Managing the group polarization of attitudes toward new policies: A procedural justice perspective

Carol E. McKnight
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MANAGING THE GROUP POLARIZATION OF ATTITUDES
TOWARD NEW POLICIES: A PROCEDURAL JUSTICE PERSPECTIVE

A Thesis
Presented to the
Department of Psychology
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
University of Nebraska at Omaha

by
Carol E. McKnight
April, 1996
THESIS ACCEPTANCE

Accepted 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.

Thesis Committee

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Chairman

Date 4/15/96
Abstract

Discussion among co-workers is common in organizations after a policy change has been made that results in change for employees. Group polarization theory asserts that group discussion will influence attitudes and perceptions about a policy change by shifting individual reactions in the direction of the average of the group’s prediscussion reactions. After a policy change resulting in negative outcomes, this shift will be in the direction of even more negative reactions. The procedural justice theoretical framework may provide organizational decision makers with an answer to the effects of group discussion after a policy change. The use of social accounts after a policy change decision has been made may lessen the polarization of policy-related and organizational attitudes and perceptions. The current study investigated reducing the polarization of five dependent variables through the use of two different types of social accounts. Specifically, using a 2x2x2 mixed design, the effect of a causal account and an ideological account on the negative polarization of fairness perceptions after the policy change, acceptance of the policy change, commitment to the University, fairness perceptions of the University, and trust of the University was assessed. Thirty-two groups of four undergraduate students each (N = 128) participated in a scenario study. Each participant was given a copy of a policy change involving a new University graduation requirement, and each received either a causal account, ideological account, both accounts, or no account. After reading the policy change and filling out a questionnaire, participants were encouraged to discuss the policy change with other group members for 15 minutes, after which each participant filled out a second questionnaire. A significant main effect of
causal account was found for perceptions of fairness of the policy change, acceptance of the policy change, and commitment to the University. This effect supports previous research findings on causal accounts in the procedural justice literature. Contrary to predictions, no main effects of ideological account were found. A main effect of time was found for four of the dependent variables, confirming the group polarization phenomenon. However, this effect was not qualified by the hypothesized interaction between account type and time demonstrating the benefit of using a social account to lessen polarization after a policy change. Methodological concerns regarding the current study and directions for future research are also discussed.
Acknowledgments

First of all, I would like to extend my gratitude and respect to the members of my thesis committee: Drs. Wayne Harrison, Ray Millimet, Bob Mathis, and Roni Reiter-Palmon. I greatly appreciate the valuable input provided to me, and the time and effort put forth to help me meet all my deadlines. To Wayne, my greatest appreciation for all the guidance, input, clarification, and especially patience for “quick” questions.

Second, I would like to extend my thanks to the members of the Justice Research Group for the valuable suggestions and insights given throughout this entire research project. A special thanks to Iris Loke for her quick and careful content coding during my mad dash toward the finish.

On a more personal level, I would like to thank my good friend Kirk Hulett for all his expert profiling and humor that has allowed me to keep my perspective during some rough times. I would also like to thank my co-pilot, Christopher, for his “data entry” skills and whose support and love have held me together and kept me going as I finished up this project. We all have our own “house” to fly and I am now closer to my “house” than I ever thought possible.

Finally, I dedicate this thesis to my parents. Without their unconditional love and support I would never have had the guts to go back to graduate school and pursue my educational goals. I have always known that all the of words of encouragement, TLC, and spaghetti sauce that I need are mine for the asking. I love you Mom and Dad!!!
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CHAPTER I
Introduction

Policy implementation and policy change are two events critical to effective and efficient organizational management. Unfortunately, in today's world of constant or shrinking resources, organizations are often forced to make policy changes that produce negative outcomes for employees (e.g., layoffs, pay reduction, pay freeze). Employee evaluation of these new outcomes will often depend on individual fairness judgments made about the change in policy.

All employees, however, will not perceive the fairness of a policy change in the same way. Individual judgments about fairness may be based on the fairness of the procedures used to make this change, the interpersonal treatment received from decision makers during the change, or the fairness of the actual decision made. If each individual employee worked in isolation from the influence of all other employees, these differences in perceptions may not matter for the organization. Employees working in isolation would be able to develop opinions and perceptions about a policy change free of any social influence or pressure from co-workers. In reality, employees do not work in isolation. Interdependence of employees is often necessary and even encouraged to maximize the effectiveness of the organization. The result is the influence of different social processes on individual perceptions.
One important and well-known social process particularly relevant to the organization is group discussion. The influence of group discussion on individual attitudes and judgments is well known in the study of group behavior (Kaplan & Miller, 1983). Terming the phenomenon "group polarization", researchers have consistently found that a group judgment, measured using the average of the group members' individual responses, is more extreme following group discussion. This shift in judgment is usually in the same direction on either side of the neutral point as the average of the members' prediscussion judgments.

The implications of group polarization for policy change have great importance for assessment of the impact this change will have on employee attitudes. A policy change that, at first glance, may appear to have only minimally negative consequences for employee perceptions and attitudes, in reality may have more unanticipated consequences. Through group discussion, either formal or informal, employee perceptions about fairness of a policy change may polarize, thus creating much deeper and more diffuse effects on the organization. The impact of group discussion must not be ignored when assessing the consequences of policy change.

Due to the inevitability of both policy change and the unanticipated consequences group discussion may have on fairness judgments, organizational leaders need a strategy to avoid or lessen this shift in individual employee judgments after the implementation of a policy change. One theoretical framework that might yield valuable answers to this dilemma of organizational leaders is procedural justice. Outcome-based theories of
fairness, commonly known as distributive justice, have long been studied in attempts to understand how individuals determine if they have been fairly treated, and how those perceptions affect attitudes and behavior. A recently emerging avenue of justice research goes beyond looking at outcomes to focus on the procedures used to determine those outcomes. These process-based theories have come to be known as procedural justice.

One of the most interesting and consistent findings of the procedural justice research has been that the use of a perceived fair procedure can increase the satisfaction with an outcome received without any change to the real outcomes available for distribution (Lind & Tyler, 1988). Procedural justice appears to have effects on satisfaction with outcomes independent of distributive fairness judgments. That is, procedural fairness not only makes outcomes appear more fair, but also directly affects feelings about the outcome. Implications of procedural justice for organizations are enormous. When faced with decisions about distribution of limited resources, satisfaction with outcomes can be enhanced by redesigning the decision-making procedures used.

The present thesis is an attempt to look at the implications procedural justice findings have for organizational leaders faced with policy changes, and to extend those findings to the social process of group polarization. Specifically, this research will endeavor to show how the procedural justice framework can be used by organizational leaders to counteract negative group polarization of fairness perceptions and other attitudes after a policy change has been implemented.
CHAPTER II
A Review of Distributive and Procedural Justice Research

The study of justice in social psychology has identified two sources of fairness judgments in social relationships: distributive justice and procedural justice. Distributive justice theories center around fairness judgments of decision outcomes based on norms of fair distribution. Procedural justice theories focus on the judgments of fairness made by individuals regarding the procedures and processes used to reach an outcome decision.

Distributive Justice

The earliest theories of justice in social relationships defined fairness in terms of the allocation of outcomes according to a normative rule of distribution, and the reactions of individuals to these allocations (Greenberg, 1993). These distributive justice theories assume individuals are outcome-oriented when evaluating social relationships, using their reactions to the outcomes of an allocation decision to form fairness perceptions.

Social exchange theories by Homans (1964), Blau (1964, 1968), and Adams (1963) were some of the first theories to link outcomes from social relationships to perceptions of fairness. The term distributive justice was introduced by Homans (1964) when using exchange theory to explain social behavior. The fundamental rule of distributive justice, as conceptualized by Homans, involves an exchange relationship in which individuals hold expectations that the rewards of each party in the relationship are
proportional to the costs, and the profits received by each party equal investments. Homans believed the principle of proportionality of rewards and cost underlying this rule of distribution is universal among parties involved in social relationships. Violations of this principle, and thus the distributive rule, by parties involved in exchange relationships arise because of differences in individual definitions of rewards and costs.

Blau (1964, 1968) applied the notion of exchange theory to a social context by making the distinction between economic and social exchange within relationships. Blau (1968) asserts that exchange is not unique to economic markets because many rewards desired by individuals can only be obtained through social interaction. When people enter into a social relationship, they expect this relationship to be rewarding and seek to continue the relationship as long as valued rewards or benefits are received. If an individual is not compensated fairly, the relationship will not survive. Social exchange differs from economic exchange mainly because the terms of the social exchange are not specified in advance. Providing rewards during a social exchange creates diffuse future obligations with no prearranged method of fulfillment. One important basis for successful social exchange relationships is trust between the parties involved. This trust usually develops gradually over time and is self-generating as long as obligations continue to be met.

One of the most well-researched and well-known distributive norms used to determine fairness in a social exchange relationship emerged from equity theory (Adams, 1963). Equity theory expands on Blau's social exchange theory by defining more precisely
when a fair exchange exists. The assessment of equity involves a social comparison between an individual's ratio of obtained inputs to outcomes relative to the inputs and outcomes of a referent other. When the two ratios are equal, equity has been achieved. When the allocation of outcomes does not meet the standards of the equity norm, negative emotions result and an individual is motivated to correct the inequity. Methods to restore the balance between the two ratios range from physical alteration to cognitive distortion of inputs or outcomes.

Adams (1963) points out that the conditions creating inequity are based upon individuals' perceptions of inputs and outcomes. As a result, inequity exists for an individual only when the perceived outcome-input ratio is psychologically unequal to the perceived outcome-input ratio of the referent other. The objective conditions are less important than the individual perceptions. Adams (1963) claims that in order to predict what conditions of inputs and outcomes will be necessary to create perceptions of inequity within an individual, something must be known about the values and norms of that individual. Furthermore, inequity is a relative state. Inequity will not necessarily result when inputs are high and outcomes are low. Inequity will only exist when an individual perceives the referent other to be in a better position. Finally, one of the most interesting findings in the equity theory research is the motivation of an individual to restore the balance between the ratios even when the inequity is in that person's favor. That is, when a person is overcompensated for the inputs he/she contributed, the individual will work to restore equity.
Reviews of the research show general support for the hypotheses made by equity theory (Mowday, 1991). As with any theory, however, limitations have been discovered that bring into question the adequacy of the theory in explaining behavior resulting from perceptions of fairness. First, although equity has been termed a fundamental norm of distribution, other norms of distribution have been identified (e.g., equality, social responsibility). Second, the theory gives several alternative methods an individual may use to correct an inequity, but makes no specific predictions about which method will be chosen. Third, little is said in the theory about how an individual chooses the referent other used for social comparison. The shortcomings of equity theory suggest a need for a more comprehensive theory of justice in social relationships to explain how people determine if they have been treated fairly.

**Procedural Justice**

The systematic study of the process and procedures used to determine an outcome in social relationships, termed procedural justice, was first introduced by Thibaut and Walker (1975, 1978) through a series of studies that examined the perceptions of fairness using different dispute resolution procedures. The basic hypothesis of this early research was that the specific procedure used to reach a dispute-resolution decision would influence an individual's satisfaction with the outcome. To test this hypothesis, Thibaut and Walker focused on legal settings using two different binding dispute resolution procedures: inquisitorial, where both the process and the decision that results from this process are under the control of a third party; and adversarial, where the disputants have
control of the process, but the decision is under the control of a third party. When these two dispute resolution procedures were compared, the adversarial procedures and outcomes were judged by individuals to be more fair than the inquisitorial procedures and outcomes (Lind & Tyler, 1988).

A second finding that emerged from this ground-breaking work by the Thibaut and Walker research group was that an individual's satisfaction with the outcome of a dispute resolution procedure can be enhanced using a procedure perceived as fair, even when that outcome is determined to be unfavorable to the individual. Both these critical findings illustrate that procedures do matter in perceptions of fairness, and have been termed the "fair process effect" in the procedural justice literature (Folger, 1977; Folger, Rosenfield, Grove, & Corkran, 1979; Tyler, Rasinski & Spodick, 1985; Tyler, 1987).

Having established that procedures do have a significant impact on fairness judgments of individuals, Thibaut and Walker (1975) explained these findings in terms of the distribution of control in decision making. Two types of control were identified by the researchers. Decision control involves the degree of influence an individual actually has over the decision to be made. Process control, on the other hand, refers to the degree to which the procedures used to make a decision allow an individual the opportunity to express information relevant to the decision. Thibaut and Walker (1975, 1978) asserted that procedures that give an individual affected by the outcome process control, even when no decision control is present, will be perceived as more fair than procedures that do not.
Subsequent research has mainly operationalized process control as presentation of information to the decision maker. Folger (1977) first used the term "voice" to describe this participation in decision-making procedures, and since then, the number of studies using "voice" as an independent variable have become quite numerous. This large body of research investigating the opportunity to "voice" have shown the positive effects of presentation of information on procedural justice judgments to be quite robust (Folger, 1977; Folger, Rosenfield, Grove, & Corkran, 1979; Tyler, Rasinski, & Spodick, 1985).

Two different theories have been proposed to explain the effects of process control, as operationalized by voice, on fairness perceptions (Lind & Tyler, 1988). These two models are based on the distinction between the instrumental and non-instrumental consequences of voice. Instrumental consequences result from the belief that presenting information will influence the outcomes obtained. Non-instrumental consequences result from the value individuals place on being able to express themselves, regardless of the influence the information may have on outcomes (Lind, Kanfer, & Early, 1990). The self-interest model, proposed by Thibaut and Walker (1975, 1978), conceptualizes the individual as interested in control over procedures only because of a concern for how this influence may affect his/her outcome. The consequences of voice, therefore, in this model are instrumental in nature. When individuals are faced with conflict situations that cannot be resolved through negotiation, a third party is often called upon to resolve the dispute. Using a third party to resolve the conflict, however, means a loss of control over the decision made for the individuals involved. Each individual, therefore, must focus on the
indirect form of control afforded through the procedures used to make a decision. Voice indirectly gives the individual control by providing the opportunity to express information that may influence the outcome determined by the third party.

The self-interest model, when tested empirically, has not been found to explain all the effects of voice on fairness perceptions (Tyler, Rasinski, & Spodick, 1985). As a result, the group-value model has been proposed to emphasize the non-instrumental effects of voice on judgments of procedural fairness. Tyler et al. (1985) suggest that individuals value the opportunity to present information, independent of the influence this information may have on the decision maker. Specifically, the opportunity to voice provides the individual with symbolic or informational consequences by assuming that individuals value their long-term social relationships with authorities or institutions (Tyler, 1989). The opportunity to voice or present information during a decision-making process implies membership in the group making the decision. Being given the chance to "state one's case" suggests this information is worth being heard and considered (Lind et al., 1990). Furthermore, Tyler (1989) points out that the value of fairness perceptions derived from these symbolic consequences of voice during a decision process has important outcomes for group survival. Membership in a group means individuals will have a long-term commitment to the group, the group authorities, and the institutions supporting the group.
Extensions of Procedural Justice Findings to Organizations

The findings of procedural justice in the legal settings first used by Thibaut and Walker have been extended to the political arena and organizational settings. The research conducted within organizational settings has shown procedural justice to have large unique effects on job satisfaction, evaluations of supervisors, reports of conflict or harmony, and trust in management (Lind & Tyler, 1988). Furthermore, researchers have found evidence that procedural justice has particularly strong effects on individuals' perceptions of system or institutional attitudes such as organizational commitment and trust in management (Lind & Tyler, 1988). Such institutional attitudes develop from a long-term evaluation of the relationship between the individual and the organization. Distributive justice effects are usually more important in specific, short-term evaluations of outcomes. If a distributive injustice occurs, the injustice may be viewed as a one-time or unique violation of fairness standards (Greenberg, 1993; Lind & Tyler 1988). A procedural injustice, on the other hand, may be seen as a long-term, systematic violation of fairness standards. Such a violation may lead the individual to believe the system is inherently unfair.

Tyler and Caine (1981) looked at the influence of procedures and outcomes on the evaluation of formal leaders. Four studies were conducted, two looking at student evaluations of teachers and two looking at citizen evaluations of political leaders. Study 1, a laboratory experiment, had participants review hypothetical scenarios depicting a student being awarded a grade using a fair or unfair procedure. The grade received was
higher than, equal to, or lower than the grade the participants were told the student deserved. In Study 2, a field study, a survey was conducted to measure students' perceptions of procedural fairness and the perceived fairness of grades received by those students the previous quarter. Studies 3 and 4 were similar to the first two studies, but focused on participants' evaluations of political leaders. In all four studies, results showed that judgments of procedural fairness influenced leader evaluations, independent of outcomes. That is, when outcomes and procedures were varied independently, each had an independent effect on leader evaluations. The relative influence of variations in outcomes and procedures was different, however, depending on where the study was conducted. The two laboratory experiments showed that evaluations and ratings of quality and fairness were influenced by both variations in outcomes and procedures. Neither variation was more uniformly important. In the survey studies, variations in procedures influenced leadership evaluations to a greater extent than outcome variation. The researchers suggest these findings show that while participants can take both factors into account when evaluating leaders, in natural settings this does not happen. Instead, in natural settings, participants put more emphasis on procedures than on outcome levels.

Konovsky, Folger and Cropanzano (1987) looked at procedural justice and distributive justice effects on the employee attitudes of organizational commitment and satisfaction with pay. Procedural justice had greater unique effects on organizational commitment, while distributive justice showed the greater unique effect on satisfaction with pay. Barrett-Howard and Tyler (1986) examined procedural justice as a criterion in
allocation decisions and found procedural justice was a more important criterion than other non-fairness criteria and equal in importance to distributive justice. Finally, Tyler and Griffin (1991) surveyed decision makers in the field to evaluate how important procedural justice is when allocating scarce resources. Results showed that decision makers emphasized the value of using fair procedures, especially when trying to maintain positive interpersonal relationships.

Interactional Fairness

A recent extension of the procedural justice framework is the examination of the quality of interpersonal treatment individuals receive during the actual enactment of procedures (Bies & Moag, 1986). Interactional fairness makes the distinction between the procedure and the enactment of that procedure. Tyler and Bies (1990) view the allocation decision as a sequence of events in which a procedure creates a process of interaction and decision making from which an outcome is determined and allocated to an individual. Each component of this sequence is subject to fairness considerations, thus resulting in procedural, interactional, and distributive fairness perceptions. Concern for the behavior of the decision maker during the enactment of the procedure, therefore, is important when evaluating fairness perceptions. The inclusion of interactional fairness might explain why people feel unfairly treated even though the procedure and outcome are judged to be fair.

A study done by Lind and Lissak (1986) points to the importance of the enactment of procedures. Lind and Lissak state that most procedural justice effects have been investigated in the context of properly enacted procedures. In their study, Lind and Lissak
placed participants in the role of defendant or observer in an adversarial procedure (a trial). The researchers manipulated the appearance of an impropriety during the trial through the presence or absence of evidence for a friendly, personal relationship between the plaintiff's lawyer and the judge. The defendant was given either a positive or negative outcome. Results showed a significant impropriety \times outcome interaction on the ratings of procedural fairness. The combination of the impropriety and an innocent verdict—a verdict unfavorable to the party advantaged by the impropriety—enhanced procedural justice judgments. The combination of the impropriety and a guilty verdict, which favored the party advantaged by the impropriety, lessened procedural justice judgments.

One set of decision maker behaviors recently studied as part of the interactional fairness framework is interpersonal communication. A series of studies by Bies (cited in Bies & Moag, 1986) asked MBA job candidates for reactions to corporate recruiting practices in an attempt to identify the principles of fairness in communication. The analyses of the data collected found four critical principles of communication: (a) truthfulness as defined by concerns about deception and candidness, (b) propriety of questions, (c) respect as defined by concerns of discourteous or attacking communications, (d) justification. Bies and Moag (1986) point out that given the exploratory nature of these studies, the findings were surprisingly consistent with one another in the identification of these four principles. Bies and Moag propose that this consistency may be due to the fact that people hold absolute standards for interpersonal treatment that are independent of comparisons with others' outcomes and treatment.
Unlike other perceptions of procedural justice that emphasize the comparative or relative nature of fairness judgments, the interactional fairness framework emphasizes absolute or objective standards used to form judgments of fairness.

Tyler and Bies (1990) review empirical evidence pertaining to the interpersonal context of procedures in an attempt to identify these norms or objective standards of proper decision maker behavior. The researchers suggest that even if an organization has formal procedures in place that have been judged as fair by the employees, the decision makers may have a great deal of freedom regarding the enactment of the procedures. Constraints are placed on this behavioral latitude of the decision maker by the standards and norms of acceptable interpersonal behavior during procedure execution. The norms identified are: (a) adequately considering employee viewpoints, (b) suppressing personal biases, (c) applying decision-making criteria consistently across employees, (d) providing timely feedback after a decision is made, (e) providing an account for the decision made. Social Accounts

The last norm of proper behavior during a procedure enactment identified by Tyler and Bies (1990) has recently been the center of a movement in the procedural justice literature to study the effects of social accounts given after decisions are made. Specifically, a group of studies in procedural justice have looked more closely at the use of accounts by decision makers in organizations. Bies (1987b) defines a social account as a "verbal strategy" a person may use to lessen the perceived severity of a decision, or to convince the recipients of the decision that the wrongful act is not a true representation of
the decision maker as a person. Bies (1987b) has identified four distinct types of accounts: (a) causal accounts, (b) ideological accounts, (c) referential accounts, (d) penitential accounts.

A causal account is an explanation for a decision that attempts to lessen the apparent role of the decision maker by giving reasons that mitigate the decision maker's responsibility. For example, a boss may claim mitigating circumstances such as a downturn in the economy for budget cutbacks. By claiming mitigating circumstances, the boss is, in a sense, pointing out that anyone else would have acted the same way given the situation.

Ideological accounts acknowledge responsibility by claiming the action was the "right thing to do". Ideological accounts reframe the action or outcome by using a broader framework to legitimize the action. For example, a decision maker might appeal to superordinate goals, or use more positive value-laden terms to label an action. Bies (1987b) cites evidence that this type of account seems to affect the type of behavior that results from an injustice more than the actual perception of injustice.

Referential accounts provide a referent standard to which the outcome or action can be compared and evaluated. Bies lists three types of referential accounts most commonly used: (a) social comparison accounts that point to other individuals who received worse outcomes, (b) temporal comparison accounts that suggest better outcomes in the future, (c) aspirational accounts that attempt to redefine an individual's expectations by pointing out that initial expectations were too high or unrealistic.
Penitential accounts, more commonly known as apologies, are designed to convince the recipients of the unjust action or outcome that the injustice is not representative of the decision maker's true nature. The penitential account usually includes an expression of guilt through a public enactment of self-retribution. This self-retribution is an attempt by the decision maker to offer partial payment for the injustice caused, and in doing so, reframe the perceptions others hold of him or her.

Empirical support has been found for the use of social accounts to influence procedural justice perceptions. Bies and Shapiro (1987) conducted three studies that examined the effects of giving a causal account on interactional fairness judgments and endorsements of decision maker's actions. Study 1 was conducted in the laboratory and looked at ratings of interactional fairness and support for a decision maker after the participants were presented with an employee grievance and either a causal account claiming mitigating circumstances for a manager's improper actions was given or was not given. This study found interactional fairness and support for a manager's actions were higher when a causal account was given to justify a manager's improper action.

Study 2 again looked at ratings of interactional fairness and support for a decision maker by replicating the causal account providing mitigating circumstances versus no account conditions of the first study. In addition, two different organizational settings were used. In both contexts the participants were asked to take the role of a person receiving news from a decision maker. Furthermore, in each context, the participants were deceived about the size of the outcome to be received from the decision maker. In
one context, participants were asked to take the role of a person that has just received a smaller-than-expected budget decision. In the second context, the participant played the role of a salesperson and received a smaller-than-expected sale. The results from this study were found to corroborate the results of the first study. In addition, this study found the perceived adequacy of the causal account was critical when explaining the effects of the account.

Study 3 was a field experiment that measured individuals' reactions to the rejection of a proposal or policy recommendation. In this study, participants were asked to recount in as much detail as possible a specific "rejection" experience with their current boss. Participants were then asked to measure the degree to which the boss used a causal account claiming mitigating circumstances. This third study revealed findings similar to the first two studies. A causal account claiming mitigating circumstances enhanced perceptions of interactional fairness and decision maker approval if the account was perceived as adequate.

Bies and Shapiro (1988) again used a multimethod research strategy that investigated fairness perceptions of job recruitment contexts and budget decision making contexts. Study 1 was conducted in the laboratory and looked at the effect of procedures that offer voice or no voice during the process and the effect of providing an account for a job recruitment decision. Participants read descriptions of an interview procedure either allowing or not allowing a candidate to ask questions and explain his/her resume. Next participants read a rejection letter received by the candidate either giving an account for
the decision or providing no account for the decision. Results showed that voice and the
presence or absence of an account had independent effects on judgments of procedural
fairness.

Study 2 was a field experiment that surveyed subordinates' reactions to an
unfavorable budget decision. Participants were asked to recount a recent rejection of a
budget request. Participants were then asked to rate the degree to which they were
provided with the opportunity to convince the boss of the necessity of the request, and the
degree to which the boss had given an account for the rejection decision. The results
confirmed those in study 1 by showing voice and the presence or absence of a justification
to have independent effects on procedural fairness judgments.

Bies (1987a) replicated and extended the findings of these earlier studies by
investigating the effects of the presence or absence of the opportunity to voice in the
formal procedures, providing an account for a decision made using these procedures, and
the sincerity of the decision maker when giving the account on procedural justice
perceptions. As with the earlier studies, the opportunity to provide voice before a
decision is made and the presence of an account after the decision was made
independently had positive relationships with procedural justice judgments. Furthermore,
decision maker sincerity showed an independent, positive relationship with the justice
judgments of the participants.

Bies, Shapiro, and Cummings (1988) conducted a field experiment that measured
the effects a causal account had on subordinate reactions to a refusal of a request by the
The specific reactions that were targeted for study were those reactions that might induce or lead to conflict between the boss and the subordinate. Using participants from a variety of organizations, the results of the study revealed that the use of an account by a boss can reduce conflict-inducing reactions of subordinates. Furthermore, the study provided insight into what components of the account are important in reducing these negative reactions. Specifically, support was found again for the importance of the adequacy of the reasoning behind the account and the sincerity of the boss when communicating the account. Furthermore, the content of the account also appeared to be important. Not all claims of mitigating circumstances were perceived as equally adequate by subordinates. Causal accounts focusing on company norms, budget constraints, or company policy were perceived to be better than accounts that focused on the subordinate's own behavior, upper management, and the political environment. Bies et al. (1988) suggest these findings point to an important tool managers can use to prevent conflict within organizations after decisions are made.

Finally, a series of studies by Folger and his colleagues (Folger & Martin, 1986; Folger, Rosenfield, & Robinson, 1983) found support for providing accounts for changes in procedures used for distributing rewards. Folger et al. (1983) found that information showing that old procedures would have yielded higher outcomes did not influence feelings of resentment over lower outcomes as long as an adequate account was given for the change in procedures. Folger and Martin (1986) replicated these results and also
found that participants were more willing to endorse the experimenter when an adequate account was given for the experimenter's action.

All of these empirical studies emphasize the importance of using accounts to influence perceptions of procedural fairness, beyond the effects of the formal procedures used to reach a decision. Furthermore, the evidence cited suggests the use of social accounts could prevent or at least control conflict-inducing reactions to unfavorable outcomes. Sitkin and Bies (1993) provide a good summary of these findings by briefly reviewing the factors that appear to influence the effectiveness of social accounts. Two factors most often found to influence the effectiveness of social accounts are perceived adequacy of the account as defined by sufficiency and credibility, and the perceived sincerity or honesty of the decision maker giving the account. Sitkin and Bies (1993) suggest that future research should investigate the use of multiple accounts when attempting to minimize conflict-inducing reactions. Multiple accounts may be better than single accounts because in reality explanations are rarely given in isolation. A review of past research done by Sitkin and Bies (1993) showed people usually offer more than one account to explain an outcome or behavior. Multiple accounts may be used by people because reality usually tends to be quite complex and motivation for behavior often results from several sources. Under such conditions, multiple accounts may be perceived as being more accurate and complete because the different accounts would address these different sources of motivation. These conditions may be particularly common in organizations because several conflicting goals or groups may be exerting pressure on the decision
making at one time. In organizations the presence of multiple goals, multiple roles, and multiple rules makes a single account inadequate for responding to the various concerns of all affected by the decision. By providing multiple accounts, a decision maker in an organization would be in a sense "covering all the bases" such that each group could attend to that part of the account that is relevant.

Social Influences on Procedural Justice Perceptions

All the studies reviewed in the above discussion have looked at the influence of different factors on perceptions of fairness. Another factor that may influence perceptions of fairness, but that has not been adequately addressed in the literature, is the social context surrounding the perceptions being formed.

Salancik and Pfeffer (1978) first introduced the idea of the social context influencing attitude formation in their Social Information Processing Theory (SIP). The SIP approach was introduced in response to need-based theories of job attitudes. These need-based theories postulate that both people and the jobs these individuals hold have basic, stable, and identifiable attributes. Job attitudes result from the correspondence between the individual's needs and the characteristics of the particular job held by the individual (Miller & Monage, 1985). SIP, on the other hand, proposes that attitudes and needs are cognitive products of three determinants: 1. the job or task characteristics; 2. social information; 3. the individual's own behavior (Salancik & Pfeffer, 1978). The SIP perspective argues that attitudes and needs are not givens, but instead are the products of information processing activities of individuals trying to make sense of their world.
Salancik and Pfeffer (1978) identified four processes by which social information can influence attitudes. First, overt statements of co-workers directly affect an individual's attitude because the complex nature of the job leaves the individual unsure about how to react to a component of the job. Furthermore, an individual may want to agree with co-workers in order to fit in with the workgroup. Second, social information can structure attentional processes by making aspects of the environment more or less salient. Overt statements by co-workers cue an individual as to what to consider in the work environment when forming attitudes and perceptions. Third, social information can guide the interpretation of environmental cues. By sharing opinions and observations, co-workers provide their constructed meanings of events in the work place. Finally, social information can contribute to the interpretation of needs. Comments made by co-workers may help to foster the belief that certain needs are or are not being met by the organization.

As a result of these four processes, individuals will develop job attitudes and perceptions about their jobs as a function of the information available to them at the time they express the attitude or perception (Salancik & Pfeffer, 1978). Specifically, attitudes are derived from the most salient, relevant, and credible information available at the time of expression. Anything that may affect the saliency, relevancy, or credibility of the information should also affect attitudes (Zalesny & Ford, 1990). For example, hearing co-workers express opinions about the work environment may make the present working conditions the most salient feature of the current job and the most salient and relevant
information used for attitude formation. Overall, empirical testing of the SIP model has found support for a positive relationship between social information and job attitude and perception formation (Miller & Monge; 1985; Zalesny & Ford, 1990).

In organizational settings, a policy decision and its consequences are rarely confined to an individual. Once a policy decision has been handed down from management, employees either formally or informally discuss the outcome of the decision, the procedures used to reach and implement that decision, and the behavior of the decision maker during the enactment of those procedures. Formal discussion of these changes may take place during training sessions for the new policy or employee meetings with management. Informal discussion may take place before work begins, or during break times. As pointed out by the SIP approach, this sharing of information in a group discussion will have significant consequences for employee attitude and perception formation regarding the new policy change.
CHAPTER III
A Review of Research on Group Polarization

One specific SIP effect on employee attitudes and perceptions resulting from group discussion is the polarization or shift of individual attitudes and perceptions toward a more extreme position from the position held before discussion. This phenomenon has been identified in social psychological research as group polarization, and has received wide empirical support.

The concern of this study is with those policy changes that do not produce universally perceived effects on employee perceptions of justice (e.g., new measures of production efficiency). One consequence of these uneven policy effects on employee fairness judgments is that those employees with more negative fairness perceptions may influence the individuals holding neutral or less negative fairness perceptions regarding the policy change. For example, Employee A may feel the policy change, while being a temporary inconvenience because new procedures have to be learned, is not a "big deal." Employee B, on the other hand, may be suspicious that the new policy change signals hard times for the company and all employees had better be on their guard. When Employee A and Employee B have lunch together, a discussion may ensue about the new policy change. Employee A, upon hearing Employee B's more negative perceptions of the policy change, may develop a more negative perception. The policy change, thus, becomes a "big deal" to Employee A.
Although rather simple, the above scenario does illustrate possible effects of employee discussion on fairness perceptions after a policy change.

The Risky Shift

The more general group polarization phenomenon came out of early work on what has been termed the "risky shift." Stoner (1961, cited in Myers & Lamm, 1976) first discovered the concept of the risky shift effect of group discussion while investigating the notion that group decision-making tends to be more cautious than individual decision-making. Stoner had participants respond to a series of story problems that required advising a fictional character on how much risk he/she should take in facing a decision dilemma. After each participant individually indicated his/her response to the dilemmas, groups of participants were assembled and instructed to discuss the dilemmas until agreement was reached. The findings of this study revealed that the groups were by and large more risky than the average individual member.

This finding of a risky shift in the group average following group discussion set in motion a large number of studies involving group risk taking. These various studies extended the generalizability of the risky shift finding by replicating the phenomenon in a large number of different countries. This research also revealed that a group decision was not necessary for the risky shift to take place. All that was needed was a brief period of group discussion (Myers & Lamm, 1977). Finally, this research showed that shifts on the different Choice Dilemmas used to measure group risk taking were not always in the risky direction. Instead, several of the dilemmas produced what is now called a cautious shift.
A cautious shift is just like a risky shift, but in this instance the mean of the group shifts toward a more cautious position after group discussion (Brown, 1986). The discovery of the cautious shift demonstrated that the term "risky shift" was a misnomer (Myers & Lamm, 1976) and that a broader theoretical framework needed to be developed to explain these new findings. The framework developed to explain these effects of group discussion was called group polarization. The hypothesis that emerged from this framework is stated by Myers and Lamm (1976) as "the average postgroup response will tend to be more extreme in the same direction as the average of the pregroup responses." (p. 603). Essentially, this new theoretical framework moved away from the focus on risk taking as a dependent variable, and instead emphasized the effects of intragroup communication on attitudes and behavior.

Brown (1986) reviewed at research that has resulted in the identification of a "shift predictor." Upon viewing the findings of the studies using Stoner's original Choice Dilemmas, researchers have looked at the relationship between the mean of the group member's initial decisions and the size of the shift that occurs after discussion. Among the original Choice Dilemmas, considerable variation in the size of the shift from item to item has been found. Those Dilemmas producing the greatest shift after discussion had more extreme initial positions, whereas those Dilemmas showing little or no shift had initial positions much closer to the middle of the scale. Group discussion appears to produce polarization of the postdiscussion average response, and the size of the shift increases as a function of the initial average positions of the group members.
The Generalizability of Group Polarization

The conclusions drawn from the comprehensive summary of the group polarization literature provided by Myers and Lamm (1976), and cited in numerous group polarization studies and book chapters, will again be used in the present discussion of group polarization. Other literature summaries will be referred to when necessary.

Myers and Lamm (1976) organized the group polarization literature into seven categories in order to explore the generality of the phenomenon. These categories included: attitudes, jury decisions, ethical decisions, judgments of fact, person perceptions, negotiation behavior, and risk measures other than choice dilemmas. Within both the attitude studies and the jury decision studies two different research paradigms have been used to study group polarization. First, the content of the materials given to the participants to discuss are varied in order to vary the dominant predisposition these materials elicit. The goal of this paradigm is to determine if group discussion will polarize the dominant predispositions elicited by the materials given. In both the attitude studies and the jury decision studies, findings are generally supportive of the group polarization hypothesis, indicating a shift in the group mean taking place after group discussion has occurred in the same direction as the dominant predisposition. Second, group composition is varied such that group members either share similar or opposite views and attitudes about the subject to be discussed. This paradigm looks at intergroup polarization by predicting that discussion with similar others will increase the attitude or judgment gap between homogeneous groups with different prediscussion views and attitudes. Again,
both attitude studies and jury decision studies show general support for the group polarization hypothesis when using this paradigm. Homogeneous groups tended to polarize more after discussion than heterogeneous groups.

The results from ethical decision studies, judgments of fact studies, and person perception studies seem somewhat ambiguous, or only show minimal support for group polarization. The research on negotiation and conflict is limited, but the few results in this research area appear to support group polarization. Finally, risk taking using measures other than the choice dilemmas are compatible with the group polarization hypothesis. Overall, Myers and Lamm (1976) conclude that the evidence available is generally in line with the original group polarization hypothesis derived from the choice dilemma studies and that the group polarization phenomenon shows generality.

Theoretical Explanations for Group Polarization

Three general theoretical explanations for the group polarization phenomenon are used in the literature to demonstrate the mechanisms by which group discussion influences individual group members.

The first explanation, termed the group decision rule, predicts a shift by concentrating on the method used to aggregate the individual judgments into a group decision (Kaplan & Miller, 1983). This explanation is based on the assumption that a group decision is derived when the individuals of the group somehow combine their preference distributions for a given set of alternatives using some systematic rule. The most popular decision scheme in the research literature is the majority rule (Myers &
Lamm, 1976). This rule predicts a shift towards the dominant tendency of the group when a majority of the group favors that tendency and the preference distributions of group members are skewed. Myers and Lamm (1976) claim that even though the group decision rule explanation is intuitively compelling, many research findings do not support it.

A second explanation applied to the group polarization phenomenon is normative influence or social comparison (Brown, 1986; Kaplan & Miller, 1983; Lamm, 1988; Myers & Lamm, 1977). This explanation conceptualizes the shift of the group mean in terms of social motivation. Individuals desire to give a favorable impression to others. When others present their positions during group discussion, individuals who discover they are not where they want to be in relation to the group mean will be motivated to change or readjust their position (Brown, 1986; Myers & Lamm, 1977). Kaplan and Miller (1983) assert that exposure to the positions of others communicates a judgmental norm. If the positions of other group members are more extreme than the position of a particular individual, that individual will conform to the norm.

Empirical investigations into this explanation have resulted in a somewhat mixed array of findings. Support has been found for the claim of the theory that individuals tend to perceive their positions to be even more in the socially desirable direction than the group average (Brown, 1986; Myers & Lamm, 1977). That is, individuals tend to perceive themselves to be better than average at realizing the ideal position. Damaging to this explanation, however, are the findings that exposure to positions alone produce only weak or no polarization effects (Kaplan & Miller, 1983; Myers & Lamm, 1977). Myers
and Lamm conclude that even though the results from the studies using the social comparison explanation are mixed, enough evidence has been found supporting certain assumptions of the theory to warrant including the explanation in a comprehensive theory of the group polarization phenomenon.

The third explanation applied to the group polarization phenomenon is informational influence (Kaplan & Miller, 1983; Myers & Lamm, 1977). This explanation suggests that group polarization results from the information content of the arguments presented during group discussion (Kaplan & Miller, 1983). The group discussion generates arguments generally in support of the initial predisposition of the group, and may include arguments that an individual has not previously considered. As a result, the information effect causes a position shift derived from new cognitive learning (Myers & Lamm, 1977). Instead of comparing oneself to others as in the social comparison explanation, the informational influence model proposes that individuals are processing, weighing, and integrating the information provided by the arguments generated in the group discussion.

Research into this explanation has revealed that arguments do indeed have a persuasive impact (Brown, 1986; Kaplan & Miller, 1983; Myers & Lamm, 1977). Normal shift effects have been demonstrated even when individuals are prohibited from mentioning their initial predispositions (Kaplan & Miller, 1983; Myers & Lamm, 1977). When the content of the arguments are varied, the shift will occur in the direction of the content (Kaplan & Miller, 1983). Covariation of positions and information content such that
others' positions are opposite from the information they share, results in a shift in the
direction of the information shared (Kaplan & Miller, 1983). Furthermore, when the
number of arguments and number of participants are varied, the number of arguments has
been found to be related to the extent of polarization (Kaplan & Miller, 1983).

Myers and Lamm (1977) contend that even with the compelling evidence for the
information influence explanation, passive cognitive learning cannot fully explain group
polarization. Research has found that when interactive discussion is eliminated and
participants are only passive recipients of arguments, the normal shift is reduced. In
addition, cognitive rehearsal of self-generated responses has also been found to be
important in attitude change. That is, an individual must actively process and reformulate
the information received from the arguments in order for a change in position to occur.

Implications for Policy Changes in Organizations

The preceding discussion of group polarization has important implications for
decision makers when proposing a policy change within an organization. A change in
policy usually brings major ramifications for those affected by the change. Furthermore,
change is frequently perceived as negative and unfair. Once the policy change has been
announced, decision makers need to be aware of the influences the discussions taking
place among groups of employees may have on perceptions of fairness and acceptance of
the policy. The result might be a shift in the group mean in the direction of the dominant
predisposition of injustice, just as the group polarization literature suggests. This group
polarization effect might be particularly relevant to those employees that originally had not even perceived an injustice.

The research problem that will be addressed in the present thesis is: Knowing the implications for fairness perceptions that group discussion may have after policy changes within an organization, does the procedural justice framework provide any solutions for halting the group polarization phenomenon?

The robust finding for voice effects on individual's perceptions of procedural fairness yields one suggestion for decision maker influence on fairness perceptions during policy change. However, the present study is focused on what happens after the policy change has already been implemented. This focus, therefore, is more in line with the interactional fairness component of the procedural justice framework, and the role social accounts may play in increasing employee judgments of fairness. Specifically, using the informational influence explanation for group polarization, social accounts may be a source of influence on the group polarization phenomenon because of the information these accounts give employees. The information given to employees by using social accounts may lessen the initial negativity of the prediscussion fairness perceptions. As pointed out in the above discussion on group polarization, the relationship between the average of individuals' initial perceptions and the size of the shift of perceptions toward a more extreme position is critical. The size of the shift is a function of the prediscussion position of the group. The farther away the prediscussion position of the group is from the neutral point, the greater the shift in attitude or perception after discussion.
The benefit of social accounts is clear. Social accounts should lessen the negativity of prediscussion perceptions of the fairness of a policy change. The shift in fairness perceptions after group discussion should then be less if an adequate account is given when the policy is announced. Social accounts, therefore, could be an effective strategy for decision makers when other strategies such as the use of "voice" is impractical or impossible during a policy change. By decreasing the negativity of fairness perceptions, the acceptance of the policy change by employees may be increased, while at the same time important attitudes such as organizational commitment and support for decision makers would be protected.
CHAPTER IV

Research Design and Hypotheses

The present study proposes to use a 2 x 2 x 2 mixed design. Measures of fairness perceptions and other attitudes will be taken before and after group discussion, and the presence and absence of two types of social accounts will be used.

The procedural justice research shows clear support for the use of social accounts to enhance fairness perceptions of individuals. Four types of accounts have been identified in the justice literature. Causal accounts and ideological accounts were chosen for this study because these two types of accounts appear to be highly relevant to the organizational setting. Decision makers often are forced by mitigating circumstances to implement a policy change within their organization. In addition, decision makers may also attempt to reframe a policy change so that the policy change would be perceived by employees to be more positive or even beneficial.

Hypothesis 1: There will be a main effect for causal account such that fairness perceptions and other attitudes measured will be less negative when a causal account is given.

Hypothesis 2: There will be a main effect for ideological account such that fairness perceptions and other attitudes measured will be less negative when an ideological account is given.
After a policy change has been implemented within an organization, the perceived negativity of the change will cause employees to discuss the new policy among themselves. The SIP approach identified social information such as the opinions of co-workers to have significant effects on individual attitudes and perceptions. One such effect might be the shift of the average of the individual attitudes and perceptions toward a more extreme or polarized position after group discussion. The group polarization literature has shown that the farther the average initial attitude or perception of the group is from the neutral point, the greater the shift in this average after discussion. Social accounts should lessen the distance of the average initial fairness perceptions from the neutral point, thereby lessening the shift in fairness perceptions after group discussion among employees.

**Hypothesis 3:** There will be a significant causal account x time interaction such that the causal account will lessen the polarization of fairness perceptions and other attitudes.

**Hypothesis 4:** There will be a significant ideological account x time interaction such that the ideological account will lessen the polarization of fairness perceptions and other attitudes.
CHAPTER V

Method

Participants

Data were collected from 128 undergraduate psychology students. The experimental sample was 69% females and 31% males with a mean age of 23 years. Sixty-five percent of the participants were freshmen or sophomores, while 21% were juniors, 10% were seniors, and 4% did not report class level. Finally, the median GPA of the participants was between 2.6 and 3.0 on a 4-point scale. The participants received extra credit for participating in the experiment. Thirty-two participants were randomly assigned to each cell of the four treatment conditions.

Design

The experimental design is a 2 x 2 x 2 mixed design. The independent variables include the time of measurement (prediscussion and postdiscussion), the presence or absence of a causal account, and the presence or absence of an ideological account. Dependent variables include participants' fairness perceptions about the policy, acceptance of the policy, commitment to the institution, fairness perceptions of the institution, and trust in the institution.

Measures

The pre and post discussion questionnaires contained a number of 7-point rating scales on perceptions of fairness of the policy, acceptance of the policy, commitment to
the institution, fairness perceptions of the institution, and trust of the institution (see Appendix A for complete questionnaire).

Procedure

The participants were told that they are participating in a discussion group to discern how individuals form attitudes and perceptions about policies of organizations.

Participants were scheduled in groups of five to ensure enough participants, but discussion groups consisted of four participants. When all five participants showed up at the scheduled time, the randomly selected fifth participant was allowed to leave before the commencement of the experiment. Upon arriving, participants signed a voluntary consent form (see Appendix B). Each group was then given a written summary of the policy change the University was considering and how this change would be implemented.

The policy change used in this study was the implementation of a senior thesis as a new graduation requirement for all seniors (see Appendix C for policy components). This policy change was designed to be relevant to students in order to elicit realistic perceptions and attitudes. Furthermore, the policy was designed to be perceived by students as somewhat negative (another requirement to be completed before graduation is possible). Pilot testing was performed using 41 undergraduate students prior to the main study to ensure the policy was not perceived by students to be too extreme. A policy perceived to be too extreme would polarize initial perceptions and attitudes and leave little room for the effects of social accounts or further polarization after group discussion. All participants received a copy of the policy change and a questionnaire similar to the one
used in the main study. Furthermore, participants were randomly assigned to three experimental conditions such that each participant either received a causal account, ideological account, or no account. Results from the analyses of these data revealed reactions to the policy to be neutral. As a result of these findings, several policy requirements were made a more stringent in an attempt to make the policy be perceived a bit more negatively.

In addition to the summary of the policy change under consideration, participants received: (a) a written causal account giving mitigating circumstances for why the policy change is necessary (see Appendix C), (b) a written ideological account reframing the change in terms of the benefits of the policy for students (see Appendix D), (c) both the written causal and ideological accounts, (d) neither a causal nor an ideological account. Participants were randomly assigned to these four treatment conditions (see Appendix D for accounts).

After participants had time to read the written material, the experimenter distributed the first questionnaire to measure fairness perceptions and other attitudes.

After approximately five minutes, the experimenter instructed the participants to discuss the policy change and implementation procedures for 15 minutes. The experimenter directed participants to share the reasons for these opinions. The experimenter left the room to allow the participants to discuss freely.
After the 15 minutes had passed, the experimenter re-entered the room and distributed the second questionnaire to measure perceptions of the different fairness dimensions. The questionnaires were then be collected.

Participants were then interviewed in an attempt to assess any suspicions about the experimental procedure. Finally, participants were fully debriefed about the purpose of the study.
CHAPTER VI

Results

The present study examined the effects of using different types of social accounts following a policy change to control the polarization of five critical policy-related and organizational perceptions and attitudes. Policy-related dependent variables included the fairness of the policy change and the acceptance of the policy change. Organizational dependent variables included the commitment to the University, the fairness of the University, and the trust of the University.

Results of the investigation are reviewed in the following sections. This review begins with the analysis of the manipulation checks and is followed by an analysis of the experimental hypotheses for each dependent variable. Next, a re-analysis of the dependent variables while partialing out group effects is reported. Finally, results are reported for the content coding of an open-ended question on the prediscussion questionnaire.

Manipulation Checks

To assess the manipulations of the two different social accounts used in this study, one item for each account was included in the questionnaire given to participants before the group discussion (see Attitude Questionnaire in Appendix A). A two-way analysis of variance (ANOVA) test was used to analyze the manipulation checks. The results for these two analyses are discussed in the following sections.

Causal account. The effectiveness of the causal account manipulation was measured using one item on the prediscussion questionnaire. Question 11 asked
participants "To what extent does the University have a choice in deciding whether or not to adopt this new graduation requirement?" The role of a causal account is to alleviate the decision maker from any blame for a decision because of mitigating circumstances. In this study, the causal account explains that the University is being forced to adopt this policy change by a threat from the Federal Government to reduce funding support. Essentially this item measured the extent to which the participant felt the University was being forced to implement this policy change due to forces beyond the University’s control.

A two-way analysis of variance (ANOVA) test was performed using Question 11 as the dependent variable and account type (causal vs. ideological) as the independent variables. Effect size estimates using the Omega² statistic (ω²) are also included for each effect reported. This statistic reflects the proportional amount of the total variance accounted for by each effect, and can be used to evaluate the meaningfulness of a significant effect (Keppel, 1991). Table 1 presents the condition means and ANOVA table for this analysis.

As predicted, the analysis revealed a significant main effect for causal account (see Table 1). The main effect for ideological account was not significant. Finally, the interaction between causal account and ideological account was also not significant. The pattern of these results suggests the causal account manipulation was effective. Participants who received the causal account correctly recognized that the University does not have much choice regarding the adoption of the policy change.
Table 1

Mean Responses and ANOVA Table for Causal Account Manipulation Check (Q11)

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<td></td>
<td>Present</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>4.50</td>
<td>5.28</td>
<td>4.89</td>
</tr>
<tr>
<td>Absent</td>
<td>4.72</td>
<td>5.50</td>
<td>5.11</td>
</tr>
</tbody>
</table>

4.11 5.39

Note. Scale is 1 to 7 where 1 is low choice and 7 is high choice.

ANOVA Table

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
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<th>ω²</th>
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<td>.0049</td>
<td>.054</td>
</tr>
<tr>
<td>Ideological Account (I)</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x I</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. Error df=124
Ideological account. The effectiveness of the ideological account was measured using one item on the pre-discussion questionnaire. Question 12 asked participants “To what extent will this new policy benefit you in the long run?” The role of the ideological account is to reframe the unfair decision to make it appear more legitimate or reasonable to recipients. In this study, the ideological account used attempts to appeal to the participant’s concern for future employment by pointing out the value of the policy change for enhancing the competitive edge of the participant in future career advancement. Essentially this item measured the extent to which the participant felt the University was making this decision due to a concern for the future of students.

Again, a two-way analysis of variance (ANOVA) was performed using Question 12 as the dependent variable and account type (causal vs. ideological) as the independent variables. Table 2 presents the condition means and ANOVA table for this analysis.

As predicted, the analysis revealed a significant main effect for ideological account. The analysis also revealed an unexpected main effect for causal account. Finally, the interaction between causal account and ideological account was not significant. The pattern of these results suggests the ideological account manipulation was effective. Participants who received the ideological account perceived future benefits of the policy change. However, the unexpected main effect for causal account suggests participants receiving the causal account also perceived future benefits of the policy change. This unexpected result is due to the combination of the content of the causal account and the wording of Item 12 on the questionnaire. The causal account does make reference to a
Table 2

Mean Responses and ANOVA Table for Ideological Account Manipulation Check (Q12)

<table>
<thead>
<tr>
<th>Ideological Account</th>
<th>Causal Account</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present</td>
<td>Absent</td>
<td>4.63</td>
<td>5.22</td>
</tr>
<tr>
<td>Present</td>
<td>4.63</td>
<td>5.22</td>
<td>4.93</td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>4.63</td>
<td>3.53</td>
<td>4.08</td>
<td></td>
</tr>
</tbody>
</table>

Note. Scale is 1 to 7 where 1 is low perceived benefit and 7 is high perceived benefit.

ANOVA Table

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>(\omega^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal Account (C)</td>
<td>5.89</td>
<td>1</td>
<td>.0167</td>
<td>.035</td>
</tr>
<tr>
<td>Ideological Account (I)</td>
<td>6.83</td>
<td>1</td>
<td>.0101</td>
<td>.042</td>
</tr>
<tr>
<td>C x I</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. Error df=124
concern for the competitiveness of students graduating from public universities, and thus, the policy change appears to have been seen as having potential long run benefits.

Overall, the manipulations used in this study appear to have produced the intended effects on the perceptions concerning the reasons for the policy change. The causal account analysis confirmed that participants perceived the University to have little choice regarding the policy change. The ideological account analysis confirmed that participants perceived the future benefits of the policy change when an ideological account was given, although this manipulation is not entirely independent of the causal account manipulation as participants receiving a causal account also perceived future benefits of the policy change.

**Scale Formation**

Participants completed two questionnaires during the current study. The first questionnaire was completed upon reading about the policy change, but before the start of the group discussion. The second questionnaire was given immediately following the group discussion. Each questionnaire contained the same items designed to measure the five dependent variables of interest. Each dependent variable was measured using two items on both the pre-discussion and post-discussion questionnaires. Throughout the following analyses used for evaluating the experimental hypotheses, the two responses to the items measuring each dependent variable were averaged together to form a scale. Internal reliability of these scales at Time 1 and Time 2 was evaluated using Cronbach’s Alpha, and is presented in Table 3. Cronbach’s Alpha is high when the items of a scale are
Table 3

Cronbach’s Alphas for Dependent Variable Scales at Time 1 and Time 2

<table>
<thead>
<tr>
<th>Dependent Measure</th>
<th>Questions</th>
<th>$\alpha_{\text{Time 1}}$</th>
<th>$\alpha_{\text{Time 2}}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairness of the policy change</td>
<td>Question 1 and Question 6</td>
<td>.83</td>
<td>.93</td>
</tr>
<tr>
<td>Acceptance of the policy change</td>
<td>Question 2 and Question 7</td>
<td>.95</td>
<td>.92</td>
</tr>
<tr>
<td>Commitment to the University</td>
<td>Question 3 and Question 8</td>
<td>.79</td>
<td>.71</td>
</tr>
<tr>
<td>Fairness of the University</td>
<td>Question 4 and Question 9</td>
<td>.69</td>
<td>.85</td>
</tr>
<tr>
<td>Trust of the University</td>
<td>Question 5 and Question 10</td>
<td>.88</td>
<td>.91</td>
</tr>
</tbody>
</table>
highly correlated with one another. According to Nunnally (1994), a Cronbach Alpha of .70 or greater is considered sufficient level of internal consistency for group data that is concerned with mean differences among experimental treatments. All pairs of items were found to be at or above this alpha level, and were therefore added together to create a scale measuring each dependent variable.

**Dependent Variables**

The hypotheses of this study proposed that the use of different types of accounts for a policy change would affect participants’ perceptions after group discussion on several crucial policy-related and organizational variables. Perceptions specifically regarding the policy change were evaluated by measuring the perceived fairness of the policy change and the acceptance of the policy change. Perceptions regarding the University in general were evaluated by measuring the perceived fairness of the University, commitment to the University, and trust of the University.

**Perceived fairness of the policy change.** Perceptions of the fairness of the policy change were measured by Question 1 “How fair is this policy?” and Question 6 “How unfair is the new graduation requirement?” on both of the questionnaires.

A repeated measures analysis of variance (ANOVA) was conducted to test the effects of the two types of accounts on perceptions of fairness regarding the policy change after group discussion. The ANOVA table for this analysis is presented in Table 4.

Hypothesis 1 predicted a main effect for causal account such that fairness perceptions about the policy change would be less negative when a causal account was
Table 4

**Mean Responses and ANOVA Table for Fairness of Policy Change (O1 and O6)**

<table>
<thead>
<tr>
<th>Ideological Account</th>
<th>Causal Account</th>
<th>Time 1</th>
<th>Causal Account</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>Absent</td>
<td></td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Present</td>
<td>4.20</td>
<td>3.69</td>
<td>3.34</td>
<td>3.27</td>
</tr>
<tr>
<td>Absent</td>
<td>4.34</td>
<td>3.36</td>
<td>3.67</td>
<td>2.89</td>
</tr>
</tbody>
</table>

*Note.* Scale is 1 to 7 where 1 is low fairness and 7 is high fairness.

**ANOVA Table**

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>$\omega^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal (C)</td>
<td>6.64</td>
<td>1</td>
<td>.0112</td>
<td>.034</td>
</tr>
<tr>
<td>Ideological (I)</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Time (T)</td>
<td>34.85</td>
<td>1</td>
<td>.0001</td>
<td>.041</td>
</tr>
<tr>
<td>C x I</td>
<td>1.64</td>
<td>1</td>
<td>.2031</td>
<td>--</td>
</tr>
<tr>
<td>C x T</td>
<td>2.44</td>
<td>1</td>
<td>.1209</td>
<td>--</td>
</tr>
<tr>
<td>I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

*Note.* Error df=124
provided. Results from this analysis revealed a significant main effect for causal account. Participants who received a causal account ($M = 3.89$) perceived the policy to be significantly more fair than participants who did not receive a causal account ($M = 3.30$). Thus, Hypothesis 1 was supported.

Hypothesis 2 predicted a main effect for ideological account such that fairness perceptions regarding the policy change would be less negative when an ideological account was given. Results from the analysis revealed that the main effect for ideological account was not significant. Participants receiving an ideological account ($M = 3.63$) did not perceive the policy change to be significantly more fair than participants who did not receive an ideological account ($M = 3.57$). Thus, Hypothesis 2 was not supported.

Hypothesis 3 predicted a significant causal account x time interaction such that the causal account would lessen the polarization of fairness perceptions of the policy change. Results from the analysis revealed that the interaction of causal account x time was not significant. Participants who received a causal account did not show less polarization of their perceptions of the fairness of the policy change ($M_1 = 4.27, M_2 = 3.51$) than participants who did not receive a causal account ($M_1 = 3.53, M_2 = 3.08$). Thus, Hypothesis 3 was not supported.

Hypothesis 4 predicted a significant ideological account x time interaction such that the ideological account would lessen the polarization of fairness perceptions of the policy change. Results from the analysis revealed that the interaction of ideological account x time was not significant. Participants who received an ideological account did
not show less polarization of their perceptions of the fairness of the policy change ($M_1 = 3.95$, $M_2 = 3.31$) than participants who did not receive an ideological account ($M_1 = 3.85$, $M_2 = 3.28$). Thus, Hypothesis 4 was not supported.

A significant main effect for time was also found. Perceptions of fairness of the policy change decrease from Time 1 ($M = 3.90$) to Time 2 ($M = 3.29$). This effect was not addressed explicitly by the hypotheses of this study, however, this effect confirms the group polarization phenomenon assumed to occur in several of the experimental hypotheses.

**Acceptance of the policy change.** Acceptance of the policy change was measured by Question 2 “I believe that UNO should adopt this policy.” and Question 7 “I support this new policy.” on both of the questionnaires.

A repeated measures analysis of variance (ANOVA) was conducted to test the effects of the two types of accounts on acceptance of the policy change after group discussion. The ANOVA table for this analysis is presented in Table 5.

Hypothesis 1 predicted a main effect for causal account such that acceptance of the policy change would be higher when a causal account was provided. Results from this analysis revealed a significant main effect for causal account. Acceptance of the policy change for participants who received a causal account ($M = 3.73$) was significantly higher than for participants who did not receive a causal account ($M = 3.05$). Thus, Hypothesis 1 was supported.
Table 5

Mean Responses and ANOVA Table for Acceptance of Policy Change (Q2 and Q7)

<table>
<thead>
<tr>
<th>Ideological Account</th>
<th>Time 1</th>
<th></th>
<th>Time 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Causal Account</td>
<td>Absent</td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Present</td>
<td>4.11</td>
<td>3.33</td>
<td>3.41</td>
<td>3.05</td>
</tr>
<tr>
<td>Absent</td>
<td>4.11</td>
<td>3.05</td>
<td>3.27</td>
<td>2.78</td>
</tr>
</tbody>
</table>

Note. Scale is 1 to 7 where 1 is low acceptance and 7 is high acceptance.

ANOVA Table

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>ω²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal (C)</td>
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<td>1</td>
<td>.0094</td>
<td>.037</td>
</tr>
<tr>
<td>Ideological (I)</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Time (T)</td>
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<td>.0001</td>
<td>.025</td>
</tr>
<tr>
<td>C x I</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x T</td>
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<td>1</td>
<td>.0266</td>
<td>.005</td>
</tr>
<tr>
<td>I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. Error df=124
Hypothesis 2 predicted a main effect for ideological account such that acceptance of the policy change would be higher when an ideological account was given. Results from the analysis revealed that the main effect for ideological account was not significant. Acceptance of the policy change for participants receiving an ideological account ($M = 3.48$) was not higher than for participants who did not receive an ideological account ($M = 3.57$). Thus, Hypothesis 2 was not supported.

Hypothesis 3 predicted a significant causal account x time interaction such that the causal account would lessen the polarization of acceptance of the policy change. Results from the analysis revealed that the interaction of causal account x time was significant. However, this significant interaction was in the opposite direction from the experimental hypothesis. Although participants receiving a causal account were more accepting of the policy change, they also showed greater polarization of their acceptance of the policy ($M_1 = 4.11$, $M_2 = 3.34$) than those participants who did not receive a causal account ($M_1 = 3.19$, $M_2 = 2.92$). Thus, Hypothesis 3 was not supported. The nature of this interaction is presented in Figure 1. This finding may be due to the fact that since those participants who did not receive a causal account were already significantly more negative in their acceptance of the policy change, a floor effect might have been operating such that acceptance could not get significantly more negative. Another explanation concerns the lack of independence of observations collected at Time 2. This explanation is discussed in a later section.
Figure 1. Causal Account x Time Interaction

Acceptance of the Policy

Time 1  Time 2

Causal Account Present
Causal Account Absent
Hypothesis 4 predicted a significant ideological account x time interaction such that the ideological account would lessen the polarization of acceptance of the policy change. Results from the analysis revealed that the interaction of ideological account x time was not significant. Participants who received an ideological account did not show less polarization of their acceptance of the policy change ($M_1 = 3.72$, $M_2 = 3.23$) than participants who did not receive an ideological account ($M_1 = 3.58$, $M_2 = 3.03$). Thus, Hypothesis 4 was not supported.

A significant main effect for time was also found. Acceptance of the policy change decreases from Time 1 ($M = 3.65$) to Time 2 ($M = 3.13$). As discussed above, this effect confirms the group polarization phenomenon.

Commitment to the University. Commitment to the University was measured by Question 3 “If this policy were adopted, how committed would you be to completing your education at UNO?” and Question 8 “If this policy were adopted, and my circumstances permitted it, I would consider transferring to another school.” on both of the questionnaires.

A repeated measures analysis of variance (ANOVA) was conducted to test the effects of the two types of accounts on commitment to the University after group discussion. The ANOVA table for this analysis is presented in Table 6.

Hypothesis 1 predicted a main effect for causal account such that commitment to the University would be greater when a causal account was provided. Results from this analysis revealed a significant main effect for causal account. Participants who received a
Table 6

Mean Responses and ANOVA Table for Commitment to University (Q3 and Q8)

<table>
<thead>
<tr>
<th>Ideological Account</th>
<th>Causal Account</th>
<th>Causal Account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>4.70</td>
<td>4.66</td>
</tr>
<tr>
<td>Absent</td>
<td>4.98</td>
<td>4.59</td>
</tr>
<tr>
<td>Present</td>
<td>4.39</td>
<td>4.11</td>
</tr>
<tr>
<td>Absent</td>
<td>3.95</td>
<td>4.02</td>
</tr>
</tbody>
</table>

Note. Scale is 1 to 7 where 1 is low commitment and 7 is high commitment.

ANOVA Table

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<tr>
<th>Source</th>
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<th>df</th>
<th>p</th>
<th>ω²</th>
</tr>
</thead>
<tbody>
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<td>.038</td>
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<td>Ideological (I)</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Time (T)</td>
<td>3.80</td>
<td>1</td>
<td>.0535</td>
<td>--</td>
</tr>
<tr>
<td>C x I</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>I x T</td>
<td>3.47</td>
<td>1</td>
<td>.0649</td>
<td>--</td>
</tr>
<tr>
<td>C x I x T</td>
<td>4.17</td>
<td>1</td>
<td>.0432</td>
<td>.002</td>
</tr>
</tbody>
</table>

Note. Error df=124
causal account \((M = 4.73)\) were significantly more committed to the University than participants who did not receive a causal account \((M = 4.12)\). Thus, Hypothesis 1 was supported.

Hypothesis 2 predicted a main effect for ideological account such that commitment to the University would be greater when an ideological account was given. Results from the analysis revealed that the main effect for ideological account was not significant. Participants receiving an ideological account \((M = 4.47)\) were not significantly more committed to the University than participants who did not receive an ideological account \((M = 4.39)\). Thus, Hypothesis 2 was not supported.

Hypothesis 3 predicted a significant causal account x time interaction such that the causal account would lessen polarization of commitment to the University. Results from the analysis revealed that the interaction of causal account x time was not significant. Participants who received a causal account did not show less polarization of their commitment to the University \((M_1 = 4.84, M_2 = 4.63)\) than participants who did not receive a causal account \((M_1 = 4.17, M_2 = 4.31)\). Thus, Hypothesis 3 was not supported.

Hypothesis 4 predicted a significant ideological account x time interaction such that the ideological account would lessen the polarization of commitment to the University. Results from the analysis revealed that the interaction of ideological account x time was not significant. Participants who received an ideological account did not show less polarization of their commitment to the University \((M_1 = 4.55, M_2 = 4.39)\) than
participants who did not receive an ideological account ($M_1 = 4.47$, $M_2 = 4.31$). Thus, Hypothesis 4 was not supported.

Finally, the main effect for time was not significant for commitment to the University, although it approached significance. Commitment to the University was not significantly higher at Time 1 ($M = 4.13$) than at Time 2 ($M = 3.99$). However, one explanation for this lack of polarization might come from the unexpected result of a significant three-way causal account x ideological account x time interaction. The nature of this interaction is presented in Figure 2. Interpretation of this interaction is not meaningful, however, due to the fact that the interaction accounts for less than one percent of the variance in commitment to the University.

Perceived fairness of the University. Perceived fairness of the University was measured by Question 4 "How unfairly do you think UNO treats students?" and Question 9 "In general, how fair are UNO’s policies?" on both of the questionnaires. A repeated measures analysis of variance (ANOVA) was conducted to test the effects of the two types of accounts on perceptions of fairness of the University after group discussion. The ANOVA table for this analysis is presented in Table 7.

Hypothesis 1 predicted a main effect for causal account such that perceptions of the fairness of the University would be higher when a causal account was provided. Results from this analysis revealed that the main effect for causal account was not significant. Perceptions of fairness of the University for participants who received a causal
Figure 2. Commitment to the University Condition Means

Commitment

Causal Account
Ideological Account
Both Accounts
No Account

Time

Time 1
Time 2
### Table 7

**Mean Responses and ANOVA Table for Fairness of University (Q4 and Q9)**

<table>
<thead>
<tr>
<th>Ideological Account</th>
<th>Causal Account</th>
<th></th>
<th></th>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present</td>
<td>Absent</td>
<td>Present</td>
<td>Absent</td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Present</td>
<td>5.02</td>
<td>4.77</td>
<td>4.45</td>
<td>4.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>5.14</td>
<td>4.90</td>
<td>4.42</td>
<td>4.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Scale is 1 to 7 where 1 is low fairness and 7 is high fairness.

### ANOVA Table

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>$\omega^2$</th>
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</thead>
<tbody>
<tr>
<td>Causal (C)</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ideological (I)</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Time (T)</td>
<td>33.98</td>
<td>1</td>
<td>.0001</td>
<td>.039</td>
</tr>
<tr>
<td>C x I</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x T</td>
<td>3.78</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

*Note.* Error df=124
account \((M = 4.76)\) were not significantly higher than for participants who did not receive a causal account \((M = 4.66)\). Thus, Hypothesis 1 was not supported.

Hypothesis 2 predicted a main effect for ideological account such that perceptions of the fairness of the University would be higher when an ideological account was given. Results from the analysis revealed that the main effect for ideological account was not significant. Perceptions of the fairness of the University for participants receiving an ideological account \((M = 4.66)\) were not higher than for participants who did not receive an ideological account \((M = 4.76)\). Thus, Hypothesis 2 was not supported.

Hypothesis 3 predicted a significant causal account x time interaction such that the causal account would lessen the polarization of fairness perceptions of the University. Results from the analysis revealed that the interaction of causal account x time was not significant. Participants who received a causal account did not show less polarization of their perceptions of the fairness of the University \((M_1 = 5.08, M_2 = 4.34)\) than participants who did not receive a causal account \((M_1 = 4.84, M_2 = 4.52)\). Thus, Hypothesis 3 was not supported.

Hypothesis 4 predicted a significant ideological account x time interaction such that the ideological account would lessen the polarization of fairness perceptions of the University. Results from the analysis revealed that the interaction of ideological account x time was not significant. Participants who received an ideological account did not show less polarization of their perceptions of the fairness of the University \((M_1 = 4.90, M_2 = 4.80)\).
4.42) than participants who did not receive an ideological account (M₁ = 5.02, M₂ = 4.53). Thus, Hypothesis 4 was not supported.

A significant main effect for time was also found. Perceptions of fairness of the University decrease from Time 1 (M₁ = 4.96) to Time 2 (M₂ = 4.48). Again, this effect confirms the group polarization phenomenon.

Trust of the University. Trust of the University was measured by Question 5 “In general, how much do you trust UNO to consider student needs when making policy decisions?” and Question 10 “When making policies, how concerned is UNO about students’ needs?” on both of the questionnaires.

A repeated measures analysis of variance (ANOVA) was conducted to test the effects of the two types of accounts on trust of the University after group discussion. The ANOVA table for this analysis is presented in Table 8.

Hypothesis 1 predicted a main effect for causal account such that trust of the University would be higher when a causal account was provided. Results from this analysis revealed that the main effect for causal account was not significant. Trust for the University was not significantly higher for participants who received a causal account (M = 4.32) than for participants who did not receive a causal account (M = 4.06). Thus, Hypothesis 1 was not supported.

Hypothesis 2 predicted a main effect for ideological account such that trust of the University would be higher when an ideological account was given. Results from the analysis revealed that the main effect for ideological account was not significant. Trust for
Table 8

Mean Responses and ANOVA Table for Trust of University (Q5 and Q10)

<table>
<thead>
<tr>
<th></th>
<th>Ideological Account</th>
<th>Causal Account</th>
<th>Causal Account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present</td>
<td>Absent</td>
<td>Present</td>
</tr>
<tr>
<td>Absent</td>
<td>4.47</td>
<td>4.47</td>
<td>4.19</td>
</tr>
</tbody>
</table>

Note. Scale is 1 to 7 where 1 is low trust and 7 is high trust.

ANOVA Table

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
<th>P</th>
<th>$\omega^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal (C)</td>
<td>1.24</td>
<td>1</td>
<td>.2672</td>
<td>--</td>
</tr>
<tr>
<td>Ideological (I)</td>
<td>1.74</td>
<td>1</td>
<td>.1892</td>
<td>--</td>
</tr>
<tr>
<td>Time (T)</td>
<td>13.42</td>
<td>1</td>
<td>.0004</td>
<td>.009</td>
</tr>
<tr>
<td>C x I</td>
<td>1.48</td>
<td>1</td>
<td>.2257</td>
<td>--</td>
</tr>
<tr>
<td>C x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x I x T</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. Error df=124
the University was not higher for participants receiving an ideological account \( (M = 4.04) \) than for participants who did not receive an ideological account \( (M = 4.34) \). Thus, Hypothesis 2 was not supported.

Hypothesis 3 predicted a significant causal account \( \times \) time interaction such that the causal account would lessen the polarization of trust for the University. Results from the analysis revealed that the interaction of causal account \( \times \) time was not significant. Participants who received a causal account did not show less polarization of their trust of the University \( (M_1 = 4.47, M_2 = 4.17) \) than participants who did not receive a causal account \( (M_1 = 4.20, M_2 = 3.93) \). Thus, Hypothesis 3 was not supported.

Hypothesis 4 predicted a significant ideological account \( \times \) time interaction such that the ideological account would lessen the polarization of trust for the University. Results from the analysis revealed that the interaction of ideological account \( \times \) time was not significant. At Time 2, participants who received an ideological account did not show less polarization of their trust of the University \( (M_1 = 4.20, M_2 = 3.89) \) than participants who did not receive an ideological account \( (M_1 = 4.47, M_2 = 4.21) \). Thus, Hypothesis 4 was not supported.

A significant main effect for time was also found. Trust of the University decreases from Time 1 \( (M = 4.33) \) to Time 2 \( (M = 4.05) \). The group polarization phenomenon was again demonstrated.
Analysis of the Influence of Group at Time 2

One of the assumptions of ANOVA is that any given observation should not be dependent on any other observation in any other cell. This assumption was not strictly met in the above analyses. At Time 1 independence of observations is achieved. At Time 2, however, there is an interdependence among those observations collected from members of the same group due to the group discussion that took place before these observations were collected. To examine the effects of group membership on the above experimental findings, a second set of analyses were performed that partialed out the effect of group membership from the Time 2 observations.

To perform this second set of analyses, a new variable GROUP was created with 32 levels to represent the 32 different groups. A one-way analysis of variance (ANOVA) was then computed for each of the five dependent variables using this new variable GROUP as the independent variable to determine if there were significant differences in responses among groups. From this series of ANOVAs, those dependent variables that showed a significant effect for GROUP were then re-analyzed using the 2x2x2 repeated measures ANOVA test with GROUP partialed out of the Time 2 observations. The dependent variables that showed a significant effect for GROUP were fairness of the policy change ($F(31, 96) = 2.20, p < .002, \omega^2 = .398$), acceptance of the policy change ($F(31, 96) = 1.92, p < .09, \omega^2 = .373$), and trust of the University ($F(31, 96) = 2.26, p < .001, \omega^2 = .413$). The other two dependent variables, commitment to the University ($F(31, 96) = 1.50, p < .0713$), and fairness of the University ($F(31, 96) = 1.51, p < .067$) did
not show significant effects for GROUP. Thus, fairness of the policy change, acceptance of the policy change, and trust of the University were re-analyzed, partialing out the GROUP effect on the Time 2 observations to examine if the pattern of findings changed at all.

The pattern of effects for the fairness of the policy change did not change when the effects of GROUP were partialed out of the Time 2 observations. As before (Table 4), significant effects for causal account ($F(1, 124) = 13.38, p < .0004, \omega^2 = .051$), and time ($F(1, 124) = 22.34, p < .0001, \omega^2 = .056$), were found.

A change in the pattern of effects for acceptance of the policy change was found. As before (Table 5), significant effects for causal account ($F(1, 124) = 12.69, p < .0005, \omega^2 = .055$), and time ($F(1, 124) = 15.484, p < .0001, \omega^2 = .034$), were found. However, the results for this second analysis showed the causal account x time interaction to be nonsignificant ($F(1, 124) = 3.53, \text{ns}$). The explanation for this change in the pattern of findings, specifically, the elimination of the causal account x time interaction is related to the discussion above concerning why the direction of the interaction was opposite from the direction hypothesized. Apparently, certain groups became much more negative in their acceptance of the policy change than other groups. This difference between groups may have been due the nature of the discussion. A more thorough or heated discussion may have taken place for those groups that became more negative in their attitude.

However, because the discussions were not recorded or monitored in any way in order to
encourage participants to share their opinions and feelings freely with other members of their groups, this explanation is purely speculation.

The pattern of effects for trust of the University did not change when the effects of GROUP were partialed out. As before (Table 8), a significant main effect for time (F (1, 124) = 6.91, p < .01, $\omega^2 = .013$), was found.

Content Coding of the Open-ended Question

The pre-discussion questionnaire contained several open-ended questions (see Attitude Questionnaire in Appendix A). Question 13 asked participants “Please indicate any comments you have regarding this policy and its implementation at UNO.” This question was included in the questionnaire as an additional assessment of participants’ reactions to the policy change; responses to this question were content coded for further analysis. Question 14 asked participants “Please indicate any comments you have about this questionnaire (clarity, purpose, etc.).” This question was included solely for the purpose of feedback, and responses from this question were not analyzed.

Question 13 was coded using the following method. Several rating questions were developed by the researcher after reviewing all the written responses of participants to Question 13 (see Coding Questionnaire in Appendix F). Essentially, ratings were collected using two dichotomously scored items to determine if participants referred to the causal account and/or the ideological account, respectively, when answering this question. Furthermore, a third item was used to assess the overall rating of acceptance of the policy change using a 5-point rating scale.
Two raters were used to code the content of Question 13. Both raters were blind to the experimental conditions and hypotheses. Each rater was provided with a set of rating sheets, a copy of the policy change, a copy of the causal account and ideological account, and a set of instructions that defined the content coding questions and scale anchors (see Instructions Given to Content Coders in Appendix G). Furthermore, each rater was given a separate set of responses arranged in random order that was independent of the experimental conditions. A total of 121 responses were coded. Seven participants were not included in the analysis because these participants did not provide a response to Question 13.

Several analyses were performed on the items of the Coding Questionnaire. The presence or absence of account content in participants' responses to Question 13 was assessed by Items 1 and 2. Item 1 addressed the presence or absence of the causal account content, and Item 2 addressed the presence or absence of the ideological account content. For both Item 1 and Item 2, the percentage of agreement between raters was assessed through cross-tabulation. For those cases where a disagreement occurred between the ratings of the two raters, the researcher, while blind to experimental condition, made the final rating decision. A chi-square ($\chi^2$) test of independence for a $2 \times 4$ frequency table was then performed on the final set of ratings for both Item 1 and Item 2 to assess the presence or absence of account content in participants' responses as a function of the four experimental conditions. For Item 3 on the Coding Questionnaire, the extent of agreement between raters was assessed using a Pearson correlation coefficient.
The ratings for Item 3 for each rater were then averaged and differences between responses as a function of experimental condition were assessed using a two-way analysis of variance (ANOVA).

**Item 1.** Item 1 on the Coding Questionnaire asked the raters to determine if the causal account was mentioned in each participant’s response to Question 13. A simple dichotomous response scale of “yes” or “no” was used. Table 9 presents the 2 x 4 frequency table for Item 1. A 72.73% agreement was found between the two raters for this item. While this percentage rate of agreement might not have been as high as hoped for, this result was not surprising considering the slight similarity of content of the causal account and ideological account. Both accounts refer to a competitive advantage of students with better writing skills, thus making coding the open-ended responses more difficult and subject to greater disagreement between raters than might have occurred had this overlap of account content not been present.

A significant overall chi-square was found for the 2 x 4 frequency table of Item 1, \( \chi^2 (3, N = 121) = 24.45, p < .001 \), indicating that the presence or absence of the causal account content in participants’ responses differed as a function of experimental condition. As a result of this significant result, the 2 x 4 frequency table used to calculate the overall chi-square was partitioned into three independent 2 x 2 subtables representing the experimental design effects. A chi-square test for independence was then performed for each of these 2 x 2 subtables. A significant chi-square was found for the subtable representing a main effect for causal account (\( \chi^2 (1, N = 121) = 12.24, p < .001 \)). The
Table 9

Frequency Table of Causal Account Ratings for Item 1

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>Causal Account</th>
<th>Ideological Account</th>
<th>Both Accounts</th>
<th>No Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>26</td>
<td>25</td>
<td>29</td>
</tr>
</tbody>
</table>
chi-square for the subtable representing a main effect for ideological account was not significant ($\chi^2 (1, N = 121) = 2.084, \text{ns}$). Finally, a significant chi-square was found for the subtable representing the interaction effect between causal account and ideological account ($\chi^2 (1, N = 121) = 9.412, p < .002$). These results confirm that participants referred to the content of the causal account more often when the causal account was present. Furthermore, the content of the causal account was mentioned significantly more only by participants in the causal account condition.

**Item 2.** Item 2 on the Coding Questionnaire asked the raters to determine if the ideological account was mentioned in each participant’s response to Question 13. A simple dichotomous response scale of “yes” or “no” was used. Table 10 presents the 2 x 4 frequency table for Item 2. An 80.16% agreement was found between the two raters for this item. Again, this percentage rate of agreement was not as high as hoped for, but was probably due to the overlap of account content as discussed in the above section.

A significant overall chi-square was found for the 2 x 4 frequency table of Item 2, $\chi^2 (3, N = 121) = 9.37, p < .025$, indicating that the presence or absence of the ideological account content in participants’ responses differed as a function of experimental condition. As a result of this significant result, the 2 x 4 frequency table used to calculate the overall chi-square was partitioned into three independent 2 x 2 subtables representing the experimental design effects. A chi-square test for independence was then performed for each of these 2 x 2 subtables. The chi-square for the subtable representing a main effect for causal account was not significant ($\chi^2 (1, N = 121) < 1, \text{ns}$). A significant chi-square
Table 10

Frequency Table of Ideological Account Ratings for Item 2

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>Causal Account</th>
<th>Ideological Account</th>
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<td>15</td>
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</tr>
<tr>
<td>No</td>
<td>21</td>
<td>15</td>
<td>16</td>
<td>24</td>
</tr>
</tbody>
</table>
for the subtable representing a main effect for ideological account was found ($\chi^2 (1, N = 121) = 8.93, p < .003$). Finally, the chi-square for the subtable representing the interaction effect between causal account and ideological account was not significant ($\chi^2 (1, N = 121) < 1, ns$). These results confirm that participants referred to the content of the ideological account more often when the ideological account was present.

**Item 3.** Item 3 on the Coding Questionnaire asked raters to assess the extent that participants accepted the policy change on a 5-point scale where a 1 was “strongly does not accept” and a 5 was “strongly accepts.” A correlation of $r (120) = .79, p < .0001$, was found between the two sets of ratings for this question. The two sets of ratings were then averaged and a two-way analysis of variance was performed on these averaged ratings to assess the differences in participants’ acceptance of the policy change as a function of experimental condition. The condition means and ANOVA table for this analysis is presented in Table 11. The results of this analysis showed no significant effects. The main effect for causal account was not significant ($F (3, 120) = 2.19, ns$), the main effect for ideological account was not significant ($F (3, 120) < 1, ns$), and the interaction between causal account and ideological account was not significant ($F (3, 120) < 1, ns$). Therefore, no conclusions concerning the differences in participants’ acceptance of the policy change as a function of experimental condition can be drawn.
Table 11

Mean Responses and ANOVA Table for Item 3

<table>
<thead>
<tr>
<th>Ideological Account</th>
<th>Causal Account</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>2.44</td>
<td>2.35</td>
<td>2.40</td>
</tr>
<tr>
<td>Absent</td>
<td>2.41</td>
<td>2.22</td>
<td>2.32</td>
</tr>
<tr>
<td></td>
<td>2.43</td>
<td>2.29</td>
<td></td>
</tr>
</tbody>
</table>

Note. Scale is 1 to 5 where 1 is strongly does not accept and 5 is strongly accepts.

ANOVA Table

<table>
<thead>
<tr>
<th>Source</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>$\omega^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal Account (C)</td>
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<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ideological Account (I)</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>C x I</td>
<td>&lt; 1</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. Error df=120
CHAPTER VII

Discussion

The current investigation combined several social psychological theories in an attempt to demonstrate how the use of social accounts after a change in organizational policy that produces negative outcomes for employees might reduce negative employee perceptions and attitudes about the policy change and the organization in general. Policy change is inevitable if organizations are going to stay competitive and healthy in today's rapidly changing global economy. Social Information Processing Theory (Salancik & Pfeffer, 1978) points to the importance of the social context in which attitude and perception formation takes place. Attitudes and perceptions about a policy change will be influenced by the information available to employees at the time these attitudes and perceptions are expressed. Anything that may make certain pieces of information more relevant or salient to employees will affect the attitudes and perceptions being expressed.

Group discussion among employees, a common occurrence in organizations after a major policy change, may be just such a process that makes certain pieces of information about the policy change more relevant and salient. According to group polarization theory (Myers & Lamm, 1976), group discussion will influence attitudes and perceptions about the policy change by shifting individual reactions in the direction of the average of the groups' prediscussion reactions. Thus, individual attitudes and perceptions about a policy change become polarized as the result of discussing the policy change with
other employees. In the case of a policy change with negative outcomes for employees, this polarization will be in the direction of even more negative attitudes and perceptions of individuals following discussion with co-workers.

Decision makers are faced with a dilemma concerning how to implement a policy change that results in negative outcomes for employees without creating many deeper and more diffuse effects on the organization through the polarization of attitudes and perceptions of employees after group discussion. Decision makers need a strategy that would lessen the shift of individual employee attitudes and perceptions after a policy change. The use of social accounts, as suggested by the procedural justice theoretical framework (Bies, 1987b), is a potential solution for this dilemma that faces decision makers forced to make tough policy changes. By providing a reason for a policy change, decision makers make certain pieces of information more relevant and salient to employees, thus influencing the social context surrounding group discussion and employee attitude and perception formation.

The aim of the present study was to look at the implications of the use of two different types of social accounts in order to lessen the polarization of reactions to a policy change that results in negative outcomes for employees. Specifically, the use of social accounts was hypothesized to lessen the degree of polarization of important policy-related and organizational attitudes and perceptions after a group discussion has taken place. The following discussion will review the results for the manipulation checks and dependent variables of the current study. An examination of the methodological concerns of the
present investigation follows this review. Finally, suggestions for future research are discussed.

**Manipulation Checks**

Participant perceptions about the two different types of accounts were assessed through the use of two items on the prediscussion questionnaire. Results from these manipulation checks revealed that the two different types of accounts affected different perceptions in participants. In the case of the causal account, while the analyses clearly showed that the manipulation worked, the perceptions of participants that resulted were not completely independent of those resulting from the ideological account. As was planned, participants receiving the causal account perceived the University as having less of a choice about the implementation of the policy change than participants receiving the ideological account. However, participants receiving the causal account also perceived a future benefit of the policy change similar to the future benefit perceived by participants receiving the ideological account. The reason for this spill-over of the perceptions of participants receiving the causal account is the content of the causal account itself. Early in the causal account, a reference is made to a concern about the competitiveness of students that do not have strong writing skills, perhaps implying that the policy change would improve writing skills and make students more competitive. This reference in the causal account to future benefits of the policy change for students was picked up by the ideological account manipulation check, thus making any further comparisons between the two different types of accounts more difficult.
Tests of Hypotheses

The current study used a 2x2x2 mixed design to investigate the effect of two different account types on five different policy-related and organizational attitudes and perceptions as expressed in the four experimental hypotheses. Specifically, the dependent variables of the study were fairness perceptions about the policy change, acceptance of the policy change, commitment to the University, fairness perceptions about the University, and trust for the University. For each dependent variable, the study hypothesized a main effect for causal account and ideological account, as well as, an interaction between causal account and time and ideological account and time.

Results showed strong support for the causal account main effect on fairness perceptions of the policy change, acceptance of the policy change, and commitment to the University. Furthermore, partialing out the effect of GROUP on Time 2 observations did not change these findings. The results of the current findings showing a causal account to have positive effects on procedural fairness perceptions support earlier studies investigating the use of social accounts (Bies & Shapiro, 1987; Bies, Shapiro, & Cummings, 1988). Furthermore, the findings of this study extend this earlier research to two other important dependent variables: acceptance of a decision and commitment to the organization.

The main effect for causal account was not supported for fairness perceptions of the University or trust of the University. A reason the effect of causal account for these the dependent variables was not found might be the nature of these dependent variables.
Specifically, perceptions of the fairness of the University and trust of the University are more global evaluations that may be dependent on many more factors other than the changing of a single organizational policy. Such global evaluations, when measured after a specific policy change like the one used in the current study, might not reflect negative perceptions and attitudes resulting from the policy change. Commitment to the University might also be argued to be a global attitude pertaining more to the University in general than to the policy, however, the nature of the items measuring commitment might explain the differences in the result for this variable. Specifically, the two items measuring commitment where hypothetical in nature, asking participants to only speculate about leaving the University due to this policy change. The hypothetical nature of these items may have allowed participants greater freedom to respond negatively than a more direct measure of commitment.

The main effect for ideological account was not supported for any of the dependent variables used in this study. The presence of an ideological account did not appear to positively influence any of the measured policy-related or organizational attitudes and perceptions. The results of the current study, therefore, were unable to show any added benefit of providing an ideological account after a decision has been made.

One reason an ideological account might not have any positive value might be due to the fact that any differences between types of social accounts are purely theoretical in nature. While important theoretical distinctions might be able to be made between a causal and ideological account, in reality the ideological account may be perceived as a
weaker causal account and defining an ideological account as a separate construct does nothing to further the study of accounts. When a policy change is made that creates negative outcomes, recipients of these outcomes may make attributions about the necessity of this change as the only option available to the decision maker. When an ideological account is provided, the recipient of the account might feel the decision maker has had a choice about which option to pursue and has chosen an option with negative outcomes. In the case of the causal account, outside forces are perceived as acting upon the decision maker, making the choice to implement the policy appear to be the only option.

A second reason for the lack of value provided by the ideological account might be that the strength of the particular ideological account used in this study might not have been sufficient to influence perceptions and attitudes of the participants. That is, the reasons provided in the ideological account, while being correctly perceived by participants, were not sufficient to counteract the negative outcomes resulting from the policy change. The benefits of the policy change were outlined by a number of statistics concerning future employment and success in the job market. Since the participants of this study were college students, such statistics might not represent information that is particularly relevant or immediate to these individuals. Furthermore, the use of an assortment of statistics to outline the benefits of the policy change might not have been the most effective format for reaching this group of participants. An ideological account that
emphasized even greater or more tangible future benefits in a more straightforward or different format might have been more effective.

Results for all five dependent variables did not support either hypothesis of an interaction between account and time. Neither the presence of a causal account nor an ideological account resulted in less polarization of participants' policy-related or organizational perceptions and attitudes. This failure is disappointing because the aim of the current investigation was to demonstrate the value of using social accounts to lessen the polarization of policy-related and organizational attitudes and perceptions. Finding an interaction of the nature hypothesized would have extended the potential uses of social accounts to situations where the negative polarization of employee attitudes and perceptions is possible after a policy change that results in negative outcomes for employees.

The significant interaction between causal account and time that was revealed for acceptance of the policy change showed the direction of this interaction to be opposite from the hypothesized direction. One reason for this result might be because a floor effect was operating for acceptance of the policy when no causal account was provided. That is, when participants did not receive a causal account, acceptance of the policy change was already about as negative as this attitude could be, thus making further polarization impossible. A second reason for this result might be due to group differences. When the effect of GROUP was partialled out of the Time 2 observations, this interaction was no longer significant. Certain groups might have been much more negative in their
acceptance of the policy change than other groups due to differences in the nature of the discussion between groups. For example, a more thorough or heated discussion may have been experienced by those groups showing more negative acceptance attitudes.

An unexpected result of the study was the significant three-way interaction found for commitment to the University. Essentially, the use of either account type alone was not sufficient to lessen polarization of this organizational attitude, however, presenting the two accounts together appears to have lessened polarization similar to the effect hypothesized. Further consideration of this effect is not meaningful due to the small percentage of variance accounted for by this interaction.

**Content Coding**

The responses to an open-ended item on the prediscussion questionnaire were analyzed to assess whether the responses differed in content as a function of experimental condition. Results showed that the content of participants’ responses did differ as a function of experimental condition. Specifically, the responses of participants in the causal account condition reflected the content of the causal account while the responses of participants in the ideological account condition reflected the content of the ideological account.

The responses to this questionnaire item were also coded for acceptance of the policy change to assess whether acceptance of the policy change differed as a function of experimental condition. No effects for experimental condition were found.
Methodological Concerns

Although support was found for the benefits of giving a causal account after a policy change, the lack of support for several of the experimental hypotheses points to the need to address a number of methodological concerns of this study.

First, the current study was a lab study. Lab studies, while giving the researcher a great deal of experimental control, limit similarity to the “real world.” The policy change used for the study was chosen specifically for the participant population. By choosing a policy change that would directly affect students, a higher degree of “believability” was hoped for in order to elicit realistic reactions from participants. However, concerns exist about the realism of the group discussion process used in this study to simulate co-worker discussions in real organizations. Most of the participants of each group had never met one another before entering the study. This lack of familiarity with each other might have limited discussion to an extent. Employees in an organization who work together on a daily basis would have a much greater familiarity with each other and feel much more comfortable sharing views and discussing differences of opinions about a policy change.

A second methodological concern of this study that has been referred to several time in the above sections is the account spill-over as evidenced by the results of the ideological account manipulation check and the lower rate of agreement between the raters used to content code the open-ended questionnaire item. Specifically, while the causal account was perceived as giving the University little choice about the implementation of the policy change as it was designed to do, this account was also
perceived as having future benefits for students similar to the ideological account. The greater strength of the causal account in lessening negative perceptions and attitudes for three dependent variables compared to the ideological account might have been due to the fact that participants perceived more reasons for the policy change in the content of the causal account. As evidenced by the one three-way interaction found in this study, the adequacy or number of reasons given by an account may increase the power the account has to lessen polarization of perceptions and attitudes.

A third methodological concern is the method of data collection used in this study. An attempt was made to utilize items from previous research on the pre and postdiscussion questionnaires. However, for several of the dependent variables, previously tested items were not available or adaptable. As discussed in an above section, several of the items might not have been assessing the measured dimensions in the same way as the other items. For example, the commitment items were speculative in nature, thus making the responses to these items different from responses to the other items. Furthermore, fairness of the University and trust of the University are more global evaluations that may not adequately reflect attitudes regarding a specific policy. Finally, the questionnaire used only included two items to assess each dimension. Due to the lack of research using many of the items included in this study, more items assessing each dimension should be included in any questionnaire used in future investigations.

Related to the above methodological concern is a concern about using questionnaires as the sole measurement method. As discussed above, the items included in
the questionnaire might not have been adequate in assessing the relevant dimensions of the current study. Furthermore, the use of a questionnaire assumes that all relevant dimensions are being measured. However, other relevant dimensions might exist that are not assessed by the questionnaires used in a study.

**Future Research**

The research question addressed by the current study is crucial to organizations, and the lack of significant results should not be taken as an indication that the polarization of perceptions and attitudes cannot be lessened. Instead, the important future directions for research as identified by the findings of the current investigation should be noted and pursued in order to provide decision makers with a solution to the dilemma of controlling negative attitudes and perceptions about the implementation a policy change with negative outcomes for employees.

One important point to note before discussing possible future directions for research is that an underlying assumption of the current investigation and any suggestions being made for future research is that controlling negative perceptions and attitudes of employees is a positive goal of organizational decision makers. At no point, however, is a value judgment being made concerning the morality of such control or manipulation. Circumstances may exist when the expression of negative perceptions and attitudes is necessary, either to increase chances of organizational survival or to allow employees freedom of expression. Any benefits of providing a social account after a policy change
must be weighed by decision makers in light of moral concerns about manipulation and control of individual perceptions and attitudes.

First of all, future research should focus on the adequacy of an account with regards to the intended purpose of the account and the audience receiving the account. Adequacy of an account may be defined in several different ways (e.g. number of arguments included, relevancy to recipient) and each definition may result in different degrees of effectiveness depending on the context surrounding the presentation of the account. In the current study, the causal account was adequate to decrease negative perceptions and attitudes about the policy change, however, it was not adequate enough to lessen the polarization of these perceptions and attitudes over time. As suggested by the findings of Bies, Shapiro, and Cummings (1988), all claims of mitigating circumstances might not be perceived as equally adequate. The adequacy of a causal account might need to be evaluated with reference to the goal the decision maker has for using the account. If the only goal of the decision maker is to lessen overall negative reactions, the account such as the causal account given in this study may be sufficient. However, if the goal of the decision maker is to combat polarization of reactions, the adequacy of the account given may have to be defined differently.

The audience receiving the account also needs to be taken into account when defining adequacy. For overall policy changes in an organization that affect large numbers of the organizations’ employees, a number of arguments might be a more effective definition of adequacy. As suggested by Sitkin and Bies (1993), by providing multiple
accounts or arguments the organization is able to address the many different perspectives and concerns of various individual and groups of employees throughout the organization. The unexpected three-way interaction found in this study points to the value of numerous arguments used in a social account in order to lessen polarization over time. How adequacy of a social account to be given after a policy change in order to lessen negative reactions to a policy change should be explored in future investigations.

A second direction for future research might be to examine other elements of fair procedures suggested by the procedural justice framework that might lessen polarization of reactions over time. For example, providing recipients with a chance to express their opinions and concerns, termed “voice” in the justice literature, might be an effective method of controlling discussion and speculation among employees about the policy change. Furthermore, how the policy change is communicated to the recipients might be important. Interpersonal elements of communication fall under the interactional justice research and include showing respect and giving someone due consideration (Tyler & Bies, 1990). By communicating a policy change with respect and understanding, the policy change might not be seen as such a threat and may be accepted more readily by recipients.

A third direction for future research is to design studies that attempt to delineate the differences between the different types of accounts addressed in the justice literature. So far research has focused on causal accounts only, leaving the definitions of the other types of accounts to be purely theoretical in nature. A point of interest would be to
determine if the theoretical differences between accounts can be perceived by participants, and if the different types of accounts are differentially effective for specific contexts.

A fourth suggestion for future research that might include a group discussion process similar to the current investigation is to include some type of assessment method that would directly record the group discussion. The content of these discussions could then be coded and relevant attitudes and perceptions not measured by questionnaires or other assessment methods could be identified. Furthermore, recording the group discussions would allow the researcher insight into the differences in depth and emotion of the group discussions. Such insights could be used to make valuable conclusions about the effects of the nature of a discussion on polarization of attitudes and perceptions.

Finally, an attempt at greater realism in the group discussion process should be made in any future research. For example, perhaps in the future an investigation similar to the current study could be performed in a lab setting with groups whose members are familiar with each other. Greater familiarity of group members with each other would better simulate discussion among co-workers and might allow for greater expression of opinions and attitudes toward a policy change. The use of social accounts after a policy change should also be investigated in the field. The use of a lab setting, while providing greater experimental control to the researcher, also eliminates much of the realism of the situation and may ignore important variables and processes operating in a real organization when a policy change is implemented. The trade-offs between experimental control and realism are well-known and should not be ignored, however, along with repeating the
current study in the lab after making the important methodological improvements suggested above, replication in a field setting may enhance understanding of the circumstances in which the use of social accounts may be beneficial to organizations after the implementation of a policy change.
References


Appendix A

Attitude Questionnaire

Subject #: 

INSTRUCTIONS:

Please read each question carefully and answer using the format provided. When you have finished filling out this questionnaire, please return it to the Investigator. At that time you will have an opportunity to discuss any concerns or unanswered questions you may have. Your answers will be confidential.

Thank you for your assistance!!

Carol McKnight
Graduate Student in Psychology
Please circle the number that best represents your response.

1. How fair is this new policy?

   1  2  3  4  5  6  7
   not at  all fair
   very fair

2. I believe that UNO should adopt this new policy.

   1  2  3  4  5  6  7
   strongly disagree
   strongly agree

3. If this policy were adopted, how committed would you be to completing your education at UNO?

   1  2  3  4  5  6  7
   not committed at all
   strongly committed

4. How unfairly do you think UNO treats students?

   1  2  3  4  5  6  7
   very unfairly
   very fairly

5. In general, how much do you trust UNO to consider student needs when making policy decisions?

   1  2  3  4  5  6  7
   very little
   very much
6. How unfair is the new graduation requirement?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unfair</td>
<td>very fair</td>
<td></td>
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</tbody>
</table>

7. I support this new policy.

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>strongly disagree</td>
<td>strongly agree</td>
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</table>

8. If this policy were adopted, and my circumstances permitted it, I would consider transferring to another school.

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly disagree</td>
<td>strongly agree</td>
<td></td>
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</tbody>
</table>

9. In general, how fair are UNO's policies?

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all fair</td>
<td>very fair</td>
<td></td>
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</tbody>
</table>

10. When making policies, how concerned is UNO about students' needs?

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<tr>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all concerned</td>
<td>very concerned</td>
<td></td>
<td></td>
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</tbody>
</table>
11. To what extent does the University have a choice in deciding whether or not to adopt this new graduation requirement?

1  2  3  4  5  6  7
very  a great
little  deal of
choice  choice

12. To what extent will this new policy benefit you in the long run?

1  2  3  4  5  6  7
very  very
little  much
13. Please indicate any comments you have regarding this policy and its implementation at UNO.

14. Please indicate any comments you have about this questionnaire (clarity, purpose, etc.).
Please fill out the following information. Thank you.

Sex: (Check one)

Male
Female

Age: (fill in years)

Year in school: (check one)

freshman
sophomore
junior
senior
nondegree

Major: (fill in)

Cumulative GPA: (check one)

0 - 1.0
1.1 - 1.5
1.6 - 2.0
2.1 - 2.5
2.6 - 3.0
3.1 - 3.5
3.6 - 4.0
Appendix B

Informed Consent Form

ADULT INFORMED CONSENT FORM
IRB # 233-94-EP

THE FORMATION OF ATTITUDES REGARDING ORGANIZATIONAL POLICIES DURING GROUP DISCUSSION

You are invited to participate in this research study. The following information is provided in order to help you make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask.

You are eligible to participate if you are an English-speaking, undergraduate student at UNO.

The purpose of this research is to study the formation of attitudes and perceptions about policies of organizations during group discussion.

You will be asked to read a policy concerning graduation requirements at UNO. You will also be asked to participate in a 15 minute group discussion about this policy, and to fill out two questionnaires. Approximately 30 minutes of your time will be required.

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

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

Your rights as a research participant have been explained to you. If you have any additional questions concerning your rights, you may contact the University of Nebraska 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 INVESTIGATORS

PRINCIPAL INVESTIGATOR

   Carol E. McKnight               Off:  554-2331

SECONDARY INVESTIGATOR

   Wayne Harrison, Ph.D.            Off:  554-2452
Appendix C

Policy Change Outline

Senior Thesis Requirements for Graduation from
the University of Nebraska at Omaha

1. The completion of 90 credit hours before beginning work on the senior thesis requirement.

2. A written 40-page research paper/proposal/study in the area of the student's major. The actual format of the written document will be determined by each department. However, a strict English grammar requirement of no more than one (1) error per 100 words will apply to all senior theses.

3. The supervision of one faculty member, including informal discussions during the development of an appropriate topic. Final approval of the topic chosen by the student must be given by this faculty advisor before work can begin on the thesis.

4. The final thesis will be carefully reviewed and evaluated by the faculty advisor and two additional faculty members chosen by the student. If the final product does not meet department standards, graduation will be delayed until the student is able to meet the standards.

5. The grade for the senior thesis will be assigned by the faculty advisor with the agreement of the other members of the thesis committee.

6. No participation in classroom meetings is required.

7. The senior thesis would be 6 credits, and these credits would be applied to the number of credits required by the department for completion of the student's major.

8. If passed, this policy will be implemented immediately and will apply to every bachelor's degree student at the University of Nebraska at Omaha who has completed fewer than 90 credit hours.
Appendix D

Causal Account

Recently a study done by the Federal Department of Education found that seniors graduating from state universities are scoring lower on tests measuring writing skills than students from private universities and foreign universities. Members of Congress are concerned about the competitive disadvantage graduates of state universities are being placed at when looking for a job because of these lower writing skills.

As a result of this concern, a bill has been proposed to Congress by Senator Joseph Biden (D) from Delaware tying the annual Federal Funding of state universities to programs that will increase the writing skills of graduating seniors. A recent report in the Congressional Register says passage of this bill is likely.

To prepare for the passage of this bill, the Department of Education has proposed guidelines that describe methods state universities may use to demonstrate increased writing competencies among their graduating seniors, thereby, meeting this Federal mandate.

To receive the annual Federal Funding, which makes up a significant portion of the budget, the University of Nebraska at Omaha has to take steps to demonstrate the writing competencies of its graduates. The policy outlined above is being considered because it fulfills the guidelines put out by the Department of Education and would ensure continued Federal Government support for the University.
Appendix E

Ideological Account

Several prominent business surveys have revealed the importance of advanced writing skills for graduating college seniors entering the work place. First, statistics show that business executives and owners report a 53% writing deficit in all positions held within their organizations. In addition, 44% of all college graduates experiencing limited advancement in the work place show writing deficiencies.

Second, business surveys also show that within the first 5 years of employment after graduation, individuals who have demonstrated advanced or highly effective writing skills will earn on the average $10,000 more a year than individuals with writing deficiencies. Furthermore, individuals with advanced writing skills are found to advance at a faster pace through an organization's career pathways, ending at higher positions in the corporate hierarchy and achieving a greater number of career goals. Business leaders have identified written communication as the primary communication vehicle used in organizations by effective leaders.

A concern for the competitiveness of University of Nebraska at Omaha graduates has prompted the University to begin considering a policy that would demonstrate highly effective writing skills by UNO graduates. The policy outlined above would allow UNO seniors to establish advanced writing skills, putting these seniors at an advantage in the work place.
Appendix F

Content Coding Questionnaire

Coding Scale for Open Answer Comments:

1. Does the individual mention the causal account?
   
   1 - yes  
   2 - no

2. Does the individual mention the ideological account?
   
   1 - yes  
   2 - no

3. Does the individual accept the policy change?
   
   1 - strongly does not accept  
   2 - does not accept  
   3 - undecided  
   4 - accepts  
   5 - strongly accepts
Appendix G

Instructions Given to Content Coders

1. To familiarize yourself with the participant of these comments, please read through the copy of the policy change and both the causal and ideological accounts given for the policy change. You will probably have to reference these materials while you are coding the comments.

2. Next, please read through each of the following open-ended comments in the order they are given to you. I would only like you to pay attention to question #13, however, some participants wrote in the question #14 space when answering question #13, so you will have use your judgment.

3. After reading each participant’s answer, please answer each question on the Coding Scale provided below. I have provided a separate sheet for your answers. Please make sure that you record your answers on the line that matches the RED code at the top of each comment.

4. Some of the answers are difficult to read. Please do your best and if you cannot code an answer, just mark it so I can try to get a better copy of it.

5. Below is a list of definitions for the scale anchors used in question #3 of the Coding Scale:

   **Strongly does not accept:** The participant clearly mentions only disadvantages about the policy change.

   **Does not accept:** The participant is still mostly negative about the policy change, but may see some slight advantages.

   **Undecided:** The participant pretty much sees equal advantages and disadvantages about the policy change.

   **Accepts:** The participant sees mostly advantages about the policy change, but may see some slight disadvantages.

   **Strongly accepts:** The participant clearly mentions only advantages about the policy change.

6. THANKS SO MUCH for taking the time to do this!! If you have any questions, please call me at school at 4-2704 or at home at 397-7630.