any questions regarding this research and its conduct answered for me.

Print your Name: __________________________                          PID: ______________________
___________________________        ________________
Signature             Date Signed
Appendix E: Vignettes and Instructions for their Administration

Below are five case studies of anonymous juvenile delinquents, who have committed a variety of offenses. Please read each case study very carefully and for each case study write at least one full page based on the following two criteria:

a) Use your knowledge of psychology and discuss aspects of the person’s childhood that may have encouraged his/her present behavior.

b) Envision yourself as a juvenile correction officer and suggest what you believe is the appropriate intervention or course of action needed to be taken towards each delinquent.

Please use as much detail as possible, and feel free to incorporate your own psychological interpretations and theories as well. Each case study should take approximately 12 minutes for you to write about; please budget your time accordingly. You have one hour to complete this task and a researcher will collect your responses only at that time.

Case study #1:
Person “A” is a 16 year old female who has been convicted of prostitution. She states that she became a prostitute because, “no one has ever loved her” and “she wants to feel close to a man,” and also because her father demanded that she, “get money for her good looks.”

Case study #2:
Person “B” is a 14 year old male who has been convicted of 4 instances of destruction of private property. Included in his destruction has been the explosion of a free-standing mailbox, the ignition of a 6’ maple tree, and the breaking of a sliding glass door with a brick on a homeowner’s property. Person “B” maintains that he performs such acts because he doesn’t like the ethnicity of the family living in the house, and this is his way of “driving them away.”

Case study #3
Person “C” is a 15 year old female who has been convicted of 3 instances of theft from a pharmacy. Included in her offenses are stealing 10 bottles (300 pills) of anti-depressant medication. The girl stated that she committed this offense because she needed the pills to make her happy for when she went home to her “violently drunk father” every day after school.

Case study #4
Person “D” is a 15 year old male who has been convicted of 2 instances of damage to private property. His offenses include slashing tires of two cars, smashing both cars’ windshields with a cement block, and extensively scratching the exterior of both cars with a key. Person “D” states that he committed his actions because the owners of both cars were women who he said reminded him of his “overbearing mother.”

Case study #5
Person “E” is a 13 year old male who has been caught sneaking into 7 R-rated movies. He states that he commits such an offense because his parents won’t let him watch R-rated movies and he “gets aroused by the violence, vulgarity, and nudity present in R rated movies.”
Appendix F: Debriefing Form for Participants in the Equity and Control Conditions

Please be assured that you will receive three extra credit points for your participation. The true purpose of the experiment was to assess how the situation you were in interacted with your emotional orientation and sensitivity to fairness to determine your willingness to help. The true title of this study was, An Experiment Examining the Relationship of Affect, Equity, and Equity Sensitivity, With Organizational Citizenship Behaviors. 

In the online phase, we measured your general positive and negative affectivity, your personality and your sensitivity to equity. In the laboratory phase, we used different manipulations that affect a person’s willingness to help out (i.e., score the Wonderlic measures that were available to you after you completed writing about the vignettes). In our analyses of helping behaviors, we will examine how emotional orientation and sensitivity to fairness interacted with the experimental situations to which participants were assigned.

Thank you again for your participation. You may withdraw your data if you desire.

WE ASK THAT YOU DO NOT SHARE THE DETAILS OF THIS EXPERIMENT WITH ANYONE, AS THIS MAY AFFECT OUR DATA

Contact Information:
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Dr. Jack Finney, Chair Psychology Department: (540) 231-6670
Dr. David Harrison, Chair HSC: (540) 231-4422
Dr. David Moore, Chair IRB: (540) 231-4991 or moored@vt.edu
Appendix G: Debriefing Form for Participants in the Inequity Condition

Please be assured that you will receive three extra credit points for your participation. You were told that you would not receive the amount of extra credit that you were promised for participating in the research study. This was not a correct statement, but was deception. This deception was necessary because we wanted to see how you would naturally respond to the information about extra credit. We apologize for any emotional distress that you may have experienced. If you believe that you need counseling for any emotional disturbance, please feel free to contact any of the individuals below, and they will put you in contact with a university counselor.

The true purpose of the experiment was to assess how the situation you were in interacted with your emotional orientation and sensitivity to fairness to determine your willingness to help. The true title of this study was, An Experiment Examining the Relationship of Affect, Equity, and Equity Sensitivity, With Organizational Citizenship Behaviors.

In the online phase, we measured your general positive and negative affectivity, your personality and your sensitivity to equity. In the laboratory phase, we used different manipulations that affect a person’s willingness to help out (i.e., score the Wonderlic measures that were available to you after you completed writing about the vignettes). In our analyses of helping behaviors, we will examine how emotional orientation and sensitivity to fairness interacted with the experimental situations to which participants were assigned.

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Dr. David Harrison, Chair HSC: (540) 231-4422
Dr. David Moore, Chair IRB: (540) 231-4991 or moored@vt.edu
Appendix H: Feedback Form for the Equity Condition

1) When you signed up for this experiment, how many extra credit points did you believe you could receive?

2) Given the time and effort that you spent participating in this experiment, do you believe that the amount of extra credit that you are receiving is fair? Please explain why or why not?
Appendix I: Feedback Form for the Inequity Condition

1) When you signed up for this experiment, how many extra credit points did you believe you could receive?

2) Would this amount of extra credit have been fair for what you did today? Why/why not?

3) How do you feel about what you were just told regarding the reduction in the extra credit you are receiving?

4) Given what you believed you would receive for participating in this experiment, do you believe that this reduction in extra credit is fair?

5) Given the time and effort that you spent participating in this experiment, do you believe that the amount of extra credit that you are now receiving is fair? Please explain why or why not.

6) Do you believe that your extra credit is being reduced?
Appendix J: Debriefing Form for the Equity Condition of the Pilot Study

Please be assured that you will receive two extra credit point hours for your participation. This purpose of this study was to test a manipulation designed for a larger study. The case studies that you wrote about were merely a means for you to exert effort and your responses are not a focus of the experiment.

Thank you again for your participation. Do you have any questions? You may withdraw your data if you desire.

WE ASK THAT YOU DO NOT SHARE THE DETAILS OF THIS EXPERIMENT WITH ANYONE, AS THIS WILL AFFECT OUR DATA. WE TRUST YOUR HONOR IN THIS MATTER!!!!

Contact Information:
Julie Kalanick: (540) 250-2632 or juliek2@vt.edu
Dr. Neil Hauenstein: (540) 231-5716 or nhauen@vt.edu
Dr. Jack Finney, Chair Psychology Department : (540) 231-6670
Dr. David Harrison, Chair HSC: (540) 231-4422
Dr. David Moore, Chair IRB: (540) 231-4991 or moored@vt.edu
Appendix K: Debriefing Form for the Inequity Condition of the Pilot Study

Please be assured that you will receive two extra credit point hours for your participation. You were told that you would not receive the amount of extra credit that you were promised for participating in the research study. This was not a correct statement, but was deception. This deception was necessary because we wanted to see how you would naturally respond to the information about extra credit. We apologize for any emotional distress that you may have experienced. If you believe that you need counseling for any emotional disturbance, please feel free to contact any of the individuals below, and they will put you in contact with a university counselor.

This purpose of this study was to test a manipulation designed for a larger study. The case studies that you wrote about were merely a means for you to exert effort and your responses are not a focus of the experiment.

Thank you again for your participation. Do you have any questions? You may withdraw your data if you desire.

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Dr. David Moore, Chair IRB: (540) 231-4991 or moored@vt.edu
Appendix L: Sample Feedback Responses for the Equity Condition

1) When you signed up for this experiment, how many extra credit points did you believe you could receive?

All participants believed that they would receive 2 extra credit points.

2) Given the time and effort that you spent participating in this experiment, do you believe that the amount of extra credit that you are receiving is fair? Please explain why or why not?

“Yes. I received 2 extra credit points for all of the writing that I had to do.”
“Yes. I had to do a lot of writing and I really put a lot of thought into my answers.”
“Yes. The amount of credit and time spent was worth equally.”
“It is worth it for the effort.”
Appendix M: Sample Feedback Responses for the 1 hour Inequity Condition

1) When you signed up for this experiment, how many extra credit points did you believe you could receive?

All participants believed they would receive 2 extra credit points

2) Would this amount of extra credit have been fair for what you did today? Why/why not?

“Yes, because it took a decent amount of time and a lot of writing was required.”

“Yes, because an hour of my time is worth 2 extra credit points.”

“Well, I only wrote for an hour, so I guess this is more then I would have needed.”

3) How do you feel about what you were just told regarding the reduction in the extra credit you are receiving?

“I agreed to come on the basis that I would be getting 2 points, so I believe it is unfair to tell me this after the fact.”

“It is fine with me; understandable.”

“No feelings good or bad. One point is still fair.”

“A little angry and deceived.”

“I am NOT happy.”

“I feel disappointed because of the time and effort that I put forth. Plus I rearranged my schedule to come here.”

“I am ANGRY. This study took a lot of my time. For one extra credit point, I could have pushed buttons on a computer instead of writing 5 pages.”

4) Given what you believed you would receive for participating in this experiment, do you believe that this reduction in extra credit is fair?

“No. When you expect to get a certain number of points for doing a task and then after you do it you don’t receive that compensation, it is really unfair and unmotivating.”

“No. Not after the fact.”
“Yes, I understand. It is all about supply and demand with these experiments.”

“Yes. This is only one experiment and I have time to do other ones.”

“Ah, no.”

“No. Not fair. I had to do a lot of writing, and for 1 extra credit point, I could have done another experiment where I just took an online survey.”

5) Given the time and effort that you spent participating in this experiment, do you believe that the amount of extra credit that you are now receiving is fair? Please explain why or why not.

“No. There was a lot of writing and it took one hour of my time.”

“No. I worked harder then on any other assignment and this is a valuable time of the day for me.”

“Yes it is fair. I did one thing and it took one hour so I should receive 1 extra credit point.”

“Yes. It was an interesting experiment and I enjoyed it so I didn’t mind.”

“The experiment only took one hour so receiving one extra credit point is fair.”

“No. If I had known, I would not have gotten up at 8am.”

“No because I had to write 5 pages and I put a lot of thought into my answers.”

6) Do you believe that your extra credit is being reduced?

All participants believed that the statement that was read was true and that they were receiving a reduction in extra credit.
Appendix N: Questionnaire for Experimenters

1) What measures did the participants fill out during Phase 1 (the online phase)?

2) What do you believe I was interested in measuring in this study (what were the independent and dependent variables)?

3) What do you believe the hypotheses were in this study?

4) What was the significance of the 15 minutes? That is, what did the funny video and the Wonderlic measures represent?
Table 1

*Summary of Investigated Antecedents of Organizational Citizenship Behaviors*

<table>
<thead>
<tr>
<th>Antecedents of Organizational Citizenship Behaviors</th>
<th>Research Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5  6  7  8  9  10</td>
</tr>
<tr>
<td>J.S.</td>
<td>X    X</td>
</tr>
<tr>
<td>J.S. as proxy for Affect</td>
<td>X    X X X X X X</td>
</tr>
<tr>
<td>J.S. as proxy for Fairness</td>
<td>X    X X X X X</td>
</tr>
<tr>
<td>Trait Affect</td>
<td>X    X X X</td>
</tr>
<tr>
<td>State Affect</td>
<td>X</td>
</tr>
<tr>
<td>Perceived Fairness</td>
<td>X    X X X</td>
</tr>
<tr>
<td>Equity Sensitivity</td>
<td>X</td>
</tr>
<tr>
<td>Leadership Style</td>
<td>X    X X</td>
</tr>
<tr>
<td>Commitment</td>
<td>X    X X</td>
</tr>
<tr>
<td>Personality</td>
<td>X    X</td>
</tr>
<tr>
<td>Task Scope</td>
<td>X    X</td>
</tr>
</tbody>
</table>

Table 2

Descriptive Statistics for each Condition with Prosocial Behavior, TV Watching, and Individual Difference Measures (N=188)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Control (n=58)</th>
<th>Equity (n=65)</th>
<th>Inequity (n=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Prosocial Behavior</td>
<td>6.98</td>
<td>4.43</td>
<td>3.34</td>
</tr>
<tr>
<td>$SD$</td>
<td>11.47</td>
<td>6.43</td>
<td>6.49</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.43</td>
<td>1.28</td>
<td>1.69</td>
</tr>
<tr>
<td>$SE$</td>
<td>0.31</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>% Helpers</td>
<td>37.9</td>
<td>40.0</td>
<td>23.1</td>
</tr>
<tr>
<td>% Watched TV</td>
<td>29.3</td>
<td>16.9</td>
<td>23.1</td>
</tr>
<tr>
<td>Mean PA ($SD$)</td>
<td>35.95 (4.22)</td>
<td>34.38 (6.29)</td>
<td>35.07 (6.68)</td>
</tr>
<tr>
<td>Mean NA ($SD$)</td>
<td>23.04 (5.47)</td>
<td>22.60 (5.98)</td>
<td>21.08 (5.96)</td>
</tr>
<tr>
<td>Mean ESI ($SD$)</td>
<td>30.52 (7.33)</td>
<td>29.48 (7.05)</td>
<td>29.13 (7.25)</td>
</tr>
<tr>
<td>Mean Conscientiousness ($SD$)</td>
<td>35.81 (5.22)</td>
<td>35.61 (7.47)</td>
<td>36.15 (7.32)</td>
</tr>
<tr>
<td>Mean Agreeableness ($SD$)</td>
<td>40.24 (5.26)</td>
<td>40.0 (4.78)</td>
<td>40.89 (4.85)</td>
</tr>
<tr>
<td>Mean Neuroticism ($SD$)</td>
<td>31.31 (7.37)</td>
<td>30.84 (8.15)</td>
<td>31.97 (7.31)</td>
</tr>
<tr>
<td>Mean Extraversion ($SD$)</td>
<td>35.42 (7.85)</td>
<td>34.55 (7.20)</td>
<td>35.08 (8.32)</td>
</tr>
<tr>
<td>Mean Openness ($SD$)</td>
<td>34.73 (5.30)</td>
<td>35.59 (5.30)</td>
<td>36.90 (6.16)</td>
</tr>
</tbody>
</table>

Note. The mean and standard deviation for prosocial behavior represent the number of measures scored. The percentages for prosocial behavior and for TV Watching represent the percentage of participants in each condition that did either scored measures or watched TV, respectively.
Table 3

*Descriptive Statistics for Log (prosocial behavior + .1) (N = 188)*

<table>
<thead>
<tr>
<th></th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>M</th>
<th>SD</th>
<th>Skewness Statistic</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log (prosocial + .1)</td>
<td>-1.00</td>
<td>1.52</td>
<td>-0.30</td>
<td>1.00</td>
<td>0.79</td>
<td>0.18</td>
</tr>
<tr>
<td>1. Control</td>
<td>-1.00</td>
<td>1.52</td>
<td>-0.19</td>
<td>1.07</td>
<td>0.65</td>
<td>0.31</td>
</tr>
<tr>
<td>2. Equity</td>
<td>-1.00</td>
<td>1.40</td>
<td>-0.21</td>
<td>1.00</td>
<td>0.50</td>
<td>0.30</td>
</tr>
<tr>
<td>3. Inequity</td>
<td>-1.00</td>
<td>1.34</td>
<td>-0.51</td>
<td>0.91</td>
<td>1.33</td>
<td>0.30</td>
</tr>
</tbody>
</table>
### Table 4

**Bivariate Correlations between PA, NA, and Equity Sensitivity with Individual Difference Variables and Log (prosocial behavior + .1) (N=188)**

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>NA</th>
<th>EQS</th>
<th>CON</th>
<th>EXT</th>
<th>AGR</th>
<th>NEUR</th>
<th>OPEN</th>
<th>LOG P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>(.86)</td>
<td>-.11</td>
<td>.15†</td>
<td>.29††</td>
<td>.29††</td>
<td>.28††</td>
<td>.31††</td>
<td>.22††</td>
<td>-.04</td>
</tr>
<tr>
<td>NA</td>
<td>(.84)</td>
<td>-.01</td>
<td>-.15†</td>
<td>-.09</td>
<td>-.10</td>
<td>-.56††</td>
<td>.05</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>EQS</td>
<td>(.86)</td>
<td>.04</td>
<td>.08</td>
<td>.26††</td>
<td>.12</td>
<td>.03</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. PA = Positive Affectivity; NA = Negative Affectivity; EQS = Equity Sensitivity; CON = Conscientiousness; EXT = Extraversion; AGR. = Agreeableness; NEUR = Neuroticism; OPEN = Openness; LOG P = Log (prosocial behavior + .1). The values in parentheses represent coefficient α. The correlations with LOG P are 1-tail tests, with *p < .05. The correlations between PA, NA and EQS and the remaining individual difference variables are 2-tailed; †p < .05. ††p < .01.*
Table 5

*Bivariate Correlations between Big 5 Factors and Log (prosocial behavior + .1) (N = 188)*

<table>
<thead>
<tr>
<th></th>
<th>CON</th>
<th>EXT</th>
<th>AGR</th>
<th>NEUR</th>
<th>OPEN</th>
<th>LOG P</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON</td>
<td>(.85)</td>
<td>-.10</td>
<td>.19††</td>
<td>-.01</td>
<td>.18†</td>
<td>.01</td>
</tr>
<tr>
<td>EXT</td>
<td>(.91)</td>
<td>.29††</td>
<td>.07</td>
<td>.19†</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>AGR</td>
<td>(.82)</td>
<td>.10</td>
<td>.11</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEUR</td>
<td>(.88)</td>
<td>.01</td>
<td>-.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPEN</td>
<td>(.80)</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. CON = Conscientiousness; EXT = Extraversion; AGR. = Agreeableness; NEUR = Neuroticism; OPEN = Openness; LOG P = Log (prosocial behavior + .1). The values in parentheses are coefficient α. All bivariate correlations are 2-tailed tests; †p < .05. ††p < .01.*
Table 6

*Summary of Hierarchical Regression Analyses for predicting Prosocial Behavior from Positive and Negative Affectivity (N =188)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$t$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affectivity</td>
<td>-0.01</td>
<td>-0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>0.00</td>
<td>0.14</td>
<td>0.00</td>
<td>0.15</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA x NA</td>
<td>0.00</td>
<td>-0.49</td>
<td>0.00</td>
<td>0.24</td>
<td>0.00</td>
</tr>
</tbody>
</table>

*Note.* The dependent variable is Log (prosocial behavior + .1). PA=Positive Affectivity; NA=Negative Affectivity.

*p < 05.*
Table 7

*Within Condition Bivariate Correlations between PA and NA with Prosocial Behavior (N =188)*

<table>
<thead>
<tr>
<th>Condition</th>
<th>$r$ between PA and Prosocial</th>
<th>$r$ between NA and Prosocial</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Control ($n = 58$)</td>
<td>-.18</td>
<td>-.19</td>
</tr>
<tr>
<td>2. Equity ($n = 65$)</td>
<td>-.05</td>
<td>.22</td>
</tr>
<tr>
<td>3. Inequity ($n = 65$)</td>
<td>.06</td>
<td>-.08</td>
</tr>
</tbody>
</table>

*Note. Prosocial Behavior = Log (prosocial behavior + .1). PA=Positive Affectivity; NA=Negative Affectivity. The tests are 1-tailed; *p < .05.*
Table 8

Summary of Hierarchical Regression Analyses for predicting Prosocial Behavior from Condition and Equity Sensitivity (N = 188)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>t</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1</td>
<td>0.15</td>
<td>1.71</td>
<td>1.36</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Vector 2</td>
<td>-0.06</td>
<td>-1.07</td>
<td></td>
<td></td>
<td>.01</td>
</tr>
<tr>
<td>Equity Sensitivity</td>
<td>0.00</td>
<td>-0.05</td>
<td>.00</td>
<td></td>
<td>1.36</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1 x Eq. Sensitivity</td>
<td>-0.01</td>
<td>-1.04</td>
<td>.70</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Vector 2 x Eq. Sensitivity</td>
<td>0.00</td>
<td>-0.58</td>
<td></td>
<td></td>
<td>.70</td>
</tr>
</tbody>
</table>

*Note.* The dependent variable is the log (prosocial + .1). Vector 1 and Vector 2 represent the effect codes for condition. Eq. Sensitivity = Equity Sensitivity. *p < .05.*
Table 9

*Summary of Hierarchical Regression Analyses for predicting Prosocial Behavior from Negative Affectivity and Condition (N=188)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$t$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1</td>
<td>0.15</td>
<td>1.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 2</td>
<td>-0.06</td>
<td>-1.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>0.00</td>
<td>-0.11</td>
<td>0.00</td>
<td>1.36</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1 x Neg. Affectivity</td>
<td>0.02</td>
<td>1.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 2 x Neg. Affectivity</td>
<td>0.02</td>
<td>1.74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The dependent variable is the Log (prosocial + .1). Vector 1 and Vector 2 represent the effect codes for condition. Neg. Affectivity = Negative Affectivity. *p < .05.*
Table 10

*Summary of results from a 3 (Equity Condition) x 2 (Helper vs. Non-helper) MANOVA (N=188)*

<table>
<thead>
<tr>
<th></th>
<th>Wilks’ Lambda</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>.94</td>
<td>0.66</td>
</tr>
<tr>
<td>Helpers</td>
<td>.98</td>
<td>0.56</td>
</tr>
<tr>
<td>Condition x Helpers</td>
<td>.87</td>
<td>1.57†</td>
</tr>
</tbody>
</table>

*Note.* p < .10†.
### Table 11

*Within Cell means for NA, Neuroticism and Openness, for Helpers and Non-Helpers (N=188)*

<table>
<thead>
<tr>
<th>Helpers</th>
<th>Condition</th>
<th>Mean NA</th>
<th>Mean Neuroticism</th>
<th>Mean Openness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>22.0</td>
<td>30.0</td>
<td>35.9</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
<td>24.4</td>
<td>28.0</td>
<td>36.9</td>
</tr>
<tr>
<td></td>
<td>Inequity</td>
<td>20.3</td>
<td>33.3</td>
<td>34.9</td>
</tr>
<tr>
<td>Non-Helpers</td>
<td>Control</td>
<td>23.7</td>
<td>32.1</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
<td>21.5</td>
<td>32.7</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>Inequity</td>
<td>21.3</td>
<td>31.6</td>
<td>37.5</td>
</tr>
</tbody>
</table>

*Note.* NA= Negative Affectivity. The possible range of scores on NA, Neuroticism, and Openness is from 5-50.
<table>
<thead>
<tr>
<th>Condition</th>
<th>M</th>
<th>SD</th>
<th>Skewness Statistic</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>18.41</td>
<td>11.70</td>
<td>0.00</td>
<td>0.49</td>
</tr>
<tr>
<td>Equity</td>
<td>11.08</td>
<td>5.42</td>
<td>0.59</td>
<td>0.46</td>
</tr>
<tr>
<td>Inequity</td>
<td>14.47</td>
<td>4.45</td>
<td>0.52</td>
<td>0.58</td>
</tr>
</tbody>
</table>

*Note.* The mean and standard deviation represent number of measures scored.
Table 13

*Summary of Hierarchical Regression Analyses for Helpers, for predicting Prosocial Behavior from Positive and Negative Affectivity (n = 63)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$t$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affectivity</td>
<td>-0.06</td>
<td>-0.30</td>
<td></td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>-0.37**</td>
<td>-2.10</td>
<td>.07</td>
<td>2.20</td>
<td>.07</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA x NA</td>
<td>0.00</td>
<td>-0.02</td>
<td>.00</td>
<td>0.00</td>
<td>.07</td>
</tr>
</tbody>
</table>

*Note.* PA=Positive Affectivity; NA=Negative Affectivity. *$p < .10$, **$p < .05$.}
Table 14

**Summary of Hierarchical Regression Analyses for Helpers, for predicting Prosocial Behavior from Condition and Equity Sensitivity (n = 63)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$t$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1</td>
<td>-1.73</td>
<td>-1.31</td>
<td>.14**</td>
<td>3.27</td>
<td>.14**</td>
</tr>
<tr>
<td>Vector 2</td>
<td>-1.90**</td>
<td>-2.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Sensitivity</td>
<td>-0.05</td>
<td>-0.28</td>
<td>.00</td>
<td>3.27</td>
<td>.14**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1 x Eq. Sensitivity</td>
<td>-0.03</td>
<td>-0.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 2 x Eq. Sensitivity</td>
<td>-0.28**</td>
<td>-2.05</td>
<td>.06</td>
<td>2.26</td>
<td>.20</td>
</tr>
</tbody>
</table>

*Note.* Vector 1 and Vector 2 represent the effect codes for condition. Eq. Sensitivity = Equity Sensitivity.

*p<.10. **p < .05.*
Table 15

Summary of Hierarchical Regression Analyses for Helpers, for predicting Prosocial Behavior from Condition, Negative Affectivity, and Equity Sensitivity (n = 63)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>t</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1</td>
<td>-1.14</td>
<td>-0.85</td>
<td>-0.12**</td>
<td>3.29</td>
<td>.19**</td>
</tr>
<tr>
<td>Vector 2</td>
<td>-1.88**</td>
<td>-2.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>-0.30*</td>
<td>-1.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Sensitivity</td>
<td>-0.04</td>
<td>-0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1 x NA</td>
<td>0.16</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 2 x NA</td>
<td>0.20</td>
<td>1.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 1 x Equity Sensitivity</td>
<td>-0.05</td>
<td>-0.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector 2 x Equity Sensitivity</td>
<td>-0.19</td>
<td>-1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA. x Equity Sensitivity</td>
<td>-.010</td>
<td>-.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA x Eq. Sen. x Vector 1</td>
<td>0.00</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA x Eq. Sen. x Vector 2</td>
<td>0.02</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Vector 1 & Vector 2 represent effect codes for condition. NA= Negative Affectivity; Eq. Sen. = Equity Sensitivity. *p < .10. **p < .05
Table 16

*Examination of $\Delta R^2$ for the 2-way interactions in Regression of Prosocial Behavior on Condition, NA and Equity Sensitivity (n = 63)*

<table>
<thead>
<tr>
<th>Step</th>
<th>Interaction</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2:</td>
<td>Equity Condition X NA</td>
<td>.06</td>
</tr>
<tr>
<td>Step 3:</td>
<td>Equity Condition X Equity Sensitivity</td>
<td>.03</td>
</tr>
<tr>
<td>Step 2:</td>
<td>Equity Condition X Equity Sensitivity</td>
<td>.05</td>
</tr>
<tr>
<td>Step 3:</td>
<td>Equity Condition X NA</td>
<td>.04</td>
</tr>
</tbody>
</table>

*Note.* *p < .10. **p < .05.*
Table 17

*Within Condition Bivariate Correlations between Big 5 Factors and Prosocial Behavior (n = 63)*

Prosocial Behavior

<table>
<thead>
<tr>
<th></th>
<th>Control (n = 22)</th>
<th>Equity (n = 26)</th>
<th>Inequity (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscientiousness</td>
<td>-.11</td>
<td>.35**</td>
<td>.27</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.16</td>
<td>.03</td>
<td>.07</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.15</td>
<td>.44**</td>
<td>.05</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.27</td>
<td>.07</td>
<td>.39*</td>
</tr>
<tr>
<td>Openness</td>
<td>.15</td>
<td>-.02</td>
<td>-.04</td>
</tr>
</tbody>
</table>

*Note.* The tests with Prosocial Behavior are 2-tailed; *p < .10. **p < .05.
Table 18

*Point Biserial Correlations between Individual Difference variables and TV Watching (N =188)*

<table>
<thead>
<tr>
<th>Individual Difference Variable</th>
<th>$r$ with TV Watching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affectivity</td>
<td>0.08</td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>0.00</td>
</tr>
<tr>
<td>Equity Sensitivity</td>
<td>0.08</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-0.01</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.02</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.04</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.20††</td>
</tr>
<tr>
<td>Openness</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

*Note.* The significance for Positive Affectivity was evaluated using a 1-tail test; *$p < .05$. The remaining correlations were evaluated for significance using a 2-tailed test; †$p < .05$. ††$p < .01$. 
Table 19

Logistic Regression for prediction of TV Watching from Condition and Positive Affect (N = 188)

<table>
<thead>
<tr>
<th>Step</th>
<th>Block</th>
<th>Chi-square</th>
<th>-2 Log likelihood</th>
<th>B</th>
<th>Wald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Positive Affectivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>1.20</td>
<td>201.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>2.41</td>
<td></td>
<td>-0.19</td>
<td>0.70</td>
</tr>
<tr>
<td>Vector 1</td>
<td></td>
<td></td>
<td></td>
<td>-0.16</td>
<td>1.81</td>
</tr>
<tr>
<td>Vector 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>3.61</td>
<td>198.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td>1.12</td>
<td></td>
<td>0.03</td>
<td>0.51</td>
</tr>
<tr>
<td>PA x Vector 1</td>
<td></td>
<td></td>
<td></td>
<td>-0.02</td>
<td>0.52</td>
</tr>
<tr>
<td>PA x Vector 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>4.73</td>
<td>197.46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05.
Table 20

Summary of Results of a 3(Equity Condition) x 2(TV Watchers vs. Non-TV Watchers) MANOVA

(N = 188)

<table>
<thead>
<tr>
<th></th>
<th>Wilk’s Lambda</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>.90</td>
<td>1.13</td>
</tr>
<tr>
<td>TV</td>
<td>.94</td>
<td>1.35</td>
</tr>
<tr>
<td>Condition x TV</td>
<td>.92</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Note. *p < .05.
Table 21

*Within Cell Point Biserial Correlations between Individual Difference Variables and TV Watching (n = 43)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control (n = 17)</th>
<th>TV Watching Equity (n = 11)</th>
<th>Inequity (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affectivity</td>
<td>.15</td>
<td>.11</td>
<td>-.01</td>
</tr>
<tr>
<td>Negative Affectivity</td>
<td>.04</td>
<td>-.12</td>
<td>.05</td>
</tr>
<tr>
<td>Equity Sensitivity</td>
<td>.01</td>
<td>.03</td>
<td>.19</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.00</td>
<td>-.14</td>
<td>-.14</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.06</td>
<td>.11</td>
<td>-.21</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.04</td>
<td>.02</td>
<td>.14</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.21</td>
<td>.26</td>
<td>.11</td>
</tr>
<tr>
<td>Openness</td>
<td>-.15</td>
<td>.10</td>
<td>.03</td>
</tr>
</tbody>
</table>

*Note.* The “n” values represent the number of participants in each condition who watched TV. The total number of participants in the Control, Equity, and Inequity conditions are 58, 65, and 65, respectively. For Positive Affectivity, significance was evaluated with a 1-tail test; \( *p < .10 \). For the other variables, significance was evaluated with a 2-tail test; \( †p < .10 \).