RUI: An investigation of a decision maker-decision recipient disparity in the meaning and importance of procedural justice

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by

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Project Summary

Five laboratory experiments and one field survey will be conducted to compare the justice reasoning of decision makers (DM) and decision recipients (DR). Based on a program of prior research, it is expected that this role variable will moderate the effect of outcomes versus procedures on judgments of procedural approval and procedural fairness, such that, compared with DR's, procedural fairness judgments and procedural satisfaction among DM's will be more heavily influence by outcome concerns—perhaps to the extent that procedural evaluations among DM's are driven almost entirely by outcome criteria rather than procedural ones. Since this role-based moderation or procedural justice judgments has been infrequently reported, and since procedural justice theories are focused rather narrowly on the role of procedural justice for decision recipients, very little is known about this phenomenon.

The research proposed here is designed to expand our understanding of this DM-DR moderation effect by focusing our inquiry on an examination of: the following aspects of the DM-DR moderation effect: (1) the generalizability of the moderation effect across contexts; (2) the components of the DM-DR distinction that are responsible for the moderation effect, and (3) an exploration of which theoretically derived procedural and outcome criteria show the moderation effect.

A review of procedural justice theory and research suggests that the meaning of procedural fairness and its importance for procedural evaluations can vary depending on the motives engaged in varying allocation contexts. However, justice theories generally make motivational assumptions that are likely to be true among DR, but might not be relevant among DMs. Therefore, the studies proposed here are also designed to examine the motives that are responsible for the DM-DR moderation effect. In the first year of this two-year project, three vignette studies will be conducted, starting with a study that incorporates 11 variables in a single fractional factorial design: contextual factors that test the generalizability of this effect; DM-DR component variables that test the proximal variables responsible for the effect, and several procedural and outcome criteria (this study is geared toward the detection of 2-way interactions involving the DM-DR component variables and the procedural/outcome variables, and 3-way interactions indicating the contexts in which the 2-way interaction is obtained). The subsequent two vignette experiments will employ smaller designs geared toward replicating and exploring the interactions in a fully crossed orthogonal design. The two laboratory experiments in Year 2 employ deception in order to create realistic allocation situations that create tension between procedural fairness criteria and outcome concerns. In addition to permitting additional tests of the moderation effect, these studies initiate a research paradigm that is amenable to the examination of numerous combinations of additional variables in future research.

The first five studies are expected to produce a refined notion of the psychological processes responsible for the moderation effect. The last study will be a field survey in an applied context that examines natural variability among variables identified as central to the moderation effect. The set of studies is expected to produce an understanding of the moderation effect that might lead to moderation of the effect of procedural and outcome variables on procedural fairness that is independent of DM-DR. While the mere fact of DM-DR moderation raises important basic and applied questions, if this effect can be disentangled from the DM-DR distinction, so that the usual dominant influence of procedural criteria for procedural evaluations

among DR’s could be undermined, this finding would pose a challenge to procedural justice theories as well.

Justice from the perspective of decision makers versus decision recipients

The proposed research takes as its starting point the findings of several studies of the role of procedures and outcomes on justice and satisfaction among decision makers versus decision recipients (Heuer, Penrod, & Kattan, 2005). Two aspects of this research are uncommon in the procedural justice research literature. First, although some justice theorists (Finkel, 2000; van den Bos & Lind, 2001) have encouraged greater attention to the influence of perspective when justice judgments are being rendered, the overwhelming majority of the research concerning procedural fairness has been focused on the targets of the procedures, or the recipients of the outcomes, rather than those who are enacting the procedures or allocating the outcomes (Flynn & Brockner, 2003; van den Bos & Lind, 2001). In contrast, our completed research has examined fairness and satisfaction among authorities as well as subordinates (the distinction between decision maker and decision recipient is confounded with numerous other constructs in such comparisons in any realistic environment—a problem I return to below). This research has consistently shown that the meaning of procedural fairness and the importance of procedural fairness for procedural evaluations is different for authorities than for subordinates.

In several studies we have found that authorities' evaluations of procedural fairness and their satisfaction with procedures are influenced more by outcome concerns than by procedural fairness criteria such as voice, a variable that figures prominently in instrumental theories of procedural fairness (Thibaut & Walker, 1975) and respect, a variable that figures most prominently in relational (Lind & Tyler, 1988; Tyler & Lind, 1992) and interactional (Bies, 1987a; Bies & Moag, 1986) fairness theories. Although several studies (Field & House, 1990; Houlden, LaTour, Walker, & Thibaut, 1978; Lissak & Sheppard, 1983; Tyler & Griffin, 1991) and reviews (Harris & Schaubroeck, 1988; Hogan & Curhpy, 1994) are suggestive of an authority-subordinate distinction of the sort we have observed in our research, such findings have been infrequently reported in a literature that has consistently found procedural evaluations to be heavily influenced by voice (Brockner et al., 1998; Folger, 1977; Folger, Rosenfield, Grove, & Corkran, 1979; van den Bos, Wilke, & Lind, 1998; van Prooijen, van den Bos, & Wilke, 2002) and respect (De Cremer, 2002; Heuer, Blumenthal, Douglas, & Weinblatt, 1999; Sunshine & Heuer, 2002; Tyler, 1989; Tyler, 1990, , 1994, , 2001). Below I summarize our research findings and then I propose a program of designed to enhance our understanding of the basic and applied implications of the disparate fairness processes that seem to be operating among authorities and subordinates.

The first two of several studies conducted in our lab were experiments conducted among actual judges (completed surveys were obtained from 70 Federal Appellate Court Justices in Study 1, and 75 State Circuit Court Judges in Study 2). In both studies, participants read a description of a hypothetical case in which an airline traveler was stopped for questioning based upon the results of a technology referred to as voice stress analysis (VSA). In all conditions, the passenger was searched and arrested, and was later tried and convicted. The materials indicated that the passenger was appealing his conviction on the grounds that the initial stop for questioning violated his Fourth Amendment protection against unreasonable search and seizure. The case varied according to experimental condition in a 2 (search procedure) x 2 (search outcome) factorial design. The manipulation of the search procedure how respectfully the police officers treated the passenger as they conducted the search. The search outcome varied according to the societal benefit that resulted from the search. In the high benefit condition, the search revealed that the passenger was in possession of a small firearm In the low benefit condition the search revealed that the passenger was in possession of either 1 joint of marijuana (Study 1) or several stolen credit cards (Study 2) Judges were asked to complete a questionnaire including 3 key dependent measures: their decision in this appellate case (either a ruling in favor of the State which upheld the

legality of the search or a ruling in favor of the defendant which overturned the conviction) and their evaluation of the fairness of the police search procedure and the fairness of the search outcome.

Two findings of these studies are relevant for the research proposed here. First, a regression of the judges' decision on the manipulated and measured variables revealed that outcome concerns explained nearly all of the unique variance. Of the two manipulated variables of procedural respect and societal benefit, only societal benefit uniquely improved the fit of the regression model. When measures of the theorized psychological mediators (perceived societal benefits and costs, bias, infringement on rights, and respectful treatment) were entered as predictors in a subsequent block, only the variables of outcome, societal benefits, and infringement made a unique contribution, with societal benefits having the greatest influence. Finally, when measures of perceived procedural fairness and outcome fairness were added to the model, only outcome fairness made a significant contribution. Seconid, in order to better understand the judges' notions of fairness, the measures of outcome fairness and procedural fairness were regressed on the manipulated variables and the theorized psychological mediators. In both analyses, the manipulated variables were entered in Block one, followed by their interaction in Block two, the postulated mediating variables in Block three. The results of both analyses are similar: only the outcome manipulation significantly influenced the fairness judgment in Block 1, and only the mediating variable of societal benefits uniquely added to the fit of the model in Block 3. There was no unique contribution of respectful treatment on the judges' perceptions of the fairness of the VSA procedure.

Although these studies suggest decision maker-decision recipient (**DM-DR**) as the moderator responsible for the enhanced influence of outcomes and the reduced influence of procedures on the procedural evaluations, a study incorporating a role variable into an experimental design was necessary to test this hypothesis. Hence, a laboratory experiment was conducted among undergraduate participants. Unlike the previous studies, this study manipulated the participant's role (DM-DR) in a vignette modeled after the one in the judge studies. Like the judge studies, this one varied the information concerning the "societal benefit" resulting from a search and information about how respectfully the search procedure was conducted. The primary dependent variable in this study was the participant's judgment about the procedure employed in this case. Interaction contrasts supported our predictions that (a) the participants who adopted the subordinate perspective would be more influenced by the procedure manipulation than would the participants who adopted the authority perspective; and, (b) the participants who adopted the authority perspective would be more influenced by the outcome manipulation than would the participants who adopted the subordinate perspective.

Generalizability, causal mechanisms, procedural criteria, and motivational mediators

Our work summarized above has established that the procedural fairness judgments and procedural evaluations of decision makers are more heavily influence by outcome concerns than is the case for decision recipients. Furthermore, in several instances, this work has shown decision makers to be influenced predominantly by outcome concerns and virtually unaffected by procedural concerns as they contemplate procedural fairness and procedural satisfaction. However, our understanding of this effect is limited in at least four ways, each of which have important applied and theoretical implications.

First, since the research and theory concerning procedural fairness has focused overwhelmingly on decision recipients, the DM-DR moderation effect has been infrequently reported; consequently, very little is known about the extent to which it generalizes to settings other than those examined thus far. Second, since one's role (DM-DR) in allocation settings such as those we have examined so far (and seemingly in most allocation settings) is confounded with a variety of variables that naturally co-vary with role (e.g., decision making authority, who is targeted by the procedure), little is known about which of these variables are most strongly linked to the moderation effect. Third, our completed work has shown

that outcomes are more important, and respect less important for procedural fairness and procedural satisfaction among DM's than among DR's. However, this begs the question of whether this effect generalizes to other procedural criteria (e.g., will DM's be less concerned with accuracy and voice as well?). Similarly, there are questions about the nature of the outcome concerns that will be particularly important to DM's. For example, when confronted with a group threat, will DM's be as vigilant in responding to information about the seriousness of the threat as they are about responding to the efficacy of the intervention proposed to reduce that threat? Finally, little is known about the motivational underpinnings of the added impact of outcomes and the reduced impact of procedures on DM's judgments of procedural fairness and procedural satisfaction. While it appears that DM's are less concerned with the message about group standing conveyed to the targets of procedures by respectful treatment, a variety of alternative motives might be responsible for the DM's concern with outcomes. Several candidates are discussed below.

Questions concerning the generalizability of the DM-DR moderation effect

Because our goal until now has been to establish the reliability of the DM-DR moderation effect, we have deliberately tapped a rather narrow range of allocation settings. So, for example, we have obtained this effect most often in legal settings. It is possible that legal settings are particularly likely to produce the DM sensitivity to outcomes that we have observed. In two of our completed studies, the DM's were actual judges—a population that might be particularly prone to perceive violations of the law as a threat to the moral order, and therefore particularly willing to sacrifice procedural protections in order to uphold their moral values (Mullen & Skitka, 2005; Skitka & Houston, 2001). In order to test the generalizability of the moderation effect, the studies proposed here will examine decision makers and decision recipients in settings other than ones that are explicitly legal.

Second, the procedures under consideration in our completed work have generally been responses to a threat posed to groups that our participants likely identified with (e.g., airline travelers, or students living in campus housing). It is possible that these group threats evoke feelings of group attachment or solidarity among DM's that would not result if the threats were posed to individuals, or to groups that the DM's do not belong to. Group commitment and social identity have played a central role in theorizing about concerns with respectful treatment (Huo, Smith, Tyler, & Lind, 1996; Smith & Tyler, 1996) and concern for the group's welfare (Dawes, van de Kragt, & Orbell, 1990). However, whereas justice researchers have pointed to group commitment as a variable that drives *down* DR's concerns with outcomes and drives *up* DR's concern with respectful treatment; our own findings are that when groups are under threat, respect matters little to DM's. These findings suggest the possibility that group commitment has different effects on the role of respect and outcomes for procedural fairness among DR's and DM's. The studies below will examine this possibility by varying whether or not the DR's and DM's are members of the groups whose welfare is at stake as they evaluate procedural fairness.

Third, the procedures under consideration in most of our studies have already been enacted and their results have been observed (e.g., the search of an airline passenger's luggage has produced evidence concerning the target's criminal behavior) rather than procedures being contemplated prior to their enactment (e.g., a procedure that has been *proposed* to respond to a threats in the future).This retrospective approach might be particularly likely to orient DM's to outcome concerns, since the individual who has been targeted by the procedure in these cases has already been caught violating the law. With the advantage of hindsight, DM's (judges in our work in legal settings) might effectively drop the presumption of innocence, and decide that the target of the (respectful or disrespectful) procedure has given up his claim to due process, and is getting the treatment he deserves. This deservingness view of

procedural justice has been well supported by previous work by my students and me (Heuer, Blumenthal, Douglas, & Weinblatt, 1999; Sunshine & Heuer, 2002).

Finally, the nature of the problems confronting the participants in our completed work have generally been ones highlighting potential harms (e.g., how to prevent airline hijackings) rather than ones highlighting potential advances or accomplishments (e.g., how to promote transportation security or public health). Research and theory concerning regulatory focus (Higgins, 1998; Shah & Higgins, 2001; Shah, Higgins, & Friedman, 1998) has shown that individuals respond differently to situations involving the prevention of threats versus the promotion of accomplishments, such that individuals with a prevention focus are concerned with fulfilling obligations and responsibilities while individuals with a promotion focus are concerned with the attainment of hopes and aspirations. This work has also found individual differences in regulatory focus can influence individuals' appraisals of situations. This work suggests the possibility that DM's (who might be chronically vigilant about threats) might be particularly inclined to appraise a situation involving a group threat as one requiring them to act responsibly to protect the group's welfare, leading them to the outcome focus we have observed so far. The regulatory focus work also suggests, however, that the same process might not be engaged when DM's are confronted with opportunities involving potential advances. The studies below will examine this possibility by manipulating this variable (confronting harms versus opportunities) and observing its effect on regulatory focus as well as its effect on the importance of procedural and outcome criteria for procedural fairness and satisfaction.

Examining the causally relevant components of the DR-DM construct.

Source-Target Effects. Our findings so far indicate that decision makers are less affected by procedural concerns than are decision recipients. However, decision makers and decision recipients differ from each other in a variety of ways, leaving considerable uncertainty regarding the particular set of proximal variables that are responsible for the moderation effect. First, DM's are typically the source of the procedures in allocation settings, and they are often not targeted by these procedures, whereas DR's typically are the targets of these procedures. It is possible that this difference is sufficient to explain their different views about the importance of outcomes and respect. While targets of procedures clearly view respectful treatment as a signal about the authority's view of their group standing, the authorities who are implementing those procedures might well have completely different concerns in mind, so that respect (or disrespect) is viewed as a means to obtaining an important group resource, and its consequences for someone else's (the target's) group standing are overlooked.

Status Effects. Second, DM's often occupy relatively high status positions in the allocation setting, whereas DR's often occupy relatively low status positions. In two studies, Chen, Brockner, & Greenberg (2003) found relational concerns to matter more for those who were relatively low in status—a finding that is consistent with our findings among DM's and DR's.

Decision Authority. Third, DM's generally have high decision authority, whereas DR's have low decision authority. It is possible that one's self-perception as being genuinely responsible for deciding what procedures will be implemented in order to minimize group threats or maximize group opportunities might be sufficient to drive up one's concern for protecting the group's outcomes. Perhaps among those who are the ultimate decision makers, the ends are viewed as justifying the means.

A second goal of the studies proposed below is to begin to disentangle the causal role of these components of the DM-DR construct. In the studies proposed, each of these three components of the DM-DR construct will be manipulated orthogonally in order to examine their contribution to the DM-DR moderation effect. If a variable or a subset of variables can be linked to the moderation effect independent of the broad DM-DR distinction, this finding would invite additional research geared toward obtaining the

same moderation effect among decision recipients. Although some researchers have shown that contextual variables can moderate the influence of outcome concerns and procedural concerns among decision recipients (Huo, Smith, Tyler, & Lind, 1996), and others have shown that contextual variables can moderate the influence of procedures and outcomes for judgments of outcome fairness (van den Bos, Lind, Vermunt, & Wilke, 1997), and self-esteem (Smith, Tyler, Huo, Ortiz, & Lind, 1998), I am aware of only one line of research that has shown decision recipients' procedural evaluations are dominated by outcome concerns (Mullen & Skitka, 2005; Skitka, 2002), and that research does not involve DM's and seems likely to be tapping different psychological principles than the ones invoked in our completed work. Therefore, an additional demonstration of such a finding under considerably different circumstances than those studied by Skitka and her colleagues would pose a considerable challenge to procedural justice theories.

Manipulating the procedural and outcome criteria that are subject to DM-DR moderation

Procedural Criteria. Until now, our studies of the DM-DR moderation effect have focused primarily on the procedural criteria of respect—a procedural variable that the group value (Lind & Tyler, 1988; Tyler, 1989) and relational (Tyler & Lind, 1992) justice theories say affects procedural justice because of its implications for purely relational concerns such as one's group standing. Furthermore, our completed studies have focused primarily on two outcome-related criteria: the seriousness of the group threat that has prompted the procedure under consideration, and the efficacy of the procedure at reducing the threat. However, in our previous studies, these outcome criteria have been confounded, so that the most serious threats were combined with the most efficacious procedural interventions.

Little is known about the extent to which the DM-DR moderation of the effect of respect on fairness would occur for the effect of other procedural variables as well. In order to address this question, the studies proposed will manipulate the procedural criteria of voice and accuracy in addition to respect. These two criteria were selected because they have implications for instrumental motives (voice and accuracy can both affect the likelihood of obtaining fair and beneficial outcomes) as well as having potential implications for relational motives (withholding of either might be viewed as a sign of disrespect). Thus, we can determine whether authorities exhibit lessened concern for instrumental criteria that they have for relational criteria. Furthermore,, with the appropriate measures, we can examine whether it is the relational or the instrumental implications of these variables that are responsible for their differential impact on DM's and DR's notions of procedural fairness.

Outcome Criteria. Similarly, since our completed work confounded the outcome variables of the seriousness of the threat to the group and the efficacy of the procedural intervention being considered to respond to the group threat, our previous work does not permit an assessment of the importance of these two different types of outcome concerns. Although some recently completed pilot work with undergraduates reading fictitious vignettes suggests that DM's have a greater concern with procedural efficacy than they do with the seriousness of the group threat, a replication of this finding would enhance our confidence in the reliability of this finding.

Measuring the motivational processes engaged among DM's and DR's

A final question to be addressed by the proposed studies concerns the motives that are responsible for DM's focus on outcomes more than procedures as the key to procedural fairness. While the motives that have received the greatest attention from procedural justice theories are the motive to maximize fair or beneficial outcomes, which was the original motivational assumption made by Thibaut and Walker (1975) and the group value, or relational motive (Lind & Tyler, 1988; Tyler & Lind, 1992). However, these theories are clearly concerned with the motives of the decision recipients who are the targets of procedures (those whose outcomes are being decided by decision makers, and those who are being treated

more or less respectfully by authorities) rather than the DM's, who are administering them, or are not the targets of them. The studies being proposed will test the role of three motives that might account for the considerable influence of outcomes on DM's judgments of procedural fairness: striving to maximize the welfare of the group facing the threat (or the group presented with an opportunity); striving to abide by a perceived responsibility to protect the group's welfare; or striving to assure that those targeted by procedures get the treatment and the outcomes they deserve.

Striving to maximize the group's welfare.

This motive is what Batson, Ahmad, and Tsang (2002) refer to as collectivism—a motive to increase the group's welfare that is, according to Batson et al., particularly likely to operate for in-groups. The measure of this motive will permit a test of the possibility that DM's, perhaps by virtue of feeling sufficiently secure in their group standing that they needn't focus on respect, are freed to strive to maximize their group's welfare, thus leading them to the focus on outcome that we have observed in our prior research. However, as we noted above, this effect might be limited to situations like those employed in our earlier studies, where the DM's are members of the group whose welfare is at stake. If DM's are found to focus on outcomes for out-groups as well, then a different motive seems a more likely candidate—such as the motive to abide by one's DM responsibilities.

Striving to abide by one's perceived responsibility.

Recently Weber, Kopelman, and Messick (2004) proposed a "logic of appropriateness" framework to decision making in social dilemmas. According to the authors, in situations like the ones examined in the research being proposed here, decision makers strive to discover what people in situations like theirs are expected to do. The process proposed by these researchers is similar to what I am proposing here—that DM's are striving to do what they think is appropriate for someone in their position. One way in which this appropriateness motive and the motive to maximize the group's welfare might be distinguished is that I expect maximizing the group's welfare to play a greater role for DM's who are evaluating procedures that affect groups they identify with. However, DM's who are striving to abide by their responsibilities are expected to strive to protect the welfare of the groups subject to their authority, regardless of whether they personally identify with those groups.

Striving to allocate according to a principle of deservingness.

My students and I (Heuer, Blumenthal, Douglas, & Weinblatt, 1999; Sunshine & Heuer, 2002) have argued that relational justice theories (Lind & Tyler, 1988; Tyler & Lind, 1992) and interactional justice theories (Bies, 1987b; Bies & Moag, 1986; Bies & Shapiro, 1987; Cropanzano & Folger, 1989; Folger & Bies, 1989) have devoted insufficient attention to the psychological mechanisms linking polite and respectful treatment to procedural fairness. We asserted that the link between respect and fairness is affected by an individual's belief that they are entitled to respectful treatment—a deservingness-fairness link that is explicit in theories of distributive justice (Lerner, 1977; Major, 1994). In two laboratory experiments our hypotheses were supported as we showed that judgments about the value of peoples behavior (positive or negative) and attributional judgments about individuals' responsibility for their behaviors moderated the effect of respect so that respect was most important for those individuals who performed positively valued behaviors, particularly those who were responsible for those behaviors. Analyses revealed that the respect-justice relationship was mediated by perceptions of deservingness. In a field survey, we observed that respect was more important for the procedural fairness judgments of high self-esteem individuals—those who felt they were most entitled to respect. In other words, our studies showed that a concern with deservingness, rather than a concern merely with enhanced group standing, was an important determinant of procedural fairness judgments.

The deservingness hypothesis suggests a reason that judges in our studies perceived procedures as fair according to the outcomes of the police search of the defendant—the outcome of the search (e.g., finding a gun) served as evidence that the defendant is responsible for a negatively valued behavior, so withholding respectful treatment, or curbing due process, might have been perceived as the fair response (Hafer & Begue, 2005). For decision recipients, however, the deservingness calculation might be considerably different. Most participants who contemplate such an encounter are not likely to be ones who would commit the sort of crimes attributed to the defendants in our research, so adopting the perspective of the defendant, even with a deservingness view, they are likely to judge the respectful or disrespectful treatment according to whether it is fair in light of their behavior or their social relationship with the decision maker.

Summary of research goals

I have argued that a better understanding of the dynamics of the DM-DR interaction we have observed in our prior research holds the prospect of important advances to justice theory as well as advances in the application of justice theory to applied settings. I have summarized four areas of inquiry that I expect to be productive ones for advancing our understanding of this problem.

Context. First I have proposed to systematically vary the context in which DM's and DR's contemplate outcomes and procedures. In particular, I have proposed that (a) the studies below will pose questions about procedural fairness in predominantly non-legal settings, in order to test the generalizability of the DM-DR moderation effect to political and organizational settings as well as legal ones. Furthermore, I have proposed to manipulate 3 contextual variables in the studies to be conducted: (1) whether the procedure under consideration is one being employed to respond to reduce a threat or to enable an opportunity; (2) whether the threat or opportunity is one that will affect the respondent's in-group or one that will affect an out-group; and, (3) whether the procedure is being contemplated retrospectively (the procedure has already been employed and the outcomes of the procedure are known) or prospectively (the procedure is under consideration, and the outcomes resulting from it are unknown).

DM-DR characteristics. Secondly, I have proposed to manipulate 3 variables that are inherently confounded with DM-DR in most allocation settings: Whether the individual contemplating the procedure (4) is the source or the target of the procedure; (5) has high or low in-group status; and, (6) has high or low decision authority regarding the application of the procedure under consideration.

Procedural Criteria. Third, I have proposed to manipulate 3 variables related to the procedural criteria under consideration and 2 variables related to the outcome criteria under consideration: (7) high versus low respect; (8) high versus low voice; (9) high versus low accuracy; (10) outcome information concerning the seriousness of the threat or the magnitude of the opportunity that the procedure is in response to (high versus low); and (11) outcome information concerning the efficacy of the procedure at reducing threat or promoting the opportunity.

Motivations. Finally, I have proposed to employ measures of the importance of several motivations that are expected to mediate the effects of the manipulated variables as respondents contemplate procedures and outcomes, and make judgments of procedural fairness: (1) the motive to maximize fair and beneficial outcomes, (2) the relational motive to be a valued members of one's valued social group; (3) the motive to maximize the welfare of the group confronting a threat or an opportunity; (4) the motive to abide by the perceived responsibilities of one in the designated role vis-à-vis the affected group; (5) the motive to make allocations and enact procedures according to what the target individuals deserve; and (6) regulatory focus.

Research Designs and Procedures

Study 1.

I propose to start with a single study that incorporates the 11 variables highlighted above in a single fractional factorial design (see below), along with the appropriate measures of the motivational constructs. This study will permit tests of (a) whether the DM-DR moderation effect is obtained in a non-legal setting (this moderation effect would be revealed by 2-way interactions between any of the 5 procedural and outcome variables and any of the 3 DM-DR component variables, in a form consistent with that obtained in our earlier research), (b) whether the moderation effect occurs across the levels of the 3 context variables, or is context specific (context specificity would be revealed by 3-way interactions revealing that the 2-way DM-DR moderation effect is evident only in certain contexts); (c) whether the DM-DR interaction effect generalizes to the procedural variables of voice and accuracy as well as to respect (revealed by 2-way interactions between the additional procedural variables and the DM-DR component variables; (d) whether the DM-DR moderation effect generalizes to both of the outcome variables (threat and efficacy) or if it occurs for only one of them (if the moderation effect is specific to particular procedural or outcome variables (limits to generalizability would be revealed by 2-way interactions between only a subset of the procedural and outcome variables and the DM-DR component variables), and (e) the role of the 6 motivational variables as mediators of the effect of the procedural and outcome variables on procedural fairness among participants assigned to various components of the DM-DR construct (e.g, does perceived responsibility mediate the effect of efficacy on procedural fairness among those with high decision authority?).

Design.

Of course, 11 manipulated variables are too numerous for an investigation using a traditional full factorial design. In a typical factorial design, investigation of the independent effects of each of eleven factors at two levels would require 2,048 conditions, and, using a rule of thumb of 10 subjects per cell, approximately 20,500 participants. Furthermore, such a design would have the potential to produce unwieldy and un-interpretable eleven-way interactions (and much the same could be said for 4- to 10-way interactions). However, a fractional factorial design allows for measurement of all main effects and two way interactions, and designated 3-way interactions with a manageable 128 cells and far fewer participants (Kenny, 1985; Winer, 1971). Although they are less commonplace than complete factorial designs, fractional replicates have been used successfully in previous psycholegal research (Cutler, Penrod, & Dexter, 1990; Cutler, Penrod, & Stuve, 1988) and researchers have encouraged greater use of them for research such as that proposed here, with multiple variables (Stolle, Robbennolt, Patry, & Penrod, 2002). The logic of the fractional factorial design is quite simple. Rather than running a fully crossed factorial design, the researcher runs only a portion of the possible factor level combinations (Winer, 1971). The factor level combinations will be carefully chosen to answer the questions summarized above (McLean & Anderson, 1984; West, Aiken, & Todd, 1993; Winer, 1971). This involves choosing combinations that allow us to assess the main effects, first order interactions, and selected higher order interactions, while confounding the remaining improbable higher order interactions with main effects or other high order interactions (McLean & Anderson, 1984). With 384 participants, we can expect ample power with the ability to detect an effect size as small as .15 (alpha = .05).

Procedure.

Study 1 will have participants read a vignette describing a procedural intervention at a middle school that is being employed to deal with a threat (or opportunity). This intervention procedure is the one that participants will provide fairness and satisfaction ratings of. All participants will be asked to imagine that

they are one of the three members of a tri-partite committee charged with the task of deciding whether to engage this intervention for the next academic year.

Briefly, the 11 experimental variables will be operationalized as follows:

Context variables.

Harms versus opportunities: Participants in the harms condition will read about a threat to the school involving a decline in the school's scores on statewide educational performance tests which, if not reversed in the next several years might result in a school closing; participants in the opportunities condition will read about an opportunity for the school to qualify for a federal grant that would add resources to the school if the school can raise its tests scores in the next several years; ***In-group versus out-group:*** Participants will imagine that the situation involves their alma-mater; participants in the out-group condition will imagine that the situation involves a school in a rural area of a state in a different geographic region of the county (participants in the out-group condition will be told that the committee is comprised of individuals from a community removed from the school's locale as part of an effort to de-politicize the decision task); ***Retrospective versus prospective:*** Participants in both conditions will read about an intervention procedure designed to raise the school's test scores. The procedure will be described as one that is administered by an outside agency. Participants in the retrospective condition will read about a procedure that has been employed for the past year and is currently facing a mandatory 1-year review before the contract with the agency is extended (thus, the efficacy of the procedure in Year 1 is known—see below); participants in the prospective condition will read about a procedure being contemplated (thus, efficacy information is available in the form of forecasts based on the outside firms performance at similar schools).

DM-DR Component variables.

The tri-partite committee will be described as having one middle school student member, one parent member, and one middle school teacher. All participants will imagine themselves as either the student representative or the faculty representative on the committee. The materials will emphasize that each member is on the committee to represent the perspective of others like them at the targeted school. ***High versus low status:*** High status members will imagine themselves as the faculty member of the committee—an individual with a PhD in education and considerable training and expertise in the domain of educational reform; low status members will be told to imagine that they are the student representative of the committee; ***Source versus target:*** Participants in the source condition will be told to imagine that the intervention procedure is focused almost entirely on evaluating the way [students, if the participant is the faculty committee member; teachers, if the participant is the student committee member] conduct themselves while at school (additional language will be employed in this source condition to underscore the point that this intervention is widely viewed as one being implemented by and at the behest of this committee); participants in the target condition will be told to imagine that the intervention procedure is focused almost entirely on changing the way [students, if the participant is the student committee member; teachers, if the participant is the teacher committee member] conduct themselves while at school (additional language will be employed in this target condition to underscore the point that intervention is targeted at their cohort at the school); ***Decision authority high versus low:*** Participants in the high decision authority condition will be told that the committee met earlier in the day to conduct a formal vote regarding whether or not to proceed with this procedural intervention, but due to a family emergency, they were unable to attend the meeting. They will be told that the two committee members who were present could not agree, so that now theirs will be the third and deciding vote; participants in the low decision authority condition will also be told that the other two members have voted and that they were in agreement, so that while their own vote is required, it cannot affect the final decision.

Procedural and outcome variables.

Respect high versus low: Participants in the respectful condition will be told that the [students, in the student target condition; teachers, in the teacher target condition] at [this school, in the in-group condition; other schools in the out-group condition] have consistently reported that this agency's employees have been unobtrusive both inside and outside of the classroom, and they have been interested in the [students in the student as target conditions; teachers in the teacher as target conditions] and by all indications, they are truly concerned with the [students' or teachers'] welfare. The materials will note that, on balance, the [students; teachers] say the agency's employees they have treated the [students; teachers] politely and respectfully; Participants in the disrespectful condition will be told that [those targeted by this intervention] have consistently reported that this agency's employees have been disruptive to the affairs of [those targeted by this intervention] both inside and outside of the classroom, and they have been uninterested in [those targeted by this intervention] and by all indications, they are not concerned with the welfare of [those targeted by this intervention]. The materials will note that, on balance, the [targets of this intervention] say the agency's employees have treated the [targets of this intervention] impolitely and disrespectfully; ***Voice high versus low:*** Participants in the voice present condition will be told that the agency has gone to great lengths to solicit the opinions and feedback of [those targeted by this procedural intervention] as they have proceeded with their business of diagnosing the situation and preparing recommendations for future policies at the target school; participants in the low voice condition will be told that the agency has proceeded with their business of diagnosing the situation and preparing recommendations for future policies without soliciting the opinions and feedback of [those targeted by this procedural intervention]; ***Accuracy high versus low:*** Participants in the high accuracy condition will be told that the agency's procedure [involved or will involve, depending on retrospective versus prospective condition] their observation of every classroom in the school over multiple days at different times throughout the academic year; participants in the low accuracy condition will be told that the agency's procedure [involved or will involve] their observation of a small fraction of the classrooms in the school, for a short period of a school day during a single week of the school year; ***Threat/Opportunity high versus low:*** Participants in the high threat condition will be told that the target school experienced a rather sudden surge in students' use of illicit drugs on school property, and a simultaneous considerable decrease in the students' performance on statewide educational tests and that this has received considerable media coverage, leading to calls by some local politicians to close the school, which would impose considerable hardships on students and parents in this school district; participants in the low threat condition will be told that that the school has experienced a modest decline in the students' performance on statewide tests, but that local experts cannot agree on whether this is a real problem or a statistical blip. No mention will be made to calls for school closings in this condition; Participants in the high opportunity condition will be told that the school is a candidate for a multi-year multi-million dollar grant from a federal agency that would permit added faculty and staff, smaller class sizes, and modernized equipment, all of which would likely transform the educational experience of the children who attend that school for many years to come; participants in the low opportunity condition will be told that the school is a candidate for a one year grant from a federal agency that would permit the upgrade of a portion of the school's computers and software; ***Efficacy high versus low:*** Participants in the high efficacy condition will be told that [retrospective: after one year of site visits and recommendations from this agency at this school, the school's test scores have been very successful at producing positive effects; prospective: at roughly similar schools this agency has been very successful at producing positive effects]; participants in the low efficacy condition will be told that [retrospective: after one year of site visits and recommendations from this agency at this school, the school has been only modestly successful at

producing positive effects; prospective: this agency's performance at roughly comparable schools has been only modestly successful at producing positive effects.

More than half of the manipulations to be employed in this study have already been piloted in our lab, and we have been very successful at showing effective manipulations that have primarily main effects on the appropriate manipulation checks. All three of the procedural manipulations are based on existing procedural justice theory and are consistent with similar manipulations employed by researchers studying similar constructs.

After reading the materials, participants will complete a questionnaire that includes checks on all manipulations and dependent measures including ratings of procedural fairness, satisfaction with the procedures (including the participants' recommendation of whether to employ the agency in the upcoming year), measures of the fairness of the (actual or anticipated) outcomes of the agency's intervention, and measures concerning each of the motivational constructs discussed above (these will be examined as potential mediators of the procedural and outcome effects on procedural fairness and procedural satisfaction). The measures of procedural fairness will be ones that are consistent with those employed by other procedural justice researchers and that have been successfully employed in our own prior research. Of the procedural manipulations, our manipulations of voice and accuracy have not been piloted in our own work with the educational vignette described above, so pilot testing will be required to assure that these manipulations have the intended effects. Measures of each of the key constructs will be based on multiple items so that reliability indices will be available.

Studies 2 & 3.

Studies 2 and 3 will employ procedures that are similar to those in Study 1, and they will be vignette studies designed to pose the same basic problem as the one posed in Study 1. These studies will differ from Study 1 in three important ways. First, the vignettes will employ vignettes that describe a problem in a different context than the one employed in Study 1. In order to extend our knowledge about the generalizability of these effects, these studies will be set in an organizational setting (which will be the setting we turn to in a field survey, proposed as Study 6). Of course this setting lends itself perfectly well to the same basic problem posed in Study 1. Second, we will target a sample that is drawn primarily from a population of working adults rather than undergraduate psychology majors (in our own work we have had considerable success administering surveys in various locations throughout New York City).

The third modification introduced in Studies 2 and 3 will be a change in the design. Anticipating that only a subset of the manipulated variables in Study 1 will result in significant interactions consistent with the anticipated DM-DR moderation effect, Studies 2 and 3 will involve fewer variables and completely factorial designs. These studies will permit a test of the reliability of the effects observed in Study 1. Furthermore, Studies 2 and 3 will permit tests of hypothesized 2-way and 3-way interactions that are orthogonal to all other main effects and interactions in the same study—thus permitting the disambiguation of any interactions that were confounded with other (higher-order) interactions in the fractional factorial design employed in Study 1. Each of the motivational variables described above will be measured in these studies as well, in order to permit tests of the motives that mediate the effect of the manipulated procedures among participants in different DM-DR component conditions.

Studies 4 and 5

Studies 4 and 5 are designed to engage undergraduate participants in a setting where they believe a procedure will be employed in order to confront a threat to their group. The design will permit the manipulation of each of the variables examined in Studies 1-3, but it has the advantage of obtaining measures of procedural fairness and satisfaction with procedures from individuals who believe these procedures have real implications, rather than from individuals responding to imaginary vignettes. Studies

4 and 5 will employ the same experimental paradigm—only the independent variables will change across the administrations according to the variables identified as prime candidates for additional experimentation based on Studies 1-3.

Design.

Both of these studies will employ factorial designs, and each can readily accommodate up to five 2-level variables (the participant compensation budget is based on two 32- cell designs with 10 participants per cell for a total N = 320 in each study). Thus, each of the experiments could include 1-2 DM-DR component variables, 1-3 procedure and outcome variables, and, if desirable, 1 context variable.

Procedure.

These studies will employ an adaptation of a procedure used by van den Bos, Vemunt, and Wilke (1997). Participants will be scheduled to arrive in groups of 4-persons in the common space of a laboratory that also has 4 private, sound-proof cubicles. The experimenter will explain that, *we are studying the performance of individuals and groups on an estimation task. You will be escorted to separate rooms where each of you will view a monitor and estimate the number of black squares in a field of 180 black squares and white squares. You will have a chance to earn a cash bonus if their group performs well on this task .A lottery will be held for either $20 or $200 (see condition information below) and that the members of the top performing one-third of the groups participating in this experiment over the course of the semester will be eligible for the lottery. Therefore, it will be in each individual's interest to perform the estimation task as accurately as possible.*

The experimenter will then direct the participants' attention to a computer monitor where a single trial of the estimation task will be demonstrated. The monitor will briefly display one test screen, after which the experimenter will ask the participants to discuss their estimations before providing them with the correct answer. After they are provided with the correct answer, the experimenter will instruct the group to spend 5 minutes discussing their ideas for the best estimation strategy before they separated to begin 2 10-trial test rounds (it is expected that this group discussion will increase the participants' identification with their group—a variable that can also be manipulated if desirable).

After the 5-minute discussion period, the experimenter will explain, *in order to keep everyone motivated, and to give each group a reasonable chance for the monetary prize, a procedure will be available after the first 5-trial practice period that would permit the elimination of one group member from each of the two 10-trial test phases. Your team's performance score will be based on the average estimation performance of the participating members. Thus, eliminating a poor performing member might increase your team's average score (and it will impose a reduction in the eliminated member's chances for a lottery prize). After you are escorted to the separate cubicles, you will engage in a 5-trial practice round, after which each participant will see a summary of each group member's accuracy score on each of the 5 trials.* The experimenter will display an example of such a summary, and inform the participants that each of them will know which of these scores are their own, but the accuracy of the other participants' performance will be presented anonymously.

The experimenter will then explain that, *after the 5-trial practice period, one randomly selected member of you group will have the opportunity to implement the elimination procedure prior to the first 10-trial test period. After viewing everyone's accuracy scores for the 5-trial practice period, you will be informed about how the elimination procedure would work, and all of you will be asked a series of questions about the procedure, although only one of you will decide whether or not to implement it. After everyone has completed their evaluation of the procedure, the first 10-trial test period will take place, with 3 or 4 participants, depending on the decision maker's (DM) decision about whether or not to employ the elimination procedure. If the DM eliminates one person from the trial period, that person will*

still participate in the estimation task, but their score will not count toward the group's score, and their chances for winning the lottery will go down by one-half, as they will not be credited for that round even if the group qualifies for the lottery by finishing in the top one-third. Since there will be two trial periods, there will be a second opportunity for a randomly selected member of your group to eliminate one person from the second round (thus, if someone were eliminated from Round 1, they would have a chance to participate in Round 2).

At this point, the participants will be escorted to the four separate rooms, where they will engage in the 5-trial practice period. Feedback will be provided only in the form of a group summary at the end of the 5 trials. However, the nature of the feedback will be independent of each individual's actual performance, in order to establish the desired experimental conditions. After seeing the performance summary, the participant will be told about how the elimination procedure will be conducted. After they have been instructed about the procedure, they will complete their ratings. Once these ratings are completed, the experiment will be over, and the experimenter will re-convene the four participants in the common area to explain the deception and the nature of the research.

This experimental paradigm should permit almost limitless experimental variations, including analogues for each of the variables described for Study 1 above. Below is a brief summary of some of the key manipulations that might be employed in Studies 4 & 5.

DM-DR component variables. (1) Status: Feedback to participants concerning their estimation accuracy on the 5 round trial period can establish each participant as ranking anywhere among the four, and placing quite well or quite poorly on an interval performance scale. With the restricted information about other participants available in this task, performance is likely to establish one as being a high- or low-status member of the group; **(2) Source versus target:** On any given round, participants could be told that they have been randomly awarded a "safe round", meaning that they cannot be eliminated from the next round (thus, they would be unlikely to perceive themselves as the perspective of the "target" of the procedure under consideration); (3) **Decision Authority:** Participants are assigned to have decision authority or not by the feedback they receive concerning which group member was randomly assigned to decide whether or not to implement the elimination procedure after the upcoming trial period.

Procedure and Outcome variables. (1) Respect: The communication to participants concerning the elimination of a participant on the upcoming round will be described as one that will communicate their elimination in a more or less respectful or dignified manner (e.g., a broadcast to the entire group announcing, "Player 1, You're fired!" versus a respectful announcement that their elimination, while regrettable, was unavoidable on this round. Of course, appropriate pilot testing would be required to ascertain the language that will accomplish the intended effects. Our own previous work (Heuer, Blumenthal, Douglas, & Weinblatt, 1999; Heuer & Stroessner, 2003) has employed a procedure like this with considerable success in multiple studies); **(2) Accuracy:** Participants would be informed that the procedure employed to identify which participant is eliminated on the next round is one that is based on the participants' performance across all 10 trials (perfect accuracy) or one that is based on a sample of 2 of the 10 trials (low accuracy). This accuracy manipulation is an adaptation of the one employed by van den Bos, Vemunt, and Wilke (1997) on which the paradigm for Studies 4-5 is based; **(3) Voice:** Voice would be manipulated by leading participants to believe they have an opportunity to express their views to the entire group about their elimination, or not. This voice manipulation could be tinkered with to make the "voice" expression purely expressive (voice with no chance of altering the decision) or making voice more or less instrumental (allowing voice with a chance that an appeal to the other members of the group might prevent their elimination from the subsequent round); **(4) Threat:** the seriousness of the threat to the group would be varied by information about the value of the lottery at stake (a poor

performer is likely to be considered a considerably more serious threat when the lottery is for $200 than when the lottery is for $20); **(5) Efficacy:** this would be manipulated by information concerning the group's standing vis-à-vis other groups that have already completed this experiment, and information about the likelihood that eliminating the weakest group performer will secure the groups success in entering the lottery (thus in a high efficacy condition, feedback to the participants would suggest that if one group member is eliminated, the group will have a very good chance of finishing in the top one-third; in a low efficacy condition, feedback would indicate that eliminating one group member is unlikely to alter the group's chances of success).

These two studies will permit the same tests of the 2-way and 3-way interaction hypotheses described for Studies 1-3, but the tests in Studies 4 and 5 are expected to have greater ecological validity due to the realism of the task.

Dependent measures and measures of the motivational mediators should transfer easily across the experiments.

Study 6.

Finally, we will conduct a field survey that incorporates the perspective effects that have been shown to be most likely to produce the moderation of the role of procedures and outcomes that have been determined to be most potent across our first 5 studies. This to will survey mid-level organizational employees (mid-level employees are desirable as they are likely to be able to recall allocation procedures in which they were the decision maker or the decision recipient) who are employed in settings that assure that they are able to think of a recent encounter in which they were either the decision maker or the decision recipient. This role variable will be manipulated by the instructions concerning the type of encounter we want the respondent to think about as they complete the survey. This study will also experimentally vary whether the encounter was one in which the outcomes at stake were ones that were positively or negatively valued. Virtually all of the other theoretical variables discussed in this proposal and varied in our five experiments can be measured in our survey with multiple-item composites. This study will survey 300 respondents—enough to permit structural equation modeling, a procedure that can enhance the power of interaction tests when latent models are employed.

Adding a field survey to the set of studies will strengthen our ability to extend our analysis of this problem to: (a) a broader population than undergraduate psychology majors; (b) a variety of real-world, complex allocation problems rather than the contrived problems typical of laboratory research; and, (c) naturalistic contexts rather than the highly controlled, and more sterile laboratory contexts. Among the additional advantages of a field survey are that it will also add to our ability to talk about the magnitude of the moderation effects in actual settings. In fact, much of the truly seminal research in the psychology of fairness in the past twenty years has been survey research conducted in field settings (Brockner, DeWitt, Grover, & Reed, 1990; Skitka, 2002; Tyler, 1984; Tyler, 1989; Tyler, 1990).

Summary and Conclusions

The importance of procedural concerns for satisfaction and fairness judgments has been established in a broad variety of settings, including legal (Tyler, 1984; Tyler, 1988; Tyler, 1990), organizational (Brockner & Wiesenfeld, 1996; Folger & Cropanzano, 1998; Greenberg, 1986, , 1994) and political (e.g., Tyler & Degoey, 1995; Tyler, Rasinski, and McGraw, 1985) settings. In fact, this finding is so well established that Brockner et al. (2001) referred to it as "one of the most robust findings in the justice literature" (p. 301). The research being proposed here takes as its starting point a series of studies that reveal circumstances where this effect does not occur—ones in which decision makers are evaluating procedures employed to respond to a threat to a group. I described several studies that suggest a perspective shift in the importance of procedural criteria and outcome criteria for procedural satisfaction

and procedural fairness. Each of these studies indicate that, compared to DR's, DMs' (actual judges considering a legal case, or students in a judicial role considering a quasi-legal case) judgments of procedural fairness and their satisfaction with procedures is less influenced by relational criteria, and more influenced by outcome criteria than are decision recipients. More strikingly, in multiple instances, the DM's judgments of procedural fairness were not significantly influenced by respectful treatment or voice, but they were considerably influenced by outcome concerns.

I have argued that a better understanding of the dynamics of this DM-DR interaction holds the prospect of important advances to justice theory as well as advances in the application of justice theory to applied settings. On the theoretical front, an exploration of (a) the settings where this effect occurs, combined with (b) an investigation of the procedural and outcome variables whose impact on procedural justice is moderated and (c) an appreciation of the components of the DM-DR distinction that are responsible for the moderation might suggest ways in which the moderation of impact of procedures and outcomes for procedural fairness might be produced among decision recipients. There is no obvious reason that outcomes couldn't dominate procedural fairness among DR's, if the appropriate context and motivational factors were in place; in fact, research by Skitka and colleagues (Mullen & Skitka, 2005; Skitka, 2002; Skitka & Houston, 2001) has produced such a result when the outcomes at stake pose a threat to individuals' moral mandates—a process that seems quite different from the one responsible for the findings of our completed work described at the outset of this proposal.

On the applied front, our previous findings present a paradox: authorities' best efforts to resolve conflicts in a fair manner might leave disputants dissatisfied because of the divergent notions of fairness held by authorities and subordinates. A better understanding of the psychological processes responsible for this effect might reduce some DM-DR tensions. On the theoretical front, a better understanding of these psychological processes is expected to yield insights about how the importance of procedures and outcomes can be influenced (or even reversed) independently of whether one is a decision maker or a decision recipient. If so, this would force a reconsideration of the assumptions of virtually all procedural justice theories, as they predict that procedural fairness is determined primarily by procedural variables rather than outcome variables.

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