WHEN FAIRNESS WORKS: TOWARD A GENERAL THEORY OF UNCERTAINTY MANAGEMENT

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> The only way in our opinion to account for this striving for justice and truth is by the analysis of the whole history of man, socially and individually. We find then that for everybody who is powerless, justice and truth are the most important weapons in the fight for his freedom and growth (Fromm, 1942/2002, p. 248).

We will describe in this chapter some very recent research that demonstrates an intimate connection between two important concepts in organizational behavior: fairness and uncertainty. We argue below that fairness and uncertainty are so closely linked that it is in fact impossible to understand the role of one of these concepts in organizational psychology without reference to the other. We describe some new studies showing that fairness judgment processes are activated by concerns about uncertainty, and we propose that people manage uncertainty using fairness judgments. By exploring the connection between fairness and uncertainty, we argue, new perspectives and new phenomena in the area of organizational fairness can be discovered, and with these discoveries we can see some previously unknown ways of helping people cope with uncertainty in organizations.

It certainly did not take the economic and political events following September 11, 2001, to make organizational behavior researchers realize that uncertainty is a part – often a very important part – of organizational life (see e.g. Brockhous, 1980; Jackson & Dutton, 1988; MacCrimmon & Wehrung,

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1990; Pablo, Sitkin & Jemison, 1996; Singh, 1986; Sitkin & Pablo, 1992; Staw, Sandelands & Dutton, 1981). Events such as these have, however, driven home the necessity of coping with uncertainty and risk if one is to undertake effective action in today's business environment. Scholars who offer prescriptive advice about decision making in business (see, e.g. Clemen, 1991; Dawes, 1979; Edwards & Newman, 1986; Hammond & Adelman, 1976) and those who document how actual decision making patterns differ from optimal decision making (e.g. Payne, Bettman & Johnson, 1993; Slovic, 1987; Tversky & Kahneman, 1981) have long argued that many business decisions involve choosing among options with uncertain consequences.[1]

Organizational behavior scholars and social psychologists have considered the question of how people cope psychologically with uncertainty and risk in business settings and have drawn conclusions on how organizations and managers might help people cope with uncertainty and risk. For example, Ashford and Cummings (1985) looked at how people respond to uncertainty in their work lives by seeking information. Kramer (2001) discusses how uncertainty in organizational (and other social) settings creates a need for trust-based interaction. He points out that it is the capacity of trust to lay to rest this uncertainty that gives research and theories on trust such an important position in organizational and social psychology. Baumeister and Tice (1990) and more recently Leary and Baumeister (2000) document the importance of concerns about uncertainty in many aspects of social life. Two other lines of work in social psychology – by Hogg and Sorrentino – also emphasize the importance of uncertainty in organizational and other social settings and suggest ways of coping with uncertainty. Sorrentino and his colleagues (e.g. Brouwers & Sorrentino, 1993; King & Sorrentino, 1988; Roney & Sorrentino, 1995; Sorrentino, Bobocel, Gitta, Olson & Hewitt, 1988; Sorrentino, Holmes, Hanna & Sharp, 1995; Sorrentino & Short, 1986; Sorrentino, Short & Raynor 1984) discuss how uncertainty influences a variety of behaviors across many different social contexts, and they present research on how individuals vary in how well they cope with uncertainty. Hogg and his colleagues (e.g. Hogg, 2000a, b; Hogg & Abrams, 1993; Hogg & Mullin, 1999) argue that uncertainty reduction is one of the major reasons that people affiliate and identify with social groups, institutions, and organizations, and they present data in support of this position. All of these lines of work point to the importance of uncertainty and coping with uncertainty.

We will begin our own exploration of these issues by taking a step back and describing some theoretical questions in organizational fairness research that led us to see an intimate connection between fairness judgment processes and uncertainty. After we have presented the evidence linking organizational fairness and uncertainty management, we will return to some of this work – most notably that of Kramer and of Hogg and his colleagues – as we discuss how our work relates to work on trust and social identity.

THE PSYCHOLOGY OF ORGANIZATIONAL FAIRNESS[2]

It has been evident for many years that fair treatment – that is, the use of fair procedures, the experience of fair interpersonal process, and the delivery of fair outcomes – has a variety of positive effects in organizations.[3] We know, for example, that fair treatment enhances job satisfaction and organizational commitment (Huo, Smith, Tyler & Lind, 1996; Moorman, 1991; Folger & Konovsky, 1989; Korsgaard, Schweiger & Sapienza, 1995; McFarlin & Sweeney, 1992), increases positive affect and decreases negative affect (Van den Bos, 2001a; Weiss, Suckow & Cropanzano, 1999), promotes acceptance of company policy (Greenberg, 1994; Lind, 1990) and supervisor directives (Huo et al., 1996), facilitates the resolution of conflict (Bobocel, Agar, Meyer & Irving, 1998), and promotes organizational citizenship behaviors (Huo, Smith, Tyler & Lind, 1996; Konovsky & Folger, 1991; Konovsky & Pugh, 1994; Podsakoff & MacKenzie, 1993). On the other hand, unfair treatment can lead to reduction in all of these desirable reactions and can promote such things as employee theft (Greenberg, 1993; Greenberg & Scott, 1996) and litigation against former employers (Lind, Greenberg, Scott & Welchans, 2000). The literature on the benefits of fair treatment and the costs of unfair treatment has seemed sufficient to prompt organizational fairness researchers to recommend, or at least to imply, that it is always a good thing for organizational actions, process, and structures to be designed with an eye to fairness. As we note below, it may be time for a new look at the patterning of fairness effects and, based on this new analysis, for prescriptions that recognize that fairness is more important in some contexts than others.

A More Psychological Approach to Fairness

With a few notable exceptions, which we discuss below, organizational fairness researchers have tended to focus their work on showing that fairness matters in organizations; they have not concerned themselves as much with why fairness might play the role it does in organizational life. We argue here, however, that by probing more deeply into the psychology of fairness we can discover when and why fairness is important to people. A deeper investigation of how people think about fairness reveals a great deal about the psychological, social, and organizational function of fairness, and it permits us to draw more finely differentiated conclusions about where and how organizational fairness affects organizational behavior. In addition, understanding the psychology of fairness judgments gives us new insights into how these judgments are formed, insights that yield interesting predictions about how fairness can be engendered or undermined in organizations. These predictions in turn have important implications for the use of fairness-relevant actions in good management practice.

In this chapter, we will describe a new "uncertainty management theory" of organizational fairness that addresses the social psychological dynamics of fairness judgments (Van den Bos & Lind, 2002). We describe below some basic social psychological research and some organizational studies that support the theory. The theory suggests that a key function, perhaps *the* key function, of fairness is that it provides people with a way to cope with uncertainties that arise in their lives. We will describe some research that shows how uncertainty, manifested in a variety of ways in laboratory and real-world settings, increases the impact of fairness. That is, people appear to make greater use of fairness judgments when they are experiencing uncertainty. We will also describe research that shows that the fairness judgment process itself changes as a function of uncertainty. Thus, people appear to remove doubt about whether they are encountering fair outcomes, procedures, or process by using heuristics – cognitive shortcuts – to generate fairness judgments. Prompted by these two findings, we have created an uncertainty-management theory of fairness, which both explains these recently discovered phenomena and gives us new explanations for some classic fairness-judgment findings. Our theory makes some novel predictions about when fairness-related policies and actions are most effective and when unfairness is especially dangerous in organizational contexts. The theory also makes new predictions about how feelings of fair treatment can be engendered (or threatened) by the actions of the organization and its agents.

Not All Fairness is Equal

Three recent studies – one conducted in the field, one conducted in the laboratory, and one conducted first in the laboratory and then replicated in the field – show that fairness effects are not constant. These studies are of particular value to understanding organizational fairness because if a common pattern can found that accounts for when fairness matters more and when it matters less, it might give us some important clues about why fairness is important to people. As we shall see, each of these studies shows that fair treatment has more powerful effects under conditions that seem to make people feel uncertain about themselves or that create the impression that their situation is uncertain.

Consider first a recent investigation of the impact of perceptions of fair treatment on the litigious activity of fired or laid-off employees (Lind et al., 2000). This study found that the decision to file wrongful termination claims is much more heavily influenced by perceptions of fair or unfair treatment *at the time of termination* than by perceptions of fair or unfair treatment *during the course of employment*. Lind et al. interviewed nearly a thousand people who had been fired or laid off from their jobs. The study involved contacting people as they were leaving an unemployment office in Central Ohio and asking them to participate in a relatively brief interview about the circumstances under which they had lost their last job, about their treatment during employment and at the time they were terminated, and about their attitudes and feelings concerning their experiences. The study was undertaken to understand how people react to different termination experiences, with an eye to investigating the circumstances, beliefs, and attitudes that lead people to file wrongful termination lawsuits against their former employers.

The interviews asked about a variety of possible antecedents of the decision to initiate a wrongful termination claim, including the expectation of receiving a large monetary award from the lawsuit, the hardships associated with job termination, fairness of pay during employment, fairness of process and treatment during employment, and fairness of process and treatment at the time of termination. Of particular relevance to the current question of whether fairness judgments exert stronger effects at some times than at others is a comparison of the impact of *fairness of treatment during employment* to the impact of *fairness of treatment at the time of termination.*[4] Lind et al. found that measures of fairness of treatment both during employment and at termination showed significant negative effects on claiming (fairness of pay did not show any significant effect), but that the impact of feelings that one had been treated fairly *at the time of job termination* was much stronger than the impact of feelings that one had been treated fairly *in the course of employment.*

A second demonstration of stronger fairness effects at one time than at others comes from a laboratory experiment by Van den Bos, Wilke, and Lind (1998), and a field replication by Van den Bos, Van Schie, and Colenberg (2002). Van den Bos et al. (1998) examined one of the most robust findings in research on procedural justice – the "fair process effect" (Folger, Rosenfield, Grove & Corkran, 1979). The fair process effect occurs when increased satisfaction with and acceptance of authoritative decisions is caused by the use of fair, rather than unfair, procedures. Van den Bos et al. hypothesized, on the basis of fairness heuristic theory (a precursor of uncertainty management theory, see

Lind, 2001; Van den Bos, Lind & Wilke, 2001) that the fair process effect would be stronger when those affected by the decision were uncertain about the trustworthiness of the authority rendering the decision. The logic is that fairness is used as a heuristic substitute for strong trust judgments. Therefore, there is less need to base satisfaction judgments on fairness judgments if one already either trusts or distrusts the authority, and there is more need to use fairness judgments when one is uncertain about the authority's trustworthiness.

In the experiment, participants were told that they would be receiving a payment, the amount of which was at the discretion of an authority appointed for this purpose. There were three trust conditions: In one the participants received credible information that the authority was trustworthy, in a second the participants received credible information that the authority was *un*trustworthy, and in a third the participants did not receive any information about the trustworthiness of the authority. This trust manipulation was crossed with a manipulation of the fairness of the process used to decide payments. In the fair process condition, participants were given an opportunity to voice their views about what their payment should be. In the unfair process condition, participants did not have any such opportunity for "voice." (Voice, when included as an element of decision making procedures, is one of most powerful ways to engender judgments that the decision making process is fair.)

The basic prediction of the study was that the fairness manipulation would have the most powerful effect on satisfaction with the authority's decision in the condition where the participants were uncertain about whether the authority was trustworthy, and that relatively small, or nonexistent, fair process effects would be seen in the conditions where the participants knew that the authority was either untrustworthy or trustworthy. As can be seen from Fig. 1, which shows the mean satisfaction ratings in each condition, this was exactly what was observed. It is interesting to note that the effect of certainty about trust on the fair process effect – that is, the difference in the magnitude of the voice effect between the trust uncertain condition and the two trust certain conditions – was much stronger than the effect of trust valence – the difference in the voice effect between the high and low certain trust conditions. This drives home the central role of uncertainty in moderating fairness effects. For purposes of activating or de-activating this important fairness effect, it matters more whether one is certain about the trustworthiness (or untrustworthiness) of the authority than whether one knows that the authority is trustworthy or not.

Van den Bos et al. (2002) conducted a conceptual replication of this study, testing for the phenomenon in a study of parents' attitudes toward the organization responsible for their children's daycare. Interviews asked about

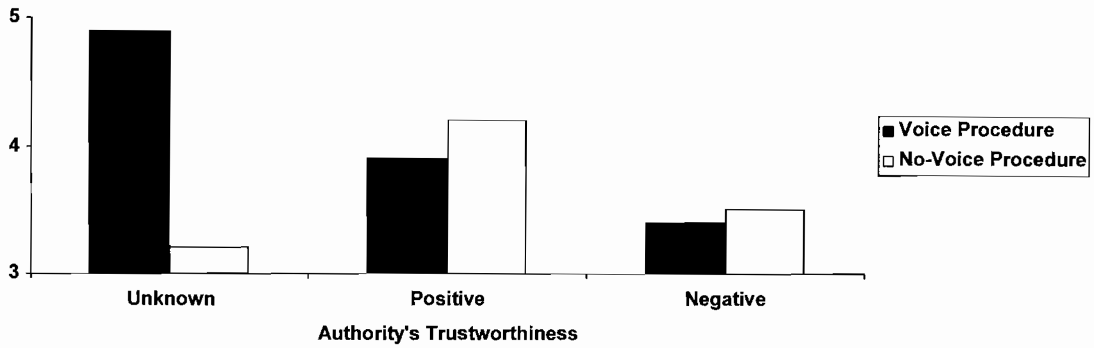

Fig. 1. Mean satisfaction with authority's decisions as a function of authority's trustworthiness and procedure (Van den Bos, Wilke & Lind, 1998, Experiment 2). Means are on 7-point scales with higher values indicating more positive satisfaction ratings. Copyright © 1998 by the American Psychological Association. Adapted with permission.

the respondents' trust in the organization, their perceptions of the fairness of the organization's procedures, and their perceptions of the organization's reliability. The study showed that the impact of procedural fairness judgments on perceptions of the organization's reliability varied depending on the extent to which the respondents trusted the organization. As in the Van den Bos et al. (1998) experiment, fairness had a greater impact when people were uncertain about whether they could trust the organization; when trust was very high, the impact of fairness was less.[5]

A third demonstration of differential fairness effects is seen in a laboratory study by Lind, Kray, and Thompson (2001). Lind et al. were interested in testing a prediction from fairness heuristic theory that fairness judgments are formed quickly in encounters with a previously unknown authority, yielding a primacy effect in the impact of experiences on fairness judgments. The theory predicted further that this primacy effect would be more pronounced under conditions of stronger social identification with the organization within which the experiences occurred. In the study, students were told that they were participating in an experimental analogue of an organizational unit. The experiment manipulated the level of identity with the unit (using a popular manipulation of group identity) and the timing of unfair experiences. The organizational unit was supposedly composed of a student supervisor and several student workers. Actually, all of the participants were in the worker role; the supervisor was an experimental confederate. The tasks that the participants worked on were business-related classification and sorting tasks, and the participants were told that, in order to make the situation more like real life, the computers that they used to do the tasks were programmed to freeze up for random periods of time. Because these computer problems could affect the participants' productivity and consequently their pay for taking part in the study, a rule was introduced that gave the supervisor power to distribute compensatory production points. The rule also allowed the participants to send messages to tell the supervisor about anything, including computer problems, that had affected their performance, but it was entirely up to the supervisor whether he considered these messages.

The timing of fairness manipulation in the Lind et al. (2001) study involved differences in the temporal patterning of two fair experiences (the supervisor said he would consider the workers' messages) and one unfair experience (the supervisor said, in rather impatient terms, that he saw no reason to even consider the message) across the three work trials in the experiment. In one condition, the unfair experience was first, followed by two fair experiences; in a second condition, the unfairness experience occurred after one fair experience and before another fair experience; and in a third condition, the two fair experiences came before the unfair experience. The prediction was that final ratings of the fairness of the supervisor would be most negative in the unfairness-first condition and most positive in the unfairness last condition, and that this pattern would be seen most strongly in the high social identification conditions. Figure 2 shows the mean fairness ratings. As can be seen from the figure, the results confirmed the predictions: early fairness experiences had greater impact on overall fairness judgments than did later fairness experiences, and this effect was stronger in the high group identification condition.

As we noted at the outset of this section, *if* differential fairness effects do occur and *if* we can see a pattern that differentiates stronger from weaker fairness effects, we might have some clues concerning why fairness matters to people. Implicit in this proposition is the idea that fairness would have the greatest effects in conditions where it was most useful or most important. Looking over the studies described above, there does seem to be a common characteristic in all of the conditions that prompted stronger fairness effects: In all of the studies fairness effects were stronger under conditions of greater uncertainty. Thus, in the Lind et al. termination study fairness of treatment at termination – a time of considerable uncertainty – had greater impact on subsequent claiming than did fairness of treatment during employment – a time of less uncertainty. In the Van den Bos et al. (1998) and Van den Bos et al. (2002) studies the impact of uncertainty is even clearer: Under conditions of manipulated or observed uncertainty about the trustworthiness of an authority, fairness judgments had stronger effects on satisfaction with decisions than under conditions of certainty about authority's trustworthiness. In the Lind et al. (2001) study, the nature of the fairness judgment process itself seems to have changed as a function of uncertainty about the fairness of the supervisor: Fairness-relevant information that was received early in an interaction with the new supervisor – a time when there is likely to be considerable uncertainty about the work relationship and the supervisor's standards – had greater impact than did fairness-relevant information received later (see also Van den Bos, Vermunt & Wilke, 1997).

There is little existing theory that can explain effects such as these. The effects are clearly not due to some general primacy or recency effect, since the high-impact experience occurs *later* than the lower-impact experience in the wrongful termination study (Lind et al., 2000), whereas the high impact experiences occur *earlier* than the lower-impact experiences in the new supervisor study (Lind et al., 2001). The effects can not be explained by either of the two major moderating variables seen in the organizational justice literature (and discussed in more detail later in this chapter): the moderation in these three studies is not linked to positive vs. negative outcomes, a variable

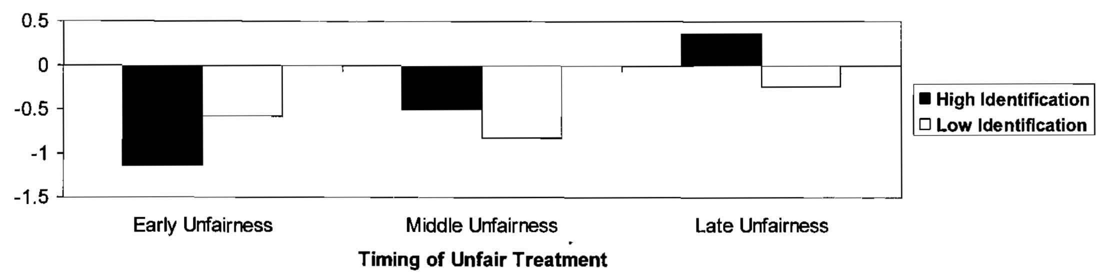

Fig. 2. Mean fairness ratings of supervisor as a function of social identification and timing of unfair treatment (Lind, Kray & Thompson, 2001). Means are standard scores with higher values indicating more negative fairness ratings. Copyright © 2001 by Academic Press. Adapted with permission.

identified in Brockner and Wiesenfeld's (1996) analysis of differential fairness effects; nor is it directly linked to ingroup-outgroup differences, a variable identified by Tyler and his colleagues (Huo, Smith, Tyler & Lind, 1996; Smith, Tyler, Huo, Ortiz & Lind, 1998; Tyler, Lind, Ohbuchi, Sugawara & Huo, 1998).

An answer to the puzzle posed by these three studies can be found, however, in some recent research and theory on the basic social psychology of fairness (Van den Bos & Lind, 2002). Specifically, the common thread in all of the studies described in this section is that fairness effects are stronger under conditions of high uncertainty. Before we describe the theory that we have advanced linking uncertainty and fairness, let us consider this basic research, which makes an even stronger case looking at the link between fairness and uncertainty.

UNCERTAINTY AND FAIRNESS JUDGMENTS

Van den Bos and his colleagues (Van den Bos, 2001a, b; Van den Bos & Miedema, 2000) have conducted a series of laboratory experiments that explore the connections between uncertainty and fairness. In one of the most striking of these studies, Van den Bos (2001a, Experiment 1) gave participants the task of either writing down the emotions and physical feelings that they experience when they think about being uncertain about something or writing down the emotions and physical feelings that they experience when they think about an event that is unrelated to certainty or uncertainty. In an apparently unrelated study that followed this manipulation, participants either experienced a highly fair process for allocating prize tickets or a less fair process. (The fairness manipulation involved a standard "voice" manipulation.) The participants then completed ratings of negative affect on a number of scales. Figure 3 shows the results of the study: When the participants had been asked to think about uncertainty, they showed stronger subsequent fairness effects on measures of affect than when they had not been asked to think about uncertainty. Making uncertainty more salient to the participants clearly increased the capacity of fair procedures to inhibit negative affect.

In a second study in the same series (Van den Bos, 2001a, Experiment 2), instead of manipulating whether the participants were asked to think of uncertain situations, the experiment manipulated whether or not the participants were asked to think of situations in which they were not in control. The dependent variables again were measures of negative-affect reactions concerning treatment in the experiment. The impact of fair procedures was clearly stronger in the out-of-control salience conditions. Fair procedures reduced

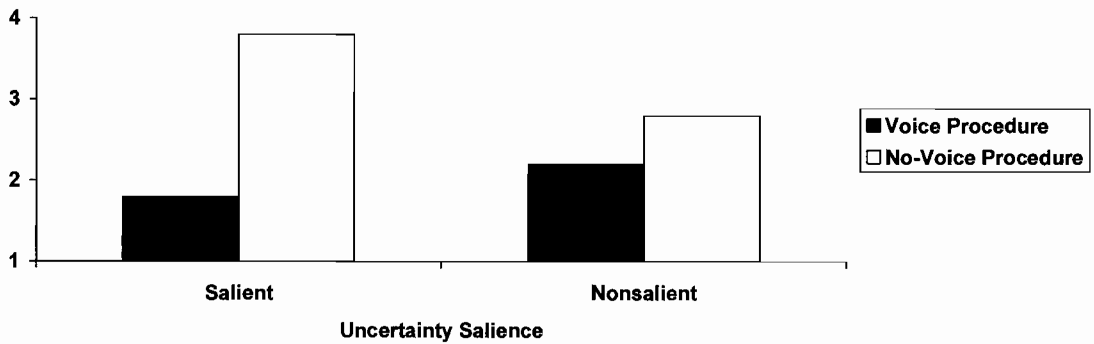

Fig. 3. Mean negative affective reactions toward treatment as a function of uncertainty salience and procedure (Van den Bos, 2001a, Experiment 1). Means are on 7-point scales with higher values indicating more negative affective reactions. Copyright © 2001 by the American Psychological Association. Adapted with permission.

negative-affect reactions more when the participants had been asked to think of how they felt when they were out of control.

The Van den Bos studies were prompted by an earlier laboratory experiment by Van den Bos and Miedema (2000), which is interesting because it shows just how strong, how general, and how "automatic" the fairness-uncertainty connection is. In that experiment, half of the participants were reminded of their own mortality, using a priming task like the one used to make people think about being uncertain or out of control in the Van den Bos (2001a) studies. That is, some of the participants were asked to think about what it would feel like to die. The other participants were given a neutral prime, again as in the Van den Bos studies. (The Van den Bos and Miedema study builds on a line of studies in social psychology called terror management research, which has to do with how people react in the here-and-now to the prospect of their own death.) As in the Van den Bos (2001a) studies, the participants then took part in an apparently unrelated study in which they either encountered a fair procedure or an unfair procedure. As in the Van den Bos studies, the Van den Bos and Miedema participants who had been reminded of their own death, and who were presumably experiencing uncertainty and anxiety connected with thinking about this, showed stronger fairness effects on measures of affect than did the participants exposed to the neutral priming procedure. Even more important for our current purposes, the findings of another study (Van den Bos, 2001b) replicate these effects and show that thoughts of uncertainty about one's self (as measured by means of state self-esteem or manipulated by the presence or absence of an opportunity for self-affirmation) mediate people's reactions to mortality salience and variations in procedural as well as distributive fairness.

Now, it is hard to see on a purely logical level how fair treatment in a psychology experiment has anything to do with anxiety and uncertainty about death, but the Van den Bos and Miedema (2000) studies, and especially the Van den Bos (2001b) findings, show quite clearly that the connection *does exist*. The connection is so fundamental, we argue, that it occurs whether there is a logical link between the fair treatment and the source of the anxiety or not. Before we begin a fuller explication of our theory, though, we should consider two additional demonstrations of the uncertainty-fairness link. Just as the Van den Bos and Miedema (2000) and Van den Bos (2001b) research shows how broad and how powerful the connection between uncertainty and fairness is, the two studies we discuss next show how the phenomenon discovered in the Van den Bos (2001a) studies plays out in the real-world settings like those that interest us in organizational behavior.

See (2000) examined the connection between perceptions of procedural fairness in a political policy-making process – the design of environmental regulations to limit nitrogen pollution in a North Carolina river – and perceived knowledge about the issue. See's data were collected from a general population survey of residents in counties bordering on the river system in question. If the uncertainty-fairness connection demonstrated in the Van den Bos (2001a) studies generalizes to this setting, we would expect people who were uncertain about issues surrounding the regulation to show a stronger fair process effect. That is, survey respondents who say they are less knowledgeable (more uncertain) should show stronger correlation between their perceptions of fair process and their support for the final regulations than those who say they are more knowledgeable (less uncertain). This is exactly what See observed. When respondents rated their knowledge of environmental issues to be low, their support for the regulation was correlated positively with their perception of the fairness of policy-making procedures. In contrast, when respondents rated their knowledge of environmental issues as high, there was a much weaker correlation between perceived procedural fairness and support for the policy.

Long (2002) reports a study of reactions to managerial fairness that also shows a connection between uncertainty and fairness in a business setting. In linked surveys of supervisors and subordinates, Long asked about a variety of issues related to different types of fairness.[6] Of greatest interest here are the data from the questionnaires completed by the subordinates, which included questions about fair treatment, questions about feelings of uncertainty both in terms of the future of their job and in terms of the likelihood of achieving performance goals, and questions about a number of potential consequences of fair or unfair treatment (loyalty to and trust in the supervisor, striving for excellence in performance, etc.). The respondents were separated into those who said they often experienced high uncertainty on either uncertainty measure and those who indicated low uncertainty on both measures. The correlations between perceptions of fair treatment and two sets of dependent variables were computed and compared between the certain and uncertain groups. One set of dependent variables reflected loyalty to the manager and to the workgroup, the other reflected striving for excellence in performance and trying to be a good representative of the organization. Compared to the less uncertain respondents, those who reported some substantial level of uncertainty showed stronger correlations between fair treatment and both the loyalty measures and the striving measures.

The findings of the See and Long studies show that the basic phenomenon seen in the Van den Bos experiments – the enhancement of fairness effects when uncertainty is present – occurs in real-world settings involving reactions to policy making and reactions to managerial actions. When the various studies described in this section are considered along with the Lind et al. and the Van den Bos et al. studies described in the previous section, a very clear picture emerges. Fairness effects become stronger in the presence of various sorts of uncertainty and they become weaker in the presence of certainty. We turn now to a description of a theory we have recently advanced to explain this phenomenon. The theory not only explains why fairness judgments have greater effects under uncertainty, it also provides a whole new way of looking at both organizational fairness processes and the way people cope with uncertainty.

Uncertainty Management Theory – Part 1

We mentioned above that we believe that fairness researchers have not been as concerned as they might have been with the psychology of why fairness matters to people. We suggest that the enhancement of fairness effects in the face of various sorts of uncertainty, demonstrated by the studies described above, gives us an important clue to why fairness matters (Van den Bos & Lind, 2002). Interpreting this clue depends on making what might be termed a "functional assumption" about fairness judgment processes (Lind, 2001). That is, we assume that fairness judgment processes serve a psychological function, and that the triggering of strong fairness effects is a sign that fairness judgments are being employed to resolve some social or psychological question. If this assumption is correct, then fairness judgments should have the greatest impact on other beliefs and behaviors at the times when fairness is most useful (or most used) as a guide to how one should deal with the social and organizational context. Since the studies we have reviewed here show that fairness has greater impact under conditions of uncertainty, we are led to conclude that fairness is most useful in uncertain contexts.

This in turn suggests that fairness helps people to cope with uncertainty. If uncertainty makes fair treatment more effective in reducing negative affect and increasing positive affect (as in the Van den Bos, 2001a, studies), enhancing support for organizational policies and decisions (as in the Lind et al., 2000; Van den Bos et al., 1998; See, 2000, studies), or increasing trust and performance aspirations (as in the Long, 2002, study), it is because being fairly treated is especially useful psychologically to people in uncertain circumstances. In fact, we have argued (Van den Bos & Lind, 2002) that one of the primary reasons that people attend to fairness is that the perception that the environment (or major entities in the environment) is fair helps them to deal with uncertainty. Fair treatment helps people manage their uncertainty, we have suggested, both because it gives them confidence that they will ultimately receive good outcomes and because it makes the possibility of loss less anxiety-provoking or even, as in fair gambles, enjoyable. Conversely, unfair treatment under conditions of uncertainty gives the uncertainty a particularly sinister complexion, and makes people even more uneasy.

In either the fair treatment or unfair treatment situation, fairness provides a guide that directs personal attitudes and actions that are needed to deal with uncertainty. In the situation where uncertainty is coupled with clearly fair treatment, the person in question is able to maintain positive affect, feel favorable toward the organization, and engage in the sort of pro-organizational behavior (e.g. accepting supervisor's orders, obeying company policies, going "above and beyond" the call of duty) that have long been known to be linked to fair process and fair outcomes (for reviews, see, e.g. Lind & Tyler, 1988; Tyler & Lind, 1992). These pro-organizational attitudes and behaviors are "safe" because fairness reduces the anxiety about being excluded or exploited, anxieties that might otherwise become very worrisome in uncertain contexts. On the other hand, when uncertainty is coupled with clearly unfair treatment, the person will engage in self-protective or even competitive actions, in order to relieve the uncertainty by seizing control of his or her own fate and identity. In this instance, the pro-organizational actions and attitudes are abandoned and self-interest takes over. Sometimes, we would suggest, the sting of unfairness becomes so strong, when treatment is so unfair or perhaps when even moderate levels of unfairness are particularly threatening in the face of great uncertainty, that negative affect drives people to frankly competitive actions in which harming the organization is as much a goal as protecting the self.[7]

Note that the central construct in our theory about the use of fairness to manage feelings of uncertainty rests is a global impression of fair treatment, rather than on one or another of the traditional modalities of fairness. That is, we are suggesting that it is not just the belief that one has encountered fair procedures, nor just fair interactional experiences, nor just receiving fair outcomes, but instead a global impression of fair treatment based on information from procedures, interactions, *and* outcomes that is the key to managing uncertainty. We will have more to say about this in the next section.

Later in this chapter we will take a closer look at the organizational implications of this theoretical position, but it is perhaps helpful here to preview some of those implications. Consider first that uncertainty occurs in many of the contexts that have engaged our interests as organizational behavior researchers. Organizational change efforts and corporate mergers and acquisitions, to cite just two examples, are almost always accompanied by uncertainty on the part of employees (and customers) affected by the change or merger. In addition, efforts to enhance creativity and exploration of new, but risky, business possibilities can also require that those who are being pushed toward new frontiers tolerate considerable uncertainty. If we are right in saying that fairness is an effective tool for managing uncertainty, then these situations are likely to be much more tolerable if managers and executives pay special attention to fairness concerns when uncertainty is high. If fairness carries costs – and we will argue below that it often does – then one might want to concentrate efforts to achieve high levels of fairness during these high-uncertainty times.

We will explore these and other practical implications of the connection between uncertainty and fairness later in the chapter, but before we do that, we need to consider another aspect of the connection between the two constructs. In the next section we explore the ways in which uncertainty affects not only the "why" of fairness judgments (i.e. why does fairness matter) but also the "how" of fairness judgments (i.e. how fairness judgments are formed).

Uncertainty and the Generation of Fairness Judgments

Uncertainty not only affects how fairness judgments are used, it also affects how fairness judgments are generated. There is a substantial body of research that shows that the psychological dynamics of fairness judgments change depending on whether the fairness judgments themselves are held with greater or lesser certainty. Much of this research was prompted by our earlier theoretical work on "fairness heuristic theory" (e.g. Lind, 1992, 2001; Lind, Kulik, Ambrose & De Vera Park, 1993; Van den Bos, Lind & Wilke, 2001), but we argue here that the phenomena involved are even more relevant to our current uncertainty management theory. One of the tenets of both theories is that people use cognitive shortcuts to generate fairness judgments. The research we are about to describe shows one such shortcut: people substituting one type of fairness judgment for another. The research shows that if people have some information about one modality of fairness, say procedural fairness, but are uncertain about another modality, say outcome fairness, they will use the information about the more certain modality to generate a belief about the less certain modality.

Van den Bos, Lind, Vermunt, and Wilke (1997) set out to investigate whether this "substitutability" effect might explain one of the most replicated findings in the procedural justice literature – the fair process effect (Folger et al., 1979). As we noted above, in the fair process effect a positive impression of the fairness of procedures leads to greater perceived fairness of decisions or policies resulting from the procedure and greater acceptance of the decisions or policies. Van den Bos et al. hypothesized that the fair process effect would in fact be seen only when there is little independent information upon which one can base an assessment of the fairness of the outcome. In the terminology we are using in this chapter, the fair process effect will be seen only when there is considerable uncertainty about the fairness of the outcome. When there is independent information about outcome equity – such as information about the inputs and outcomes of others (Adams, 1965; Walster, Berscheid & Walster, 1973; Walster, Walster & Berscheid, 1978) – and consequently greater certainty about the fairness of the outcome, there should be little temptation to substitute procedural fairness judgments for outcome fairness judgments, and hence less evidence of fair process effects. Van den Bos et al. compared the magnitude of the fair process effect under conditions of substantial uncertainty about the fairness of the outcome to the magnitude of the effect under conditions of greater certainty about the fairness of the outcome. The results of their experiments showed substantial and significant fair process effects in the outcome-fairness-uncertain conditions and small and non-significant fair process effects in the outcome-fairness-certain conditions.

Other research showed that the substitutability effect can function in the opposite direction if there is uncertainty about procedural fairness and certainty about outcome fairness. That is, if outcome fairness perceptions are held with some certainty but the person is uncertain about the fairness of the procedures that generated the outcome, then the outcome fairness judgment is used to generate a procedural fairness judgment, producing a "fair outcome effect" (Van den Bos, 1999; Daly & Tripp, 1996).

The Lind et al. (2001) study on primacy effects in fairness judgments, which we described in our earlier discussion about how "not all fairness is equal," offers some findings that show another aspect of how uncertainty can affect the generation of fairness judgments. Recall that in the Lind et al. experiment, participants found themselves confronted with a new supervisor. The experiment varied when the participants received unfair treatment at the hands of the supervisor. The results showed that early unfair treatment had greater impact on post-experimental impressions of the supervisor's fairness than did later unfair treatment. It appears that just as uncertainty about how fairly one is treated can prompt the substitution of one fairness modality for another, it can also prompt people who have no fairness judgments at all (as in the case of a brand new supervisor) to grasp at the first available fairness-relevant experience and give that experience greater weight in subsequent fairness judgments (see also Van den Bos, Vermunt & Wilke, 1997).

Uncertainty Management Theory – Part 2

Our theory explains substitutability and primacy effects of the sort just described by positing that people move to make their fairness judgments more certain, even when this involves cognitive shortcuts, because they need certainty in their fairness judgments to manage external uncertainty. It would do little good, after all, to try to manage one's concerns about uncertainty in the environment if one had no certainty about one's fairness judgment. To do so would be simply to exchange one uncertainty for another, and this would not be a very effective way of resolving discomfort of the sort caused by uncertainty. If, however, one can find some information in the environment to generate an impression of even one fairness modality, then substitutability effects can supply fairness impressions on other modalities and generate a global impression of fairness, which can be used to manage uncertainty in the environment.

The picture that is emerging of the relationship between fairness and uncertainty, then, looks like this: When people are confronted with uncertainty in their environment, they turn to their impressions of fair or unfair treatment to help them decide how to react. If they are uncertain about their fairness judgments, they resolve this uncertainty using shortcut reasoning, such as that involved in substituting one modality of fairness judgment for another. Once fairness judgments are available, if the person concludes that he or she is being treated fairly, positive fairness effects like acceptance of organizational decisions and policies, trust in supervisors, enhanced performance aspirations, and positive (or less negative) affect will be seen, and the person will use the perception of fairness to reduce the concerns they have about uncertainty (cf. Koper, Van Knippenberg, Bouhuijs, Vermunt & Wilke, 1993).

If, on the other hand, the person in question concludes that he or she is being treated unfairly, organizational decisions and policies will be rejected, organizational authorities will be distrusted, high performance goals will be abandoned, negative (or less positive) affect will increase, and the person may even engage in anti-organizational activities such as theft or litigation. In addition, when faced with organizational unfairness, people are likely to feel even more distressed about the organization's ability of help them manage the uncertainty, and they are likely to turn to their own personal resources to deal with the uncertainty. As we noted earlier, an illustration of what might be the ultimate positive fairness effect in uncertain circumstances is the enjoyment of pure random processes in the thrill of a fair gamble. An illustration of what might be the ultimate negative fairness effect in uncertain circumstances is seen in the actions of the litigious former employees in the Lind et al. (2000) study described above, who were seeking in court redress for the unfair treatment they felt they had received when they were told they had been fired or laid off.

The substitutability effect is an intriguing example of how the potential use of fairness judgments to resolve uncertainty may in turn alter the basic psychology of fairness. We are suggesting that the usefulness of fairness as a psychological tool affects the psychological construction of fairness judgments. Our original hypothesizing of a substitutability effect was based on the idea that people would prefer a consistent, readily useable fairness judgment to a more complex, more nuanced, but possibly less useful fairness judgment. In seeking to reach some level of certainty about the general level of fairness they are experiencing, we argue, people assume a congruence between different types of fairness, substituting more certain fairness judgments in one domain for less certain fairness judgments in other domains.

All of this substitution is in service of having a useable fairness judgment that can be put into service to manage external uncertainty. (Recall our suggestion that there is little usefulness, in terms of managing uncertainty, if the fairness judgment itself is not held with some level of certainty.) The substitutability effect, then, is more or less a byproduct of the usefulness of fairness to resolve external uncertainty, and the fair process (or fair outcome) effects, which have occupied so much of our attention as organizational justice theorists, result from this effort to be ready to deal with uncertainty. There is a theoretical dynamic here that is fascinating, we think: Fairness is useful in resolving psychological issues with environmental uncertainty and this usefulness suggests that people work especially hard, in a figurative sense, to remove uncertainty from the fairness judgments themselves.

Trust, Identity, and Fairness

We mentioned earlier that there are other social psychological constructs that have been advanced as mechanisms to deal with uncertainty. Two of these seem to us to deserve particular attention in the context of our theory. As we noted, Hogg and his colleagues (e.g. Hogg, 2000a, b; Hogg & Abrams, 1993; Hogg & Mullin, 1999) contend that people use their membership in social entities to manage life's uncertainty. Kramer (2001) makes a similar claim for trust, arguing that trustworthy relationships with coworkers and supervisors can buffer people against many of the uncertainties encountered in organizations. Are there then three different ways that people cope with uncertainty in organizations: identity, trust, and fairness? We think not.

Consider first that Kramer's work makes his ideas entirely congruent with Hogg's by linking identity to trust. Kramer focuses on a particular source of trust – identity-based trust – in his analysis, linking social identity to trust and trust to the sort of prosocial actions seen in some of Kramer's other work (see, e.g. Kramer & Brewer, 1986). In this sense, then, Kramer's analysis extends Hogg's analysis, adds to it, and describes how exactly identity might work to help people cope with uncertainty. Kramer's work suggests, in part, that identity often works by giving people a shared cognitive category that they can use to establish a feeling of trust in those whose otherwise uncertain actions affect them.

We would argue that fairness acts in much the same way, and that fair treatment is an especially effective barrier against the stress of uncertainty because it both substitutes for identity and trust *and* enhances feelings of identity and trust. Our argument here is based on two foundations – one empirical and the other theoretical. Empirically there is the evidence from the Van den Bos et al. (1998; see also Van den Bos et al., 2000) study described earlier, which could be viewed as showing that fairness effects "kick in" when trust is uncertain. This suggests that when trust is not present (and Van den Bos et al., 1998, argue that this is in fact quite often the case), fairness can provide the support needed to help people manage their uncertainty. If the sort of identity-based trust processes that Kramer describes are not pervasive in organizational contexts – if, for example, belonging to the same organization or unit as one's coworkers and supervisor is not enough to engender sufficient trust to make uncertainty manageable – then fairness judgments can serve this function. It is of course a matter open to debate, but we believe that there are a great many organizational contexts in which identity-based trust is not strong, either because organizational identity is weak (perhaps because of repeated mergers or reorganizations or because the external culture downplays organizational identity) or because the actions of the organization (e.g. layoffs, poor management practices) have undermined the natural propensity to identify and trust. In these situations the fairness-based processes and applications we discuss here will have particular importance.

There is evidence that fair treatment enhances trust, especially in the context of external uncertainty. Recall that one of the findings of Long's (2001) survey of managers and subordinates was that perceptions of fair treatment were more strongly correlated with trust in managers when the business context held considerable uncertainty. Identity also is probably affected profoundly by fair or unfair treatment. Indeed considerable theorizing on the psychology of fairness, beginning with Lind and Tyler's (1988) "group value theory" and continuing through "fairness heuristic theory" (Lind, 2001; Van den Bos, Lind

& Wilke, 2001), has been founded on the proposition that people look to the fairness of their treatment for information about whether they are valued members of the social entity and use this information to guide how much they should identify with the social institutions and organizations to which they nominally belong. Given the substantial research support for this view of the psychology of fairness (for reviews see Tyler & Lind, 1992; Van den Bos et al.. 2001), we can conclude with some confidence that fairness judgments are one of the ways that people decide whether or not they should identify, which in turns means that at least part of the uncertainty management capacity of identity depends on fairness, since feelings of social identity themselves depend, at least in part, on fairness.

Without denying in the least the importance of the Hogg and Kramer work. then, we can contend that the position we present here – that fairness is a key element of how people manage uncertainty – deserves attention. As we have noted, fairness can function as both a substitute for and a source of trust and identity. Fairness has another important feature, which we believe recommends it for special consideration for understanding how people deal with uncertainty in organizations: We have a substantial empirical base for understanding what makes people feel that they have been treated fairly or unfairly. Forty years of research and theory on fairness, much of it focused on organizational contexts. allows us to make sound recommendations about how feelings of fair treatment can be engendered, and this gives us a good set of suggestions about how management can help workers deal with uncertainty.

Implications for Other Organizational Justice Theories

Our theory is consistent with many existing theories of organizational justice, but it extends these theories and provides a new information on what we think are core elements of these theoretical frameworks (Van den Bos & Lind, 2002). We have already noted that uncertainty management theory builds on our earlier work on fairness heuristic theory. Fairness heuristic theory can be viewed as dealing with a subset of uncertainty management phenomena. Specifically, fairness heuristic theory deals with how people use fairness judgments to resolve uncertainty about whether they might be exploited or excluded from organizational and social relationships. Uncertainty management theory extends the use of fairness to include not only such social uncertainties, but the more general situation of any source of uncertainty. (See Van den Bos & Lind, 2002, for more on the connection between these two theories.)

Among the theories most closely linked to uncertainty management theory are a classic distributive justice theory – Adams (1965) equity theory – and a classic procedural justice theory – Thibaut and Walker's (1975, 1978) control-oriented theory of procedural justice. Equity theory sees the cognitive and affective dynamics of distributive fairness as an effort to resolve "inequity distress," a construct that is arguably a particular type of uncertainty about fairness. In this regard, Adams' theorizing is not unlike the logic that lead us to predict and find substitutability effects. Of course, since multiple fairness modalities had not yet been discovered when Adams did his work, there was no basis then for predicting the aligning of justice judgments across modalities. When cognitions within the distributive justice modality are aligned, distress is reduced, according to Adams, and this reduction in distress is itself not unlike the affect-calming effects we posit fairness having on non-fairness uncertainty.

Thibaut and Walker (1975, 1978) looked at the adjudicative conflict resolution procedures they studied as a means for organizations and societies to reduce uncertainty about issues in conflict. In fact, in the 1978 paper (Thibaut & Walker, 1978) they analyze the objective benefits of procedures in terms of which types of uncertainty each procedure resolves best. In that article they recommend non-adversary procedures as best at resolving fact- or science-conflicts and adversary procedures as best at resolving distribution conflicts. This line of thinking resonates with both a centuries-old approach to resolving objective uncertainty (as we note in the next paragraph) and with the Fromm quote with which we began this chapter. It may also give one reason that people find fairness reassuring in the face of uncertainty.

In the modern resolution of disputes, both inside and outside organizations, fairness is a touchstone for effective resolution of the collective uncertainty underlying the conflict. Notice that a wide variety of organizational issues, ranging from the dynamics of union organizing to the resolution of major contractual disputes to national and international political action, all involve uncertainty, and in modern social contexts there is wide consensus that the appropriate societal, institutional, or organizational response to such uncertainty is to use fair procedures to find a fair solution to the conflict. Given the strength and ubiquity of fairness norms as appropriate solutions to external uncertainty, it is not surprising that people look to their fairness judgments to help them cope with internal, psychological uncertainty. That is, when the conflict is resolved fairly, whether by fair process, fair outcome, or fair interactional standards, people in essence define away the uncertainty – the issue is no longer uncertain once it is fairly resolved. It is just a small step to assume that even when the issue has not yet been resolved, people within organizations and other institutions feel better able to deal with the uncertainty when fairness can be anticipated, making uncertainty more tolerable when one has been treated fairly or anticipates being treated fairly. So one reason that fairness is used to manage personal uncertainty may be that people generalize this institutional principle (fairness = management of uncertainty) to their own personal feelings and cognitions.[8]

Let us now turn our attention from general theories of fairness to two existing analyses of organizational justice that predict the moderation of procedural fairness effects under some circumstances. Brockner and Wiesenfeld (1996) suggest that fairness effects are stronger when outcomes are negative, and Tyler and his colleagues (Huo et al., 1996; Smith et al., 1998; Tyler et al., 1998) suggest that fairness effects are stronger in the context of ingroup interactions than in the context of outgroup interactions.

Brockner and Wiesenfeld (1996) review a number of studies that have included measurements or manipulations that allow them to test whether the magnitude of fairness effects is greater when outcomes are negative than when outcomes are positive. While a great many of the studies included in their review do show stronger fairness effects when the outcome of the process in question is negative, there are other studies – some included in the Brockner and Wiesenfeld review and others not included in the review – that show no outcome-based moderation of the fairness effects and some that even show stronger procedural fairness effects in the presence of positive outcomes than in the presence of negative outcomes. Lind (2001) discusses this issue in more detail, but for the present purpose two examples – one a laboratory experiment and one a field study – should suffice. The very first procedural fairness experiment, conducted by Walker, LaTour, Lind, and Thibaut (1974), included manipulations of both procedure and outcome. The procedure manipulation – a manipulation of high vs. low process control – was crossed with a manipulation of the outcome of the conflict resolution – the judgment of the adjudicator was either favorable or unfavorable to the participant. Walker et al. report cell means for a measure of acceptance of the verdict (ratings of satisfaction with the verdict), and these means show that the fair process effect is as strong under conditions of positive outcomes (marginal means of 8.71 and 7.94 for fair and unfair procedures respectively; ratings on a nine-point scale) as under conditions of negative outcomes (ratings of 2.69 and 1.92 for fair and unfair procedures respectively). Similarly, in the Lind et al. (2000) study of litigation following job termination, there was no evidence of an outcome-based moderation of the effects of fair process at termination. Lind et al. tested for an interaction between fair treatment and the magnitude of bad outcomes or negative feelings following job termination, and found no evidence of such an effect, in spite of great statistical power (with nearly a thousand respondents) to detect the effect if it had been present.

Indeed, Brockner's own more recent work has uncovered more instances of variation in the strength or even the existence of the fairness by outcome interaction (e.g. Brockner, 2002; Brockner, Chen, Mannix, Leung & Skarlicki, 2000; Brockner, Siegel, Daly, Tyler & Martin, 1997). Brockner and his colleagues have advanced credible explanations for the variations they have seen in strength and appearance of the fairness by outcome interaction, but we wonder if there might not be a simpler underlying psychological process. Specifically we would suggest that the key variable producing both the interaction effects originally reviewed by Brockner and Wiesenfeld and the variation in that effect seen in other studies is not the valence of the outcome, but rather the extent to which the outcome prompts uncertainty.

In many instances receiving a negative outcome would indeed increase one's uncertainty about the organizational context, relative to what one would feel if one received a positive outcome, and in these instances uncertainty management theory would predict greater fairness effects under negative outcomes. In other instances, however, there might be no difference in the uncertainty engendered by positive or negative outcomes, as would be the case when both positive and negative outcomes are either equally expected or equally unexpected. We would argue that in these cases there would be no difference in the magnitude of fairness effects. There are probably even some situations where the positive outcome is less expected than the negative. Consider for example a situation in which a person expects to be laid off in a corporate downsizing but instead receives a promotion. In this situation, we would expect the positive outcome to engender more uncertainty, and following uncertainty management reasoning, we would expect fairness effects to be stronger under positive than under negative outcomes. In general, then, where cultural or situational factors increase the salience of uncertainty, we expect to see stronger fairness effects. Where culture or situation makes the connection between negative outcomes and uncertainty stronger, we expect to see strong outcome by fairness effects of the sort described by Brockner and Wiesenfeld.

Before we leave the Brockner and Wiesenfeld hypothesis and the related empirical studies, we should consider a possible alternative explanation that would account for both their data and some of ours. Might it be that fairness becomes important to people not in response to uncertainty generally nor in response to negative outcomes specifically, but rather in response to the *potential of negative experiences or evaluations*? This explanation would argue that our data on the moderation of fairness effects by uncertainty might really be not a response to uncertainty but rather a response to fear of negative outcomes, and it would argue that the Brockner and Wiesenfeld moderation of fairness by negative outcomes might occur not because of the experience of negative outcomes per se but rather because of some anticipatory effect caused by awareness of the possibility of negative outcomes.

This possibility certainly deserves additional empirical examination, but we think that there is a case to be made for viewing general uncertainty and not just uncertainty about negative outcomes as the key moderating variable. We take this position because many of the research studies we cite here, especially the experimental studies, have examined uncertainty that does not have an especially negative connotation. In most of the experiments by Van den Bos and his colleagues, there is no chance of any real negative outcome; the only question is how much of a positive payment one might receive.[9] In the key studies with uncertainty priming, the prime was deliberately neutral and participants' responses to the primes give no reason to suspect that they thought mainly or even at all about being uncertain about negative outcomes. In addition, as we noted, there are instances of reversals of the Brockner and Wiesenfeld interaction that we think might be explained by uncertainty about positive outcomes. Thus we think it unlikely that the processes we describe are driven by the fear of negative outcomes or negative evaluations, but we certainly think that this hypothesis deserves testing in future studies.

Note that our theory suggests that these moderation effects, when they occur, will occur not just for procedural fairness, but also for distributive and interactional fairness. An intriguing implication of our interpretation of the outcome moderation effect is that if one makes the negative outcome less surprising, the fair process effect is diminished.

As noted above, Tyler and his colleagues (Huo et al., 1996; Smith et al., 1998; Tyler, 1999; Tyler & Blader, 2000; Tyler et al., 1998) report a number of studies showing stronger fairness effects when the fair or unfair treatment is at the hands of an in-group authority than when the fair or unfair treatment is at the hands of an out-group authority. This line of research has been advanced as a demonstration of a general principle of fairness: that fairness is more important or more powerful within groups than between groups. To be sure, there is evidence supporting Tyler et al.'s group identity moderation prediction in a number of studies, but there is also evidence (e.g. Van den Bos & Lind, 2001) of stronger fairness effects when the authority in question is a member of an out-group. More recent work by Tyler and his colleagues (see, e.g. Tyler, 1999; Tyler & Blader, 2000) points to more complex relationships among identity categories, fairness judgments and fairness effects.

Again we think that the empirical complexities and even the apparent conflict of findings in these studies might in fact be complex manifestations of the same basic psychological process. Our theory would suggest that in-group authorities' actions have stronger fairness effects only when there is greater (or more salient) uncertainty about the intragroup situation. When there is greater uncertainty about the intergroup situation, then out-group authorities' actions should have greater fairness effects.

ORGANIZATIONAL IMPLICATIONS

The research and theory we present suggests that many of the effects of fair treatment – enhanced acceptance of decisions and policies, greater commitment and higher levels of organizational citizenship behavior, and lower levels of theft, violence, and litigation – will be stronger when organizational or personal uncertainty is high. This, in turn, suggests that it is especially important that organizations use fair procedures and provide fair process and fair outcomes when the organizational context is characterized by high levels of uncertainty. For example, we would argue that fair treatment is especially important in times of organizational change, mergers or acquisitions, technological innovation, or market turmoil. Similarly, fair treatment is important when the personal situations confronted by workers are uncertain – as in times of layoffs, promotions or transfers, re-training, or in policies around significant life changes outside of work. And when we want people to seek or at least tolerate uncertainty as part of their job, as is the case when workers have to be encouraged to take business risks or seek creative but untested solutions to novel business problems, again fair treatment is especially important.

A few comments are in order about why it is essential to know when fair treatment is especially important . . . and when unfair treatment is especially dangerous. As we noted at the beginning of this chapter, those of us who do research on organizational fairness often talk about fair treatment as though it were beneficial in all situations and as though it could be provided without any cost. But fairness is not without cost. Making outcomes fair often involves increasing salaries or benefits, since it is seldom possible to increase overall perceptions of fairness by lowering some outcomes to achieve equity. Thus, achieving fairness by way of fair outcomes generally involves greater expenditures on salaries and benefits.

Could one then turn to fair procedures or fair interpersonal process to enhance feelings of fairness at little cost? Again, those of us advancing the notion of fair process as a good management technique often talk as though this were the case, but in reality it is probably not so. Consider that fair procedures are often more complicated and less efficient than are less fair procedures, and this means that extra time and effort has to go into providing procedures that will engender general feelings of fairness. Fair interpersonal process – which involves according subordinates personal attention and providing them with accounts and explanations of decisions – of necessity involves substantial investment in the form of the time and attention of managers and executives. Thus it is arguable that fair procedures and process, instead of being "cheaper" than fair outcomes, involve the investment of one of the few resources more scarce than money in most organizations: managers' and executives' time.

This is one of the most important practical implications of our work. If fair treatment is costly, as we argue here, then we need to know where it can best be "invested" and when we can allow ourselves to spend somewhat less time and money on fairness issues. Where, in other words, can we best spend the time and money that is required to engender feelings of fair treatment, if we cannot afford to seize every opportunity for fairness? We would suggest that by knowing (or measuring) when uncertainty is likely to be salient to workers, we can predict when they will be most concerned about fairness, and we can focus fairness-enhancing policies and actions at those times.

Interestingly, absent the insights advanced in this chapter, an economic or quasi-economic consideration of the cost of fair outcomes, procedures, and process can lead to exactly the wrong behavior. A purely economic analysis, if founded on the assumption that fair treatment is a desirable practice but not a necessity, might suggest that fairness should be provided when it can best be afforded. According to this logic, when times are bad fairness is a luxury that can be done without. Prompted in part by an unspoken, but widely held view that fairness was a nice, but hardly essential, element of managerial practice, organizational justice theorists in the 1980s started testing the effects of fairness in times of turmoil and found that, in contrast with what economists would predict, fairness effects were found. Indeed, our analysis suggests, and our data show, that fairness is in fact most needed in times of trouble. An ironic but clear implication of our model is thus that in times of organizational turmoil, when management is tempted to pay less attention to fairness (and more to cutting down expenses and sorting out other financial issues) it is, in fact, especially important that fairness-related actions receive high priority.

The research and theory presented earlier in the chapter also offers information about how a sense of fairness is best engendered. In general it appears that fairness impressions are themselves most easily altered during times of change. The Lind et al. (2000) primacy study shows that very early actions by a new supervisor have the greatest impact, for good or evil, on fairness judgments. When the internal or external organizational context is undergoing salient changes, we would suggest, uncertainty is likely to be high and fairness judgments are most likely to be reevaluated. In these fluid contexts, actions that provides evidence of fair treatment are more likely to be incorporated into the general fairness impressions of workers than would be the case in more stable times. (Lind, 2001, describes this phenomenon as a shift in fairness judgment processes from a "use" to a "judgment" mode. In more stable times, fairness judgments are used without much effort to reevaluate their validity; in less stable times fairness judgments are reevaluated before being used.)

This line of reasoning in turn provides three practical implications of our theory for the practice of management. First, when a manager is assigned to a new unit or when new workers are hired or transferred into a unit, the manager should move quickly to act fairly. Second, if a general impression of unfairness has arisen in a unit, some salient change might "re-open" the fairness evaluation process and allow those impressions to be changed in a positive direction. Upper-level managers often intuit this and move mid-level managers to new units to "give them a fresh start." Our theory suggests that this is in fact a good idea because it allows the re-assigned manager to establish a good relationship with his or her new subordinates if the "fresh start" is accompanied by obviously fair outcomes, procedures, and processes on the part of newly assigned managers. (Of course, if the newly assigned manager acts unfairly, then the future working relationship between the manager and his or her subordinates can be quickly "soured.") Both of these recommendations are based on the fact that our theory, and the research that supports it, points to times of uncertainty as the times fair actions have the most potency.

The third implication of our theory is that it makes most sense to move quickly to alter whatever type of fairness judgment is most easily enhanced, since other fairness modalities will generally follow by virtue of substitutability effects. If, in a time of uncertainty, outcomes can be made fairer (and made so in a salient, impressive way), then it might make most sense to act to enhance this fairness modality to bring up general impressions of fairness, trusting to substitutability effects to enhance perceptions of procedural and interactional fairness. On the other hand, if there are few economic resources available and if procedures are hard to change rapidly, a savvy manager will invest his or her own time in listening, explaining, and generally conveying respect for subordinates, using salient acts of interactional fairness to enhance general impressions of fair treatment, again trusting in substitutability effects to bring perceptions of distributive and procedural fairness along.

Taken with the implications of our theory for when fairness matters most, this last point suggests that clear, unambiguous acts of fairness – of whatever type – that occur early in a time of uncertainty will have the greatest chance of aiding workers in dealing with uncertainty and will have the greatest "payoff" to the company. This idea, and other implications of the theory, can be applied to a number of common organizational contexts, and we turn next to a more detailed consideration of what uncertainty management theory suggests about how fairness works in four important organizational contexts: in organizational change, in mergers and acquisitions, in human resource policies concerning personal life-change events, and in organizational contexts that require creativity and risk-taking.

Organizational Change

The question of how one can facilitate acceptance of changes in organizational policy, structure, or technology is receiving a great deal of attention these days. There are a number of studies (e.g. Daly & Geyer, 1994; Greenberg, 1994; Kidwell & Bennett, 1994; Lind, 1990) showing that distributive, procedural, and interactional fairness can promote acceptance of change. Of course, to the extent that organizational change produces uncertainty – and it almost always does, one could argue – our theory is entirely congruent with research showing such effects. Indeed, we would expect the impact of fairness judgments to be greater in the context of change than at "normal" times. In addition, we would expect that the use of fair procedures and process or the provision of (or assurance of) fair outcomes early in the change sequence would be especially effective in promoting feelings of fair treatment and acceptance of the change, since at these times people are forming new fairness judgments pertaining to the fairness of the change itself.

It is worth noting that our suggestion that special attention be devoted to establishing feelings of fair treatment early in the change management process is consistent with the current wisdom for how change should be approached (see, e.g. Novelli, Kirkman & Shapiro, 1995). Best practices in managing change often emphasize the importance of early consultation with those likely to be affected by the change and careful explanation of the need for and implications of the proposed change. These practices are, of course, exactly what one would advise to promote feelings of fair process.

Uncertainty management theory builds on these practice-oriented accounts by making the recommendations more specific. Thus, our analysis places special emphasis on the importance of fairness-linked aspects of participation. It is not enough, we would say, to gather information from those with some stake in the change, one should make the gathering of information an opportunity to show how stakeholders have voice in the process and to treat all involved with dignity and respect, thus providing the interactional fairness that will help people deal with the uncertainty that accompanies change. We can be more specific about the timing of these actions too: Our theory would say that while fairness-enhancing participation and explanation is important early in the change process – uncertainty is likely to be high then and new fairness judgments are being formed – additional fairness-enhancing actions may well be needed later if uncertainty returns. Thus, if early fair treatment makes initial uncertainty more manageable, that is good, but if later modifications in the change plan re-introduce uncertainty, then it would be advisable to focus again on fair treatment.

Neither of the two propositions advanced here – greater impact of fairness in the context of change than in normal times and greater impact of fairness early in the change process than later – has been tested in the field (see, however, Kulik & Holbrook, 2000, for supportive evidence from consumer research), but both provide hypotheses for future research. Nor is there much research on the other major implication of our theory – that fair treatment will help workers deal with the stress that accompanies change. Research looking at the effects of fairness before, during, and after organizational change efforts might be one of the most fruitful areas for testing uncertainty management theory and for exploring associated phenomena and we thus hope that the current contribution may stimulate OB researchers and practitioners to study these potentially very exciting issues of how people deal with uncertainty and organizational fairness.

Mergers and Acquisitions

Mergers and acquisitions tend to be times of considerable uncertainty among workers of all of the component entities. A merger might be seen as a particular instance of an organizational change, but we single it out for special attention because it is an especially powerful type of change in the organizational environment. When a merger or acquisition occurs, employees often have uncertainty about both their future outcomes and their organizational identity. In addition, it seems likely that a merger or acquisition is just the sort of salient event that will raise questions about the accuracy of previous fairness judgments and that will therefore prompt new analysis of fairness of treatment. This makes it especially likely that primacy and substitutability effects will occur.

Many mergers that look good in terms of financial or market analyses turn out to be unsuccessful. One potential problem in any merger is lack of effective buy-in to the new organizational entity by employees of the constituent units.

Given the well-documented links between fairness judgments and organizational commitment (Huo et al., 1996; Moorman, 1991; Folger & Konovsky, 1989; Korsgaard et al., 1995; McFarlin & Sweeney, 1992), fairness seems a good solution for this particular problem. If effective fairness management can produce a strong fair treatment to organizational commitment effect, an important barrier to effective merger might be eliminated.

But what does our theory say about how to accomplish this? Our theory, and research such as that by Kim and Mauborgne (1993, 1995), shows how fair process and fair outcomes can make mergers and acquisitions work better. The line of thought pursued in this chapter suggests that fair treatment policies, targeted toward the areas or units with greatest uncertainty and pursued early and vigorously, will result in smoother transitions in mergers by assisting workers in dealing with uncertainties about their jobs and their organizational identity. As we suggested in the section on change management, we would recommend that managers of units facing uncertainty under the merger search out and seize opportunities for providing fair outcomes, fair procedures, and fair process. Uncertainty management theory suggests that fairness-oriented actions here will pay huge dividends later.

As was the case with change management, another major benefit of fair treatment at the time a merger is being executed is that the feelings of fair treatment it engenders can reduce the stress that accompanies the merger. If uncertainty management by fairness can reduce anxiety, it may well contribute to more reasoned, and more reasonable, reactions to the merger.

Organizational Policies Around Uncertain Life Events

The laboratory research on the use of fairness as a tool for managing uncertainty suggests that the specifics of fair treatment need not address specifically the source of the uncertainty. Recall the findings of the study by Van den Bos and Miedema (2000; Van den Bos, 2001b), in which the researchers manipulated uncertainty by asking subjects to think about their own mortality (using a "terror management" manipulation) and then manipulated whether the subject was given voice with respect to the division of payment for an apparently unrelated experimental task. Van den Bos and Miedema found that the fairness effect of voice was substantially greater when subjects had been asked to think about their own death than when the subjects were not asked to think about death. Clearly the provision of voice in an experiment has no direct link to uncertainty about issues surrounding mortality, but the implication of the study is that fair treatment in the context of the experiment was more important even when unrelated uncertainty was present (cf. Van den

Bos, 2001b). Following this line of thought, it may well be the case that fair treatment at work is especially desirable – and especially productive – when life events inside *or outside* work have increased general feelings of uncertainty.

Suppose that events outside of work prompt feelings of uncertainty and that this does in fact strengthen the connection between fair treatment at work and such variables as organizational commitment, acceptance of supervisors' instructions, or organizational citizenship behavior, as the Van den Bos and Miedema studies suggest. This means that fairness-related actions will have greater "bang for the buck" when they are targeted toward an employee whose life is in turmoil. Conversely, unfair actions experienced by those whose private lives are in turmoil are likely to be especially damaging for the organizational attitudes and behaviors.

The Lind et al. (2000) termination study shows what might well be such an effect of generalized uncertainty. The uncertainty in that study did not in fact concern the workers' situation in their company: The employment relationship was over at the time of the interview, although uncertainty about future employment and future financial circumstances was presumably still quite high (since the interviews were conducted while the respondents were still unemployed). Fair treatment during the termination process – which in the Lind et al. study meant treatment with dignity and respect and the provision of an honest explanation about why the worker was losing his or her job – appeared to prompt a strong positive response in this uncertain context, providing an effective barrier to subsequent conflict.

Drawing on uncertainty management theory and on the proposition that fair treatment in any aspect of life might well help one manage uncertainty in other aspects of life, we would predict that an organization could get particularly strong positive reactions by designing human resource management procedures and other policies to give clear fairness messages to workers who fall on difficult or uncertain times outside of work. This process of cross-domain substitutability implies that special attention should be given to fairness in outcome and process for workers who are relocating or who are experiencing major life changes (e.g. marriage, divorce, child birth, or the death of a loved one). Fair actions encountered in these uncertain contexts will contribute especially strongly to positive overall impressions of fairness held by the worker. Reasonable, considerate leave or support policies triggered by uncertainty-provoking life events are likely to pay big dividends in employee loyalty and other organizational attitudes and behaviors. By the same token, managers would be well-advised to listen to and offer respect for uncertainty outside work, even if they cannot do anything to lighten the burden. In general the suggestion is that the positive consequences of fairness-relevant actions, be they outcome-, process-, or interactional-oriented, might be as much enhanced by extra-organizational uncertainty as by intra-organizational uncertainty.

The examples used so far in this section have involved life uncertainty resulting from individual life events or experiences. Of course other sources of extra-organizational uncertainty are found in the political and social context. The events of September 11, 2001, prompted feelings of uncertainty in many Americans, and our theory would predict that fair actions on the part of their organizations had especially powerful effects while that uncertainty was salient. Feelings of fair treatment, where they occurred, probably did a lot to ease the stress that many of us felt at that time (cf. Lerner, 1977, 1980). One would expect that in general employees trying to work through times of political unrest will be likely to show stronger positive reactions to fair treatment and stronger negative reactions to unfair treatment.

This line of thought points to new connections between work and personal life. We are arguing that organizational fairness actions are likely to be especially appreciated, and especially effective at promoting good employment relations, when they are focused around troubled times, whether the trouble occurs at work, at home, or in the society at large.

Fairness, Risk, and Creativity

As we noted above, there are some business situations in which uncertainty is unavoidable. In situations that call for creative action, failure is not only common, it is part of the business process. Thus, entrepreneurial activity is by its very nature risky, and even in established lines of business, sometimes the nature of the business is such that uncertain outcomes are a large part of what the company is all about: Pharmaceutical companies, for example, have to accept that many of the chemical compounds they create will fail to be reliable drugs. It is one thing to plan for frequent failure in an actuarial or financial planning context, though, and quite another to motivate employees who see their hard work going "down the drain" in project after project. The pharmaceutical example is just one instance of a more general business situation. Analogous situations exist for salespersons in highly competitive markets, who have to pursue every reasonable customer, even though many of those customers will end up buying from their competitors.

How might one reap the benefits of risk taking in creative contexts and at the same time find ways to sustain motivation and creativity among workers who know they are likely to fail repeatedly before they succeed? Uncertainty management theory suggests, of course, that fair treatment is especially important in contexts that call for creativity and tolerance of risk. If fair treatment helps people to deal with chronic levels of uncertainty, then it may well reduce the occurrence of such potential consequences of chronic uncertainty as emotional stress and "burn out."

This last point is worth emphasizing, since it suggests an opportunity for a whole new line of fairness research. In the previous sections on applications of uncertainty management theory, we have focused on the prediction of the theory that fairness effects will be enhanced in the face of uncertainty, and our recommendations have concerned how well-known fairness effects might help the organization in high-uncertainty contexts. We have only mentioned in passing the potential benefit of fair treatment in reducing the psychological stress that accompanies uncertainty and lack of control. Thus, we recommended special attention to fair treatment of employees during a merger because in this context fairness-to-organizational-commitment effects could bind the employee to the new, merged organizational identity. But the theory points to other, potentially more valuable, benefits from fair treatment under uncertainty. In the merger example, fair treatment might not only help forge new feelings of organizational identity, it might also help employees cope with the day to day stress that occurs during the merger process.

Specifically, our theory suggests that people look for indications of fairness and use them to manage psychologically the stress of uncertainty. If this is so, then fair treatment can provide workers with an effective mechanism for coping with their uncertainty. This in turn means that many of the negative consequences of uncertainty – not only "burn out" but also other psychological and physiological problems associated with exposure to an uncertain environment – might be reduced if only people were treated fairly in uncertain situations.

We have devoted less space to these potential consequences of fair treatment under uncertainty because there is to date little research on this topic. There is, however, support for the proposition that fairness can help people cope with the stress and negative emotions that can accompany uncertainty. Note that the Van den Bos laboratory experiments (Van den Bos, 2001a, 2001b; Van den Bos and Miedema, 2000) all measured the effects of uncertainty on the relationships between fairness and affect, usually negative affect. In all of these experiments, uncertainty enhanced the capacity of fairness to reduce negative affect. The clear implication is that fair treatment can help people cope with stress and other negative consequences of uncertainty in their work or private lies. Future fairness research might profitably look, especially in field settings, at the relationships among stress, negative affect, fairness and uncertainty to see whether fair treatment in the face of uncertainty reduces, and unfair treatment increases, psychological and physiological indicators of stress.

Finally, it is worth noting in the context of this discussion that fairness might not only help people cope with the uncertainty that arises from the external business environment; it might also help people cope with chronic uncertainty about the actions or trustworthiness of their supervisors and coworkers. Consider for example, the uncertainty a stock trader might feel about the trustworthiness of his or her coworkers, given the extreme competitiveness that is built into their compensation system. Our theory would argue that clear and salient fairness on the part of the organization would make this environment less stressful.

CONCLUDING REMARKS

Our theory gives a new perspective on why, when, and how fairness matters in organizations, and it suggests some new organizational fairness phenomena. To recap, we have advanced a rather radical proposition: That fairness is important to people *because it gives them a means of managing uncertainty.* We suggest that uncertainty is a powerful moderating variable for fairness effects, such that fairness effects are magnified in proportion to the level of uncertainty being experienced. We suggest further that the uncertainty in question need not be logically related to the context in which fair or unfair treatment is experienced. What appears to be happening is that people use fairness to manage their reactions to uncertainty, finding comfort in related or even unrelated fair experiences and finding additional distress in unfair experiences.

The theory is informed by existing research, and some of the novel predictions of the theory have been confirmed by recent research, but still other research propositions that follow from the model have not yet been tested and we hope that this will stimulate future research. The theory is congruent with most existing theories of organizational justice, but it pushes our understanding of the processes described by these theories deeper and yields additional understanding of when distributive, procedural, and interactional fairness effects will be more or less powerful.

The link between uncertainty and fairness provides not only novel predictions about when fairness matters, it also yields interesting new predictions about how fairness judgments are generated. Phenomena like the substitutability effect call on us to change rather radically our understanding of the meaning of fair treatment, since they suggest that types of fairness are far more closely linked and, in the final analysis, perhaps more fungible, than organizational justice scholars had imagined.

These theoretical points have immediate practical implications in organizational practice. Once it is recognized that fairness, like any other organizational desideratum, is not without cost and cannot be provided always and in every circumstance, then it becomes critically important to know when fairness is most needed and most effective. Our theory suggests that by analyzing (or measuring) the level of uncertainty being experienced by workers, one can determine the extent to which fairness is needed. Taken in concert with the substitutability effect, the clear prescription is that managers and executives need to move quickly when uncertainty is high to provide whatever sort of fairness they can.

Figuratively speaking fairness seems to illuminate the darkness of uncertainty. It is a light that can drive away the real or imagined dangers that worry us at work and elsewhere, and it can be a lantern that allows us to explore exciting and creative but risky business possibilities. In more poetic words:

When the night is cloudy,
There is still a light that shines on me,
Shine until tomorrow,
Let it be, let it be."

(Lennon & McCartney, 1969)

NOTES

1. We should note that our use of the term "uncertainty" differs from the more technical meaning that term has in behavior decision theory work. BDT scholars distinguish between decisions made under "uncertainty" and decisions made under "risk." We include both uncertain and risky situations, to use BDT parlance, in our consideration of uncertainty and fairness. That is, we view a situation as uncertain when the outcome is in doubt, whether the probabilities associated with various outcomes are known (as in risky decisions) or not (as in uncertain decisions).

2. Although it has been fashionable for some time to use the term "organizational justice" refer to research on how outcomes, procedures, and interpersonal treatment affects judgments of fairness, we advocate (Van den Bos & Lind, 2002) use of the term "organizational fairness". We do this for two reasons, one linguistic and one scientific. First, to the extent that the English words "justice" and "fairness" have different meanings, "justice" refers to more normative and "fairness" to more popular notions of correct treatment. Given this distinction, clearly what we "organizational justice" researchers have been studying is really "organizational fairness." Second, it seems silly to call a field "organizational justice" when in fact measures of the central constructs involve asking about "fairness" rather than "justice". For example, a researcher in this field is far more likely to use an item that asks "How fairly were you treated by your manager" than "Were your treated with justice?".

3. Fair procedures often involve providing "voice" to those subject to the procedure and assuring accuracy and consistency (Folger, 1977; Lind, Kanfer & Earley, 1990; Van

den Bos, Vermunt & Wilke, 1997). Fair interpersonal process involves treating people with dignity and respect and providing explanations for managerial actions (Bies & Moag, 1986; Tyler & Lind, 1992). Fair outcomes generally involve rewarding people equally or in an equitable manner (Adams, 1965; Messick, 1993).

4. Lind et al. compared the impact of treatment fairness in times of termination vs. treatment fairness in times of normal employment using hierarchical chi-squares from a structural equation analysis. By comparing a structural model in which the paths from both treatment fairness variables to the claiming variable were constrained to be equal to a model in which the paths were free to vary, Lind et al. established that the impact of the two fairness variables differed. Descriptively, the relevant path for fairness of treatment at termination (standardized path coefficient = 0.420) was nearly three times as strong the path for fairness of treatment during employment (standardized path coefficient = 0.155).

5. Not surprisingly, few of the parents had negative trust perceptions of the daycare center in whose care they had placed their children.

6. Long recruited managers who were taking executive MBA courses, and sent questionnaires to the managers and to subordinates who were nominated by the managers. Seventy-five males and 52 females responded to the survey; two survey respondents did not disclose their gender. Of the subordinates who responded to the survey, 12.3% were in information technology fields, 12.3% were in financial services, 11.5% were in manufacturing, 10.8% were in the energy industry, 6.2% were in the chemical industry, 6.2% were in the health care industry, and 33.4% were in a variety of other industries.

7. See Lind (2001) and Lind et al. (2000) for a similar line of argument in the context of fairness heuristic theory and see Greenberg (1993, 1997) and Greenberg and Lind (2000) for a discussion of unfairness as antecedent of anti-social behaviors.

8. As we note elsewhere (Van den Bos & Lind, 2002), there is some evidence that this connection between fairness and social order may be "built into the brain" of humans and other higher primates. De Waal (1996) and others (e.g. Wright, 1994) have argued that a concern for morality and justice is evident in some non-human primates and indeed in other mammalian species that live in groups. These researchers contend that social primates, canines, and marine mammals that live in social groups seem to develop at least a crude sense of fairness and justice. Presumably in these instances natural selection has favored those whose social units include some of the patterns we humans call fairness and morality.

9. We realize of course that the question of what is a negative outcome is a comparative issue. An inequitable payment might be seen as negative even though it is objectively more money than the experimental participant had when he or she entered the study. Nonetheless, in many of the experiments great effort was taken to make the payments even comparatively positive.

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