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## Making organizational punishment work: The effects of social accounts and punishment severity

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MAKING ORGANIZATIONAL PUNISHMENT WORK: THE EFFECTS  
OF SOCIAL ACCOUNTS AND PUNISHMENT SEVERITY

A Thesis

Presented to the

Department of Psychology

and the

Faculty of the Graduate College

University of Nebraska

In Partial Fulfillment

of the Requirements of the Degree

Master of Arts

University of Nebraska at Omaha

By

Andrew L. Noon

August, 2001

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THESIS ACCEPTANCE

Acceptance for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree of Master of Arts, University of Nebraska at Omaha.

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# MAKING ORGANIZATIONAL PUNISHMENT WORK: THE EFFECTS OF SOCIAL ACCOUNTS AND PUNISHMENT SEVERITY

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University of Nebraska, 2001

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Punishment continues to be used by organizations as one method to eliminate unwanted employee behaviors. Bennett (1998) argued that managers must be aware of two aspects of the punishment situation: (a) the punishment intensity and (b) the negative consequences of the punishment. Previous research indicates that strong punishments are most effective at changing unwanted behaviors, but strong punishments are also more prone to producing negative attitudes in the punished individual. One way managers may be able to reduce the negative impact of punishment is by using explanations regarding the need for punishment. These explanations are called social accounts. Not all social accounts have the same effectiveness; therefore, both ideological and causal accounts were examined in this research to evaluate their effectiveness in mitigating the negative impact of punishment. Using a 3x3 between-subjects design, the effect of punishment severity (low, moderate and high) and social account type (ideological, causal, and redundant) on performance, fairness of punishment, Interactional Justice, satisfaction with the experiment, anger, and intentions to retaliate was assessed. One hundred eighty undergraduate students from a Midwest university participated in the study. Participants were given an opportunity to win lottery tickets for a \$150 gift certificate based on their performance on two simple tasks. Participants were told that lottery tickets would be

removed (low, moderate, or high punishment) if they did not perform satisfactorily on Task 1. After the punishment, participants were given one of three social accounts and a set of questionnaires examining their attitudes. Task 2 was completed to determine the behavior change from Task 1 to Task 2. A significant main effect of punishment severity was found for punishment fairness, satisfaction with the experiment, anger, and intentions to retaliate. A significant main effect of account type was found for Interactional Justice and satisfaction with the experiment. Finally, a significant interaction of punishment severity and account type was found for performance such that a moderate punishment with a social account produced greater task 2 performance after accounting for task 1 performance. Despite lacking significance, other conditions produced high task 2 performances. This research indicates that punishment severity and account type have a simple relationship with the attitudinal variables and have a complex relationship with task performance. Future research should examine the characteristics and presentation of social accounts in punishment situations that maximally reduce the negative impact of punishment incidents.

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## Chapter 1

### Introduction

Punishment is used by workplace supervisors to control or change employees' behavior. Punishment continues despite the call from management researchers to eliminate punishment from organizational discipline because of victims' negative reactions to the administered punishment (Butterfield, Trevino, & Ball, 1996). Researchers propose that employees' poor behavior should be changed and exemplary behavior should be maintained with positive reinforcement because no signs of negative side effects will appear. Despite the fact that punishment causes negative side effects, three reasons have been proposed to explain why punishment continues to be used in organizations: (a) punishment effectively changes behaviors; (b) positive reinforcement is impossible to use in some situations; and (c) punishment is often more time- and cost-efficient (Avery & Ivancevich, 1980). Since managers are reluctant to eliminate punishment as their agent of behavioral change, it is important to determine how punishment affects employees' perceptions of fairness and ultimately their change in behavior .

Bennett (1998) proposed that whenever punishment is studied the research must focus on two fundamental questions: (a) when will punishment be most effective at facilitating behavioral change and (b) when will punishment cause negative side effects? The most commonly researched variable associated with punishment effectiveness has been punishment severity. Currently, no research finding has provided ubiquitous support for a particular level of punishment that is most effective at behavior change. The most often cited finding of the punishment research has been that intense punishments most effectively change undesirable behaviors (Bennett, 1998; Church, 1963; Johnston, 1972). Employees who are given a very strong punishment are more

likely to apply the appropriate behavior change than employees given weak punishments. The employee given a strong punishment changes his/her behavior because he/she does not want to receive the negative outcome again. Weak punishments typically do not change behavior because the negative outcome from the punishment is not strong enough to harm the employee.

These strong punishments, despite their effectiveness at changing employee behavior, may cause the negative consequences found to accompany strong punishment events. The negative side effects that accompany punishment include avoidance, resentment, retaliation, and anger. These are the same reactions employees display after receiving unfair reward allocation decisions (e.g., layoffs, pay-cut, performance appraisal). Therefore, employees may react to strong punishments negatively because they perceive the punishment as unfair. Here lies the dilemma with punishment. First, in order to change an individual's behavior, the supervisor must apply a relatively strong punishment. Second, if the supervisor applies a relatively strong punishment, the employee perceives the punishment as unfair, which results in negative reactions by the employee. These negative reactions then result in negative outcomes for the supervisor and organization. Therefore, even though the supervisor may change the undesired behavior with punishment, the punishment may lead to a more destructive behavior than the original behavior being changed. The manager must find a way to use strong punishments to change the undesirable behavior without causing the employee to perceive the punishment as unfair. One possible way managers could use strong punishments without causing negative reactions would be to administer a social account to explain why this level of punishment was given.

Employees want to know and to understand the reasons why they receive negative outcomes. Managers often give social accounts to help explain the reasons for the

negative outcomes employees receive. Social accounts are verbal explanations used by a manager to increase employees' acceptance of a negative outcome (Bies, 1987).

Individuals who receive a social account in conjunction with a negative outcome consistently have been found to perceive the negative outcome as more fair compared to those individuals not receiving a social account (Bies & Shapiro, 1987). Social accounts may be helpful in reducing the negative side effects that accompany severe punishment, thereby allowing severe punishment to change behavior without resulting in negative reactions in the individual.

This thesis attempts to examine how two types of social accounts (ideological and causal) affect employees' perceptions of a punishment's fairness. Specifically, this research attempts to show how managers can use these types of social accounts to counter the negative fairness perceptions and negative attitudes that accompany strong punishments.

## Chapter 2

### Review of Organizational Justice Research

Three types of fairness have been determined to affect individuals' perceptions of justice within organizational relationships: distributive justice, procedural justice and interactional justice. Distributive justice theories focus on the perceived fairness individuals place on outcome distributions. Procedural justice theories focus on the perceived fairness of the procedures enacted to make an outcome decision. Interactional justice theories study the interpersonal relationship between the decision-maker and receiver of the outcome. Specifically, interactional fairness focuses on how the decision-maker's treatment of the employee during the enactment of the procedures affects the employee's perceptions of fairness.

#### Distributive Justice

One of the most well-established theories of distributive justice has been Adams' (1965) equity theory. Equity theory states that individuals judge the fairness of the outcomes they receive by comparing their input/outcome ratio to the input/outcome ratio of a referent other. Individuals will perceive their outcomes as fair only when their proportion of inputs and outcomes equals the proportion of inputs and outcomes of a referent other. The importance of a referent other used for making social comparisons was a critical aspect of this theory. Without a referent other against whom to compare their inputs and outcomes, individuals cannot determine the fairness of their outcome. Equity only occurs when the two proportions are equal. Inequality between the two proportions results in an individual feeling either anger (when the individual receives the lower proportion) or guilt (when the individual receives the larger proportion). Therefore, individuals are motivated to balance the equity equation by actually or cognitively altering the referent other's or their own inputs or outcomes.



The evaluation that an individual makes about an outcome is based on his/her perceptions of outcome fairness. Specifically, Adams (1963) proposed that fairness is a relative state. Fairness is influenced by what the individual perceives as the appropriate rate of outcomes for the services rendered, and inequity only results when the individual psychologically judges his/her ratio of inputs and outcomes as not meeting the inputs and outcomes of a referent other. As a result, managers can never know how outcomes will affect the individual unless they are aware of the individual's evaluative processes.

One assumption of equity theory is that individuals with positive inequity also work to restore equity. Individuals are motivated to restore equity even if the inequity is in their favor. Adams (1963) examined how overcompensation would affect hourly and piece-rate subjects' quality of work. He found that hourly overpaid subjects produced greater quality, and piece-rate overpaid subjects produced greater quality and lower quantity compared to the equitably paid subjects. Overpaid subjects altered their inputs by increasing the work quality in order to increase the perceived equity. Despite the motivation to balance positive inequity, positive inequity events result in motivational force that is weaker than the motivational force during a negative inequity event (Mowday, 1991).

Despite the frequent research support accumulated for equity theory, some major limitations of the theory have made its ability to predict fairness perceptions questionable. First, the fundamental limitation of this theory is its inability to predict how the individual attempts to correct the inequity. The theory cannot predict whether the individual cognitively distorts or physically changes his/her own or the referent other's inputs or outcomes. Additionally, researchers believe that how the individual reduces inequity is dynamic and may not remain the same over time, resulting in more uncertainty about how people correct inequity (Mowday, 1991). Finally, the theory

cannot predict how the individual decides upon the referent against which to compare his/her input/output ratio. Equity theory research has shown that people do care about the fairness of the outcomes they receive, but the limitations accompanying these theories have pushed researchers to examine other areas of the outcome distribution event to determine how individuals perceive fairness.

### Procedural Justice

The limitations of equity theory and the inability of distributive justice to predict individuals' perceptions of fairness in all situations has caused researchers to examine other aspects of organizational justice. More recently, researchers have begun to examine how the procedures used to determine outcomes affect the individuals' perceptions of fairness. The fairness perceptions of procedures used to determine outcomes are called procedural justice. The theory of procedural justice was developed by Thibaut and Walker (1975) through a series of studies on dispute-resolution procedures. Individuals were given two types of dispute-resolution procedures that differed in the type of control they had over the proceedings: process control – level of control disputants were offered over the procedures used to settle the grievance, and decision control – the level of control the individual had over the outcome decision.

Thibaut and Walker (1975) manipulated the process control by using autocratic and inquisitional court styles. Participants were asked to evaluate a series of grievance cases that contained both autocratic and inquisitional court styles. In the autocratic procedures, disputants had no control over the collection and presentation of the evidence for their case and also lacked influence in deciding the outcome of the grievance. Therefore, individuals in the autocratic procedures held low process control and low decision control. An inquisitional system allowed the disputants to gather information and present their case, but it did not allow the disputant any decision control. Therefore,

inquisitional procedures gave the disputants high procedural control and low decision control. Disputants perceived the legal decision to be fairer, and they were more accepting of the decision when they were given process control (inquisitional procedures) compared to when they were denied process control (autocratic procedures).

In an extension of Thibaut and Walker's (1975, 1978) original work on procedural justice theory, it was found that procedures are especially important to perceptions of fairness when the outcome is negative. This interaction has been called the fair-process effect (Lind & Tyler, 1988). Specifically, the fair-process effect says that procedures only affect perceptions of fairness when the outcome is negative. Outcomes are more salient to people than procedures, thus outcomes are important in determining fairness. As a result, there is no motivation to examine the fairness of the procedures if the individual received a positive outcome. On the other hand, the individual who receives a negative outcome is motivated to evaluate the fairness of the procedures. When the procedures are determined to be fair, the individual will evaluate a negative outcome more favorably compared to individuals receiving unfair procedures. The fair-process effect illustrates that "outcomes and procedures work together to form a sense of injustice. A full understanding of fairness cannot be achieved by examining the two constructs separately. Rather, one needs to consider the interaction between outcomes and procedures" (Cropanzano & Folger, 1991, p. 79). The fair-process effect has been found regularly in organizational justice research across many different organizational settings (Brockner & Wiesenfeld, 1996).

Many researchers have proposed that other procedural factors affect perceptions of procedural justice beyond that of process control. Leventhal (1980) proposed six procedural rules that people use to evaluate the perceptions of outcome allocation procedures. The six rules are: (a) consistency – allocating procedures should be

consistent across people and time; (b) bias suppression – personal self-interest and blind allegiance to narrow preconceptions should be prevented; (c) accuracy – decisions should be made on as much information as possible; (d) correctability – opportunities must exist to modify and reverse decisions; (e) representativeness – the allocation process must represent the concerns of all important subgroups and individuals; (f) ethicality – the allocation process must be compatible with prevailing moral and ethical standards.

Leventhal's (1980) work has provided evidence that people care about more than their level of process control when evaluating procedural fairness.

Recently, two models have been developed to explain why procedural justice affects people. The self-interest model, also called the instrumental model, says that people want fair procedures because fair procedures give the individuals an opportunity to gain positive outcomes in the future. The group-value model attempts to explain procedural justice in terms of group identification (Lind & Tyler, 1988).

The self-interest model assumes that individuals are hedonistic and try to obtain the most favorable outcomes. Individuals tend to be unaffected by short-term negative outcomes if they feel optimistic about the likelihood of receiving positive outcomes in the future. Individuals evaluate the procedures in order to make inferences about their future outcomes. Procedures that are fair and stable are more likely to result in future positive outcomes if the outcomes are deserved. Unfair procedures may lead people to believe that decisions are made arbitrarily, and therefore, people are less certain about the probability of receiving future positive outcomes.

The group-value model was developed out of the inability of the self-interest model to explain fully the effects of procedures on reactions to allocation decisions (Lind & Tyler, 1988). The group-value model was developed to explain the non-instrumental effects of procedures on perceptions of fairness. The underlying assumption of the

group-value model is that people value their relationships in organizations. Social relationships serve the function of impacting the individual's self-esteem and self-identity.

The procedures that decision-makers and organizations enact inform individuals about their standing within the group. Individuals possess a set of values that defines how they should be treated, and when procedures do not match those values the individuals will feel they have been treated procedurally unjustly. The perception of procedural justice is based on an individual's values and beliefs and is dynamic across individuals. The model predicts that there are some values that all people possess regardless of idiosyncratic value differences; those values are the belief that one should be treated with politeness, respect and dignity. Fairly treated individuals will feel more respected and proud of their group (Tyler, DeGoey, & Smith, 1996). Unfair procedures symbolize to the members the lack of dignity and respect the organization has for them (Tyler, 1994). Anger often accompanies procedural violations because the employees feel that they have not been treated with the respect and dignity they deserved (Lind & Tyler, 1988). In summary, the self-interest model implies that procedures are important because they are a means to an end; the group-value model assumes that procedures are important because they are an end in and of themselves (Brockner & Wiesenfeld, 1996).

#### Interactional Justice

An individual's fairness perceptions are not restricted to distributive or procedural events, but also include how the decision-maker treats the individual interpersonally. Interactional justice is the quality of interpersonal treatment individuals receive during the enactment of the procedures (Bies, 1987). The primary thrust of organizational justice research has been confined to the impact of distributive and procedural justice on employee reactions. More recently, researchers have begun to examine how

interpersonal treatment affects employees' perceptions of justice.

A study by Mikula, Petri, & Tanzer (1990) examined what types of events in everyday life provoked feelings of injustice. They proposed that people do not base fairness perceptions solely on distributions of outcomes and enactments of procedures, but that people also are cognizant of the interpersonal treatment by the decision-maker. Participants were asked in an open-ended format to describe a recent unjust event. Many of the reported injustices did not concern distributive or procedural events, but instead dealt with the manner in which the individual was interpersonally treated. The categories of behaviors that individuals found interpersonally unfair were (a) inconsiderate, impolite or aggressive behavior; (b) treatment that violates personal dignity; and (c) acts that indicate lack of loyalty from the other person. The implication of this study is that people in their daily lives are aware of their interpersonal treatment and perceive poor treatment as unfair.

One criterion for examining interpersonal fairness is the manner in which the decision maker communicates the procedures. In two studies (Bies & Moag, 1986), a group of MBA job candidates were asked to recount their reactions to a corporate recruiting interview. In the first study, prior to participating in an interview, the MBA students were asked to determine the fairness procedures that they expected the recruiter to follow. Four communication criteria emerged: trustfulness, respect, propriety of questions, and adequate justification. The MBA job candidates defined each of the communication criteria as follows: trustfulness was the recruiter's ability to be open and honest; respect was shown by the recruiter refraining from rudeness or attacking behaviors; impropriety of questions was defined as the candidates' expectation that recruiters would not ask improper questions; and adequate justification was defined as the candidates' expectation that they would receive an explanation for the decision.

The second study used a critical incidents technique on another group of MBA job candidates to gather incidents of fair or unfair interview experiences (Bies & Moag, 1986). Candidates distinguished procedural criteria from interpersonal treatment in their perceptions of procedural fairness. The group of MBA job candidates in this study determined that the same four communication criteria found in Study 1 were important in their perceptions of fairness. In this second study, corporate recruiters who appeared untrustworthy, displayed rude behavior, asked improper questions, or did not justify their decisions were perceived as less fair. Therefore, the way procedures are communicated to individuals affects their perceptions of fairness. Bies and Moag (1986) proposed that fairness of interpersonal treatment will be determined on an absolute standard and not via the social comparison that is necessary for equity theory. Specifically, if a manager treated you rudely, you could identify this as unfair treatment without comparing your treatment to a referent's treatment.

### Reactions to Injustice

Organizational justice is studied prominently in organizational research because the perceptions of injustice affect employees' attitudes and job performance. Distributive justice, procedural justice, and interactional justice must be studied to determine how these injustices affect an individual's attitudes (satisfaction with the supervisor, satisfaction with the organization, organizational commitment, intentions to leave) or behavior (retaliatory behaviors, organizational citizenship behaviors, job performance). Researchers have consistently found that when situations are perceived as unfair, people are less satisfied with the outcome and possess more negative perceptions of the event (Folger & Konovsky, 1989; Greenberg, 1990a). Similar reactions have been found across many organizational situations, and these reactions can have a profound negative impact on the organization or the supervisor.

Organizational justice research has examined how perceptions of injustice have affected employees' attitudes. Folger and Konovsky (1989) examined how distributive and procedural justice influenced employees' reactions to pay raise decisions. Interestingly, the two forms of justice did not have identical effects on people's attitudes. Distributive justice was found to influence satisfaction with pay, while procedural justice had a significant impact on employees' trust in the manager and organizational commitment. This research has shown that perceptions of outcome and procedure fairness do not result in identical reactions for the individual.

Perceptions of injustice will not only affect individuals' reactions, but also their performance. In a selection context, Gilliland (1994) examined whether distributive and procedural justice would affect employees' reactions to the selection system. In this laboratory experiment, a group of participants were either selected or rejected for a paid employment opportunity. The procedural variables were job-relatedness of the selection criteria and explanations given for the outcome decision. Individuals who were accepted for the paid position based on job-related criteria were better performers than individuals who were accepted based on non-job related criteria. Additionally, when the participant was rejected for the job, receiving an explanation influenced whether the individual applied for participation in a similar study or recommended a similar project to others. This study shows that perceptions of injustice not only can affect an individual's attitudes about the outcome and process but also can affect how the individual performs on the job. If perceptions of justice can influence how an individual performs, then it may also affect other behaviors such as retaliatory behaviors.

Injustice in the workplace can bring about many undesirable effects, such as anger, resentment, avoidance, and retaliation. Unfair managers fail to treat subordinates with dignity and respect, and individuals treated without dignity and respect retaliate for



this value violation with “reciprocal deviance” (Kemper, 1966). Reciprocal deviance refers to the manager treating employees unfairly, and the employees reciprocating this unfair treatment by acting against the manager or organization in a destructive manner.

Greenberg (1990a) attempted to study the conditions under which employees retaliate during times of underpayment. More specifically, Greenberg wanted to know how an adequate or inadequate explanation for a pay cut would affect the employees’ theft behavior. The adequate explanation was believed to represent higher level of procedural fairness than the inadequate explanation. Employees who were given an inadequate explanation were found to steal more from the organization than were the employees who received adequate explanations. This finding implies that levels of overt retaliatory behavior increase when the individual perceives the situation as procedurally unjust.

Unlike the overt retaliatory behaviors of stealing that occurred in Greenberg’s (1990a) study, people can react to injustices with more covert retaliatory behaviors to punish the organization. Organizational Retaliatory Behaviors (ORBs) are subtle retaliations that decrease the efficiency of the organization. In Skarlicki and Folger (1997), these behaviors included wasting company material, calling in sick when not ill, disobeying supervisor’s instructions, failing to give coworkers required information, just to name a few. Skarlicki and Folger (1997) predicted that ORBs would increase when perceptions of injustice were high. They found that when distributive, procedural and interactional justice were perceived to be low, the number of retaliatory behaviors was the highest.

In summary, research has found that perceptions of injustice influence attitudes, performance, and retaliatory behaviors. These cognitive and behavioral reactions to the injustice have financial and motivational implications for the organization, and as a

result, managers must find a way to increase employees' perceptions of justice in spite of the finite resources within organizations. One way that managers have begun managing the impressions of outcomes within organizations has been with the use of social accounts (Greenberg, 1988).

### Social Accounts

People who feel that they have been treated unfairly will feel morally outraged, and this results in feelings of anger and frustration (Bies, 1987). Managers must find some method to manage the impressions of the situation's fairness so that employees do not experience these emotions in the face of unfair outcomes. Much of the recent research has examined how social accounts reduce the negative reactions people experience when outcomes are perceived to be unfair. A social account can be defined as a verbal strategy that a decision-maker can use to minimize the severity of the decision or to convince the individual that the wrongful act was not truly what the decision-maker was "really like" as a person (Bies, 1987). The impact of social accounts may be the result of people's need to understand the situations affecting them. People have been characterized as "intuitive jurists," meaning that they want to know the specific reasons for an apparent injustice so that they can judge whether they have been treated fairly (Bies, 1987). The four types of social accounts that managers can use are: (a) causal, (b) ideological, (c) referential, and (d) penitential.

A causal account is an explanation that attempts to reduce the perceived responsibility of the decision-maker for the injustice. Causal accounts are often referred to as excuses. The most common way for managers to reduce their responsibility for the outcome would be to claim mitigating circumstances caused the injustice, or more specifically, the injustice was not the decision maker's fault. For example, "My boss told me I had to punish you for performing poorly." In essence, the decision-maker is

pointing out through the social account that another decision-maker would make the same decision, and therefore, the employee should not feel negatively towards him/her.

An ideological account attempts to legitimize the action by putting the action in the larger organizational framework. An ideological account is also referred to as a justification. The decision-maker acknowledges his/her responsibility for the decision by explaining that the decision was the “right thing to do.” Managers enacting ideological accounts do so by appealing to superordinate goals or labeling the decision in more value-laden terms. Through the use of superordinate goals and invoking value-laden terms, the decision-maker hopes to change the victim’s schema used to evaluate the injustice (Bies, 1987). An example might be a manager who tells a punished subordinate that the punishment was necessary to put him/her on the right track so that the team can be more efficient.

Referential accounts influence perceptions of injustice by comparing employee’s treatment or outcomes to the treatment or outcomes that others have received. There are three basic types of referential accounts: (a) social, (b) temporal, and (c) aspirational. The social type uses social comparison information to point out to the individual that his/her outcomes are not as bad as others’ outcomes. The temporal type provides the person with information that suggests that the situation will be better in the future. Finally, the aspirational type explains to the individual that his/her original expectations are unrealistic and helps to change his/her expectations.

A penitential account, commonly referred to as an apology, is an expression of remorse by the harm-doer for the negative outcome. Penitential accounts represent an enactment of self-retribution as a partial payment for the injustice that has occurred (Bies, 1987). As a result of such partial payments, the manager expects the victim to see him/her more favorably.

Researchers have found an extensive amount of experimental support for the use of social accounts for impression-management purposes. Researchers have most often examined the mitigating effects of causal accounts. One of the first systematic studies of causal accounts was performed as part of three studies by Bies and Shapiro (1987). In Study 1 the participants of the laboratory experiment were given a scenario that explained how their supervisor had used his subordinate's idea to gain recognition from the top management. Participants either received or did not receive a causal account explaining the reason why the subordinate's idea was used. The participants were then asked to act as an arbitrator for the case. Participants judged the interactional fairness and appropriateness of the managerial decision to be higher when a causal account was given as a justification for the manager's conduct.

Study 2 attempted to replicate the above-mentioned findings of Study 1 in the context of a sales purchase decision and a budget proposal decision. Participants were given one of two contextual scenarios. In the sales context, the salesperson received a smaller than expected sale; in the budget context, a manager received a smaller than requested budget. This study supported the findings from Study 1 in that interactional fairness and acceptance of the managerial decision was higher when a causal account was given. More importantly, this study found that in order for the causal account to be effective, it must be perceived as adequate.

Study 3 attempted to replicate the findings of the previous laboratory studies in a field setting and also examined how causal accounts influenced the judgments of procedural fairness. Participants were asked to recount an incident when they had a proposal or policy rejected by their boss. They were then asked to measure the adequacy of the account, interactional fairness, procedural fairness, approval of the boss, and affective reactions. The results replicated the previous findings of Studies 1 and 2 in the

field setting. In addition, only adequate causal accounts were found to influence perceptions of procedural justice. The conclusion was made that adequacy of the causal account, rather than the claim of the account, was what impacted the perceptions of interactional and procedural justice.

An empirical review of the state of social account research by Bies and Sitkin (Bies, 1989; Bies & Sitkin, 1992; Sitkin & Bies, 1993) has found that many variables influence the effects of social accounts. The most frequently examined characteristic that influences a social account's effectiveness is adequacy. A series of studies by Folger and his colleagues (Folger & Martin, 1986; Folger, Rosenfield, & Robinson, 1983) found that adequate accounts were required when reward distribution procedures were changed. In the study by Folger et al. (1983), participants took part in a winner-take-all competition in which the procedures for distributing the outcomes were set before the start of the competition. At the end of the competition, all participants were informed that they had lost the competition because the procedures for outcome distribution had changed. Participants who received adequate explanations for the change in procedure expressed less discontent for the decision.

In Folger & Martin's (1986) follow-up study, participants were denied a favorable outcome because of the boss's actions, and an adequate or inadequate reason was given for the decision. The authors found that participants were more accepting of the decision when an adequate explanation was given. Specifically, participants were less resentful and more willing to recommend the experimenter for a permanent job as a research assistant when adequate accounts were used to legitimize the boss's decision.

In a field study, Bies, Shapiro, and Cummings (1988) attempted to determine how causal accounts would affect an individual's reaction to a rejection of a proposal or request. The participants were asked to recount a specific incident in which the boss

rejected a request. The variables measured in the study were predicted to result in conflict within the organization (anger, disapproval with the boss, and complaints to higher-ups). As found in previously cited studies, adequacy of the account was negatively correlated with the negative reactions to the decision. As a result, when an account was given, negative outcomes had less impact on variables that caused organizational conflict.

Interestingly, this study was one of the first to look beyond adequacy in determining the effectiveness of causal accounts. Support was also found for the importance of the boss's sincerity in communicating the account. Therefore, the study found that people take into consideration both the adequacy and sincerity of the account, instead of simply the claim of mitigating circumstances, when making their affective reactions to the injustice.

Additionally, the content of the account was found to be important. Managers were found to communicate many types of mitigating circumstances when using causal accounts, but they were not perceived to be equal by employees. Accounts focusing on company norms, budget constraints, or formal company policies were perceived to be more adequate than those focused on employee behavior, upper management, or political environment. The authors concluded that mitigating circumstances that focus on impersonal criteria would be perceived as more adequate. The implication from this study is that many variables besides adequacy may influence the effectiveness of social accounts.

In a series of three studies, Shapiro, Buttner, & Barry (1994) examined a set of variables that were predicted to affect the perceived adequacy of an account. Study 1 examined how perceived concern, perceived reasonableness, and outcome severity affected an explanation's perceived adequacy. Participants were instructed to recall an

interview with both a company they strongly desired to join and a company they did not desire to join. Outcome severity was manipulated by including groups that strongly desired to join the company and a group that did not desire to join the company. The perceived concern of the decision-maker was not found to affect adequacy significantly, but the perceived reasonableness of the explanation did affect perceived adequacy. Therefore, the substance of the explanation may be more important to the perceived adequacy than the manner in which it is communicated. Additionally, situational variables such as the severity of the outcome also affected the adequacy of the account. The greater the severity of the outcome, the more difficult it was for an explanation to be perceived as adequate. Thus, explanations were more effective when the outcome severity was low. In conclusion, the adequacy of an account was affected by the message of the account and the level of outcome severity.

Study 3 examined how an explainer's sincerity, an explanation's specificity, and outcome severity interacted to influence the perceived adequacy of the explanation. Individuals in the high specificity condition received specific personalized information, while the low specificity condition received a small amount of impersonal information. The high sincerity condition contained a personalized letter (with a personalized signature) expressing concern, understanding, and an offer for help; while the low sincerity condition did not. Participants in the high severity condition were told that the failing grade they received came in a required class, and as a result, they would not graduate that semester. In the low severity condition, the participants were allowed to graduate because the failing grade was not in a required class. An unexpected two-way interaction emerged between sincerity and specificity: adequacy was the highest when sincerity and specificity were the highest. Therefore, an explanation's adequacy was affected by both the explanation's content and the manner in which the explanation was

communicated. Interestingly, this study did not replicate the low-severity effect found in Study 1.

Social accounts have been found to mitigate the negative reactions to injustice outside the laboratory setting. Greenberg (1990a), as previously mentioned, studied how employee theft behavior would be affected by the implementation of an adequate account. Employees in three different plants had their salary cut by 15%. Employees were given either an adequate explanation (president of the company explained in detail the reasons for the decision and answered questions) or an inadequate explanation (president of the company gave no explanation and answered no questions). Employees who received an inadequate explanation stole significantly more than they did prior to the pay reduction. Additionally, employees who received an adequate explanation also stole more than they did prior to the pay-cut. However, employees who received an adequate explanation stole less than the employees who received inadequate explanations. As a result, explanations were more effective than no explanations at reducing negative reactions, but they were not as effective as giving fair outcomes. During the pay reduction period, the inadequate explanation group had significantly more theft behavior than did the adequate explanation group. The implication of this study is that employers should distribute fair outcomes whenever possible, but when the fair distribution is not possible, the next most effective solution is to give an adequate explanation for the outcome.

Bies and Shapiro (1988) used two studies to examine how voice opportunities and a managerial justification would interact to influence perceptions of procedural justice. In a laboratory setting, Study 1 examined how procedures that allowed no voice or voice and receiving an account or no account would affect an individual's reactions to a job recruitment decision. Participants read a description of an interview procedure that the



job candidate went through where the job candidate was given either voice or no voice opportunity and a rejection letter that contained either justification or no justification for the decision. Voice and justification were shown to have independent effects on perceptions of procedural justice. If voice and justifications have independent effects, then it might be possible to use social accounts to increase perceptions of fairness even if other procedural variables are unjust.

Study 2 attempted to replicate the findings of Study 1 in the context of a budgetary decision. Participants were asked to describe a recent rejection of a budget request by their boss. The presence or absence of a voice opportunity was measured on a 7-point scale by one criterion, “opportunity to persuade your boss by fully presenting your position.” Additionally, two items were used to measure the presence or absence of an account; “boss attempted to provide justification” and “boss claimed that the circumstances were beyond his or her control”. Study 2 found that people perceived voice procedures as fairer than mute procedures, and justification situations as fairer than nonjustification situations for unfair budget decision-making as well as unfair job recruitment situations. These two studies show that justifications have an effect on perceptions of fairness even when procedures are unjust.

The social accounts literature has supported the impact of both causal accounts and an account’s perceived adequacy on employees’ reactions to injustice. Despite the overwhelming support for using causal accounts provided by these studies, only one study was found that compared the effectiveness of two different types of accounts in the same study. Bobocel and Farrell (1996) examined the influence of both ideological and causal accounts on white males’ perceptions of interactional fairness in the context of an Affirmative Action decision. The authors tested two hypotheses: (a) interactional fairness would be highest in the ideological account condition, when the employer takes

responsibility for the decision and provides a justification legitimizing the decision; and (b) adequacy would be a partial mediator of the relationship between the social accounts and interactional fairness. The authors proposed that ideological accounts would increase the white males' perceptions of interactional fairness. In an ideological account, the decision-maker assumes responsibility and attempts to justify the decision for the outcome. Since the underlying goal of the ideological account is to legitimize the outcome by appealing to a superordinate goal, the reasoning for the received outcome will be perceived as objective rather than arbitrary. Causal accounts, on the other hand, claim that the outcome was due to mitigating circumstances and may not have been seen as a viable explanation for the outcome. Casual accounts will be seen as more arbitrary than ideological accounts (Bobocel & Farrell, 1996).

Ideological accounts were found to increase perceptions of interactional fairness more than the causal or no account conditions. Surprisingly, causal accounts were not even as effective at increasing interactional fairness as the no account condition. Based on this study's findings then, it could be concluded that causal accounts may not be as effective as providing no account at all. The overwhelming support for causal accounts in previous research, however, make this bold conclusion inappropriate.

The second hypothesis of this study (adequacy would partially mediate the account's impact on interactional fairness) was also supported. After adequacy was controlled for, the overall variance accounted for by the account conditions was reduced from 16% to 10%. Therefore, adequacy partially mediates the effect of social accounts, but the accounts may also have their own unique effect. Bobocel and Farrell (1996) concluded, "there must be something more than just adequacy that contributes to the participant's ratings of interactional fairness in the ideological account condition" (p. 28).

Additionally, ideological accounts may be more effective because of their ability to signal respect for the employee, something causal accounts may not be able to do. For example, an explanation in which the decision-maker takes responsibility for his/her actions and appeals to a superordinate goal presumably conveys more respect and dignity than does an explanation that denies responsibility and blames the outcome on mitigating circumstances. Therefore, the group-value model may help explain the difference in the fairness-enhancing effects of the ideological account over the causal account.

#### Interaction of Outcome Severity and Social Accounts

Outcome severity is a variable that also has been found to affect the relationship between social accounts and an individual's fairness perceptions. In Folger and Cropanzano's (1998) model of social accounts, outcome severity was predicted to moderate this social account-outcome fairness relationship. Research has found support for two different effects of outcome severity: the high-severity effect and the low-severity effect. The low-severity effect states that the social account is most effective (that is, more able to reduce perceived injustice and negative reactions) when the outcome is relatively mild. Specifically, an account is less effective when the individual receives an extremely negative outcome, and most effective when the individual is impacted minimally by the outcomes. Therefore, small problems are easier for managers to explain away than large ones (Folger & Cropanzano, 1998).

Three studies have provided support for the low-severity effect. First, as mentioned in the prior section, Shapiro et al. (1994) found that social accounts were perceived to be more adequate when the outcomes received were less damaging compared to outcomes that were more damaging. Maier and Lavrakas (1976) examined when individuals would be receptive to an apology for a co-worker's lie. Individuals would accept the apology more readily when the co-worker's lie did not cost them much

money, therefore rendering the lie less costly to them. Finally, Johnson and Rule (1986) examined individuals' reactions to being severely or mildly insulted. Individuals who received severe insults were found to be less accepting of the social account, while individuals who received mild insults viewed the account in a more accepting manner. These studies support the low-severity effect prediction that social accounts have a more positive impact when the outcome received is less damaging to the individual.

The high-severity effect states that accounts are most effective when the outcome is most severe. The high-severity effect elicits a similar interaction as the fair-process effect (discussed in the procedural justice section): when outcomes are negative, procedures are used to determine fairness. Therefore, in situations in which outcomes are perceived as severely negative, a social account is needed to mitigate the damaging effects of the situation. Greenberg (1994) garnered the high-severity effect in a study that examined heavy-, light- and non-smokers' reactions to a smoking ban. Heavy smokers were perceived to be most affected by the implementation of a smoking ban, and thus were predicted to perceive the smoking ban as most severe. As predicted, heavy smokers did find the smoking ban more harmful. Greenberg found that when the heavy smokers were given an adequate explanation for the smoking ban, however, they had the biggest change in their acceptance of the smoking ban compared to the light- and non-smokers.

Cropanzano and Konovsky (1995) examined how different levels of perceived severity would affect an employee's perceptions of the fairness of an employee drug screening. A severe outcome condition in this study was defined as a person who, after being tested positive for drug use, was treated like a criminal; the mild outcome condition was defined as a person who, after being tested positive for drug use, was given rehabilitation for their addiction. The authors found that when little justification was given for treating the individual like a criminal, perceptions of drug testing fairness were

low, but when high justification was given, a higher perception of drug testing fairness resulted.

One reason for the increased effectiveness of social accounts in the high-severity condition may be that an explanation helps a person understand the reasons for the harsh outcome. Conversely, when the outcome is weak and not perceived to be severe, there is no reason for people to change their attitudes toward the outcome, both because the outcome has no real effect on them and because the punishment is not seen as unjust. The harsh outcome, on the other hand, does have a strong effect on the individual; without some reasoning for the punishment, the individual can only see the outcome as unfair.

Finally, Folger and Cropanzano (1998) proposed that the severity of the outcome has a curvilinear effect on the effectiveness of the social accounts. By a curvilinear relationship the authors mean that when the outcome severity is low, the social account may not be needed to change the perceptions of the injustice because this outcome does not affect the employee and is not seen as unjust. As the outcome severity increases, the individual becomes more emotionally distraught by the outcome, and the social account may help lessen the emotional reactions. The outcome severity may hit a certain threshold, at which point the social account becomes effective at mitigating the effects of the injustice. Finally, if outcome severity became too severe, the individual may perceive the outcome as extremely unjust and may perceive an explanation as inadequate for justifying the negative outcome he/she received. Thus, merely an explanation for the extremely severe outcome is not enough to exonerate the injustice.

## Chapter 3

### Review of Punishment Research

Punishment as a concept has been studied for many decades, but not much of this research has been conducted in organizational settings. Punishment within an organizational context can be defined as a superior's application of a negative consequence or removal of a positive consequence following a subordinate's undesirable behaviors (Butterfield, Trevino, & Ball, 1996). Subordinates' undesirable behaviors take two forms: poor performance and antisocial behavior.

Wheeler (1976) reviewed 339 arbitration cases reported in the Law Arbitration Report between 1970 and 1974 and classified the cases into categories based on the types of offenses or undesirable behaviors that were punished. The categories that emerged were the following: (a) absenteeism, tardiness, leaving early; (b) dishonesty, theft, falsification of records; (c) incompetence, negligence, poor workmanship, violation of safety regulations; (d) illegal strikes, strike violence, deliberate restriction of production; (e) intoxication, bringing intoxicant to work; (f) fighting, horseplay, troublemaking; (g) insubordination, refusal of job assignment, refusal to work overtime, fights or altercations with supervisor; (h) miscellaneous rule violations.

Robinson and Greenberg (1998) defined six different types of antisocial behavior, including (a) workplace deviance; (b) antisocial behavior; (c) employee vice; (d) organizational misbehavior; (e) workplace aggression; (f) non-complaint behavior. Managers want to eliminate poor performance and antisocial behavior from their organizations because of the economic and motivational effects these behaviors have on the organization.

Robinson and Greenberg (1998) cite five organizational statistics that clearly illustrate the detrimental effects of antisocial behavior and poor performance: (a)

seventy-five percent of employees have stolen from their employers at least once; (b) from one-third to three-quarters of all employees have engaged in some type of fraud, vandalism, or sabotage in their workplaces; (c) forty-two percent of women have experienced sexual harassment at the workplace; (d) almost twenty-five percent of employees have admitted knowledge of illegal drug use among employees; and (e) seven percent of employees have been threatened with physical violence while on the job. These statistics illustrate the extensive nature of poor performance and antisocial behavior occurring within organizations. These behaviors create a damaging economic effect on the organization through theft, vandalism and poor performance; these behaviors can also impact morale and indirectly affect the company's profits. Individuals who are sexually harassed or threatened with violence may decrease satisfaction and commitment to the company which may result in their decreasing work performance or leaving the company. Therefore, it is in a manager's best interest to find an effective way to eliminate or change the undesirable behaviors.

Much of the study of punishment has examined the most effective methods to change behavior, and specifically, how different levels of punishment severity affect individuals' likelihood of changing undesirable behaviors. Bennett (1998) proposed that there are two consequences of punishment: (a) it will change behavior and (b) it will result in negative side effects in the punished individual. First, the conditions under which punishments will change behaviors will be discussed.

#### Impact of Punishment on Undesired Behaviors

Before attempting to determine the conditions under which punishment is most effective, it is important to determine if punishment has been found to change behaviors at all. Kempen and Hall (1977) attempted to control absenteeism behavior by using a system of both rewards and punishments. Positive reinforcement was differentially

applied, that is, employees received positive reinforcement for regular attendance, and employees with poor attendance received punishment. The results found that after this system was implemented the level of absenteeism decreased. Similar results for a mixed discipline system were also found by Kopelman and Schneller (1982). The authors attempted to use this system to control the amount of overtime and unscheduled absences for medical center employees. This system resulted in a 54% decrease in the amount of overtime and significantly decreased the amount of unscheduled absences. From these two studies, it can be concluded that a system that combines both rewards and punishments to change undesirable behaviors is effective, but how effective can punishment be at changing undesirable behavior if it is used by itself?

Baum and Youngblood (1975) examined the effects of a classroom attendance policy in which the students were punished for missing classes. Punishment was found to increase the level of attendance behavior over that of the no punishment condition. Additionally, punishment also has been found to decrease unethical behavior, even if the unethical behavior is being reinforced (Hegarty & Sims, 1978). Punishment can therefore have a very powerful effect on changing employees' undesirable behaviors.

Brass and Oldham (1976) examined supervisors' use of punishment as a motivational tool to increase employees' work performance and motivation. They found that Personally Rewarding and Personally Punishing motivational strategies were positively related to eight measures of employee effectiveness. Personally Punishing strategies were significantly related to 7 of the 8 measures of effectiveness, while Personally Rewarding strategies were only related to 3 of the 8 measures of effectiveness. These results show that punishment can be as effective or even more effective than reward allocations at increasing the effectiveness of employees. In summary, research has shown that punishments are effective both when delivered in combination with



rewards and when delivered by themselves. Despite all the literature examining the effects of punishment on undesirable behaviors, little research has examined the conditions under which punishment is most effective at changing undesirable behaviors.

### Punishment Severity

Thus far, the majority of the research on punishment has looked at how the severity of punishments affects levels of performance. Severity of punishment appears to be a very important variable that affects behavioral change, but studies of punishment have not produced consistent results. One recurring finding has been that more intense punishments result in the greatest amount of behavioral change (Church, 1963; Johnston, 1972; Skinner, 1953; Walters & Grusac, 1977).

From his work within a therapy setting, Johnston (1972) outlined ten guidelines for effectively changing behaviors through punishment. Two of the guidelines dealt with the severity of punishment. First, Johnston proposed that the initial intensity of the punishment should be as powerful as possible, and that this level of punishment should be administered for as long as possible. Second, he suggested that if only a moderate level of punishment could be administered, then long periods of the punishment should be used. Thus, from this research it could be concluded that the most effective way to change undesirable behaviors was through the administration of the most severe punishment possible. Researchers who find support for the use of strong punishments reason that more intense punishment suppresses behaviors because individuals do not want to be given this level of punishment again (Church, 1963; Johnston, 1972; Skinner, 1953; Walters & Grusac, 1977). They also hypothesize that weaker punishment will be ineffective at deterring undesirable behaviors because this level of punishment will have no dire consequences for the individual.

Bennett (1998) found that behavioral change was related to the level of outcome

severity. Participants who were given less severe punishments were less likely to change their behaviors compared to those who were given more severe punishments. Bennett concluded that the low levels of punishment did not act as a deterrent to performing the undesirable behavior, and simply the act of applying punishment was not enough to change the behavior. The implication from this study is that in order for the punishment to be effective, it must be intense.

In contrast, a second finding has been that the level of punishment severity was irrelevant to the amount of behavioral change (Leon, 1981; Rimm & Masters, 1979). It was proposed by Leon (1981) that the application of the punishment was what caused the behavioral change and not the punishment's level of intensity. In other words, low levels of punishment would bring about exactly the same amount of behavior change as would moderately or extremely intense punishments. Little additional empirical evidence has been found to support these findings.

The third possible relationship between punishment severity and performance change states that a moderate level of punishment severity may be most effective in changing undesirable behaviors. Avery and Ivancevich (1980), in a commentary regarding the state of punishment research in organizations, reasoned that punishment can only be effective in changing behaviors at a moderate intensity level. They surmised that if the punishment were too intense compared to the undesirable behavior, then the employee would become so upset that he/she would not feel obligated to change that behavior. For example, an employee who is suspended for one week after being tardy once would probably perceive the punishment as extremely unfair, and he/she would not attempt to change this behavior. On the other hand, if the punishment is not harsh enough, the individual would not view the punishment as a deterrent and would thus continue to perform the undesirable behavior. A moderate level of punishment would be

strong enough to deter the behavior from occurring, but not too intense to cause resentment and not too weak to result in a lack of change in behavior.

Currently, no studies have been found to support Avery and Ivancevich's prediction. Additionally, none of the studies cited in my study specifically examined how the individual receiving the punishment perceived its severity. Severity is a relative state, so it is essential for researchers to determine at what levels people perceive punishment as high, medium or low. Authors have not commented on how high levels of punishments have been defined; is a high level of punishment synonymous with severe punishments, or are high-level punishments simply more intense than an appropriately intense punishment. In these other studies, the label the authors placed on certain levels of punishment may have misrepresented the perceived level of punishment the individuals received. If high-intensity punishments are defined as severe punishments, then Avery and Ivancevich's proposal may be valid, and high punishments would decrease behavior change. On the other hand, if high punishment is not defined as severe, then high punishments may increase behavior change.

Empirical evidence has shown that punishment can be effective in changing employees' undesirable behaviors, but much of the management literature instructs supervisors to eliminate punishment from their disciplinary system. The reason for the push to eliminate punishment from organizations is because of the perceived negative side effects of the punishment on the individual.

#### Negative Outcomes of Punishment

The second part of Bennett's (1998) proposed consequences of punishment was that punishment resulted in negative consequences for the punished. The belief by most researchers has been that punishment causes the victim to develop anger, resentment, avoidance, and retaliatory behaviors towards the punishing agent; in an organizational

context, the punishing agent would be the supervisor or the organization (Luthans, 1995; Moorehead & Griffin, 1995; Northcraft & Neale, 1994; Organ & Hammer, 1983). Avery and Ivancevich (1980) reviewed previous punishment research studies and concluded that punishment will result in anxiety, aggressive acts, passivity, and withdrawal.

Additionally, punishment may lead to escape or avoidance by the victim. These behaviors could have a detrimental effect on the supervisor-subordinate relationship. Parke (1972) found that undesirable side effects were only manifested when the individual was punished indiscriminately or harshly. Therefore, negative side effects occurred only when the punishment was not contingent on the behavior or the punishment was too severe compared to the punishable behavior.

More recent studies have continued to examine individuals' reactions to the presentation of punishment within an organizational setting. Baron (1988) compared the reactions of individuals receiving destructive criticism against individuals receiving constructive criticism. Participants in the study were instructed to develop a company's ad campaign for a new line of shampoo that would be introduced soon. Participants were either given constructive criticism in which the comments about the ad campaign were specific in content and considerate in tone, and no attributions were made about the reasons for the poor performance and no threats were made; or destructive criticism in which participants received general remarks in which the comments were inconsiderate, attributed the poor performance to the individual, and threatened the individual. Destructive criticism had a profound effect on the participant's emotional and behavioral reactions. Individuals receiving destructive criticism were more inflexible to the suggestions, showed more avoidance, felt angrier, felt tenser, and were less likely to collaborate. The implication of this study is that severe punishments have a negative emotional effect on the victim, and thus will result in behaviors that are detrimental to the

organization.

Ball, Trevino, and Sims (1994) examined how fair and unfair punishments affected employee performance and citizenship behaviors. Recently punished employees from 20 different organizations were asked to complete a questionnaire about the punishment event. Harsh punishments were found to have a strong impact on subsequent performance and retaliatory behaviors. When the punishment was perceived to be overly harsh, employees rated the anticitizenship measure significantly higher than the organizational citizenship measure, which meant that the individual was more likely to have covertly retaliated since the punishment incident's occurrence. Some examples of items included in the anticitizenship measure included: lying in order to get the boss into trouble, sabotaging the work of co-workers, and purposely interfering with someone else doing his/her job. Additionally, this study found that when punishment was too harsh, individuals were less likely to change their own behaviors. The performance measure examined the extent to which the individual's work performance had taken a turn for the better and/or whether the individual had stopped performing the undesirable behaviors. Therefore, this measure tapped both types of punishable behaviors: poor performance and antisocial behaviors. The importance of this study is that it illustrated that overly severe punishments have had a detrimental effect on the performance that managers were trying to eliminate or change and have resulted in retaliatory behavior.

In summary, punishments do have negative side effects on individuals. The side effects often include anger, resentment, avoidance and retaliation. These side effects are especially evident when the punishment is extremely severe, yet most of the punishment literature found that highly severe punishments are needed to change behavior effectively. In this dilemma lies the paradox of punishment. Managers can change the behaviors they find undesirable, but new negative emotions and behaviors may occur as a

result of the punishment needed to change the original unwanted behavior. In order for punishment to be a successful method of changing behavior, managers must use punishment in a way that changes behaviors without producing the negative side effects. An exciting avenue to explore to solve this dilemma is to examine individuals' perceptions of justice during punishment incidents.

## Chapter 4

### Punishment and Organizational Justice

One organizational context that has not been extensively studied via justice theory has been organizational punishment (Avery & Jones, 1985). Very few studies have examined how individuals perceive the fairness of punishment events. Greenberg (1990b) proposed that a very promising avenue of research would be to apply procedural justice theory to issues of employee discipline.

Sampson (1986) proposed that individuals see punishment through the eyes of justice. If people cognitively evaluate punishment in terms of fairness, then people should have the same reactions to unfair punishment as they do to unfair reward allocations. It does appear plausible that people evaluate the fairness of punishment events as they do reward allocations because both outcomes, when unfair, elicit negative reactions from the recipients. Unfair reward allocations and punishment cause people to react with negative attitudes (lower commitment, lower satisfaction), negative emotions (anger), poorer performance, and/or retaliatory behaviors. Previous research on fairness and reward allocation research has found that people will perceive the outcome as fair even if it was negative as long as fair procedures were used. Therefore, a similar application of procedural justice may affect an individual's perception of a punishment's fairness. In particular, certain types of social accounts may be effective at eliminating the negative side effects of punishment.

Much of the introductory research examining the effects of procedural justice variables on reactions to punishment has studied aspects of punishment consistency. Consistency of outcome decisions is a procedural justice variable proposed by Leventhal (1980). If this procedural variable affected individuals' perceptions of fairness, then the possibility exists that other procedural variables may also affect individuals' perceptions

of fairness. Avery, Davis, and Nelson (1984) surveyed a group of refinery workers about their perceptions of their supervisors' discipline behaviors. Particularly, they wanted to know how the disciplinary behavior affected job satisfaction. The results support their hypothesis that people who are given consistent punishments have a greater level of job satisfaction than people who are given inconsistent punishments. The authors also found that when the punishment was administered in an inappropriate manner – childishly, in a petty manner, or in an angry fashion – job satisfaction was decreased. Unfortunately, this study did not examine the perceived level of fairness, so no conclusion can be made about whether consistency affects perceptions of fairness, but based on its effect on job satisfaction, consistency should have an effect on procedural justice.

Bennett and Cummings (1991) examined how the schedule of punishment affected people's performance on a proofreading task. Procedural justice theory hypothesizes that aversive consequences delivered on a fixed ratio or continuous schedule results in fewer undesirable behaviors than would a variable ratio schedule. The authors found that continuous punishment and a fixed ratio schedule of punishment did not significantly differ in the number of errors they produced, but the fixed ratio group had significantly fewer errors than the variable ratio group. Unlike much of the early punishment literature that suggested that in order to be effective, punishment must be administered after each incident (Azrin & Holtz, 1966; Johnston, 1972; Parke, 1972), this study demonstrated that punishments will be effective as long as they are on a consistent schedule.

Bennett (1998) used two in-basket exercises to determine if punishment could be used to change behavior without causing negative side effects (anger and retaliation). Bennett examined how the magnitude and consistency of punishments for giving distributors kickbacks would affect behavior change, anger, and retaliatory behaviors.



Interestingly, the magnitude of the punishment influenced the level of behavior change, while the consistency didn't, thus supporting the contention in previous literature that high magnitude punishments are needed to change behavior. Both consistency and magnitude had a significant effect on levels of anger, but individuals were angrier when they received inconsistent rather than severe punishments. Consistency also had an effect on the level of aggression and retaliatory behavior the individual enacted. Individuals who received inconsistent punishments were more likely to act aggressively against a competitor and against a subordinate than were individuals receiving consistent punishments. The implication of this study was that the level of punishment and the procedures with which it is administered has differing effects on the individual. Specifically, higher levels of punishment are needed to change behavior, and fair procedures are needed to reduce anger and retaliatory behaviors.

The impact of the previous three articles has not been simply the finding that consistency is important when administering punishments. The most important finding of these studies has been that people use procedures to determine the fairness of severe punishment. Additionally, fair procedures appear to be a necessity in order to reduce the negative side effects that accompany negative punishments. Also, a solid conclusion could be made based on these studies that punishments always should be applied consistently. Unfortunately, punishments cannot always be administered consistently because of the dynamics of organizational settings; not all situations are exactly the same, so other aspects of punishment procedures also must be examined to find out if they have similar effects on individuals' reactions to punishment.

Ball, Trevino, Sims (1993) developed a model of subordinates' attitudes in response to punishment incidents. The authors proposed that negative attitudinal reactions that occur during punishment are a result of the perceptions of unfair

punishment. Therefore, the model was developed to explore the variables that affect subordinate attitudes to punishment. This model is important because it was the first model to examine punishment events through an organizational justice framework. The variables and connections proposed by this model are the starting point for future research.

The model proposes that personality variables, justice variables, and attitudinal outcomes are all connected. The model proposes that the personality variables, belief in a just world, and negative affectivity have direct and indirect effects on employees' attitudes. The perceived justice of the punishment event mediates the effect of personality variables. The procedural justice characteristics are perceptions of subordinate control, counseling, positive demeanor, arbitrariness, privacy, and explanations. The distributive justice characteristic was the harshness of the punishment. The model also shows that the distributive and procedural justice variables affect different attitudinal outcomes. Procedural characteristics would be a better predictor of attitudes about procedural fairness, trust in the supervisor, satisfaction with the supervisor, and organizational commitment, while the distributive characteristic harshness should be the best predictor of distributive justice and intentions to leave. For the most part, the connections between predicted variables were supported. The implication of this study was that there are variables beyond consistency that affect the perceptions of punishment fairness. Additionally, this study provides evidence that fair punishments affect attitudinal outcomes like commitment, satisfaction and intentions to leave the company. One limitation of this model has been the fact that it does not take into consideration how fairness impacts the level of behavioral change that occurs with the punishment.

Trevino and Weaver (1998) also believed that justice evaluations were extremely important to individuals' reactions to punishment. The authors proposed five procedures that managers must follow in order for subordinates to perceive the punishment as fair. First, the severity of the punishment must match the severity of the behavior and make the punishment consistent with what others received. Second, the manager must provide subordinates with input into the punishment decision-making process. Third, the manager should use the punishment for constructive counseling and avoid negative emotional actions. Fourth, the manager should adequately explain the punishment in a way that ties it to the misconduct. Fifth, the punishment should be administered based on organizational rules. One of the procedural variables that was proposed by both Ball et al. (1993) and Trevino and Weaver (1998) was that explanations should accompany the punishment. Causal accounts have been proposed to be positively related to procedural justice evaluations of the punishment incident and therefore to increase the individual's perceptions of fairness (Ball, Trevino, & Sims, 1992). Butterfield et al. (1996) found that managers do use explanations to try to manage the impressions of punishment. Managers usually make self-serving explanations that often take the form of excuses, justifications, or apologies (Schlenker & Wiengold, 1992). Unfortunately, no research has been undertaken to examine which type of account will be most effective at reducing the negative reactions to punishment.

#### Implications for Punishment in Organizations

The preceding discussion of punishment and organizational justice has implications for how supervisors and managers administer punishment to their subordinates. Punishment usually brings about negative side effects, such as anger, avoidance, resentment and retaliation, in the punished individual. The negative side effects that accompany punishment are very similar to the reactions of individuals who

receive unfair reward allocations. Managers must be aware of ways to punish undesirable behavior without inciting these negative reactions.

Studies of punishment and justice have shown that fair procedures can be used to decrease the negative reactions to punishment. The most often examined procedural variable has been consistency. Unfortunately, consistency cannot always be used by managers to influence the perceptions of punishment because of the dynamics of each punishment event. Therefore, the focus of this study will be on a variable that can be used during all punishment events regardless of the situation: social accounts. Social accounts have been extremely effective at reducing the negative reactions of individuals receiving damaging outcomes. Since individuals receiving negative punishment react similarly to individuals receiving negative reward allocation decisions, a social account should have a similar effect on a punished individual's reactions. Managers do use social accounts to manage subordinates' impressions of the punishment, but no one has examined which of the four types of accounts is most effective at reducing subordinates' reactions.

The research problem of this thesis is: how can managers effectively use punishment to change undesirable behavior without the punished individual having negative side effects that result in detrimental effects on the organization?

This study has a threefold focus. First, at what level of punishment severity will undesirable behaviors be most effectively changed? Second, will social accounts increase the perceived fairness and increase individual's attitudes towards the levels of punishment? Finally, will ideological accounts and causal accounts differ in their patterns of effectiveness for the different levels of punishment?

## Chapter 5

### Research Design and Hypotheses

The present study uses a 3 x 3 design. The first independent variable manipulated the severity of the punishment with three levels: low, medium, high; and the second independent variable manipulated the type of account that was given: ideological, causal, redundant account.

The majority of studies in the punishment literature have examined the most effective methods of changing behavior with punishment, while most of the literature joining justice and punishment have not included the effectiveness of behavioral change in their examination of perceived punishment fairness (Bennett, 1998, as the sole exception). Therefore, in concordance with the punishment literature, the first two hypotheses state the predicted conditions under which there will be the most behavioral change.

Hypothesis 1: The high level of punishment will result in greater performance compared to either low or moderate punishment.

Hypothesis 2: The punishment severity and social account type will interact to affect performance. Specifically, at the low level of punishment the presence of a social account will have no effect on performance, but at moderate and high levels of punishment the presence of an account will result in greater performance in comparison to a redundant account.

Bennett (1998) found that high levels of punishment decreased perceptions of fairness and increased negative attitudes (anger, dissatisfaction, retaliation). Hypothesis 3 provides the same prediction for the current study.

Hypothesis 3: There will be a main effect of punishment on punishment fairness, Interactional Justice, anger, retaliatory behavior, and dissatisfaction. Specifically, the high level of punishment will decrease the perceptions of punishment fairness and Interactional Justice and increase levels of anger, retaliatory behavior, and dissatisfaction compared to low or moderate punishment. Additionally, a moderate level of punishment will decrease the perceptions of punishment fairness and Interactional Justice and increase levels of anger, retaliatory behavior, and dissatisfaction compared to low punishment.

The benefits of social accounts on perceived fairness and reactions to negative outcomes have been found in many organizational settings, and there appears to be some benefit for them in punishment incidents. Ball et al. (1993) found that social accounts are effective at increasing perceptions of fairness during punishment, but to date, no study has experimentally examined the effects of social accounts in a punishment context.

Hypothesis 4: There will be a main effect of social account on punishment fairness, Interactional Justice, anger, retaliatory behavior, and dissatisfaction. Individuals receiving an account will have increased perceptions of punishment fairness and Interactional Justice and will show less anger, retaliatory behaviors, and dissatisfaction compared to individuals receiving a redundant account.

The group-value model states that procedures are important to individuals' perceptions of fairness because they convey to the individual his/her status within the group. Therefore, fair procedures convey to the individual dignity and respect. Ideological accounts, in which the decision-maker takes responsibility, justifies the outcome, and appeals to a superordinate goal, should be perceived as fairer than causal accounts, in which the decision-maker does not take responsibility and blames the punishment on mitigating circumstances. The causal account should be seen as a less

viable explanation for the punishment and, therefore, will be judged as less fair than the ideological account.

Outcome severity has been shown to moderate the effect of social accounts on fairness and attitudes. The level of the punishment severity should have an effect on perceptions of fairness, attitudes, and behaviors. Schlenker (1980) found the severity of the injustice was affected by the extent to which the behavior appeared to contradict an aspect of the individual's social-identity. An ideological account takes into consideration the individual's self-identity by explaining the reasons for the negative outcomes through the use of a superordinate goal and appeals to the individual's values. The decision-maker shows the individual dignity and respect by taking complete responsibility for and justifying the reasons for the negative outcomes the individual received. Since the ideological account helps to make sure that punishment does not contradict the individual's self-identity, ideological accounts should help increase perceptions of fairness for all levels of punishment. Therefore, even high levels of punishment should be perceived as appropriate when ideological accounts are given. Individuals receiving an ideological account should perceive a high level of punishment fairer than an individual receiving a causal account or no account.

Causal accounts will have the greatest effect when the punishment's severity is moderately strong. When the punishment is very weak, the social account should not have an effect because the mild nature of the punishment should not harm the individual to the point where an explanation is needed. Additionally, when the punishment is extremely severe, more than simply a causal account will be needed to change how the individual feels about the punishment event. Therefore, at a moderate level of punishment the individual should be most receptive to the causal account, and as a result, the causal account should be most effective at increasing perceptions of fairness and

decreasing negative attitudes at moderate levels of punishment. Ideological and causal accounts will have different patterns depicting their moderating effects.

Hypothesis 5: There will be an interaction of punishment severity and social account. Specifically, at the high level of punishment, individuals receiving an ideological account will have greater perceptions of punishment fairness and Interactional Justice and will have less anger, retaliatory behaviors, and dissatisfaction compared to individuals receiving a causal account. Additionally, at the low level of punishment, no differences are predicted between any of the account conditions.



## Chapter 6

### Method

#### Participants

One hundred-ninety-five Midwestern university students participated voluntarily in the experiment. The sample consisted of 68% females and 32% males with gender distribution by condition ranging from 45% female to 85% female. The average age of the participants was 21 years old. Most of the participants were early in their college careers (32% freshman, 34% sophomores, 19% juniors, 14% seniors, and less than 1% classified themselves as either nondegree or graduates students). Seventy-three percent of the students were in majors outside of psychology. Participants were given extra credit points for participating in the study along with 20 opportunities to win a \$150 gift certificate in a lottery.

#### Design

The experiment is a 3 x 3 between-subjects design. The independent variables include the level of punishment (low, moderate, and high) and the type of social account (ideological, causal and redundant account). The dependent variables include punishment fairness, Interactional Justice, satisfaction with the experimenter, anger, and intention to retaliate.

#### Measures

Manipulation checks. Numerous items were used to assess the impact of the independent variables and other experimental features. The impact of the independent variables was examined with two questions that assessed the punishment severity and two questions that assessed the social accounts. Punishment severity was examined with Questions 2 and 3 from Appendix C. The three bipolar items of Question 3 were aggregated to form a scale. Question 2 along with Question 7 and Question 8 that

examines the effectiveness of the accounts were measured on a 7-point rating scale (1-strongly disagree to 7-strongly agree).

Other measures assessed the impact of certain experimental features such as the gift certificate value, the number of tickets participants received, and the understanding of the social accounts. (See Appendix B and C for the additional manipulation check items).

Attitudinal scales. Questionnaire B contained scales for fairness of punishment, Interactional Justice, satisfaction with the experimenter, and anger. Each item was rated on a 7-point scale. The punishment fairness scales contained five bipolar items that were aggregated to form a scale. The measure was adapted from Ball et al. (1993) ( $\alpha = .96$ ). Four items measured Interactional Justice (items 9-13 in Appendix C). Three items measured satisfaction with the experiment (items 14-16 in Appendix C). Finally, four bipolar items measured the amount of anger the participants felt about the removal of tickets. These items were adapted from Bies et al (1988) ( $\alpha = .92$ ). The complete questionnaire is located in Appendix C.

Questionnaire C contained questions about participants' intentions to retaliate against the experimenter. Participants were asked to evaluate the experiment for the Psychology Department. The Psychology Department evaluation questionnaire was developed to measure the retaliatory behavior the participants might show towards the experimenter for the punishment they received. The complete questionnaire is located in Appendix E.

### Procedure

The experiment was run with 65 participants as an early pilot study to determine the effectiveness of the independent variables. Small changes were made to the independent variables to maximize their impact. First, it was determined that the no

account condition had the same impact as the ideological and causal account conditions. Post-experiment interviews determined that participants used the instructions at the beginning of the experiment as their explanation for why they had tickets taken away, thus, their attitudes towards the punishment were at the same level as the individuals in the social account conditions. Two steps were taken to combat this problem. First, the opening instructions were made more general. Second, the participants in the no account condition received an explanation that was general and based on the instructions. By making the instructions more general, participants had less information to process the reasons for the punishment. The no account condition was now labeled the redundant account condition.

The appropriate number of tickets taken away for the three levels of punishment severity was also determined during the initial stage of the experiment. It was important to find the number of tickets that would be perceived to be slightly, moderately and highly punishing. It was determined that 1 worked best for low, 5 for moderate, and 9 for high.

When the participants arrived at the laboratory, they were greeted and were seated around a large table. Groups of three to six participants participated in the experiment at the same time. First, the participants were invited to read and sign the consent form in Appendix G. Next, the experimental instructions were read out loud to the participants. The participants were told that they would complete two simple editing tasks. For each of the editing tasks, the participants were required to circle the entire set of upper case and lower case letter Ts that appeared in a story. The reward for circling 90% of the Ts that appear in each task would be 10 tickets for a lottery drawing for a \$150 gift certificate that would occur at the end of the data collection. If the participant did not identify 90% of the Ts on each task, some of their tickets would be taken away from the

total number of tickets they received.

Participants were taken to isolated rooms where they found 10 lottery tickets placed on the desk with the first task. Task 1 was timed for 10 minutes, at which time the experimenter collected the task from each participant and pretended to grade it while the participants completed Questionnaire A. After approximately 10 minutes the experimenter returned to participants a sheet of paper explaining the level of punishment they received (the number of tickets removed) and an account explaining the reason for the level of punishment they received. Participants reviewed their score sheet and completed Questionnaire B.

The participants next completed Task 2. Before beginning the task, the experimenter reminded the participants that they still had an opportunity to obtain an additional 10 tickets if they could perform well on the next task. After 10 minutes, the experimenter gathered the task and pretended to grade it while the participants completed the retaliation questionnaire.

After the participants completed all of the questionnaires, they were all brought back together into the large room and debriefed. All of the participants were given 20 lottery tickets regardless of the punishment severity condition they were in along with their extra credit. After the collection of the experimental data, the \$150 gift certificate was given to one research participant, and the remaining participants were notified that the prize was awarded.

## Chapter 7

### Results

This study examines how punishment levels and different types of social accounts affect people's task performance and their attitudes. The performance-related dependent variable was measured by counting the number of upper- and lower-case Ts that were present in a short passage used on Task 1 and Task 2. The attitudinal dependent variables were the fairness of the punishment, the Interactional Justice, the punishment-induced anger, the satisfaction with the experiment, and the intention to retaliate against the experimenter.

The experimental results will be discussed below. The discussion will begin with a review of the analysis of the manipulation checks. Next, the experimental analyses and evaluation of the hypotheses pertaining to the performance dependent variable will be discussed. Then, the experimental analyses and evaluation of the hypotheses pertaining to the attitudinal dependent variables will be examined. Finally, the results section will conclude with an exploratory analysis of the no account and redundant account conditions.

#### Manipulation Checks

Manipulation checks were used in this study to determine whether or not participants understood important aspects of the experiment, especially the experimental treatments. A two-way analysis of variance (ANOVA) was used to analyze the punishment severity and adequacy of the social accounts. Other manipulation checks were analyzed in order to evaluate participants' understanding of the experimental

features. The other features included: (a) the gift certificate value; (b) the number of tickets they received; (c) the participants' understanding of the social account.

Additional analyses were conducted to examine the Task 1 difficulty, and the analyses included: (a) the number of participants completing Task 1 and (b) and the number of individuals achieving 90% or more on Task 1. The results of the manipulation check analyses are discussed in the following sections.

Punishment severity. Either one, five or nine tickets from the participants' original ten tickets were removed for not performing satisfactorily on Task 1. This removal of tickets manipulated the three levels of punishment severity. Participants who had more tickets removed from their original allotment of ten tickets, as a result of poor performance, should have perceived the ticket removal as more severe than participants who had fewer tickets removed.

The punishment severity was measured with two questions, Question 2 and Question 3, on Questionnaire B. Question 2 asked participants, "How much of a penalty did you feel ticket removal was?" A two-way analysis of variance (ANOVA) was performed using Question 2 as the dependent variable and punishment severity (low, moderate, and high) and social account type (ideological, causal, and redundant) as the independent variables. Table 1 displays the means of the experimental conditions, and Table 2 displays the ANOVA table for this analysis.

As expected, there was a significant main effect of punishment level. Unexpectedly, a significant main effect of social account type was revealed. Finally, a significant interaction between punishment level and social account type was found.

Table 1

Punishment Severity Manipulation Check Means (Q2)

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	1.45	3.60	4.95	3.33
Causal	1.30	3.20	4.70	3.07
Redundant	1.20	3.95	6.00	3.72
Means	1.32	3.58	5.22	3.37

Note. Scale is 1 to 7 where higher values indicate greater severity. Condition  $n = 20$ .

Table 2

ANOVA of the Punishment Severity Manipulation Check (Q2)

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	460.31	2	185.25	.001	.684
Account Type (A)	12.81	2	5.16	.007	.057
P x A	12.49	4	2.51	.043	.056
Error	212.45	171			



Since the significant interaction takes precedence over the significant main effects, the interaction will be discussed in detail.

Simple effect analyses were performed to reveal the pattern of the interaction. Four significant simple effects were found. A significant simple main effect of punishment was found for each of the three social account conditions at  $p < .001$ . A Tukey Honestly Significant Difference Test was used to further evaluate all significant simple main effects, and the alpha level was set at .05. The pattern of these simple main effects indicates that the low severity level was perceived to be less severe than the moderate or high punishment levels, and the moderate severity condition was perceived to be less severe than the high punishment for each of the social account conditions. The pattern of means for these conditions can be found in Table 1. Finally, an unexpected simple effect of account type was found at the high punishment level,  $F(2,169)=7.57$ ,  $p < .01$ . A post hoc analysis revealed that the redundant account ( $M=6.00$ ) increased participants' perceptions of punishment severity compared to the causal account ( $M=4.70$ ) or the ideological account ( $M=4.95$ ); the causal and ideological accounts did not differentially affect participants' perceptions of punishment severity.

The results indicated that as the punishment level increased, participants' perceptions of punishment severity increased for all account types. For the low or moderate punishment level, the account type did not influence participants' perceptions of punishment severity, but at the high punishment level, providing an ideological or a causal account helped ease the negative effects of the high punishment compared to providing a redundant account.

Question 3 on Questionnaire B asked participants to circle a value on three bipolar scales that illustrated their feelings about the penalty they received. The bipolar responses were aggregated into a scale and used in this analysis. A two-way analysis of variance was performed using Question 3 as the dependent variable and punishment severity and account types as the independent variables. Table 3 displays the means for the experimental conditions, and Table 4 displays the ANOVA table of the results.

As expected, there was a significant main effect of punishment level. A Tukey Honestly Significant Difference Test was used for all post hoc analyses, and the alpha level was set at .05. A post hoc analysis indicated that the punishment level participants received directly influenced their severity perceptions. Specifically, participants who received a low severity level ( $M=2.19$ ) perceived the punishment to be less severe than participants receiving a moderate ( $M=3.63$ ) or high punishment level ( $M=4.93$ ), and participants receiving a moderate punishment perceived the punishment to be less severe than participants receiving a high punishment level. The results indicated that participants' perceptions of punishment severity increased as the punishment level increased.

Questions 2 and 3 in Questionnaire B were used to evaluate participants' perceptions of punishment severity. As expected, there was a significant correlation between the two questions,  $r=.81$ ,  $p<.001$  suggesting that the two questions were measuring a similar construct and presumably the construct was punishment severity perceptions. The analysis of the two punishment severity manipulation checks questions revealed that punishment level affected how participants perceived the punishment's

Table 3

Punishment Severity Manipulation Check Means (Q3)

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	2.48	3.63	4.47	3.51
Causal	2.00	3.38	4.86	3.39
Redundant	2.08	3.87	5.42	3.79
Means	2.19	3.63	4.93	3.57

Note. Scale is 1 to 7 where higher values indicate greater severity. Condition  $n = 20$ , except the ideological high and causal high conditions,  $n = 19$ . Two participants were not included because of incomplete survey data.

Table 4

ANOVA of the Punishment Severity Manipulation Check (Q3)

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	219.76	2	89.72	.001	.515
Account Type (A)	4.38	2	2.19	ns	--
P x A	9.41	4	2.35	ns	--
Error	206.99	169			

severity. Specifically, at the low punishment level, participants felt as though the punishment were mildly severe; at the moderate punishment level, participants felt as though the punishment were moderately severe; and at the high punishment level, the participants felt as though the punishment were strongly severe.

In summary, the expected main effect of punishment severity was found across the three social account types for both Question 2 and Question 3. As the punishment severity increased, participants' perceptions of punishment severity also increased. One minor qualification to this main effect pattern occurred for Question 2. The analysis of the significant interaction revealed that in addition to the three significant severity simple effects, there was also one significant account simple effect. At the high punishment level, providing an ideological and causal account reduced participants' perceptions of punishment severity more than providing a redundant account.

Account adequacy. The adequacy of the three social accounts was evaluated with two questions, Question 7 and Question 8, from Questionnaire B. Question 7 asked the participants, "How adequate was the explanation provided on the Task 1 score sheet that describes why you had tickets taken away?" The intent of this question was to determine if the participants felt that the explanation they received provided strong enough justification as to why they had the number of tickets taken away that they did. It was predicted that participants who received an ideological account or a causal account would perceive the account to be more adequate than participants receiving a redundant account because an ideological and a causal account are more detailed and provide the participants with a plausible reason why they had tickets taken away.

A two-way analysis of variance was performed using punishment level and account type as the independent variables and Question 7 as the dependent variable. Table 5 displays the means for the experimental conditions, and Table 6 displays the ANOVA table for this analysis.

As expected, there was a significant main effect of account type. A Tukey Honestly Significant Difference Test was used for all post hoc analyses, and the alpha level was set at .05. A post hoc analysis indicated that participants perceived the ideological account ( $\underline{M}=4.58$ ) and causal account ( $\underline{M}=4.20$ ) to be significantly more adequate than the redundant account ( $\underline{M}=3.19$ ). There was no significant difference between the ideological and causal accounts. Unexpectedly, there was also a significant main effect of punishment level. The follow-up post hoc analysis indicates that participants receiving a low punishment level ( $\underline{M}=4.83$ ) perceived the account they received to be more adequate than participants receiving a moderate ( $\underline{M}=3.68$ ) or high punishment level ( $\underline{M}=3.48$ ). There was no significant difference between the moderate or high punishment levels. The interaction of punishment level and account type was not significant.

These results indicate that the ideological and causal accounts were effective. Both the ideological and causal accounts were perceived to be significantly more adequate than the redundant account. The unexpected significant main effect of punishment severity suggested that each account type was perceived to be more adequate when they received a weak punishment compared to when they received a moderate or high punishment.

Table 5

Social Account Manipulation Check Means (Q7)

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	5.80	3.65	4.30	4.58
Causal	4.53	4.15	3.95	4.20
Redundant	4.15	3.21	2.20	3.19
Means	4.83	3.68	3.48	3.99

Note. Scale is 1 to 7 where higher values indicate greater adequacy. Condition  $n = 20$ , except the causal low and redundant moderate conditions,  $n = 19$ . Two participants were not included because of incomplete survey data.

Table 6

ANOVA of the Social Account Manipulation Check (Q7)

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	62.59	2	8.60	.001	.092
Account Type (A)	61.97	2	8.51	.001	.092
P x A	26.29	4	1.81	ns	--
Error	615.10	169			



Question 8 asked the participants, “How sufficient was the explanation provided on the Task 1 score sheet that describes why you had tickets taken away?” The intent of this question was to determine if the participants felt that the explanation they received provided enough information as to why they had the number of tickets taken away that they did. It was predicted that the ideological account and the causal account would be perceived to be more sufficient than the redundant account since these two accounts are more detailed and provide the participants with a significant amount of information why they had tickets taken away.

A two-way analysis of variance was performed using Question 8 as the dependent variable and punishment level and account type as the independent variables. Table 7 displays the means for the experimental conditions, and Table 8 displays the ANOVA table for this analysis.

As predicted, there was a significant main effect of account type. A Tukey Honestly Significant Difference Test was used for all post hoc analyses, and the alpha level was set at .05. The follow-up post hoc analysis showed that participants perceived the ideological account ( $\underline{M}=4.63$ ) and causal account ( $\underline{M}=4.30$ ) to be significantly more sufficient than the redundant account ( $\underline{M}=2.95$ ). There was no significant difference between the ideological and causal accounts. Unexpectedly, there was also a significant main effect of punishment level. A post hoc analysis indicates that participants receiving a low punishment level ( $\underline{M}=4.62$ ) perceived the account they received to be more sufficient than participants receiving a moderate ( $\underline{M}=3.77$ ) or high punishment level

Table 7

Social Account Manipulation Check Means (Q8)

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	5.75	4.20	3.95	4.63
Causal	4.45	4.30	4.15	4.30
Redundant	3.65	2.80	2.40	2.95
Means	4.62	3.77	3.50	3.96

Note. Scale is 1 to 7 where higher values indicate greater sufficiency. Condition  $n = 20$ .

Table 8

ANOVA of the Social Account Manipulation Check (Q8)

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	40.81	2	5.63	.004	.062
Account Type (A)	95.34	2	13.15	.001	.133
P x A	14.42	4	.99	ns	--
Error	620.15	171			

( $M=3.50$ ). There was no significant difference between the moderate or high punishment levels. Additionally, the interaction of punishment level and account type was not significant. Both the ideological and causal accounts were perceived to be significantly more sufficient than the redundant account. Finally, since there was no significant difference between the ideological and causal accounts, the results indicated that participants felt as though these two accounts provided a similar level of detail in the explanations. The unexpected significant main effect of punishment severity revealed that the perceived sufficiency of the explanation was significantly higher when the punishment was weak compared to when it was moderate or high. The account sufficiency of all three accounts decreased as the punishment became more severe.

Questions 7 and 8 on Questionnaire B were used to measure how effectively each social account was in explaining why the participants had their specific number of tickets taken away. The results indicated that participants perceived the ideological and causal accounts both to be more adequate and more sufficient than the redundant account. The unanticipated main effect of punishment severity for adequacy and sufficiency indicated that the punishment level affected participants' perceptions of the social account, such that a weak punishment resulted in significantly more adequate accounts than did a moderate or high punishment. Since Question 7 and Question 8 were used to evaluate the effectiveness of the social accounts in explaining why the participant had tickets taken away, it was predicted that the two items would be highly correlated. Question 7 and Question 8 were significantly correlated,  $r=.76$ ,  $p<.001$ . Participants who perceived the social account as adequate also perceived the social account to be sufficient.

Overall, the analyses for Question 7 and Question 8 produced the same pattern of results. Ultimately, the results indicate that ideological and causal accounts provided the participants a better justification for why they received the punishment. Despite the fact that ideological and causal accounts were perceived to be more adequate and sufficient than the redundant account, the overall results indicate that the mean adequacy and sufficiency ratings for the ideological and causal accounts were smaller than expected. The small mean ratings of adequacy and sufficiency could have resulted from poorly designed social accounts.

Other manipulation checks. Other manipulation check questions were asked in Questionnaire A and Questionnaire B. These manipulation checks were intended to examine participants' understanding of the information provided in the experiment. Additional manipulations checks were conducted to evaluate participants' performance on Task 1.

Question 5 on Questionnaire A asked the participants, "What was the value of the gift certificate you could receive?" The intent of this question was to determine if the participants knew the value of the gift certificate that was being given away as a prize by the experimenter. Since the amount of the gift certificate could potentially impact the participants' perceptions of the punishment severity, it is important to know if the participants were aware of the gift certificate amount. Incorrect answers could indicate that participants did not pay close attention to the experimenter's instructions. Ninety-eight percent of the participants (177 out of 180) were aware of the gift certificate amount.

Question 1 on Questionnaire B asked the participants to identify the number of tickets they received for completing Task 1. The intent of this question was to determine how conscientiously the participants read the Task 1 Score Sheet. An incorrect response would indicate that the participant did not thoroughly read the Task 1 Score Sheet. Ninety-nine percent of the participants (178 out of 180) correctly identified the number of tickets they received on Task 1.

Question 4 asked the participants, “Who was responsible for taking away the tickets for Task 1?” Participants were to circle either the response choice “Experimenter” or the response choice “Thesis Committee.” The intent of this item was to determine if the participants in the ideological and causal account conditions understood who was responsible for deciding how many tickets the participants would have taken away. In the ideological account, participants were told that the experimenter had taken away tickets to help motivate the participants to increase their performance on Task 2. In the causal account, the participants were told that the experimenter’s thesis committee determined the level of punishment that they would receive and the experimenter was not involved in the decision. Seventy percent of the participants (42 out of 60) receiving an ideological account indicated that the experimenter was the individual who was responsible for taking away Task 1 tickets. Ninety-five percent of the participants (57 out of 60) receiving a causal account indicated that the thesis committee was responsible for taking away Task 1 tickets. These results indicate that the majority of participants did thoroughly read and understand who was responsible for taking away tickets in the ideological and causal accounts.

The final two manipulation checks evaluated participants' performance on Task 1. In this experiment, one of the goals was to examine how punishment level and account type would affect participants' performance from Task 1 to Task 2. One of the greatest challenges of this study was to determine the appropriate length of Task 1. Task 1 needed to be long enough that participants would fall just short of finishing but not be so long that the participants would not come close to finishing. If Task 1 were too short and many of the participants completed the task within the allotted 10 minutes, a ceiling would be placed on participants' performance resulting in an unrepresentative measure of Task 1 performance. If the task was too long, and the participants only finished a small portion of the task, they would not feel unfairly treated when tickets were taken away because internally they knew they deserved the outcome.

The first evaluation of the participants' performance on Task 1 was the number of participants who finished the task. Twenty-seven of the 180 (15%) participants finished Task 1. Finishing Task 1 was defined as any participant who circled the last "t". This measure was an indication of a potential ceiling effect because participants who finished the task could only increase their performance by going back through the task and finding any "ts" they missed. Therefore, completing Task 1 was not a measure of the number of "ts" circled in Task 1. These 27 participants may or may not have performed well on Task 1.

The second evaluation of participants' performance on Task 1, the number of "ts" circled, was performed to determine the number of participants who performed extremely well on the task. Excellent performance was defined as participants who circled 90% or

more of the “ts” in Task 1. Ninety percent was used as the standard of excellence because that was the value participants in the ideological and causal accounts were told they needed to achieve. Twenty out of the 180 (11%) of the participants were able to circle 90% or more of the “ts” in Task 1. The pattern of results from participants’ Task 1 performance indicated that relatively few participants were able to complete Task 1 and even fewer were able to circle 90% or more of the “ts”. These results indicate that there was not a ceiling on participants’ Task 1 performance.

In summary, the manipulations appeared to work as intended, and participants seemed to understand the experimental information given to them throughout the experiment. The analysis of the punishment severity confirmed that participants receiving higher punishment levels perceived the punishment as more severe. The analysis of the social account adequacy confirmed that participants in the ideological and causal accounts perceived the explanation for ticket removal as more adequate and more sufficient than participants in the redundant account. Additionally, participants were aware of both the number of tickets they had taken away from them and the value of gift certificate. The causal account results indicate that participants understood that the experimenter’s thesis committee was responsible for removing the participant’s tickets. The ideological account results indicate that participants understood that the experimenter was responsible for removing the participant’s tickets. Finally, there did not appear to be a ceiling on participants’ performance on Task 1 that might have resulted from too short a task.



### Dependent Variables

This experiment proposed that the punishment level and social account type would affect both the participants' performance and the participants' attitudes towards the punishment and experiment. Performance was measured by counting the number of upper- and lower-case "ts" correctly circled in Task 2 and controlling for the number of "ts" circled in Task 1. The participants' attitudes towards the punishment level and social account type were measured with five dependent variables: fairness of the punishment, Interactional Justice, satisfaction with the experiment, anger produced as a result of the punishment, and intention to retaliate against the experimenter.

Performance measure. Performance was measured by counting the number of upper- and lower-case "ts" correctly circled in Task 2 and controlling for the number of correctly circled "ts" in Task 1. The intent of the performance measure was to evaluate how the participants' performance on Task 2 changed from Task 1 after they received the independent variable manipulations. Therefore, evaluating Task 2 after controlling for the performance on Task 1 would provide evidence as to the effect of the independent variables on Task 2 performance beyond the performance on Task 1.

A two-way analysis of covariance (ANCOVA) was conducted to evaluate the effects of punishment level and social account type on participants' performance on Task 2. Task 1 was appropriate to use as the covariate in the ANCOVA because it was administered before the application of the independent variable manipulations, and because Task 1 and Task 2 are significantly correlated,  $r=.71$ ,  $p<.001$ . After the removal of one univariate outlier on Task 1, homogeneity of regression was achieved,  $F(8,$

178)=1.76,  $p=.09$ . The mean number of “ts” circled on Task 1 and Task 2 is displayed in Table 9 and Table 10, respectively. The mean number of “ts” circled on Task 2 adjusted for the covariate, Task 1, is displayed in Table 11. Finally, the ANCOVA table is located in Table 12.

The ANCOVA analysis reveals that the main effect of punishment level was not significant. Interestingly, the main effect of account type was significant. Finally, the interaction of punishment level and account type was not significant. The results indicate that Task 2 performance after controlling for Task 1 performance was not affected either by the punishment level or by the interaction of punishment level and social account type, but that the account type received affected performance. Two hypotheses were proposed to explain the effect of punishment level and social account type on the performance dependent variable. The a priori contrasts used to evaluate the two hypotheses are discussed below.

Hypothesis 1 predicted that the high punishment level would result in greater performance compared to either low or moderate punishment. The contrast between the high punishment condition and the moderate and low punishment conditions was not significant,  $t(170) = 1.512$ ,  $p>.10$ . Specifically, participants receiving the high punishment condition ( $M=347.98$ ) did not perform better on Task 2 than did participants receiving the moderate and low punishment conditions ( $M=349.78$ ). As a result, Hypothesis 1 is not supported.

Hypothesis 2 predicted that the punishment level and social account type would interact to affect performance. Specifically, at the low punishment level the presence of a

Table 9

Mean Number of "Ts" Circled on Task 1

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	304.10	297.84	264.70	288.88
Causal	287.55	304.75	290.75	294.35
Redundant	305.60	291.00	304.95	300.52
Means	299.08	297.86	286.80	294.58

Note. Condition  $\underline{n}$  = 20, except the ideological moderate condition  $\underline{n}$ =19. One case was removed because of an outlier on Task 1.

Table 10

Mean Number of “Ts” Circled on Task 2

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	353.65	362.37	333.30	349.74
Causal	351.75	363.25	342.30	352.43
Redundant	341.10	337.30	349.05	342.48
Means	348.83	354.31	341.55	348.23

Note. Condition  $\underline{n}$  = 20, except the ideological moderate condition,  $\underline{n}$ =19. One case was removed because of an outlier on Task 1.

Table 11

Adjusted Mean Number of “Ts” Circled on Task 2

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	345.75	359.65	358.03	354.48
Causal	357.56	354.81	345.46	352.61
Redundant	331.96	340.25	340.45	337.55
Means	345.09	351.57	347.98	348.22

Note. Condition  $n = 20$ , except the ideological moderate condition,  $n=19$ . One case was removed because of an outlier on Task 1.

Table 12

ANCOVA of the Performance on Task 2

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Task 1 Performance	290534.37	1	216.73	.001	.562
Punishment Level (P)	704.40	2	.46	ns	--
Account Type (A)	9009.61	2	3.72	.026	.042
P x A	26.29	4	.65	ns	--
Error	232055.18	170			

social account would have no effect on performance, but at moderate and high levels of punishment the presence of an account would result in greater performance in comparison to a redundant account. At the low punishment level, the contrast between the average of the ideological and causal account and the redundant account was not significant,  $t(170) = 1.01, p > .10$ . Participants who received an ideological or causal account ( $M=351.66$ ) did not perform better on Task 2 than participants receiving a redundant account ( $M=331.96$ ) in the low punishment condition. At the moderate punishment level, the contrast between the average of the ideological and causal account and the redundant account was significant,  $t(170) = 2.22, p = .03$ . Participants who received an ideological or causal account ( $M=357.16$ ) did perform better on Task 2 than participants receiving a redundant account ( $M=340.50$ ) in the moderate punishment condition. At the high punishment level, the contrast between the ideological and causal account and the redundant account was not significant,  $t(170) = 1.00, p > .10$ . Participants who received an ideological or causal account ( $M=351.75$ ) did not perform better on Task 2 than participants receiving a redundant account ( $M=340.45$ ) in the high punishment condition. Hypothesis 2 was partially supported.

### Attitudinal Measures

Scale formation. Participants completed two questionnaires that contained the dependent variable scales. Questionnaire B contained the measures of fairness of the punishment, Interactional Justice, satisfaction with the experiment, and anger due to the punishment. The Psychology Department Survey contained the intention to retaliate measure.

An analysis of internal consistency was performed on each variable's items before developing the dependent variable scales. The internal reliability for each dependent variable's items was evaluated by Cronbach's Alpha, and the reliabilities were presented in Table 13. All of the dependent variable scales except the satisfaction scale possessed the reliability of at least .70 that Nunnally (1994) suggested to be an adequate internal consistency for evaluating group data. After the removal of item 15 from Questionnaire B, the reliability of the satisfaction scale increased to near the .70 level. Following the internal consistency analysis, the items comprising each scale were aggregated to form a composite scale measuring each dependent variable. The composite scores were used in all subsequent analyses.

Attitudinal analyses. The analysis of the attitudinal dependent variables will begin with a discussion of the results of the multivariate analysis of variance and each dependent variable's univariate analysis of variance. The attitudinal analysis section will conclude with a review of the remaining experimental hypotheses and a review of their specific a priori contrasts.

The omnibus  $F$  tests for the multivariate and univariate analysis of variance were provided to illustrate the overall effect of the two independent variables on the five attitudinal dependent variables. No follow-up post hoc analyses were performed to evaluate significant main effects or interactions. Instead, the anticipated effects of punishment level and social account level, predicted in Hypotheses 3, 4, and 5, were examined with a priori contrasts and will be discussed after the presentation of the omnibus  $F$  tests.



Table 13

Intercorrelations and Cronbach's Alpha for Attitudinal Scales

Scale	1	2	3	4	5
1. Fairness	.93				
2. Interactional Justice	-.26	.88			
3. Satisfaction	-.41	.73	.69		
4. Anger	-.75	.31	.44	.91	
5. Retaliation	-.26	.35	.39	.39	.78

Note. All correlation coefficients are significant,  $p < .01$

Cronbach's Alpha for each scale is shown on the diagonal.

A two-way multivariate analysis of variance (MANOVA) was performed using the five attitudinal variables (fairness of punishment, Interactional Fairness, satisfaction with the experiment, anger due to the punishment, and intention to retaliate) as the dependent variables and the punishment level and social account type as the independent variables. The MANOVA table is displayed in Table 14.

The main effect of punishment level was significant. The main effect of account type was not significant, but as Table 14 shows, was nearly significant ( $p=.057$ ). Finally, the interaction of punishment level and account type was not significant. The results reveal that across the five dependent variables, the punishment level has a significant effect on participants' attitudes towards the punishment, the experimenter, and the experiment.

Five two-way analyses of variance (ANOVA) were performed using punishment fairness, Interactional Justice, satisfaction, anger, and retaliation as the dependent variables, and the punishment level and social account type as the independent variables for the five dependent variables. Condition means are displayed in Tables 15, 17, 19, 21, 23, respectively, and their ANOVA summaries table in Tables 16, 18, 20, 22, 24, respectively.

A significant main effect of punishment was found for the punishment fairness, satisfaction with the experiment, anger, and retaliation toward the experimenter, and there was a nearly significant main effect for Interactional Justice (Table 18). A significant main effect of social account type was found for Interactional Justice and satisfaction

Table 14

MANOVA of the Five Attitudinal Variables

Source	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	10	18.84	.001	.360
Account Type (A)	10	1.82	.057	--
P x A	20	.64	ns	--
Error	334			

Table 15

Punishment Fairness Scale Means

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	1.37	3.01	4.13	2.84
Causal	1.87	3.25	4.36	3.16
Redundant	1.22	3.16	4.61	3.00
Means	1.49	3.14	4.37	2.99

Note. Scale is 1 to 7 where 1 is Fair and 7 is Unfair. Condition  $n = 20$ .

Table 16

ANOVA of the Punishment Fairness Scale

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	250.65	2	95.51	.001	.528
Account Type (A)	3.14	2	1.20	ns	--
P x A	4.39	4	.84	ns	--
Error	224.38	171			

Table 17

Interactional Justice Scale Means

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	6.88	6.46	6.22	6.45
Causal	6.43	5.94	6.10	6.16
Redundant	6.00	5.73	5.35	5.70
Means	6.38	6.04	5.89	6.10

Note. Scale is 1 to 7 where higher values indicate greater perceptions of Interactional Justice. Condition  $n = 20$ .

Table 18

ANOVA of the Interactional Justice Scale

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	7.43	2	2.89	.058	--
Account Type (A)	17.28	2	6.73	.002	.073
P x A	1.70	4	.43	ns	--
Error	219.71	171			

Table 19

Satisfaction Scale Means

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	6.78	6.65	6.10	6.51
Causal	6.48	6.32	6.18	6.33
Redundant	6.33	5.95	5.35	5.88
Means	6.53	6.31	5.88	6.24

Note. Scale is 1 to 7 where higher values indicate greater satisfaction. Condition  $n = 20$ , except the causal moderate condition,  $n=19$ . One participant was not included because of incomplete survey data.



Table 20

ANOVA of the Satisfaction Scale

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	13.14	2	5.94	.003	.065
Account Type (A)	12.74	2	5.75	.004	.063
P x A	2.59	4	.58	ns	--
Error	189.24	170			

Table 21

Anger Scale Means

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	6.44	4.94	4.10	5.16
Causal	6.21	4.83	4.28	5.10
Redundant	6.43	4.45	3.64	4.84
Means	6.36	4.74	4.00	5.03

Note. Scale is 1 to 7 where higher values indicate less anger. Condition  $n = 20$ .

Table 22

ANOVA of the Anger Scale

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	174.14	2	69.35	.001	.448
Account Type (A)	3.54	2	1.41	ns	--
P x A	4.05	4	.81	ns	--
Error	214.70	171			

Table 23

Retaliation Scale Means

Account Type	Punishment Level			Means
	Low	Moderate	High	
Ideological	4.62	4.55	4.23	4.47
Causal	4.58	4.55	4.20	4.44
Redundant	4.65	4.20	4.23	4.36
Means	4.62	4.43	4.22	4.42

Note. Scale is 1 to 7 where higher values indicate less retaliation. Condition  $n = 20$ .

Table 24

ANOVA of the Retaliation Scale

Source	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>	$\eta^2$
Punishment Level (P)	4.68	2	7.34	.001	.079
Account Type (A)	.37	2	.58	ns	--
P x A	1.32	4	1.04	ns	--
Error	54.48	171			

with the experiment. No significant punishment severity by social account type interactions were found for any of the attitudinal dependent variables.

Attitudinal hypotheses. Hypothesis 3 predicted that there would be a main effect of punishment on punishment fairness, Interactional Justice, anger, retaliatory behavior, and dissatisfaction. Specifically, the high level of punishment would decrease the perceptions of punishment fairness and Interactional Justice while increasing levels of anger, retaliatory behavior, and dissatisfaction compared to low or moderate punishment. Additionally, a moderate level of punishment would decrease the perceptions of punishment fairness and Interactional Justice while increasing levels of anger, retaliatory behavior, and dissatisfaction compared to low punishment.

Two planned contrasts were used to evaluate Hypothesis 3. First, the high punishment level was contrasted with the low and moderate punishment levels for each attitudinal dependent variable. Second, the moderate punishment level was contrasted with the low punishment level for each attitudinal dependent variable. Means for the five dependent variables are displayed in Tables 15, 17, 19, 21, 23.

The first planned comparison was significant for punishment fairness ( $t(171)=11.34, p<.001$ ), satisfaction with the experiment ( $t(170)=3.32, p<.001$ ), anger ( $t(171)=8.71, p<.001$ ), and intention to retaliate ( $t(171)=3.39, p<.001$ ) but was not significant for Interactional Justice ( $t(171)=1.79, p=.076$ ). The second planned comparison was significant for punishment fairness ( $t(171)=7.91, p<.001$ ), satisfaction with the experiment ( $t(170)=2.20, p=.03$ ), and anger ( $t(171)=7.92, p<.001$ ) but not significant for either Interactional Justice ( $t(171)=1.61, p>.10$ ) or intention to retaliate

( $t(171)=1.78, p=.077$ ). Hypothesis 3 was fully supported for the dependent variables fairness of punishment, satisfaction with the experiment, and anger about the punishment; partially supported for the dependent variable intention to retaliate; and not supported for interpersonal treatment. The results reveal that the high punishment level produced less fairness, less satisfaction, greater anger, and greater intentions to retaliate than did either the moderate or the low punishment levels. In addition, the moderate punishment level produced less fairness, less satisfaction, and greater anger than did the low punishment level. Finally, none of the three punishment levels significantly affected participants' perceptions of interpersonal treatment.

Hypothesis 4 predicted that there would be a main effect of social account on punishment fairness, Interactional Justice, anger, retaliatory behavior, and dissatisfaction. Individuals who received an account would have increased perceptions of punishment fairness and Interactional Justice and would show less anger, retaliatory behaviors, and dissatisfaction in comparison to individuals who received no social account. One planned contrast was used to evaluate Hypothesis 4. Specifically, the ideological and causal accounts were combined and contrasted with the redundant account for each attitudinal dependent variable.

The planned comparison was significant for Interactional Justice ( $t(171)=3.38, p<.001$ ) and satisfaction with the experiment ( $t(171)=4.96, p<.001$ ), but was not significant for punishment fairness ( $t(171)=.01, p>.10$ ), anger ( $t(171)=1.66, p>.10$ ) or intentions to retaliate ( $t(171)=1.06, p>.10$ ). Thus, Hypothesis 4 was supported for two of the five attitudinal dependent variables. Receiving a thorough explanation (ideological or

causal accounts) for why the participant had lottery tickets taken away resulted in greater perceptions of interpersonal treatment and greater satisfaction than did receiving a superficial explanation (a redundant account). However, the type of account did not affect participants' perceptions of punishment fairness, anger, or their intentions to retaliate.

One important facet of this study was examining how ideological and causal accounts differentially impact peoples' attitudes towards a negative outcome. Fair procedures convey dignity and respect to the individual. It is expected that an explanation that provides an individual dignity and respect in the face of a negative outcome will be the most effective at maintaining positive attitudes. A decision-maker who provides an ideological account takes responsibility for the outcome, justifies the outcome, and appeals to a superordinate goal. On the other hand, a decision-maker who provides a causal account does not take responsibility for the outcome and blames the negative outcome on mitigating circumstances. The ideological account, which focuses the explanation on how the negative outcome can help the employee through a superordinate goal, should be more effective at alleviating the negative impact of harmful outcome. Hypothesis 5 predicts a differential effect of ideological and causal accounts at the high severity level.

Three planned contrasts were used to evaluate Hypothesis 5. Specifically, the first contrast examined the differential effect of the ideological and causal accounts for each attitudinal dependent variable at the high punishment level. The other two contrasts examined the differential effects of the social accounts at the low punishment level for



each dependent variable. The second contrast specifically examined the average effect of the ideological and causal accounts compared to the redundant account for each attitudinal dependent variable at the low punishment level. The final contrast examined the effect of the ideological account to the causal account at the low punishment level for each dependent variable.

The first contrast examines the prediction that at the high punishment level, individuals who received an ideological account would perceive punishment as fairer, would be more satisfied, would perceive the interpersonal treatment as more fair, would be less angry, and would be less likely to retaliate. This contrast between the ideological and causal accounts at the high punishment level was not significant for punishment fairness ( $t(171)=.64, p>.10$ ), Interactional Justice ( $t(171)=.74, p>.10$ ), satisfaction with the experiment ( $t(170)=.19, p>.10$ ), anger ( $t(171)=.49, p>.10$ ) or intention to retaliate ( $t(171)=.19, p>.10$ ). Means are displayed in Tables 15, 17, 19, 21, and 23. The ideological account was unable to lessen the negative impact of the high punishment for any of the five attitudinal variables compared to the causal account.

The other two contrasts examine in tandem the null hypothesis that the three social account types will have the same effect on the five attitudinal variables at the low severity level. In other words, at the low punishment level, an account is not needed, and a weak explanation will have the same effect as a thorough one.

This pair of contrasts was evaluated for all five attitudinal variables. The first planned contrast was significant for satisfaction with the experiment ( $t(170)=2.43, p=.02$ ) but was not significant for punishment fairness ( $t(171)=1.28, p>.10$ ), Interactional Justice

( $t(171)=1.72, p=.09$ ), anger ( $t(171)=.33, p>.10$ ), and intentions to retaliate, ( $t(171)=.32, p>.10$ ). The second planned contrast was not significant for any of the attitudinal dependent variables; specifically, punishment fairness ( $t(171)=1.38, p>.10$ ), Interactional Justice ( $t(171)=.70, p>.10$ ), satisfaction with the experimenter ( $t(171)=.66, p>.10$ ), anger ( $t(171)=.64, p>.10$ ), and intentions to retaliate ( $t(171)=.187, p>.10$ ). Thus, the second part of Hypothesis 5 was supported for four of the five dependent variables. At the low punishment level, the type of account the participant received did not affect perceptions of punishment fairness, Interactional Justice, anger, or intentions to retaliate. In contrast to Hypothesis 5, receiving an ideological or causal account increased perceptions of satisfaction at the low punishment level.

In summary, Hypothesis 5 was partially supported for four of the five dependent variables. The results of the first contrast revealed that at the high punishment level the ideological account was not found to affect differentially any of the five dependent variables. This indicated that the two social accounts had equivalent impact on the five dependent variables, and these results do not support Hypothesis 5. The other two contrasts examined if any of the account types would significantly affect the five dependent variables at the low punishment level. Receiving a thorough account (an ideological or causal account) at the low punishment level did not impact participants' perceptions of punishment fairness, Interactional Justice, anger, or intentions to retaliate compared to receiving a superficial account (a redundant account) supporting Hypothesis 5. However, in contrast to the predictions of Hypothesis 5, participants were more satisfied when a thorough account was given compared to a superficial one at the low

punishment level. The pattern of results revealed that giving an individual an ideological account provided no added benefit compared to giving a causal account. Additionally, the results indicate that each of the accounts has the same effect on individuals' attitudes when given a weak punishment, although one must be cautious when support has been given to a predicted null hypothesis such as that proposed in the second half of Hypothesis 5.

Exploratory analysis. This study proposed that social accounts would help relieve the negative effects produced by administering high levels of punishment. Therefore, a condition in which no account was given would be predicted to produce less punishment fairness, satisfaction, and Interactional Justice, and would produce increased anger and intention to retaliate than a condition in which an account was given. Unfortunately, the results of the first pilot study indicated that participants in the no account condition were unaware that they did not receive an account and interpreted some of the information given in the beginning instructions as an adequate explanation for why they had tickets removed. In an attempt to alleviate this problem, the experimenter altered the instructions to the beginning of the experiment so that participants could not misconstrue why they had tickets removed. Additionally, instead of giving the participants no explanation for the ticket removal, they were given a short, vague, and superficial explanation that provided participants only with redundant information.

In order to determine if having absolutely no account would produce a different result for the five dependent variables, an exploratory analysis was performed. Fifteen additional subjects were run through the experiment. These fifteen participants received

the high punishment level and the no account condition. The participants were only run through this condition because it was predicted that a difference between the redundant account and no account would be best identified at the high punishment level.

The exploratory analysis was conducted for the five attitudinal dependent variables. The redundant account ( $M=4.61$ ) did not produce greater perceptions of fairness than the no account ( $M=5.17$ ),  $t(185)=1.50$ ,  $p>.10$ . The redundant account ( $M=5.35$ ) did not produce greater feelings of Interactional Justice than the no account ( $M=5.70$ ),  $t(184)=.94$ ,  $p>.10$ . The redundant account ( $M=5.35$ ) did not produce greater feelings of satisfaction than the no account ( $M=5.87$ ),  $t(185)=1.21$ ,  $p>.10$ . The redundant account ( $M=3.64$ ) did not incite less anger than the no account ( $M=3.20$ ),  $t(185)=.64$ ,  $p>.10$ . Finally, the redundant account ( $M=4.23$ ) did not incite the participants to retaliate more than the no account ( $M=4.35$ ),  $t(185)=1.45$ ,  $p>.10$ . The results revealed that providing the participants a short, superficial, and redundant account held the same effectiveness at mitigating the negative effects of the high punishment level as not providing an account, thus, indicating that the administration of a weak explanation had the same impact as giving no explanation at all.

## Chapter 8

### Discussion

Despite the call from researchers to eliminate punishment because of its negative impact on workers, punishment has a long-standing place in organizations (Butterfield, Trevino, & Ball, 1996). Even with the negativity associated with organizational discipline, management continues to use punishment as a way to change ineffective behavior when positive reinforcement is not possible. The effectiveness of punishment may depend on the level of punishment given and how the punishment is justified.

Employees will not react to all punishments exactly the same. The severity of the punishment and the adequacy of the explanation will affect both the amount of behavior change and employees' resulting attitudes about the punishment, the administering manager, and the organization. The manager who must give an employee a punishment holds the tricky task of administering the appropriate level of punishment to change the unwanted behavior without inciting negative feelings in the employee.

Researchers have repeatedly examined how the level of punishment affects punishment effectiveness, but little consensus has been reached as to the most appropriate level. In behavioral terms, punishment is an aversive stimulus that is intended to decrease the likelihood of an unwanted outcome (Lutz, 1994). The goal of punishment, then, is to remove the unwanted behavior and to bring the employee into accordance with the organizations' expectations. Unfortunately, determining the appropriate punishment is often difficult, and inappropriate punishments can be costly to the organization.

One effect an inappropriate punishment might have is not changing behavior.

Punishments that are very lenient may not be strong enough to change employee behaviors. If the punishment is too strong, the individual may be too strongly impacted by the punishment, leaving the individual angry, frustrated, and unmotivated to perform his/her job.

Individuals who are treated fairly during negative organizational outcomes (selection decisions, layoffs, and pay reductions) tend to view the outcome as fair. One way to treat an employee fairly during a punishment incident is to provide him/her with a thorough explanation of the reasons the punishment was given. In general, people want to know the reasons why things happen to them, and punishment incidents are no different. Individuals who receive an explanation in conjunction with a negative outcome perceive the negative outcome as more fair compared to individuals who do not receive an explanation (Bies & Shapiro, 1987). Thorough explanations will work to build trust between the supervisor and employee, which will then produce positive attitudes in the employee despite the negative outcome.

Decision-makers are faced with a dilemma: Do I give an employee a strong punishment, which will result in behavior change but may result in the employee forming negative attitudes? Or, do I give an employee a weak punishment, resulting in both little behavior change and few negative attitudes? Based on the synthesis of previous research, it was hypothesized that a manager can get substantial behavior change without jeopardizing employees' positive attitudes with the use of social accounts.

The aim of this study was to examine how punishment severity and different types of social accounts would work to impact performance and attitudes. Specifically, it

was hypothesized that strong punishments would result in the greatest change in performance. Additionally, it was proposed that the stronger punishments would have a more negative impact on employee attitudes, and thorough explanations would have a more positive effect on attitudes than a weak account. Finally, it was hypothesized that the ideological account would have a more positive impact on attitudes at the strong punishment level than either the causal account or the redundant account. The following sections review the results of the manipulation checks and dependent variables and the implications of these results. The chapter will conclude with an examination of the limitations of this study and areas for future research.

### Manipulation Checks

The participant's perceptions of the severity of punishment were assessed with two questions. As expected, the results revealed that participants' perceptions of punishment severity increased as the number of tickets that were taken away increased. Unexpectedly, the results from Question 2 in Questionnaire B revealed a significant interaction, such that the punishment severity was perceived to be less severe when either an ideological or causal account was given. The inconsistency in finding a significant interaction for one of the two items measuring the perceptions of punishment severity was not anticipated. The two items were highly correlated, but the questions may not have been perceived the same way due to their different rating scales. Unfortunately, it is unknown exactly what aspect of the two questions produced the unexpected results.

The effectiveness of the social accounts was assessed with two questions examining account adequacy and sufficiency. As expected, the participants viewed the

ideological and causal accounts as more adequate and sufficient than the redundant account. Therefore, explanations that gave a thorough justification as to why someone received a punishment were viewed more favorably than explanations that provided a weak justification. Additionally, punishment severity had a strong impact on the perceived adequacy and sufficiency of the social accounts. Specifically, if a weak punishment were given, accounts were considered more adequate and sufficient than they were at either the moderate or high punishment levels.

One caveat should be made about these social account results, even though the results were generally in the expected direction. The mean perception of adequacy and sufficiency was quite low. At the moderate and high punishment levels, the adequacy and sufficiency ratings were not much higher than four on a 7-point scale for either the ideological or causal accounts.

The weak effect of the social accounts could have been due to multiple reasons. First, the content of the ideological and causal accounts may not have been strong enough explanations to justify why the participant had tickets taken away. Therefore, the current accounts were not strong enough to counteract the negative effects of the moderate and high severity level. Second the nonverbal medium used to present the social accounts may have limited their effectiveness. Shapiro et al. (1994) found that causal accounts were perceived to be more adequate when the explanation was presented verbally rather than in a written format. Presenting the explanations verbally may have helped strengthen the impact of the justification. Finally, these social accounts may have reached their maximum possible effectiveness and little could be done improve their



impact. It is possible that peoples' attitudes during punishment events are driven by the punishment outcome, and social accounts may have little impact on reducing negative attitudes. Social accounts may not be the answer to solving the punishment paradox.

Finally, many items were used to evaluate participants' understanding of the features of the experiment. The possibility that participants did not understand key parts of the experiment could indicate that unintended stimuli affected the participants' reactions in the study. With very few exceptions, participants understood the features of the experiment. Participants' understanding of both the value of the gift certificate and the number of tickets they received should have impacted participants' perceptions of the punishment severity. Only three and two people incorrectly identified the gift certificate value and number of tickets received, respectively.

A difficult aspect of this study was developing Task 1 so that the length was short enough that participants would almost finish but not so long that the participants would not come close to finishing. Pilot research found that participants who did not come close to finishing Task 1 did not perceive any of the three punishment levels to be punishing because they felt their performance was undeserving of a reward. On the other hand, when participants completed the task circling the majority of the "ts", they possessed a heightened perception of unfairness as a result of punishment. The number of participants finishing Task 1 and the number of people achieving 90% accuracy was used to evaluate the appropriateness of Task 1's length. The number of participants completing Task 1 and achieving the 90% accuracy was small enough to assume that no ceiling was placed on the amount of performance change produced from Task 1 to Task2.

### Test of Hypotheses

This study used a 3x3 between-subjects design to examine the effect of punishment severity and account type on five attitudinal dependent variables and one performance dependent variable. The five attitudinal dependent variables were fairness of the punishment, Interactional Justice, satisfaction with the experiment, anger, intention to retaliate, and performance. Planned contrasts were used to evaluate the five hypotheses of the study.

Hypothesis 1 and 2 examined the effective of punishment severity and the interaction of punishment severity and social accounts on Task 2 performance after accounting for Task 1 performance. Before examining the planned comparisons, an ANCOVA was performed to gain a broad understanding of the results. The main effect of punishment severity and the interaction of punishment severity and account type were not significant. Unexpectedly, a main effect of account type did emerge. Providing an individual with a thorough explanation for his/her punishment may actually help increase performance.

The planned comparisons of Hypothesis 1 indicate that punishment severity had no significant effect on Task 2 performance after controlling for Task 1 performance. These results do not support Bennett's (1998) results showing that the greatest increase in performance occurs with stronger punishments. Intuitively, there is reason to believe that participants' lack of motivation to perform on the Task 2 affected these results. This study assumes that participants were motivated to win the \$150 gift certificate. The distal motivation produced by a gift certificate given away two to six months after participants

completed the experiment may have not been enough incentive to perform well on Task 2. Additionally, the participants did not know about the \$150 prize gift certificate before they signed up for the experiment; therefore, the gift certificate may have been seen as a bonus if participants won but may not have been a true motivator. Even though these issues of motivation seem relevant to this outcome, there is no evidence that participants were not motivated to perform on Task 2. In fact, participants performed proportionally better on Task 2 than they did on Task 1. Participants on average circled 294.58 out of the 422 “t”s (70%) on Task 1 while participants circled 348.23 out of 460 “t”s (76%) on Task 2. Undoubtedly, the increase in performance is affected in some capacity by a practice effect, but there is no indication that participants were not motivated to perform on Task 2.

Hypothesis 2 predicted an interaction of punishment severity and account type on Task 2 performance after accounting for Task 1 performance, which has never been examined in a punishment context. The results revealed that at the low punishment level, none of the social accounts affected performance; at the moderate punishment level, the ideological and causal accounts produced a greater performance increase over Task 1 than the redundant account; and at the high punishment level, the type of account received had no effect on performance. Receiving a thorough explanation and a moderate punishment produced the greatest amount of performance after accounting for Task 1. Interestingly, as Table 11 indicates, providing a social account produced greater performance on Task 2 after accounting for Task 1 than providing a redundant account

across all punishment levels. Providing a thorough explanation for a negative outcome may benefit performance regardless of the outcome severity.

Next, the effect of punishment severity and account type was examined on the five attitudinal dependent variables. In order to form a broad understanding of the impact of punishment severity and account type on the five attitudinal variables, one multivariate analysis of variance using all five attitudinal dependent variables and five separate univariate analysis of variance tests were conducted. The MANOVA results revealed a significant main effect of punishment severity and a near significant main effect of account type. The univariate analyses revealed a significant main effect of punishment for punishment fairness, satisfaction with the experiment, anger, and intentions to retaliate and a near significant main effect for Interactional Justice. A significant main effect of social account type was found for Interactional Justice and satisfaction with the experiment. No significant punishment severity by social account type interactions was found for any of the attitudinal dependent variables. Planned comparisons developed in Hypotheses 3, 4, and 5 were used to further evaluate the effects of punishment severity and account type on the five attitudinal dependent variables.

Previous research has shown that negative outcomes can have a detrimental effect on peoples' attitudes, such as perceptions of fairness (Adams, 1963, Brockner & Wiesenfelt, 1996), Interactional Justice (Bies & Moag, 1986), satisfaction (Folger & Konovsky 1989, Greenberg, 1990a), anger (Kemper, 1966), and intentions to retaliate (Kemper, 1966). This study attempted to support previous research by examining how different levels of punishment affect peoples' attitudes in Hypothesis 3.

Hypothesis 3 predicted a main effect of punishment severity on fairness of punishment, Interactional Justice, satisfaction with the experimenter, anger, and intention to retaliate. The results indicated that as the punishment increases, punishment fairness decreases, satisfaction with the experiment decreases, and anger increases. Participants' willingness to retaliate only increased at the highest punishment level, which indicates that acts of retaliation may only occur when punishment outcomes are strong. Finally, Interactional Justice was not affected by any of the punishment levels. Interactional Justice examines the interpersonal treatment an individual receives, and therefore, the level of the punishment may not have affected how participants viewed their interpersonal treatment. In general, these results support the previous research findings and extend them to the context of punishment.

Hypothesis 4 tested the main effect of account type on the five attitudinal variables. The results partially support the previous research that indicates that social accounts can reduce the negative impact of negative outcomes (Bies, 1986). The results revealed that providing a thorough explanation increased participants' feelings of interpersonal fairness and satisfaction with the experiment. These results extend previous research findings revealing that explanations increase peoples' perceptions of Interactional Justice to disciplinary situations. Building trust through interpersonal relations can be very important in the workplace, and by providing thorough explanations during the punishment, the manager may be able to keep the interpersonal relationship intact in the face of the disciplinary decision by using a social account.

Unexpectedly, the main effects of account type on punishment fairness, anger, and intentions to retaliate were not significant. These results indicate that the punishment severity may have been more important in determining these attitudes than social accounts. It is somewhat unexpected that these attitudes were not impacted by the thorough explanations. Based on previous research findings, one would suspect that a thorough explanation would decrease the perceived punishment severity and thereby increase punishment fairness, decrease anger, and decrease intentions to retaliate.

Hypothesis 5 predicted an interaction between punishment severity and account type; specifically, the ideological account would be more effective at reducing the negative impact of the high punishment level. The results for the five attitudinal dependent variables were not significant. Support for previous research that has shown ideological accounts to be more effective than causal accounts was not obtained (Bobocel & Farrell, 1996). The two accounts had the equivalent impact on the participants' attitudes. Based on the results testing Hypothesis 4 and Hypothesis 5, it appears that more research needs to be undertaken to determine when explanations will be most effective in a punishment context. The results did reveal that, as predicted, account type did not effect participants' perceptions of punishment fairness, Interactional Justice, anger, or intentions to retaliate at the low punishment level. It is realized by the author that this hypothesis predicted the acceptance of the null hypothesis, and one should not over interpret this result because it is unknown whether or not the result is due to the experimental manipulations or due to measurement error, bias, or power issues. It is possible to fail to reject the null for reasons other than the experimental manipulations.

One exploratory analysis was conducted to examine how the no account condition compared to the redundant account condition. Early in the experiment implementation, it was discovered that participants who received no account explaining the punishment used information provided in the instructions to interpret the punishment fairness. As a result, the experiment had to be redesigned so that participants could not use the information provided in the introductions. Specifically, two changes were made: (a) the instructions were made more general and (b) the participants were given a very short, vague, and redundant (information they already knew) explanation rather than receiving no information about the punishment.

Fifteen participants received the no account, high punishment condition to determine how the no account condition would compare to the redundant account condition now that the instructions were general. Subjects were only run through the high punishment severity condition because the biggest difference between the two conditions should occur there. No differences were found between the two conditions. Disciplinary appear to be no better off providing a weak explanation than if they had given no account at all.

### Implication of Findings

By performing a laboratory experiment, the experimenter has been able to control for many extraneous variables that occur in organizational contexts. Therefore, one of the benefits of this research is that it examined the effects of punishment severity and account type without the influence of any other organizational influences, such as politics, subordinate-supervisor relationship, previous behavior, or previous punishments.

Additionally, the adequate sample size, random assignment to conditions, and a sampling of both males and females should allow for some generalization of results.

This study has many implications for individuals in power positions who administer punishments. This study has shown that the level of punishment may not be the most important influence on peoples' performance change. In fact, it was found that the three levels of punishment did not differ in their levels of performance. The impetus for the increased performance was the interaction of social accounts and punishment level. Only when a thorough social account explaining why the punishment was given along with a moderate punishment was Task 2 performance significantly large.

This was a very interesting finding because it implies that managers may not need to provide strong punishments to effect performance as previous researchers have indicated (Bennett, 1998). Not having to provide people with strong punishments will allow disciplinarians to improve performance without producing strong negative attitudes towards him/her or the organization. This study determined that perceptions of punishment fairness and satisfaction were lowest and anger and intentions to retaliate were highest at the high punishment severity level. As a result, employees who do not receive strong punishments will have better perceptions of their managers and organization.

One way to decrease the negative impact of punishment is to provide social accounts explaining in detail why the individual received the punishment. Managers who provide a thorough explanation are working proactively to reduce the negative impact of the punishment. This study found that thorough explanations did increase Interactional



Justice and satisfaction with the experiment compared to the redundant account condition. Interestingly, the type of account given may not differentially impact peoples' attitudes. It was predicted that an ideological account would display greater dignity and respect to the recipient of the punishment than the causal account because the ideological account frames the discipline in terms of a superordinate goal. Managers can use either ideological or causal accounts so long as the punished individual perceives the account as adequate.

### Limitations

Before starting the experiment, all precautions were taken to ensure all methodological concerns were dealt with before implementing the study. Unfortunately, methodological issues arose during the study that could have caused the non-significant results found in this study.

First, the current study was a laboratory experiment. The results of this study may not generalize to organizational settings because many aspects of this study were not relevant to employees working in the "real world." The effects of discipline in organizational settings can be affected by many organizational and interpersonal relationship factors that this study did not take into consideration. The discipline that occurred in this study was between two individuals, the experimenter and the participant, who had never met before. In organizational settings, punishment occurs between two individuals, the subordinate and the manager, who have some type of relationship. This relationship can impact, either positively or negatively, the result of the punishment. Other factors such as the organizations' climate for discipline, employees' feelings about

the manager or organization, the procedures used to determine the punishment, and how the problem behavior was investigated will impact how employees will view the punishment incident.

Second, the method used to motivate participants to perform in this study was not equivalent to how people are motivated to perform in the workplace. In this study, participants could gain lottery tickets for a \$150 gift certificate that would be given away to one of the participants after all the data had been collected. This distal reinforcer appears to be motivating to some participants because performance on Task 2 was proportionally better than the performance on Task 1. In the work place, managers often hold many immediate reinforcers, such as pay or promotions that if removed would be extremely motivating to an employee. Even though mildly reinforcing, this \$150 gift certificate may have not been strong enough to produce the motivation needed to truly impact performance. It would be extremely interesting to see how different organizational punishers affect employee performance.

Third, the tasks of this study provided many problems. The first problem with the two tasks was the lack of control on how people performed on Task 1. Performance on Task 1 ranged from very well to very poor. As would be expected, how you performed on Task 1 may affect how you viewed the punishment. As a result there was more variability in the punishment severity perceptions than was expected.

The second problem with the tasks was the length of the tasks. As stated above, the variability of scores on Task 1 made it difficult to develop Task 1 so that it was long enough for the good performers and not too long for the poor performers. Many trials

were taken to find the optimal length, and even then some participants finished the task. Task 2 was longer than Task 1 to reduce the ceiling effect produced by excellent performers. Anecdotal evidence indicates that the longer Task 2 may have actually motivated poor performers to reduce their effort level on Task 2 because they were unable to finish the shorter Task 1. Some poor performers believed that they were definitely not going to finish the longer Task 2 regardless of their effort. Even though Task 2 performance was proportionally better than Task 1, the difference between the two performance levels could have been greater if it was possible to make the tasks equivalent. Due to the variability of Task 1 performance, there was little that could be done to make the task lengths any more similar.

The third problem with the tasks was that they were completely based on effort. Participants circled upper and lower-case “ts” in the two tasks. No skill or training was needed to perform these tasks. It is uncertain how punishment would affect performance on other tasks that required more technical skill or cognitive ability.

The fourth problem with the tasks was the possibility of a practice effect. Any time people are measured more than once with similar measures, there is the possibility that people will perform better on the second measure because they use information they learned on the previous measures. In this case, participants may have performed better on Task 2 because of the practice they had on Task 1. The experimenter attempted to control the practice effects by using a completely different passage to circle “ts” for Task 2, and an ANCOVA was used to analyze the data so that performance on Task 1 could be controlled.

### Future Research

The results of this study provide some support for the importance of punishment severity and social accounts in changing unwanted behaviors and maintaining peoples' positive attitudes. Despite the significant findings, this study has produced many more questions than it has answered. This section highlights the many areas of future research that this study has stimulated.

First, future studies should examine punishment incidents in applied settings. Other studies have examined employee attitudes after punishment incidents in organizational settings, but no studies have examined the most effective punishments that will produce behavior change (Ball, Trevino, Sims, 1993; Trevino & Weaver, 1998). Understanding how to decrease the negative attitudes accompanying punishment is an important and noble goal, but researchers first need to gain a better understanding of the most effective ways to change behavior.

This study specifically examined one of the many procedural methods to reduce the negative impact of punishment. Providing explanations was found to increase Interactional Justice and satisfaction. Additional research should examine how other procedural justice components – such as employee participation in the punishment, punishment consistency, non-biased decision-making, and a match between the punishment and behavior – impact peoples' attitudes after the punishment incident. Based on research by Leventhal (1980), it is expected that all of these features should have some effect on the perceived punishment fairness.

The punishment in this study attempted to change participants' performance on a simple, uncomplicated task. Punishment is used in situations other than those that attempt to change performance. Robinson and Greenberg (1998) defined six different types of antisocial behavior, including (a) workplace deviance; (b) antisocial behavior; (c) employee vice; (d) organizational misbehavior; (e) workplace aggression; and (f) non-compliant behavior. Future research should examine the punishment intensity and implementation method that is most effective at changing unwanted behaviors other than poor performance.

In this study all the participants were set up to receive a punishment regardless of their performance. In organizations, hopefully this would not be the case. Managers should work hard to help their employees succeed. Organizations provide employee training, provide goal setting and feedback, and assist troubled employees with employee assistance programs as ways to fix behavior before punishment is necessary. During these interventions, performance and behavior expectations are usually directly or indirectly disclosed to the employee. Future research should examine how people perceive the punishment fairness when clear, specific performance expectations are set and when they are not.

Finally, more research needs to examine how and when social accounts will have the greatest ability to diminish the negative effect of punishment. The mean adequacies for both social accounts were much lower than expected, especially in the moderate and low punishment levels. Bies, Shapiro, and Cummings (1988) explain that all claims of mitigating circumstances are not the same. This suggests that some explanations are

better than others. In this study, it appears that one account will not work in all situations. With a strong punishment, a new explanation is needed that provides a better and more thorough justification. Future research should examine what types and levels of thoroughness work best at different levels of punishment.

Additionally, an account's effectiveness may be linked to the interpersonal nature in which it is presented to its audience. In this study, each participant was given a sheet of paper with the punishment explanation. The experimenter participated in no verbal conversation with the participants, and participants were not allowed to ask questions about punishment outcome. Thus, in this situation, the personalness of the social accounts was very low. Future research should examine how the social account's content and the perceived personalness of the account's presentation interact to reduce the effect of negative outcomes.

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## Appendix A

Subject Number \_\_\_\_\_

**Task: #1**

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**Instructions:** You will be given an editing-type task. For this task you must circle all of the *upper* and *lower case* letter Ts (all “t”s and “T”s) that are found in the passage. You will receive 10 lottery tickets for performing satisfactorily on this task. Your performance will be measured as the number of Ts you circle minus any circling errors (e.g. circling the incorrect letter). Therefore, it is to your advantage to work as quickly and accurately as you possibly can. You will be given 10 minutes to complete the task. A short practice passage has been provided to let you practice performing the task before beginning the first real task.

---

**Practice Passage**

**Circle all of the Ts that appear in this passage.**

When I wrote the following pages, or rather the bulk of them, I lived alone, in the woods, a mile from any neighbor, in a house which I built myself, on the shore of Walden Pond, in Concord, Massachusetts, and earned my living by the labor of my hands only. I lived there for two years and two months. At present I am a sojourner in civilized life again.

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**Turn to the next page for the correctly circled Ts.**

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**Practice Passage**

When I wrote the following pages, or rather the bulk of them, I lived alone, in the woods, a mile from any neighbor, in a house which I built myself, on the shore of Walden Pond, in Concord, Massachusetts, and earned my living by the labor of my hands only. I lived there for two years and two months. At present I am a sojourner in civilized life again.

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To achieve 100% accuracy on this task, you should have correctly circled **17 Ts** (5 in line one, 2 in line two, 3 in line three, 6 in line four, and 1 in line five).

You will be given 10 minutes to perform this task. After 10 minutes, the experimenter will ask you to please **STOP** working at which time please put down your pencils and wait for further instructions.

If you have any questions about performing the task, please ask the experimenter at this time.

**Do Not Turn the Page Until Instructed to Do So!**

**Circle all upper and lower case Ts found in the Passage.**

I was born in the year 1632, in the city of York, of a good family, though not of that country, my father being a foreigner of Bremen, who settled first at Hull: he got a good estate by merchandise, and, leaving off his trade, lived afterwards in York, from whence he had married my mother, whose relations were named Robinson, a very good family in that country, and from whom I was called Robinson Kreutzaer; but, by the usual corruption of words in England, we are now called, nay, we call ourselves, and write our name Crusoe, and so my companions always called me.

I had two elder brothers, one of which was lieutenant-colonel to an English regiment of foot in Flanders, formerly commanded by the famous Colonel Lockhart, and was killed in battle near Dunkirk against the Spaniards: what became of my second brother I never knew, any more than my father or mother did know what was become of me.

Being the third of three sons of the family, and not bred to any trade, my head began to be filled very early with rambling thoughts. My father, who was very ancient, had given me a competent share of learning, as far as house education and a country free school generally goes, and designed me for the law; but I would be satisfied with nothing but going to sea, and my inclination to this led me so strongly against the will, nay, the command of my father, and against all the entreaties and persuasions of my mother and other friends, that there seemed to be something fatal in that propension of nature tending directly to the life of misery which was to befall me.

My father, a wise and grave man, gave me serious and excellent counsel against what he foresaw was my design. He called me one morning into his chamber, where he was confined by the gout, and expostulated very warmly with me upon the subject. He asked me what reasons more than the mere wandering inclination I had for leaving my father's house and my native country, where I might be introduced, and had a prospect of raising my fortune by application and industry, with a life of ease and pleasure. He told me it was for men of desperate fortunes on one hand, or of aspiring, superior fortunes on the other, who went abroad upon adventures, to rise by enterprise, and make themselves



famous in undertakings of a nature out of the common road; that these things were all either too far above me, or too far below me; that mine was the middle state, or what might be called the upper station of low life, which he had found by long experience was the best state in the world, the most suited to human happiness, not exposed to the miseries and hardships, the labor and sufferings of the mechanic part of mankind, and not embarrassed with the pride, luxury, ambition, and envy of the upper part of mankind. He told me I might judge of the happiness of this state by this one thing-namely, that this was the state of life which all other people envied; that kings have frequently lamented the miserable consequences of being born to great things, and wish they had been placed in the middle of the two extremes, - between the mean and the great; that the wise man gave his testimony to this as the just standard of true felicity, when he prayed to have neither property nor riches.

He bid me observe it, and I should always find, that the calamities of life were shared among the upper and lower part of mankind; but that the middle station had the fewer disasters, and was not exposed to so many vicissitudes as the higher or lower part of mankind; nay, they were not subjected to so many distempers and uneasiness either of body or mind, as those were who, by vicious living, luxury, and extravagances on one hand, or by hard labor, want of necessaries and means or insufficient diet on the other hand, bring distempers upon themselves by the natural consequences of their way of living; that the middle station of life was calculated for all kind of virtues and all kind of enjoyments; that peace and plenty were the handmaids of the middle fortune; that temperance, moderation, quietness, health, society, all agreeable diversions, and all desirable pleasure, were the blessings attending the middle station of life; that this way men went silently and smoothly through the world, and comfortably out of it, not embarrassed with the labors of the hands or of the head, not sold to the life of slavery for daily bread, or harassed with perplexed circumstances, which rob the soul of peace and the body of rest; not engaged with the passion of envy, or secret burning lust of ambition for great things; but in easy circumstances sliding gently through the world, and sensibly

tasting the sweets of living, without the bitter; feeling that they are happy, and learning by every day's experience to know it more sensibly.

After this, he pressed me earnestly, and in the most affectionate manner, not to play the young man, not to precipitate myself into miseries which nature and the station of life I was born in seemed to have provided against; that I was under no necessity of seeking my bread; that he would do well for me and endeavor to enter me fairly into the station of life which he had been just recommending me; and that if I was not very happy in the world, it must be my mere fare or fault that must hinder it.

## Appendix B

Subject Number: \_\_\_\_\_

**Questionnaire A****Instructions:**

**While the research assistant is grading your task, please answer these questions. Please read each of the following questions carefully and answer the questions in the format provided. After finishing the questionnaire please put the questionnaire back into the folder and wait for the research assistant to give you further instructions.**

**All answers that you provide in the questionnaire will be kept strictly confidential.**

**Thank you very much for your assistance!**

**Please fill out the following information. Thank you.**

1. **Sex:** (Check one)

Male \_\_\_\_\_

Female \_\_\_\_\_

2. **Age** (fill in years) \_\_\_\_\_

3. **Year in School** (check one)

freshman \_\_\_\_\_

sophomore \_\_\_\_\_

junior \_\_\_\_\_

senior \_\_\_\_\_

nondegree \_\_\_\_\_

graduate \_\_\_\_\_

4. **Major:** (fill in) \_\_\_\_\_

**Please Turn to the Next Page.**

**Please Fill Out the Following Information. Thank You.**

5. What dollar amount is the gift certificate that you have a chance to win in the lottery?

(fill in the exact value) \$ \_\_\_\_\_

6. What percentage of the Ts did you need to circle on Task 1 to be awarded all 10 lottery tickets?

(fill in the percentage) \_\_\_\_\_%

7. Did you complete all five pages of the task?

(Check one) \_\_\_\_\_ **Yes**      \_\_\_\_\_ **No**

**Please Turn to the Next Page**

8. What prior experience have you had with editing tasks, either in research settings or in school (proof reading papers, etc.)? Describe three such experiences.
  
9. Please explain the strategies you use to effectively perform these editing tasks.
  
10. What prior work experiences have you had with simple tasks (e.g. filing, data entry, etc.)?
  
11. Please explain the strategies you used to most efficiently perform these tasks.
  
12. If you had to teach someone else how to perform Task 1 what steps would you tell them to follow?

**Please place the questionnaire back into the folder, and wait for the research assistant to give further instructions. Thank you for your assistance.**

## Appendix C

Subject Number: \_\_\_\_\_

**Questionnaire B**


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**Instructions:** Please fill out the questionnaire in the format provided. If you have any questions about the number of tickets you received for Task 1, please look back at the scoring sheet given to you by the experimenter. After finishing the questionnaire, please place the questionnaire back in the envelope and wait for instructions from the experimenter. **PLEASE READ EACH QUESTION CAREFULLY AND ANSWER HONESTLY!!!!**

---

1. How many tickets did you earn on Task 1? (please enter the number) \_\_\_\_\_
2. If you earned fewer than 10 tickets for Task 1, how much of a penalty did you feel this was (circle one value) (If you received all 10 tickets circle N/A)?

1	2	3	4	5	6	7	N/A
Slight		Moderate		Strong		Severe	

3. (If you received **fewer** than 10 tickets, please complete question #3. If you received all 10 tickets for task 1 please skip question #3 and continue on to question #4.)

I feel that the penalty I received for Task 1 was:  
(circle one value for each scale a., b., and c.)

- |    |            |   |   |   |   |   |   |   |           |
|----|------------|---|---|---|---|---|---|---|-----------|
| a. | Mild       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Severe    |
| b. | Lenient    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Extreme   |
| c. | Inadequate | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Excessive |

4. The experimenter was responsible for the decision to take away lottery tickets for not reaching the 90% accuracy score.

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

5. Who was responsible for the decision to remove lottery tickets (Circle one).

**The Experimenter**

**The Thesis Committee**

6. How do you feel about the number of tickets you received?  
It was (circle one value for each scale a., b., c., d., and e.):

a.	Fair	1	2	3	4	5	6	7	Unfair
b.	Improper	1	2	3	4	5	6	7	Proper
c.	Just	1	2	3	4	5	6	7	Injust
d.	Unreasonable	1	2	3	4	5	6	7	Reasonable
e.	Warranted	1	2	3	4	5	6	7	Unwarranted

7. How adequate was the explanation provided on the Task 1 Score Sheet that describes why you had tickets taken away (the punishment).

1	2	3	4	5	6	7
Extremely Inadequate			Neither Adequate nor Inadequate			Extremely Adequate

8. How sufficient was the explanation provided on the Task 1 Score Sheet that describes why you had tickets taken away (the punishment).

1	2	3	4	5	6	7
Extremely Insufficient			Neither sufficient nor Insufficient			Extremely Sufficient

9. The experimenter has dealt with me in a truthful manner.

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

10. The experimenter has treated me with dignity and respect.

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

11. The experimenter has been polite.

1	2	3	4	5	6	7
Strongly			Neither agree			Strongly





## Appendix D

Subject Number \_\_\_\_\_

**Task: #2**

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**Instructions:** You will be given an editing-type task. For this task you must circle all of the *upper* and *lower case* letter Ts (all “t”s and “T”s) that are found in the passage. You will receive 10 lottery tickets for performing satisfactorily on this task. Your performance is measured as the number of Ts you circle minus any circling errors (e.g. circling the incorrect letter). Therefore, it is to your advantage to work as quickly and accurately as you possibly can. You will be given 10 minutes to complete the task.

---

You will be given 10 minutes to perform this task. After 10 minutes, the experimenter will ask you to please STOP working at which time please put down your pencils and wait for further instructions.

**Do Not Turn the Page Until Instructed to Do So!**

**Circle all of the upper and lower case Ts in the Passage.**

I never traveled in this journey above two miles outright in a day, or thereabouts. But I took so many turns and returns to see what discoveries I could make that I came weary enough to the place where I resolved to sit down for all night; and then I either reposed myself in a tree, or surrounded myself with a row of stakes set upright in the ground, either from one tree or another, or so as no wild creature could come at me without waking me.

As soon as I came to the seashore I was surprised to see that I had taken up my lot on the worst side of the island; for here, indeed, the shore was covered with innumerable turtles, whereas on the other side I had found but three in a year and a half. Here was also an infinite number of fowls of many kinds; some which I had seen, and some which I had not seen before- and many of them very good meat- but such as I knew not the names of, except those called penguins.

I could have shot as many as I pleased, but was very sparing of my powder and shot, and therefore had more mind to kill a she-goat if I could, which I could better feed on; and though there were many goats here- more than on my side of the island- yet it was with much more difficulty that I could come near them, the country being flat and even, and they saw me much sooner than when I was on the hill.

I confess this side of the country was much pleasanter than mine; but yet I had not the least inclination to remove, for as I was fixed in my habitation it became natural to me, and I seemed all the while I was here to be as it were upon a journey, and from home. However, I traveled along the shore of the sea towards the east, I suppose about twelve miles; and then, setting up a great pole upon the shore for a mark, I concluded I would go home again, and that the next journey I took should be on the other side of the island east from my dwelling, and so round till I came to my post again: of which in its place.

I took another way to come back than that I went, thinking I could easily keep all the island so much in my view that I could not miss finding my first dwelling by viewing the country. But I found myself mistaken; for being come about two or three miles, I found myself descended into a very large valley, but so surrounded with hills, and those

hills covered with wood, that I could not see which was my way by direction but that of the sun, nor even then, unless I knew very well the position of the sun at that time of the day.

I could not tell what part of the world this might be, otherwise than that I knew it must be part of America, and, as I concluded by my observations, must be near the Spanish dominions; and perhaps was all inhabited by savages, where, if I should have landed, I had been in a worse condition than I was now; and therefore I acquiesced in the dispositions of Providence, which I began now to own and to believe ordered everything for the best; I say I quieted my mind with this, and left afflicting myself with fruitless wishes of being there.

Besides, after some pause upon this affair, I considered that if this land was Spanish coast, I should certainly, one time or other, see some vessel pass or repass one way or the other; but if not, then it was the savage coast between the Spanish country and Brazil, which are indeed the worst of savages, for they are cannibals, or men-eaters, and fail not to murder and devour all the human bodies that fall into their hands.

With these considerations I walked very leisurely forward. I found that side of the island where I now was much pleasanter than mine; the open savanna fields sweet, adorned with flowers and grass, and full of very fine woods. I saw abundance of parrots, and fain I would have caught one, if possible, to have kept it to be tame, and taught it to speak to me. I did, after some painstaking, catch a young parrot, for I knocked it down with a stick, and having recovered it I brought it home; but it was some years before I could make him speak. However, at last I taught him to call me by my name very familiarly. But the accident that followed, though it be trifle, will be very diverting in its place.

I was exceedingly diverted with this journey. I found in the low grounds hares, as I thought them to be and foxes; but they differed greatly from all the other kinds I had met with, not could I satisfy myself to eat them, though I killed several. But I had no need to be venturous, for I had not want for food, and of that which was very good too; especially these three sorts- namely, goats, pigeons, and turtle or tortoise, which, added to

my grapes, Leadenhall Market could not have furnished a table better than I in proportion to the company. And though my case was deplorable enough, yet I had great cause for thankfulness, and that I was not driven to any extremities for food, but rather plenty, even to dainties.

It happened to my further misfortune, that the weather proved to be hazy for three or four days while I was in the valley; and not being able to see the sun, I wandered about very uncomfortably, and at last was obliged to find the sea-side, look for my post, and come back the same way I went. And then by easy journey I turned homeward, the weather being exceedingly hot, and my gun, ammunition, hatchet, and other things very heavy.

I reposed myself here a week, to rest and regale myself after my long journey; during which most of the dime was taken up in the weighty affair of making a cage for my poll, who began now to be a mere domestic, and to be mighty well acquainted with me. Then I began to think of the poor kid which I had penned in within my little circle, and resolved to go and fetch it home or give it some food.

Accordingly, I went, and found it where I left it; for, indeed, it could not get out, but almost starved for want of food. I went and cut boughs of trees and branches of such shrubs as I could find, and threw it over; and having fed it, I tied it as I did before, to lead it away. But it was so tame with being hungry that I had no need to have tied it, for it followed me like a dog; and as I continually fed it, the creature became so loving, so gentle, and so fond, that it became from that time one of my domestics also, and would never leave me afterwards.

## Appendix E

Subject Number: \_\_\_\_\_

**Questionnaire C****Instructions:**

**Please read each of the following questions carefully and answer the questions in the format provided. After finishing the questionnaire please put the questionnaire back into the folder and wait for the research assistant to give you further instructions.**

**All answers that you provide in the questionnaire will be kept strictly confidential.**

**Thank you very much for your assistance!**

1. Please describe the purpose of this study in your own words.

2. What knowledge do you think the experimenter was trying to gain by performing this study?

**Please fill out the enclosed survey!!!**

Dear Participants,

The Psychology Department takes great pride in developing competent and knowledgeable graduate students. The Psychology Department is in the process of evaluating its graduate students to ensure that they have the proper research skills.

It has come to our attention that the experimenter performing the experiment you are currently participating in may be unfairly treating his/her participants. Specifically, there is a procedure in the experiment that some individuals might find punishing. As part of the evaluation of this researcher and his/her experiment, we would invite you to answer the three questions found at the bottom of this survey. Your honest responses will provide the Psychology Department and this researcher valuable feedback. Please answer honestly the following questions based on the experiences you had in this experiment. The information you provide us will be kept strictly confidential. The responses you provide on this survey will in no way affect your standing at the University of Nebraska at Omaha. After completing the survey, please fold the survey and place it in the white envelope provided by the experimenter. Finally, seal the envelope to ensure anonymity. The experimenter will forward the survey to the Psychology Department.

Thank you for your cooperation,

University of Nebraska at Omaha Psychology Department

**Based on your experience with this researcher:**

1. I would recommend this research experiment to other students (circle one).

SD	D	N	A	SA
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

2. If given the opportunity, I would **not** participate in research by the same experimenter (circle one).

SD	D	N	A	SA
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

3. Overall, I believe the experiment was performed well (circle one).

SD	D	N	A	SA
Strongly disagree	Disagree	Neutral	Agree	Strongly agree



## Appendix F

Subject Number: \_\_\_\_\_

**Task # 1 Scoring Sheet**

Number of tickets taken away: none (0) or \_\_\_\_\_

The number of tickets you received for completing this task:

\_\_\_\_\_

(The account will go here or on a separate sheet of paper)

**Remember you can get an additional 10 tickets by performing satisfactorily on Task #2.**

## Appendix G

**Informed Consent Form****THE EXAMINATION OF INDIVIDUAL'S PERFORMANCE ON SIMPLE TASKS.**

You are invited to participate in this research study. The information in this consent form is provided to help you decide whether to participate. If you have any questions, please do not hesitate to ask.

You were selected for participation in this study because you are an English-speaking adult.

The purpose of this study is to examine how people perform on simple tasks.

You will be asked to perform two editing tasks that will take 10 minutes each. Additionally, you will be asked to complete three short questionnaires. Approximately 40 minutes of your time will be required.

There are no known risks or discomforts associated with this research.

The information collected by the tasks and questionnaires in this study will be identified by number and not by name. There will be no information that could identify you as an individual. All responses to the questionnaires will be kept confidential.

You will have the possibility of winning a \$150 gift certificate that will be given away through a lottery system by participating in the study.

You have rights as a research participant. These rights are explained in *The Rights of Research Participants* which you have been given. If you have any questions concerning your rights, you may contact the Institutional Review Board (IRB), telephone (402) 559-6463.

You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators or the University of Nebraska. Your decision will not result in any loss of benefits to which you are otherwise entitled.

**DOCUMENTATION OF INFORMED CONSENT**

**YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE CERTIFIES THAT YOU HAVE DECIDED TO PARTICIPATE HAVING READ AND UNDERSTOOD THE INFORMATION PRESENTED. YOU WILL BE GIVEN A COPY OF THIS CONSENT FORM TO KEEP.**

---

 SIGNATURE OF PARTICIPANT

---

 DATE

**IN MY JUDGMENT THE PARTICIPANT IS VOLUNTARILY AND KNOWINGLY GIVING INFORMED CONSENT TO PARTICIPATE IN THIS RESEARCH STUDY.**

---

 SIGNATURE OF INVESTIGATOR

---

 DATE
**IDENTIFICATION OF THE INVESTIGATORS****PRINCIPAL INVESTIGATOR****Andy Noon****Off: 554-2591****SECONDARY INVESTIGATOR****Wayne Harrison, Ph.D.****Off: 554-2452**

## Appendix H

### **Ideological Account**

Unfortunately, you did not circle enough Ts to achieve the 90% accuracy criterion necessary to earn all 10 lottery tickets for Task 1. As you can see, you did receive some lottery tickets for your efforts. Since you did not receive all 10 tickets, I feel that it is important that you know why you received the number of tickets you did.

A recent research study in the *Journal of Applied Psychology* found that the removal of a positive incentive can effectively increase individuals' motivation to perform. The tasks that are performed in this study are effort tasks. During effort tasks, individuals' level of motivation has a greater influence on their performance than does their level of ability.

I have taken away these tickets hopefully to help motivate you to perform better on Task 2. Since you did not reach the performance criterion, it is definitely important that you perform well on Task 2 so that you will gain all 10 tickets for that task. You still have a great opportunity to gain all 10 lottery tickets for Task 2, so I hope you will be motivated to perform your best on Task 2. By gaining all 10 lottery tickets, you will have a greater chance of winning the \$150 gift certificate.

### **Causal Account**

Unfortunately, you did not circle enough Ts to achieve the 90% accuracy criterion necessary to earn all 10 lottery tickets for Task 1. As you can see, you did receive some lottery tickets for your efforts. Since you did not receive all 10 tickets, I feel that it is important that you know why you received the number of tickets you did.

My Thesis committee decided that participants who did not perform satisfactorily would have some of their tickets taken away to increase their motivation to perform on Task 2. The committee felt that the level of punishment you received was most appropriate to motivate participants to perform better on Task 2. I was **not** responsible for determining the punishment you received. You will still have an opportunity on Task 2 to gain 10 tickets to use in the lottery for the \$150 gift certificate.

### **Redundant Account**

You did not receive all 10 lottery tickets because you did not perform satisfactorily on Task 1.