TREATMENT FAIRNESS AND GROUP NORMS
IN TIMES OF TURMOIL:
Implications for Employee Well-Being

Philip Miles
TREATMENT FAIRNESS AND GROUP NORMS 
IN TIMES OF TURMOIL: 
Implications for Employee Well-Being 
(with a summary in English)

RECHTVAARDIGE BEHANDELING EN GROEPSNORMEN 
IN TIJDEN VAN BEROERING: 
Implicaties voor het welzijn van medewerkers 
(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van de graad van doctor aan de Universiteit Utrecht op 
gezag van de rector magnificus, prof.dr. J.C. Stoof, ingevolge het besluit 
van het college voor promoties in het openbaar te verdedigen op dinsdag 
28 september 2010 des middags te 12.45 uur

door

Philip Miles

geboren op 8 februari 1973 
te Morristown, New Jersey, Verenigde Staten
Promotoren: Prof. Dr. K. van den Bos
Prof. Dr. W. B. Schaufeli
# CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>FAIR TREATMENT SOMETIMES IS NOT GOOD: HOW TREATMENT FAIRNESS CAN HAVE NEGATIVE EFFECTS ON EMPLOYEE WELL-BEING</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>PLEASE DON’T BE NICE TO ME: HOW INTERACTIONAL FAIRNESS CAN BE NEGATIVELY RELATED TO WORK ENGAGEMENT IN THE FACE OF UNFAIR OUTCOMES</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>WHEN UNFAIR PROCEDURES HAVE POSITIVE EFFECTS ON EMPLOYEE WELL-BEING: INTERACTIONS BETWEEN PROCEDURAL FAIRNESS AND INTERNAL ATTRIBUTIONS</td>
<td>58</td>
</tr>
<tr>
<td>5</td>
<td>WHEN WEAK GROUPS ARE STRONG: HOW LOW COHESIVE GROUPS MODERATE THE EFFECT OF ABSENCE TOLERANCE ON VOLUNTARY ABSENCE AT THE INDIVIDUAL AND GROUP LEVEL OF ANALYSIS</td>
<td>72</td>
</tr>
<tr>
<td>6</td>
<td>CONCLUSIONS AND GENERAL DISCUSSION</td>
<td>89</td>
</tr>
</tbody>
</table>

REFERENCES 104  
SUMMARY (SAME NVATTING IN HET ENGELS) 117  
SAME NVATTING (SUMMARY IN DUTCH) 121  
DANKWOORD (ACKNOWLEDGEMENTS IN DUTCH) 125  
CURRICULUM VITAE 128
CHAPTER 1: INTRODUCTION

“Life is never fair, and perhaps it is a good thing for most of us that it is not.”
Oscar Wilde (1895, An Ideal Husband).

Introduction
Organizational change is one of the few certainties that we have in today’s economy. Corporations face the challenge of an unstable and volatile economy, optimizing efficiency and minimizing cost, and in addition: the increasing need to operate as fluent multi-nationals and to guard themselves from hostile takeovers. All these demands on organizations imply that major changes are constantly undertaken in an attempt to achieve optimal efficiency. Moreover, employees are increasingly made accountable for the results and outcomes of their organization. These environmental factors constitute the context in which employees work today. This thesis needs to be viewed within this context. Other important aspects to consider are longer-term demographic developments, such as an aging workforce (Centraal Beheer Achmea & Mercer, 2008; Mercer, 2008). Even though the current economic conditions result in negative short-term effects for employment opportunities, these longer-term issues, which have a negative impact on the supply of critical human capital, remain a pressing reality for the survival of organizations in the future. This thesis aims to further insights into how employee well-being may be influenced during times of turmoil and the unfavorable conditions that result from these circumstances. More specifically, with this research I set out to do so by studying treatment fairness (procedural and interactional fairness) and group norms (absence tolerance and group cohesion) within the current context of unfavorable conditions and organizational cultures that increasingly focus on the responsibility and accountability of employees and less on the atmosphere and on team aspects.

Change for organizations often means unfavorable changes for employees as organizational changes often are accompanied by reorganizations and/or lay-offs. These unpleasant changes in turn are likely to bring along feelings of uncertainty and worries about outcomes to be obtained for employees, and unstable and deranged teams. One study among a large sample of 14,710 Dutch employees revealed that, on an annual basis, 52% of employees in the Netherlands are forced to deal with the effects of reorganizations (Tijdens & Van Klaveren, 2002). This percentage is even higher for large organizations with more than 5000 employees (83%). It probably comes as no surprise then that in such uncertain and turbulent times employees place great value on transparency and being treated in a reasonable manner. For instance, it has been found that, of a list of organizational characteristics, employees value fair treatment and open communication as most important (37% of employees; Unique, 2007). Furthermore, another study has shown that one out of three employees feels that their manager is not fair towards them (Werksite.nl, 2008). In turn, a consequence of this unfair treatment may be disruptive organizational behaviors such as absenteeism, less productivity and company theft and lowered group morale (Blader & Tyler, 2005; Conlon, Meyer, & Nowakowski, 2005; Elovainio et al., 2005, in press; Greenberg, 1993c). In addition, studies have shown that lack of cohesiveness within groups and absence tolerance are related to more disruptive work behavior, such as lack of emotional support, satisfaction and cooperation, and higher turnover and absenteeism rates (George & Bettenhausen, 1990; Griffith, 1988; Mullen & Copper, 1994; Sanders & Hoekstra, 1998).
Organizations thus need to acknowledge the importance of managing their workforce effectively, especially during the unstable economic conditions that we are experiencing currently. This acknowledgement is needed to reduce unnecessary productivity loss and increase employee well-being in terms of more employee engagement and less absenteeism, health complaints, workaholism and turnover intention (for a more thorough description of how this thesis operationalizes employee well-being, see the section on this topic later on). In essence, organizations need to see their Human Capital as an asset (Gründemann et al., 2003; Mercer, 2007a). Thus, increasing accountability and employee well-being within an organization will clearly help them create competitive advantage as this will impact (at least) three crucial business outcomes:

- Employee well-being aspects such as work engagement lead to higher productivity, less turnover, and higher client satisfaction for business units, which helps organizations increase efficiency and profit margins (Harter, Schmidt, & Hayes, 2002).
- Less absenteeism and intent to turnover can help organizations manage continuity and costs.
- An organization that stimulates employee well-being such as work engagement is likely to create an attractive and engaged working atmosphere and organizational culture (Bakker, Demerouti, & Schaufeli, 2005; Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003). In turn this will make it easier for organizations to retain and attract the best new recruits.

This thesis examines how treatment fairness and group norms are related to employee well-being and especially how unfavorable conditions influence this relationship. Although treatment fairness and group norms clearly can have an impact on employee well-being (Conlon et al., 2005; Sanders & Hoekstra, 1998), we know from theoretical frameworks (Brockner & Wiesenfeld, 1996; Van den Bos & Lind, 2002) and research findings (Brockner & Wiesenfeld, 1996; Elavainio et al., 2005; Van den Bos, 2001; Sanders & Hoekstra, 1998; Xie & Johns, 2000) that these effects can be influenced by some specific conditions. For instance, the effects of treatment fairness appear to be most pronounced when employees are confronted with personal uncertainty (Van den Bos, 2001; Van den Bos, Wilke, & Lind, 1998) and unfavorable outcomes (Brockner & Wiesenfeld, 1996). In addition, group norms about absence tolerance are likely to interact with group cohesion to impact voluntary absence behavior (Sanders & Hoekstra, 1998). Pulling together the insights from this previous research, this thesis examines how these specific unfavorable conditions (uncertainty, unfair outcomes, and low cohesiveness) impact the effects of treatment fairness and group norms on employee well-being. In addition, this thesis addresses how evaluative contexts and internal attributions may influence employees’ responses to treatment fairness in the face of unfavorable conditions. All the research themes examined here are displayed in one heuristic model depicted in Figure 1. Taking this model as a starting point, I focus on three central issues.

1. The first issue concerns the questions when and how the effects of treatment fairness and group norms on employee well-being (e.g., absenteeism and work engagement) are most pronounced. Therefore, I examine how unfavorable conditions caused by a major reorganization or a merger, such as uncertainty and outcome concerns affect the importance of treatment fairness for employee well-being. For example, will employees be able to deal better with the uncertainty caused by reorganizations or mergers when they are treated in a fair manner by management? Regarding group norms, another
research theme of this thesis is to understand how the cohesiveness of a group interacts with group or individual behavioral norms. Specifically, I examine how tolerant views towards illegitimate absence impact actual voluntary absence spells in low cohesive groups. In other words, if an employee has very lenient personal views about what is legitimate absence behavior, will this individual be more inclined to act according to his personal views if he or she is part of a team with weak ties?

Nowadays society, groups, and teams are becoming less and less cohesive (Castells, 1998; Putnam, 2000). The development of increasingly less cohesive working groups can be seen as another unfavorable condition employees are confronted with in modern organizations, alongside unfair outcomes and uncertainty. Many potential reasons can be given for this development and this thesis will attempt to give a few. First, organizational changes such as reorganizations and redundancies often are catastrophic for the atmosphere within these organizations and thus for their teams. Second, performance cultures place much more emphasis on individual employees than on organizational teams and subsequently reward individualistic and less group-oriented behavior. Finally, these days employees are more inclined to easily move from organization to organization and therefore see the team they belong to as less permanent than in the past. Therefore, I argue that it is important to investigate how this development of decreasing group cohesion as an unfavorable condition influences organizational behavior and employee well-being.

2. Organizational fairness scholars commonly distinguish between procedural and interactional fairness (Bies & Shapiro, 1987; Colquitt, 2001; Skarlicki & Folger, 1997). Procedural fairness relates to fair and consistent decision making and procedures (Leventhal, 1980; Thibaut & Walker, 1975) and interactional fairness to fair and respectful treatment during interactions with supervisors (Bies & Moag, 1986; a more elaborate description of these two fairness concepts follows in the next section). However, less is known about whether interactional fairness has the same potential as procedural fairness to impact employee well-being during unfavorable conditions. A considerable amount of research has shown that procedural fairness can lower or buffer the negative effects of uncertainty and outcome unfairness on employee well-being (Brockner & Wiesenfeld, 1996; Van den Bos & Lind, 2002). Besides some speculation that interactional fairness is less likely to have this potential (Brockner et al., 2003), the exact role of interactional fairness in the face of unfavorable conditions is relatively unexplored (for an exception, see Elova"nia et al., 2005). This current thesis explicitly aims to address this issue.

3. A final research theme I set out to investigate is the role that an evaluative context or the degree of internal attribution of responsibility for outcomes together with fairness perceptions may play on actual employees (not undergraduate students participating in lab experiments). To be more precise, studies have revealed that treatment fairness can have a potential negative effect when employees receive unfavorable news or outcomes and at the same time feel strongly being held responsible for these outcomes (Brockner et al., 2003; Gilliland, 1994). Fair treatment in these unfavorable conditions can potentially reinforce the negative impact of the experienced unfair outcome on employee well-being. For instance, this could be the case for an employee who did not receive a promotion he/she had hoped for. If the decision making and procedures surrounding this promotion were fair, he/she will be forced to feel personally responsible for this outcome, which in turn could have a negative impact on his/her well-being (e.g., health complaints, turnover intention, less engagement). In fact, under strong self-evaluative conditions, unfair procedures can be nice since they provide a way for an employee to attribute the reasons for unfortunate events to
other causes than the employee him- or herself (Van den Bos, Bruins, Wilke, & Dronkert, 1999). The present thesis studies this effect in organizational contexts for both procedural and interactional fairness on various relevant organizational variables related to employee well-being.

Addressing these central research themes serves one important aim of this thesis: to provide new insights for management and practitioners within organizations to manage employee well-being more effectively during times of change and uncertainty. Another core aim is to help further connect the domains of social and organizational psychology. That is, the origins of organizational fairness theories are deeply nested in social exchange theories (Homans, 1951), whereas the subject of employee well-being is typically seen as oriented towards organizational psychology. Therefore, the heuristic model presented in this chapter connects fairness to realistic and pressing organizational conditions. Moreover, it proposes how treatment fairness is related to real life organizational behavior such as, for instance, sickness absence, turnover intention, health complaints and the emerging concepts of work engagement and workaholism. In the following section the central research themes are elaborated on in more detail.

**Treatment Fairness and Employee Well-Being**

Many studies have established that fairness in organizations can be linked to a variety of aspects of employee well-being, such as absenteeism and turnover intention (for an overview, see Conlon et al., 2005). A distinction between at least three types of organizational fairness can be made (Colquitt, 2001). The discussion about which different fairness types are to be distinguished is one with a long and rich history (for an overview, see e.g., Colquitt, Greenberg, & Zapata-Phelan, 2005). This noted, this thesis focuses on a commonly made distinction between outcome, procedural fairness and interactional fairness.

**Outcome Fairness**

The first organizational researchers that explored how fairness affects employees were mostly interested in distributive or outcome fairness. The origins of outcome fairness lie in social exchange perspective (Homans, 1961), which was later reworked into equity theory (Adams, 1965). Outcome fairness refers to the fairness of the allocation of rewards in comparison with others (Leventhal, 1976; Walster, Berscheid, & Walster, 1973). More specifically, this research looked at whether individuals experienced an appropriate balance between the effort they put into their work and what they got in return for it. Physical or mental withdrawal from this situation, by being absent or less committed, could then be interpreted as the individual’s way to restore this inequity. For instance, employees who believe that they are not receiving enough pay may decide to call in sick, even when they are not really ill. By doing so, these employees may experience a more fair balance between what they invest in and what they receive from their organization.

**Procedural Fairness**

Following the first wave of fairness theory and research, procedural fairness was introduced (Thibaut & Walker, 1975). The concept of procedural fairness assumes that not only the distribution of rewards is important to employees, but also the way in which these rewards are allocated (Greenberg, 2000; Greenberg & Folger, 1983; Folger & Konovsky, 1989; Van den Bos, Lind, Vermunt, & Wilke, 1997). The addition of procedural fairness to the fairness domain triggered a vast amount of research (for an overview, see Lind & Tyler,
Leventhal (1980) proposed a number of specific rules to define procedural fairness. That is, procedures are considered to be fair when they are consistent, free from bias and executed in an accurate manner. In addition, procedures should appropriately consider ethical issues, allow room to correct them and should be representative with regard to the subject matter. Justification for the distinction between fair procedures and fair distributions is given by a number of meta-analyses (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Hauenstein, McGonigle, & Flinder, 2001).

Especially within the field of management, the applications of procedural justice for organizational behavior have been shown to be useful. That is, the experience of fair procedures has been related to positive effects on organizational commitment (Folger & Konovsky, 1989; Masterson, Lewis, Goldman, & Taylor, 2000) and produces employee support for decisions and policy (See, 2009). Furthermore, when employees are given the opportunity to have input in the procedure of performance evaluations, this shows positive effects on the perceptions of the fairness of this evaluation (Greenberg, 1986).

**INTERACTIONAL FAIRNESS**

In addition to these two fairness types mentioned above, Bies and Moag (1986) added interactional fairness as a third type to the fairness family. This fairness type focuses on the treatment of employees by superiors. In a very similar manner to Leventhal (1980), Bies and Moag (1986) identified a number of rules to define interactional fairness. In their opinion, interactions should be justifiable and should be based on truthful, respectful and proper interactions by superiors.

An ongoing debate exists as to whether interactional fairness is a distinct third type of fairness (Barling & Philips, 1993; Bies & Shapiro, 1987; Brockner et al., 2004; Colquitt, 2001; Skarlicki & Folger, 1997) or rather a sub-aspect of procedural fairness (Moorman, 1991; Niehoff & Moorman, 1993; Tyler & Bies, 1990; Van den Bos, 2005). This thesis draws on supportive evidence that interactional fairness sometimes is more important to employees than procedural fairness (De Cremer, Van Knippenberg, Van Dijke, & Bos, 2004). Following this reasoning and research, not making the distinction between procedural and
interactional fairness prevents us from being able to investigate and understand possible different patterns of the two fairness types. Therefore, this thesis focuses on the conceptual distinction of procedural and interactional fairness.\textsuperscript{1}

Additional support for the distinction between procedural and interactional fairness comes from a considerable amount of supportive evidence that these two fairness types affect employees in different ways. To illustrate this, research findings show that employees use interactional fairness to decide how to respond to supervisors, whereas they use procedural fairness to decide how to judge decision-making systems (Bies & Moag, 1986; Cropanzano & Prehar, 1999; Masterson et al., 2000; Moe, Masterson, & Bartol, 1997). Greenberg (1993a) also argued that interactional fairness may influence procedural fairness. That is, receiving information and explanations from a superior may help to judge how procedures are designed and followed through. In addition, Brockner and colleagues (2004) found that procedural fairness had a significant impact on interactional fairness. These arguments and findings suggest that these two main forms of fairness clearly are related, but indeed are conceptually and empirically distinct. Therefore, I will treat the two fairness types as such.

One of the main research themes relates to investigating the potential differential effects of procedural and interactional fairness on employee well-being. Therefore, the focus in this research is less on outcome fairness as a fairness type. Instead, the research presented here considers outcome fairness as an unfavorable condition, which will be further discussed in the section and empirical chapters dealing with that topic. This chapter now proceeds to take a deeper look at the (differential) link(s) between the different treatment fairness types and employee well-being measures such as, for instance, absenteeism and work engagement.

**Differential Treatment Fairness Effects on Employee Well-Being**

In the long history of research on organizational fairness, numerous studies established that fair treatment of employees indeed does positively influence employee well-being (for overviews see, Conlon et al., 2005; Greenberg, 1993a). That is, fair treatment has been positively related to organizational commitment and job satisfaction (Greenberg, 1993a; Folger & Konovsky, 1989; McFarlin & Sweeney, 1992; Moorman, 1991) and organizational citizenship behavior (Moorman, 1991; Konovsky & Folger, 1991), and negatively related to burnout (Schaufeli, 2006) and absenteeism (De Boer, Bakker, Syroit, & Schaufeli, 2002). On the other hand, unfair treatment of employees has shown an increase in the levels of anti-social behavior like, for instance, theft (Greenberg, 1993c).

Additionally, a relationship with specific employee well-being aspects has been established for the different fairness types. Fair procedures, on the one hand, have a positive effect on organizational commitment (Folger & Konovsky, 1989; Masterson et al., 2000; Sweeney & McFarlin, 1993), acceptance of evaluations of a system or organization (Folger & Konovsky, 1989; Sweeney & McFarlin, 1993), and compliance to organizational rules (Colquitt, 2001). Interactional fairness, on the other hand, is related to higher evaluations of one’s supervisor (Cropanzano & Prehar, 1999), increased levels of inclusion and trustworthiness (Tyler & Bies, 1990), and better leader-member exchange relationships.

\textsuperscript{1} In addition to distinguishing between procedural and interactional fairness, Colquitt (2001) proposed a further splitting of interactional fairness into interpersonal and informational fairness. This thesis, however, focuses on the distinction between procedural and interactional fairness.
(Masterson et al., 2000). This distinction between procedural and interactional fairness is further supported by models explaining more variance of different outcome variables when the two fairness types are separated, compared to when they are seen as one construct (e.g., the two factor model put forward by Sweeney and McFarlin, 1993). These studies showing differential fairness effects on employee well-being provide more support for distinguishing between procedural and interactional fairness.

**Unfavorable Conditions**

Moving beyond the studies relating employee well-being directly to treatment fairness (for an overview, see Conlon et al., 2005), organizations today face many trying and complex challenges. Globalization and vulnerability to volatile international economic developments make the modern business environment an unpredictable place to operate in. Inevitably this has far-reaching consequences for employees and raises many questions for them. How to have faith in the leadership of your organization when they promise economic growth one moment, and announce mayor redundancies the next? How to feel certain and secure about one’s future within the organization, when management doesn’t seem capable of understanding and effectively dealing with this new economic reality? How to understand why your organization is not capable of appropriately rewarding its employees, even when one has worked extremely hard in testing times? In addition to these concerns for employees, organizations are placing an increasing amount of emphasis on justifying organizational results. This performance orientation can lead to an evaluative context where employees are made accountable and feel responsible for the organization’s results. Therefore, I argue that treatment fairness needs to be viewed in the light of the economy of today. That is, fairness research needs to take into account the conditions described here of uncertainty, unfair outcomes and evaluative contexts (Brockner et al., 2003; Brockner & Wiesenfeld, 1996; Van den Bos et al., 1999; Van den Bos & Lind, 2002). Studies have revealed that treatment fairness can help employees to make positive sense of received unfair outcomes (Brockner & Wiesenfeld, 1996) and uncertainty (Van den Bos & Lind, 2002). Taken together, these studies relating fairness to unfavorable conditions reveal that viewing treatment fairness in isolation can yield incomplete or inaccurate information. Two unfavorable conditions and how they intervene with treatment fairness are now described at greater length.

**Outcome Unfairness**

When organizational fairness research was still a considerably younger discipline, organizational fairness scholars were roughly divided into two camps, those interested in the effects of distributive or outcome fairness (Homans, 1961; Leventhal, 1980), and those interested in the fairness of procedures (Thibaut & Walker, 1975). In the mid-1990s, researchers sought to integrate these two research streams. Brockner and Wiesenfeld (1996, 2005), for example, provided an overview of the available research on the interactive effect of treatment fairness with outcome fairness on employees’ responses. Brockner and Wiesenfeld (1996) concluded from this overview that people will be more accepting of unfavorable rewards, when these rewards are determined in a procedurally fair manner. Facing such an unfavorable outcome, procedural fairness acts as an indicator of the trustworthiness of the person distributing the outcome (Konovsky & Pugh, 1994), and in turn mitigates the concern about that outcome (Lind, 2001). In their reviews, Brockner and Wiesenfeld (1996, 2005) came to the additional conclusion that research on the mitigating
effect of treatment fairness on the negative impact of outcome unfairness results in richer and more complete analyses than separate research on these different fairness dimensions.

Consequently, one can reason that treatment fairness is more important for employee well-being when they experience unfair outcomes compared to when they experience favorable outcomes. Outcome unfairness probes trust issues with regard to the distributor and fair treatment in turn relieves these trust concerns. Until now, approaches such as the uncertainty management model (Van den Bos & Lind, 2002) have focused on trying to unravel the sense-making processes that are responsible for the mitigating effect of treatment fairness on the negative effects of unfair outcomes. On the other hand there has been less focus on linking this sense-making effect to employee well-being (for exceptions, see Elovaïnio et al., 2005; Trevor & Nyberg 2008). Relating these sense-making effects to real-life organizational practices, one could therefore predict that the effects of treatment fairness on employee well-being are more pronounced when outcomes are unfavorable.

Uncertainty

Another approach that builds on social exchange (Homans, 1961) and equity theory (Adams, 1965), and integrates them with procedural fairness (Thibaut & Walker, 1975), is the uncertainty management model (Van den Bos & Lind, 2002). Early outcome unfairness researchers assumed that people base their fairness judgments on whether their rewards are in line with the efforts they invest, compared to relevant referent others (Adams, 1965; Walster et al., 1973). To illustrate this, an employee will likely perceive his or her rewards as unfair when another employee receives a higher reward for exactly the same efforts.

Van den Bos and colleagues (1997), however, reasoned that people often do not know precisely which outcome comparable other persons receive. Subsequently, Van den Bos and colleagues (1997) found that procedural fairness, in those uncertain conditions, is used as a heuristic to determine the fairness of the reward. More specifically, procedural fairness is taken as a substitute for the unavailable information and thus reduces the uncertainty (Van den Bos et al., 1997). Alongside this uncertainty caused by the lack of available information (Van den Bos, 2003), a number of studies support the reasoning that procedural fairness alleviates the experience of personal uncertainty. For instance, treatment fairness was related to lower levels of experienced personal uncertainty during a reorganization process (Van den Bos, Heuven, Burger, & Van Veldhuizen, 2006) and during lack of control and unfavorable changes at work (Elovaïnio et al., 2005). In fact, procedural fairness is seen as a means to regain at least some control over and make sense of uncertain conditions. This reasoning led to the introduction of the uncertainty management model (Van den Bos & Lind, 2002).

In the same way as treatment fairness may help employees to make sense of unfair outcomes (Brockner & Wiesenfeld, 1996), the buffering effect of fairness on the effects of uncertainty has hardly been linked to employee well-being. Most uncertainty management studies focus on the persons’ response to fair treatment in uncertain conditions. That is, these studies focus on establishing how this process works, rather than trying to relate them to organizational behaviors. This noted, there are a couple of examples of field studies that did just this. For example, treatment fairness has been found to help employees make sense of personal uncertainty they experience, such that fairness is related to higher loyalty and striving for excellence (Long, 2002), more support for state policies (See, 2009), lower turnover rates (Trevor & Nyberg 2008), and less absence sickness and health complaints (Elovaïnio et al., 2005; Elovaïnio, Kivimäki, Steen, & Vahtera, 2004). In line with these studies,
this thesis predicts a stronger effect of treatment fairness on employee well-being when employees experience personal uncertainty, compared to less uncertain conditions.

**HOW UNFAVORABLE CONDITIONS INTERACT WITH INTERACTIONAL FAIRNESS**

Research investigating the interactions of treatment fairness with outcome unfairness (Brockner & Wiesenberg, 1996) and personal uncertainty (Van den Bos & Lind, 2002) generally focuses on procedural fairness. Some studies, however, indicate that interactional fairness has the same potential to help employees make sense of experienced lack of control (Van den Bos, 2001, Study 2), outcome unfairness (Elovainio et al., 2005), and little job decision latitude (Elovainio et al., 2004), and reduces the negative impact of these unfavorable conditions on absenteeism.

This thesis therefore reasons that interactional fairness should systematically be included in studies investigating how treatment fairness interacts with the effects of unfavorable conditions on employee well-being. According to the relational model (Tyler & Lind, 1992), procedural fairness instills trust in a relationship, even when the outcomes are unfavorable or uncertain. Subsequently, this thesis reasons that interactional fairness is likely to be likewise capable of producing trust in an authority or organization. Interactional fairness includes elements such as respectfulness and truthfulness, which are closely linked to trust. Consequently, interpersonal fairness indeed has been linked to trust (Becerra & Gupta, 2003) and has been identified as a heuristic for trust (Lind, 2001). Thus, I conclude that not including interactional fairness, when investigating the effects of unfavorable conditions on employee well-being, would be an oversight.

**Internal Attributions and Evaluative Contexts**

The ability of procedural and interactional fairness to help employees make sense of experienced outcome unfairness (Brockner & Wiesenberg, 1996) and personal and informational uncertainty (Van den Bos & Lind, 2002) was discussed above. This noted, alongside these normal effects of procedural and interactional fairness, a new wave of research is demonstrating quite different results. That is, some studies have revealed that fair treatment of employees during unfavorable conditions can actually have a harmful effect on employee well-being (Brockner, Wiesenberg, & Diekmann, 2009; Brockner et al., 2003; Gilliland, 1994; Van den Bos et al., 1999). This contra-intuitive finding is referred to as the reversal of the normal procedural and interactional fairness effect (Brockner et al., 2003). This reversal of the normal procedural and interactional fairness effect originates from the field of selection psychology (Gilliland, 1994; Schinkel, Van Dierendonck, & Armstrong, 2004). These studies within selection settings found that when candidates received an unfair outcome (rejection), the candidates preferred to be treated with unfair procedures. The explanation for this counterintuitive effect is that unfair treatment allows them to avoid feeling responsible for this negative outcome. Other studies revealed that it depends on the context employees work in. That is, it appears to depend on whether or not the context in which employees work is strongly evaluative whether these employees will be likely to experience negative effects of fair treatment (Van den Bos et al., 1999, Study 3).

This thesis argues that working conditions today often confront employees with such highly evaluative contexts. That is, increased pressure on organizations (and thus on employees) to perform and compete enforces cultures that emphasize accountability and personal responsibility for short-term results. In addition, contemporary developments within human resource management contribute to such an evaluative context. For instance,
organizational trends such as attempts to link pay incentives to performance and an increased focus on individual targets only add to employees’ experience of being evaluated strongly and held responsible for their (and the organization’s) outcomes. These working conditions appear to be important, as they may provide just the type of context in which counterintuitive negative sense-making effects of procedural fairness can be found.

SENSE-MAKING PROCESSES AND ATTRIBUTIONS

Fair treatment, under some conditions, thus appears to be capable of preventing an individual from blaming someone else for an unfair outcome. Put in another way, fair treatment appears to be capable of instigating internal attributional processes (Weiner, 1985). This can be illustrated by the fact that when a candidate is rejected after applying for a job, fair procedures could reinforce that this is likely to be a correct or justifiable decision. On the other hand, unfair procedures would have given the person an opportunity to attribute externally and thus escape taking blame for the causes of this rejection (Gilliland, 1994). The reinforcement of the personal responsibility for experienced unfair outcomes can lead to the enhancement of a negative affective state and the experience of stress (Gosling, Denizeau, & Oberlé, 2006). Ultimately, fair treatment thus could negatively impact employee well-being.

Van den Bos and colleagues (1999, Study 3) found that counterintuitive negative effects of fairness in particular are likely to appear in strongly evaluative contexts. Such an evaluative context can trigger sense-making processes. That is, when the behavior or performance of an individual is constantly evaluated, he/she will start thinking about his/her personal responsibility for the outcomes he/she receives and the conditions they find themselves in. It appears that when people are engaged in sense-making processes regarding who is accountable for certain unfavorable conditions they experience, fair treatment could prohibit them from externally attributing the blame for this condition. In turn, these negative sense-making processes can lead to negative self-evaluations (Brockner et al., 2009; Van den Bos et al., 1999).

Brockner and colleagues (2003) argue that unfavorable conditions (e.g., outcome unfairness) may be linked to sense-making processes. That is, unfavorable conditions may drive people to raise questions about their responsibility (internal attributions) for their outcomes. Chapters 2, 3 and 4 of this thesis present hypotheses about this linkage between unfavorable conditions and negative sense-making processes. These chapters thus investigate whether fair treatment, together with uncertainty and outcome unfairness, reinforces evaluative concerns and internal attributions, such that reversal effects may be found.

The experience of unfair outcomes (Brockner & Wiesenfeld, 1996) typically is regarded as a condition that can lead to these sense-making processes. Borrowing from the uncertainty model (Van den Bos & Lind, 2002) mentioned above, recently the experience of personal uncertainty has also been suggested as likely to trigger sense-making processes (De Cremer & Sedikides, 2005). That is, people who experience uncertainty are likely to try and make sense of why this uncertain condition is happening to them. The experience of personal uncertainty, however, has rarely been linked to the reversal of the normal procedural (and interactional) fairness effect. Therefore, the current thesis proposes that uncertainty is equally capable of leading to sense-making processes and thus negative effects of fair treatment (Brockner & Wiesenfeld, 2005).
According to this reasoning, treating people in a fair manner when they experience unfair outcomes or uncertainty could stir up feelings of being held personally responsible for these unfavorable conditions. When people feel inclined to internally attribute the causes for such conditions, this could have a negative impact on their affective state (Van den Bos et al., 1999). The stress associated with this negative affective state could ultimately lead to health complaints or withdrawal behaviors such as absenteeism, reduced work engagement, and turnover intention (Johns, 1997). Ultimately, this explains how fair treatment thus may negatively impact employee well-being.

**Interactional Fairness and Attributions**

As mentioned above, the potential interactional fairness may have to help employees make sense of unfavorable conditions (such as outcome unfairness and personal uncertainty) is often overlooked. In the same manner, to the best of my knowledge, interactional fairness has also not yet been linked to the reversal of the normal fairness effect. In some cases, interactional fairness is even purposely left out of the scope of such studies (see, e.g., Brockner et al., 2009). Furthermore, it has been suggested that interactional fairness is less likely than procedural fairness to influence sense-making processes (Brockner et al., 2003; Van den Bos et al., 1999). Procedural fairness aspects such as information accuracy and consistency in decision making, supposedly, are more strongly related to the feelings of having some sense of control (Lind & Tyler, 1988; Thibaut & Walker, 1975). Consequently, fair procedures may more likely lead to internal attributions of the causes of unfair outcomes. Following this reasoning, respectful treatment – a central aspect of interactional fairness – is more likely to accompany the outcome, rather than to influence the perception of and the impact of the outcome (Brockner et al., 2003).

Earlier on in this chapter, however, the reasoning that interactional fairness may have the same potential to impact the effects of unfavorable conditions and yield normal fairness effects (Brockner & Wiesenfeld, 1996) was discussed. Therefore, this thesis also notes that interactional fairness, like procedural fairness, may be able to instigate a reversal of the normal fairness effect. If interactional fairness is closely related to trust issues (Becerra & Gupta, 2003), interactional fairness may be just as capable to stir up internal attributions during unfavorable conditions. Therefore, this thesis proposes to include both fairness types (both procedural and interactional fairness) and to compare how they help employees to make sense of unfavorable conditions they experience. Can interactional fairness be related to a reversal of the normal fairness effect in the same manner as procedural fairness? In other words, can interactional fairness negatively impact employee well-being through the enforcement of internal attributions? Chapters 2, 3, 4, and 6 discuss these possible differential attribution effects for the two different fairness types at greater length.

**Group Norms and Absenteeism**

In addition to treatment fairness, group norms also are related to employee well-being. Group characteristics such as innovative cultures positively impact work engagement (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007), and a positive atmosphere within groups strengthens the similarity of group members’ positive effect and the quality of the interpersonal relationships (Walter & Bruch, 2008). In addition, groups in which employees share similar values and beliefs lead to higher potency of these groups (Guzzo, Yost, Campbell, & Shea, 1993), and work engagement can be shared as a workgroup phenomenon (Bakker et al., 2005; Salanova et al., 2003). Moreover, one could argue that working in
organizations means that individuals work in an environment where they meet groups or work teams. Fairness tells us something about the nature of the relationship between these individuals and the group (Van den Bos & Lind, 2009). It thus appears that there are similarities between how treatment fairness and group norms are related to employee well-being.

Group norms and culture thus are related to many aspects of employee well-being. This noted, this thesis focuses on the relationship between group norms and absenteeism in particular, as previous studies on individual determinants of absenteeism show clear limitations (Johns, 1997). Initially, research trying to explain absenteeism was almost exclusively limited to individual-level models. For instance, the job-strain-model (Karasek, 1979) assumes that absence is the result of an imbalance between job strain and the autonomy of employees. Another individual-level model, the withdrawal model (Johns, 1997), predicts that employees withdraw from organizations by being absent. More precisely, employees call in sick because of a lack of employee commitment and job satisfaction (De Boer et al., 2002; Farrel & Stamm, 1988; Goldberg & Waldman, 2000), or as a response to organizational unfairness (De Boer et al., 2002; Geurts, Schaufeli, & Buunk, 1993; Geurts, Schaufeli, & Rutte, 1999; Van Yperen, Hagedoorn, & Geurts, 1994).

Farrel and Stamm (1988), on the other hand, concluded that although the correlations between both job satisfaction and organizational commitment with absenteeism often were significant, these results were quite low in most studies reviewed. That is, they found that correlations for absenteeism with satisfaction correlations were between -.23 and -.27, and with commitment on average were -.12. These modest results from individual-level models led to more attention being paid to how cultural and group aspects influence the voluntary absence behavior of individuals (Chadwick-Jones, Nicholson, & Brown, 1982; Johns & Nicholson, 1982; Marcus & Smith, 1985; Nicholson & Johns, 1985). The fact that different rates and patterns of absenteeism can be found for different organizations within the same industry (Parkes, 1983), different plants within organizations (Johns, 1987; Mathieu & Kohler, 1990), different departments within plants (Johns, 1987), and even different supervisory groups within these departments (Johns, 1994b), implies the influence of intra-group processes, and thus of group norms (Johns, 1997).

Johns and Nicholson (1982, p. 136) defined absence culture as: “the set of shared understandings about absence legitimacy ... and the established ‘custom and practice’ of employee absence behavior and its control.” Central themes within absence culture are absence tolerance (Sanders & Hoekstra, 1998, 1999) and group cohesion (Xie & Johns, 2000). These two themes will now be described at greater length. Their individual relationships with absence behavior are described first, followed by how group cohesion can influence the relationship between absence tolerance and voluntary absence.

**Absence Tolerance**

Social exchange theory (Homans, 1951) reasons that members of groups will seek peer approval and act according to group norms. In line with social exchange theory, a considerable amount of studies found that the behavioral norm of a group with regard to absence tolerance impacts the voluntary absence levels within the group (Bamberger & Biron, 2007; Gale, 1993; Gellatly, 1995; Gellatly & Luchak, 1998; Geurts, Buunk, & Schaufeli, 1991; Haccoun & Jeanrie, 1995; Harrison, 1995; Harrison & Shaffer, 1994; Harrison & Bell, 1995; Johns, 1994a; Sanders & Hoekstra, 1998, 1999; Xie & Johns, 2000). Absence behavior can be seen as “white”, “grey” or “black” (Allegro & Veerman, 1990). White absenteeism is
completely legitimate as the individual clearly is ill and subsequently can not work. Grey absence behavior, however, is more disputable. That is, these absence reasons usually are psychosomatic or psychological (e.g., absenteeism due to tiredness, a headache, or staying home longer than strictly necessary after sickness). Finally, black absenteeism, which is also called illegal absenteeism, refers to calling in sick when the person clearly is not ill at all. Grey and black absenteeism indicate a degree of freedom for individuals to decide whether or not to be absent (Philipsen, 1969). It thus is in these grey and black conditions that absence tolerance is likely to impact the actual levels of voluntary absenteeism (Sanders & Hoekstra, 1998).

**Group Cohesion**

Group cohesion concerns the tightness of a group and the degree of informal ties between its members (Xie & Johns, 2000). A cohesive group has been shown to impact the behavior of individuals within groups and to align this behavior with the group norms (Locke, Latham, & Erez, 1988). Exchange theories (Homans, 1951) predict that the influence of this group norm leads to cohesiveness within the group. Generally speaking cohesive groups stimulate constructive work behavior, such as emotional support and satisfaction (Griffith, 1988), and cooperation (Mullen & Copper, 1994). On the other hand, group cohesiveness discourages disruptive work behavior such as, for instance, turnover rates (George & Bettenhausen, 1990). Subsequently, a considerable number of studies shows that cohesive groups discourage absenteeism (Buunk, 1990; Newsome, 1993; Sanders, 2004; Sanders & Hoekstra, 1998, 1999; Spink & Carron, 1992; Xie & Johns, 2000; Zaccaro, 1991).

**How Group Cohesion and Absence Tolerance Interact**

In addition to the direct relation between absence tolerance and group cohesion with absence behavior, I will now discuss the interactive effects of these two central absence culture dimensions (Sanders & Hoekstra, 1998, 1999). As described above, group cohesion can be a determinant of absenteeism (Sanders, 2004; Sanders & Hoekstra, 1998, 1999; Xie & Johns, 2000). Commonly it is assumed that cohesive groups influence how an absence culture is related to the absence behavior of its members. In view of the development that groups are increasingly becoming less cohesive, and in line with the findings that unfavorable conditions influence how treatment fairness is related to employee well-being, I propose to investigate how low cohesive groups interact with absence tolerance to influence voluntary absence behavior.

According to social exchange theory, the exchange of compliance to group rules and norms for peer approval is at the basis of social control (Homans, 1951). This thesis argues that weak groups may contribute to a culture with little social control and group pressure. In such an absence culture, individuals are likely to be encouraged to act in line with their personal beliefs about legitimate absence behavior. This implies that in a weak team individuals with lenient personal absence tolerance views may be more likely to actually be absent. On the other hand, individuals with strict views about absence behavior may be expected to be less absent. This reasoning suggests a counterintuitive positive potential of weak groups. Therefore, this thesis proposes to analyze the effects of both group cohesiveness and absence tolerance on voluntary absence behavior separately as well as analyzing how they interact to influence voluntary absence behavior.

It thus appears sensible for organizations to view both treatment fairness and group norms within the context of unfavorable conditions. Modern working conditions bring along
many threats and unwanted circumstances for employees, such as reorganizations, redundancies, cultures with an overly strong focus on performance and on accountability of individuals, and groups with little engagement and cooperation. These contemporary organizational developments influence the impact of both treatment fairness and group norms on employees. Therefore, this thesis proposes to consider how unfavorable conditions resulting from the times of turmoil organizations of today are operating in, such as personal uncertainty, experienced unfair outcomes, highly evaluative contexts and low cohesive groups, impact the relationship between treatment fairness and group norms with employee well-being.

Defining Employee Well-Being

Various forms of employee well-being are related to treatment fairness (for overviews see, Conlon et al., 2005 and group norms as antecedents for absenteeism (Sanders & Hoekstra, 1998; Xie & Johns, 2000). In this thesis, employee well-being is conceptualized according to the framework proposed by Van Horn and colleagues (2004). Employee well-being is often seen as multi-faceted (e.g., Van Horn, Taris, Schaufeli, & Schreurs, 2004; Ryff & Keyes, 1995; Warr, 1994) with behavioral, psychosomatic, and affective-motivational components.

Behavioral Indicators

Absence frequency is used as a behavioral indicator (Johns, 1997), reflecting absences in which employees have some freedom of choice in deciding whether or not to stay away from work (i.e., voluntary absence; Ivancevich, 1985; Judge & Martocchio, 1996). Self estimations of absence have sometimes proven to be less reliable than company records, and the latter are thus superior and preferable (Van Poppel, De Vet, Koes, Smid, & Bouter, 2002). In the majority of the research presented in the following chapters including absence frequency as an indicator of employee well-being, company record absenteeism rates were obtained.

Psychosomatic Indicators

Perceived health complaints were included as an indicator of psychosomatic well-being (Kinnunen, Parkatti, & Rasku, 1994). These health complaints can be seen as an assessment of the physical functioning of an employee, indicating whether he/she does or does not experience psychosomatic symptoms.

Affective-Motivational Indicators

Turnover intention is proposed as an affective-motivational indicator of employee well-being. Turnover intention has previously been linked to both group cohesion (George & Bettenhausen, 1990), and treatment fairness (Trevor & Nyberg 2008). In addition, work engagement was introduced as another affective-motivational indicator of employee well-being (Schaufeli, Salanova, Gonzalez-Romá, & Bakker, 2002). Work engagement is defined as a positive work-related state of fulfillment that is characterized by vigor (i.e., high levels of energy and mental resilience while working), dedication (i.e., being strongly involved in one's work), and absorption (i.e., being fully concentrated and happily engrossed in one's work). Work engagement is a relatively new research concept. In line with the emerging positive psychology (Seligman & Csikszentmihalyi, 2000), work engagement is a positive
indicator of employee well-being, contrasting all the other negative indicators, making engagement a valuable contribution.

Finally, workaholism is also proposed as an affective-motivational employee well-being component. Workaholism is another relatively recent studied psychological phenomenon within employee well-being research and can be identified in employees who work excessively hard out of a strong, irresistible inner drive (Taris & Schaufeli, 2003). Interestingly, studies have identified that workaholism can be triggered up to a certain extent (Brett & Stroh, 2003), which implies that it can be evoked by organizational conditions (McMillan, O’Driscoll, Marsh, & Brady, 2001). Following this reasoning, conditions such as uncertainty appear likely to instigate workaholism. That is, the lack of control that is often associated with uncertainty (Van den Bos, 2001) may motivate employees to regain control. Reactance theory (Brehm, 1966) would predict that this desire to regain control could be very strong, such that this could lead to excessive working patterns ultimately leading to compulsive workaholic tendencies.

**Main Goal**

The main object of this thesis is to further our understanding of how treatment fairness and group norms impact employee well-being. Organizational changes such as mergers, acquisitions, and reorganizations are constantly occurring and economic developments are volatile. These economic conditions confront employees with uncertainty and unfavorable circumstances. The aim here is to understand how to deal with these constant changes that influence employee well-being (more work engagement, less absenteeism, health complaints, workaholism, and turnover). That is, this thesis ultimately sets out to understand how organizations can face up to the challenges presented to them and foster a healthy and productive working environment.

To understand how to do this, I investigate the relationship between, on the one hand, treatment fairness and group norms, and, on the other hand, employee well-being. In addition, this thesis focuses on the conditions in which this relationship is most pronounced. The focus thus is on how unfavorable conditions such as uncertainty and outcome unfairness intervene with treatment fairness, and how group cohesion intervenes with absence tolerance to affect employee well-being.

**Overview**

An overview of the chapters with empirical data (Chapters 2 through 5) and the discussion and general conclusions (Chapter 6) is provided now.

**Chapter 2**

The study in Chapter 2 among 291 employees of a consultancy firm both replicates and extends earlier work on procedural and interactional fairness. More specifically, this study supports the findings of earlier experimental studies by showing in a field setting that treatment fairness buffers the effects of outcome unfairness and personal uncertainty on employee well-being (normal effects of treatment fairness) and shows that both procedural and interactional fairness may also yield reversed effects: Perceived procedural and interactional fairness reliably enhances (not weakens) the effects of outcome unfairness and uncertainty on absenteeism and health complaints. The results are unique for at least three reasons: (1) Although earlier studies revealed that procedural fairness perceptions can strengthen the negative impact of unfair outcomes on employee well-being, this study is the
first to suggest that interational fairness can yield similar effects; (2) this study is the first to find both normal and reversed effects of procedural and interational fairness on the same dependent variables (health complaints and absenteeism); and (3) the results suggest that normal and reversal effects may occur on different dependent variables for procedural fairness than for interational fairness, indicating possible differences by which the two fairness types influence reactions to different unfavorable conditions.

Chapter 3

The study in Chapter 3 among a Dutch wholesale organization investigates the effects of interational and procedural fairness on work engagement and how these concepts interact with outcome fairness. Data were collected in two measurements (with 377 respondents at Time 1, 273 at Time 2, and 213 taking part in both Times 1 and 2). The results are the first to explicitly show that both interational and procedural fairness are directly related to work engagement. Additionally, results reveal that outcome fairness and interational fairness interact such that a reversal of the normal fairness effect was found. That is, in the face of unfavorable outcomes high interational fairness was negatively related to work engagement, whereas low interational fairness was positively related to work engagement. This significant reversal effect of interational fairness was found on both measurements. The reversal of the normal fairness was not found for procedural fairness. These findings reveal that even though procedural fairness consistently is positively related to work engagement, interational fairness appears to have the potential to yield reversals of the normal fairness effect on work engagement in the face of unfair outcomes.

Chapter 4

Chapter 4 describes a study among 582 employees of a Dutch social welfare organization builds on earlier studies suggesting that procedural fairness perceptions may be strongly linked to self-serving attributional processes. Results reported here support the hypothesis that, in case of unfair outcomes, the combination of a strong orientation toward making internal attributions and high perceived procedural fairness is more likely to negatively impact employee well-being (reversal of the normal effect of treatment fairness). In addition, this study shows that perceived interational fairness together with strong internal attributions is more likely to positively impact employee well-being (normal effect of treatment fairness). These differential effects of procedural and interational fairness are found on registered absence and were supported by similar effects on two other employee well-being measures as well (workaholism and turnover intention). In addition, a normal and a reversal of the normal fairness effect are found for the same dependent variable (workaholism). These findings attest to the robustness and ecological validity of the results.

Chapter 5

The study described in Chapter 5 took place in a commercial production organization and a non-profit social welfare organization (N=377 and N=582, respectively). The study investigates how group cohesiveness and absence tolerance separately and in tandem are related to company registered absenteeism rates. As predicted, results support the hypotheses that absence tolerance is positively related with absenteeism and interacts with low group cohesion to result in absenteeism. Contrasting earlier studies that found highly cohesive groups to interact with absence tolerance, results of this study are the first to show that low group cohesiveness interacts significantly with absence tolerance. That is, low
cohesive groups counterintuitively are related to the lowest levels of voluntary sickness absence together with intolerant views towards absence. This interaction effect is found independently in two different organizations.

Chapter 6

Chapter 6 summarizes the empirical results described in Chapters 2 through 5 and an attempt will be made to integrate these findings according to the model presented in this chapter. These results will also be discussed in light of current organizational and economical conditions and the most recent thinking about how treatment fairness and group norms are related to employee well-being.

Please note that the Chapters 2 to 5 may display a certain amount of overlap, as they were drafted with the intention to be readable independently from each other.
CHAPTER 2: FAIR TREATMENT SOMETIMES IS NOT GOOD
HOW TREATMENT FAIRNESS CAN HAVE NEGATIVE EFFECTS ON EMPLOYEE WELL-BEING

Introduction

Fair treatment (with which we refer to both procedural and interactional fairness; Brockner, Wiesenfeld, & Diekmann, 2009; Lind, Kray, & Thompson, 1998; Van den Bos, 2005) clearly impacts the way employees react to experienced outcome unfairness and personal uncertainty (Brockner & Wiesenfeld, 2005; Van den Bos & Lind, 2002). In addition, fair treatment has often been related to various work aspects such as absenteeism, health complaints, and work engagement (Greenberg & Colquitt, 2005), grouped in this chapter under the umbrella term of "employee well-being" (Van Horn, Taris, Schaufeli, & Schreurs, 2004). Generally it is assumed that treatment fairness positively impacts employee well-being (Masterson, Lewis, Goldman, & Taylor, 2000; Tyler & Bies, 1990), and buffers against the experiences of outcome unfairness (Brockner & Wiesenfeld, 1996) and of personal uncertainty (Van den Bos & Lind, 2002). However, recent studies indicate that this is not necessarily always the case (Brockner et al., 2003; Van den Bos, Bruins, Wilke, & Drnoke, 1999). Counterintuitively, these studies indicate that when employees experience strong self-evaluative concerns, fairness of treatment does not per se elicit positive effects on how employees react to the experience of unfair outcomes and personal uncertainty. Instead it seems that, fair treatment may have a negative impact on their well-being. In the current chapter we explore whether this counterintuitive phenomenon occurs in an organizational context, and whether it occurs for both procedural and interactional fairness.

OUTCOME UNFAIRNESS AND PERSONAL UNCERTAINTY

Traditional and dominant thinking within the organizational fairness literature holds that treatment fairness helps employees to deal better with unfavorable conditions such as experienced outcome unfairness (Brockner & Wiesenfeld, 1996, 2005) and personal uncertainty (Van den Bos & Lind, 2002). This thinking leans on the relational model (Tyler & Lind, 1992), which assumes that unfavorable conditions trigger sense-making questions about whether the authority associated with unfavorable conditions can be trusted. These sense-making questions regarding the trustworthiness of the authority increase the importance of treatment fairness. That is, the trust that is established by fair treatment (Tyler & Lind, 1992) helps employees to make sense of and thereby better deal with why they are experiencing these unfavorable conditions. For instance, a stressful event such as organizational change may raise personal uncertainty concerns and questions about the fairness of the outcomes that will be received. In such conditions fair treatment by authorities may alleviate these concerns and thus the negative consequences of the unfavorable conditions (Brockner & Wiesenfeld, 1996, 2005; Van den Bos & Lind, 2002, 2009). In this chapter we focus on the two unfavorable conditions of outcome unfairness and experienced uncertainty because fairness scholars have shown that these conditions raise such sense-making questions and concerns (Brockner & Wiesenfeld, 1996, 2005).

Numerous studies reveal that treatment fairness indeed can make employees more accepting of experienced outcome unfairness (for an overview, see Brockner & Wiesenfeld, 1996). Following the relational model (Tyler & Lind, 1992), when employees experience an

---

2 Chapter 2 has been submitted for publication as: Miles, P., Van den Bos, K., & Schaufeli, W. B. (2010a). Fair treatment sometimes is not good: How treatment fairness can have negative effects on employee well-being. Manuscript submitted for publication.
unfair outcome, procedural fairness helps them to trust the authority distributing the outcome (Konovsky & Pugh, 1994). Thus, fair procedures in turn helps take away or compensate the concerns employees have about the fairness of the outcome (Lind, 2001).

The uncertainty management model (Van den Bos & Lind, 2002, 2009) builds further upon the relational model. That is, this model reasons that uncertain conditions trigger employees to seek for information regarding whether they are being treated fairly in order to make sense of the uncertainty they experience (Lind & Van den Bos, 2002; Van den Bos, 2001; Van den Bos, Lind, Vermunt, & Wilke, 1997; Van den Bos, Poortvliet, Maas, Miedema, & Van den Ham, 2005). Evidence for these positive effects of fair treatment has been found with a variety of different uncertainty measures (Van den Bos, 2001; Van den Bos, Wilke, & Lind, 1998; Van den Bos et al., 2005), and for several dependent variables, such as loyalty and striving for excellence (Long, 2002), less sickness absence (Elovainio et al., 2005), more support for state policies (See, 2009), and less antisocial work behaviors (Thau, Aquino, & Wittek, 2007).

Brockner and Wiesenfeld (2005) advocate that how fairness helps employees to make sense of outcome fairness has much in common with findings from the uncertainty management model. Fair treatment, in both models, appears to help employees to make sense of the unfavorable conditions in which they find themselves. Following these unfavorable conditions, fair treatment thus makes people more accepting of uncertainty and unfair outcomes they perceive and consequently leads to a positive impact on employee well-being. This effect commonly has been labeled as the normal effect of treatment fairness (Van den Bos et al., 1999).

**NORMAL TREATMENT FAIRNESS EFFECTS AND REVERSED EFFECTS**

The findings documented by Brockner and Wiesenfeld (1996) underline positive sense-making effects of treatment fairness during unfavorable conditions. This noted, in their review article these authors also observed that a smaller amount of studies on treatment fairness has found fairness to be related to negative sense-making processes as well. That is, employees may respond negatively to fair treatment when they experience unfavorable conditions. Since then, a number of studies has confirmed this negative effect of treatment fairness (Brockner, 2002; Brockner & Wiesenfeld, 2005; Brockner et al., 2003; Gilliland, 1994; Schinkel, Van Dierendonck, & Anderson, 2004; Van den Bos et al., 1999). These studies assume that the negative effects of treatment fairness are due to evaluative contexts (Van den Bos et al., 1999). Evaluative contexts can be described as environments in which employees feel strongly judged and evaluated. Such environments can be found in highly competitive organizations or organizational cultures with overly strong authoritative leadership practices. We build on this recent research tradition to propose that when self-evaluative concerns are sufficiently salient or strong enough, negative sense-making processes, and thus a reversal of the usually found (normal) treatment fairness effects may occur. That is, evaluative contexts may increase an employee’s awareness of their personal responsibility for outcomes. It appears that if employees face unfavorable conditions in such a context, they may prefer unfair treatment to fair treatment. More precisely, unfair treatment in an evaluative context may give an employee the opportunity to blame others (and not themselves) for the unfavorable outcomes they experience. For example, an employee working in a competitive environment who is not considered for a promotion when the decision making processes clearly were unfair, may blame the procedures (or the authority incorrectly applying the procedures). In contrast, fair treatment may force
employees to take responsibility for the unfavorable outcomes themselves. Extending on
the example used above, fair procedures will force the employee to personally feel the
blame for this missed promotion opportunity.

Ultimately, these negative sense-making processes are likely to lead to negative self-
evaluations (Gilliland, 1994) and may therefore negatively influence employee well-being.
This negative effect of treatment fairness clearly is in contrast with research that has
established a positive relationship between treatment fairness and employee well-being
(Greenberg & Colquitt, 2005; Greenberg & Lind, 2000; Masterson et al., 2000; Tyler & Bies,
1990). However, we argue that this reversal of the normal treatment fairness effect
illustrates how fair treatment counterintuitively may be harmful for employee well-being.
That is, as described above, fair treatment of employees in an evaluative context could
reinforce self-evaluative concerns (Van den Bos et al., 1999) and thus be related to higher
levels of arousal or stress for employees. In turn, the arousal or stress caused by these self-
evaluative concerns is likely to negatively affect employee well-being. Fair treatment thus
could lead to employees engaging in various kinds of negative organizational withdrawal
behaviors such as absenteeism, cynicism, and decreased levels of involvement and
commitment (Johns, 1997). This point is important because we propose to relate the
reversal of the normal treatment fairness effect to real-life working behaviors. Whereas
earlier studies did not go beyond establishing that people can respond in negative affective
terms or had more protest intentions following fair treatment (Van den Bos et al., 1999), we
investigate how fair treatment can be negatively related to employee well-being behaviors.

Procedural and Interactional Fairness

Our study considers treatment fairness to consist of both procedural and interactional
fairness (Brockner, Wiesenfeld, & Diekmann, 2009). Procedural fairness is seen as the
fairness of decision-making procedures that lead to outcomes (Leventhal, 1980; Thibaut &
Walker, 1975), and interactional fairness as the degree of fair and respectful interactions
with key authorities (Bies & Moag, 1986). However, most of the research and theory
described thus far in this chapter focuses on procedural fairness thereby neglecting
interactional fairness. This appears to be an oversight and we intend to address this
omission. Both those studies establishing positive (Brockner & Wiesenfeld, 1996; Van den
Bos & Lind, 2002) and those establishing negative sense-making processes (Brockner et al.,
2003; Van den Bos et al., 1999) measured procedural fairness aspects. This is done because
interactional fairness commonly is reasoned to provide less information about the accuracy
of decision-making within these sense-making conditions (Brockner et al., 2003). However,
to the best of our knowledge, evidence for this speculation has not or hardly been
presented in the research literature for both normal fairness effects (for an exception, see
Elovainio et al., 2005) and especially for a reversal of the normal fairness effect.

Following the reasoning of the relational model (Tyler & Lind, 1992), people view
procedural fairness as information about the trustworthiness of authorities and as an aid to
help accept and make sense of unfavorable conditions (Brockner & Wiesenfeld, 1996; Van
den Bos & Lind, 2002). We reason that interactional fairness could be just as capable of
installing trust in the decision makers, as it focuses on elements such as respectfulness and
truthfulness, which are closely linked to trustworthiness. To illustrate this, interpersonal
fairness has been related to trust (Becerra & Gupta, 2003) and has even been identified as a
heuristic for trust (Lind, 2001; see also Brockner & Siegel, 1996). In addition, interactional
fairness is also presumed to provide some information about decision accuracy (Greenberg,
1993b). Underlining our reasoning, there is at least one example that illustrates that this
indeed is the case for positive sense-making processes, and thus normal fairness effects.
That is, Elovaainio and colleagues (2005) demonstrated that interactional fairness was able to
reduce the negative effects of uncertainty on absenteeism in the same way as procedural
fairness did. Our conviction is that if interactional fairness is capable of helping employees to
make positive sense of unfavorable conditions, it should also be capable of forcing
employees to make negative sense of unfavorable conditions in such evaluative conditions as
described above.

Even though the research on sense-making processes predominantly focuses on the
role of procedural fairness (Brockner et al., 2003), at present there is still some debate as to
whether interactional fairness may be considered a fairness type in its own right (Thibaut &
Walker, 1975), or rather should be seen as a sub-set of procedural fairness (Moorman, 1991;
Tyler & Bies, 1990; Van den Bos, 2005). These conflicting viewpoints add to the importance
of including interactional fairness into sense-making studies. That is, we consider it
important to establish whether respectful interactions with employees may provide relevant
trust related information to help them make sense of unfavorable conditions in the same
manner as procedural fairness. Thus, ultimately we are interested in understanding whether
interactional fairness is just as capable as procedural fairness of instigating normal as well as
reversals of the normal fairness effect.

THE CURRENT STUDY

Previous studies looking at sense-making processes during unfavorable conditions
have mainly been conducted in experimental settings (Van den Bos et al., 1997; Van den Bos
et al., 1999). In addition, when these studies examined normal and reversal effects in
organizational contexts, they did so by establishing a normal effect on one type of
dependent variable and showing the reversal effect on another dependent variable (e.g.,
Gilliland, 1994). The current research extends on the lab experiments by building on the
(limited number of) field studies about reversals of the normal procedural and interactional
fairness effects (Brockner et al., 2003; Brockner & Wiesenfeld, 2005). For reasons of
ecological validity, we think that it is essential to investigate the findings from those
experimental settings within an organizational context. Furthermore, we think more insights
can be obtained by showing, depending on potential moderators, both normal and reversal
effects on the same dependent variable.

Another distinction between most previous research and the present study is the
multi-dimensional approach we took to measuring employee well-being. Most other studies
concerning the uncertainty management model (Van den Bos & Lind, 2002) focused on
participants’ judgments of fairness or on their affective reactions to these fairness
judgments (for reviews, see Van den Bos & Lind, 2002, 2009). In contrast, following the
multidimensional model of employee well-being proposed by Van Horn and colleagues
(2004) we include behavioral, psychosomatic, and affective indicators of employee well-
being. The frequency of sickness absence was used as a behavioral indicator (Johns, 1997),
reflecting absences in which employees have some freedom of choice in deciding whether
or not to stay away from work (i.e., voluntary absence; Ivancevich, 1985). Perceived health
was used as an indicator of psychosomatic well-being (Kinnunen, Parkatti, & Rasku, 1994),
which is the evaluation of one’s physical functioning in terms of the presence or absence of
psychosomatic symptoms. Finally, work engagement was used as an indicator of employee’s
affective-motivational well-being (Schaufeli, Salanova, Gonzalez-Romá, & Bakker, 2002).
Work engagement is defined as a positive work-related state of fulfillment that is characterized by vigor (i.e., high levels of energy and mental resilience while working), dedication (i.e., being strongly involved in one's work), and absorption (i.e., being fully concentrated and happily engrossed in one's work). It is important to note that, following the emerging positive psychology (Seligman & Csikszentmihalyi, 2000), in the current study employee well-being is not only assessed by using negative indicators (absenteeism and health complaints), but also by including a positive indicator (work engagement).

Our main aim of the present study is to investigate in an organizational context whether both procedural and interactional fairness may help employees to make sense of the uncertainty and outcome unfairness they experience. Interestingly, the organization we examined included employees who operate in a strongly evaluative context. Prior to the survey, a new management team was established, as the previous management was not considered as sufficiently people oriented. It was an organization with a history of strong authoritative leadership practices and little employee democracy. Alongside the management change, a major reorganization was announced in order to improve the effectiveness of the organization. In addition to this information, given to us by the new management, interviews with key-officials as well as a series of management training sessions around the time of the survey clearly indicated the presence of an organizational culture in which employees felt they were being strongly evaluated by their supervisors and management. Moreover, as an effect of the reorganization, a large group of employees was being made redundant. Due to this, experiences of unfair outcomes or personal uncertainty were common, and many employees feared for their future position. This further reinforces our perception that employees in this sample operate in a strongly evaluative context. It is exactly in such an evaluative context (Van den Bos et al., 1999) that we would expect to find reversals of the normal procedural and interactional fairness effect (Brockner et al., 2003; Van den Bos et al., 1999). This leads us to formulate the following hypotheses for procedural and interactional fairness:

Hypothesis 1:
Procedural fairness is negatively related to employee well-being (behavioral, psychosomatic, and affective-motivational) in the unfavorable conditions of outcome unfairness and personal uncertainty.

Hypothesis 2:
Interactional fairness is negatively related to employee well-being in the unfavorable conditions of outcome unfairness and personal uncertainty.

Alternatively, in view of the impressive amount of research supporting the normal fairness effect (Brockner & Wiesenfeld, 1996) we would also like to consider the possibility that procedural and interactional fairness are related to positive sense-making processes. Therefore we additionally examine the following alternative hypotheses for procedural and interactional fairness:

Hypothesis 1_{alt}:
Procedural fairness is positively related to employee well-being in the unfavorable conditions of outcome unfairness and personal uncertainty.
Hypothesis 2_{alt}:

**Interational fairness is positively related to employee well-being in the unfavorable conditions of outcome unfairness and personal uncertainty.**

**Method**

**Respondents and Employee Survey Setting**

In the Dutch branch of a large multinational consultancy firm, 291 respondents participated in the present survey study (response rate 53%). The employees (59% males, 41% females) on average were 40.43 years old (SD = 9.91), 90.9% were Dutch nationals compared to 9.1% non-Dutch, and the majority of the respondents (81.2%) worked 32 hours or more per week. All employees received an e-mail inviting them to fill in the survey on the internet. Participation was voluntary and anonymity and confidentiality were emphasized in communication by the management of the organization and in the e-mail accompanying the questionnaire.

**Measures**

**Personal uncertainty.** Because previously conducted pilot studies showed unsatisfactory results with existing scales (e.g., Elovainio et al., 2005), we used a self-constructed 8-item scale in order to measure experienced personal uncertainty at work. An example item is “To what extent do you feel uncertain about your future within the organization” (1 = very weakly, 6 = very strongly). The internal consistency of this scale was good (α = .82).

**Outcome fairness**. Following Moorman (1991), outcome fairness was measured with a five-item scale. An example of an item is “How fair do you consider the outcomes (salary and recognition) you receive, considering the amount of effort you put into the organization?” A six-point answering scale was used with the endpoints *very unfair* (1) and *very fair* (6). The internal consistency was very good (α = .96).

**Procedural fairness.** Again, following Moorman (1991), two fairness scales were used (procedural and interactional fairness; cf. Adams-Roy & Barling, 1998; Gellatly, 1995; Skarlicki & Latham, 1997). The procedural fairness measure consisted of 7 items (example item: “How fair do you consider the manner in which information is gathered to make decisions?”) using an answering scale ranging from (1) very unfair to (6) very fair. Cronbach’s α was .92.

**Interactional fairness** was measured with 6 items from Moorman (1991). The same answering categories as for procedural fairness were used. An example question is: “How fair do you consider the manner in which your superior takes your point of view into consideration?” (1 = very unfair, 6 = very fair), and showed a good consistency (α = .90).

**Absenteeism.** Absence in frequency was measured with Johns’ (1994a) scale: “In a typical year, how many times do you miss work due to absenteeism?”, with the answer categories 1 *time or less* (1) up to 10 *times or more* (5). Studies show that self-reports do not necessarily accurately reflect the company absenteeism records, which are usually seen as

---

3 Please note that in this thesis we specifically measured outcome fairness as our measure of negative outcomes. We did this because we are interested in the specific effects of different types of fairness on people’s reactions, and we preferred to measure outcome fairness specifically rather than more globally (and hence possibly more vague) assessments of outcome favorability (cf. Brockner & Wiesenfeld, 1996, 2005).
superior (Van Poppel, De Vet, Koes, Smid, & Bouter, 2002). Unfortunately, it was not possible to use the company records of behavioral absenteeism for this study.

Health complaints. The 13-item short version of the VOEG (Vragenlijst voor Onderzoek van de Ervaren Gezondheidstoestand [Questionnaire for Research on the Experienced Health-Condition]; Dirken, 1967) was used to assess health complaints. The VOEG is a well-validated Dutch instrument to measure health complaints (De Boer, Bakker, Syroit, & Schaufeli, 2002; Martens, Nijhuis, Van Boxtel, & Knottnerus, 1999) and includes items such as: “Do you often feel pain in your stomach?” and “Are you short of breath quickly?” Respondents were asked to answer how they experienced these health complaints with an extreme confirmation answer category (YES!), a normal confirmation category (yes), a normal rejecting answer category (no) or an extremely rejecting category (NO!) (α = .88).

Work engagement. A 17-item scale (Schaufeli et al., 2002) was used to measure work engagement. Example questions for the engagement scale are: “When I am working, I feel strong and fit”, “I am proud of the work I do”, and “When I am working, I forget all other things around me”. All items could be answered with these 7-point scale answers, Never (0), Almost never (1), Rarely (2), Sometimes (3), Often (4), Very often (5), Always (6) (α = .93).

Results

Correlations and Confirmatory Factor Analyses

In Table 1, means, standard deviations and Pearson zero-order correlations of the study variables are presented. The sizes of the correlations between the fairness measures (procedural and interactional fairness) and outcome fairness show that these measures assess related concepts, but also indicate that interactional and procedural fairness are closer related (r = .75, p < .001), with each other, than with outcome fairness (procedural fairness (r = .45, p < .001) and interactional fairness (r = .43, p < .001), respectively.

In order to test the factorial validity of our procedural and interactional fairness scales, a Confirmatory Factor Analysis was performed, using the AMOS 5 computer program (Arbuckle, 2003). The hypothesized model with two correlated fairness factors was compared with the one-factor model on which all fairness items were loaded. The two-factor model showed a good fit of the data (χ² = 306.35, df = 63, NNFI = .90, CFI = .92), albeit after a correlation was allowed between the error terms of the first two procedural justice items because of overlapping item content. Both relative fit-indices (i.e. NNFI and CFI) satisfied their criterion of .90 (Byrne, 2001). Moreover, the fit of the two-factor model was superior to that of the one-factor model (Δχ² = 379.73, Δ df = 2, p < .001). Hence, the factorial validity of the procedural and interactional fairness dimensions was demonstrated.

Examination of the correlations between uncertainty and the other variables yielded some interesting results (e.g., the correlation between procedural fairness and uncertainty), suggesting that uncertainty is a crucial variable to take into consideration when investigating the relationship of procedural fairness and other employee well-being determinants (Lind & Van den Bos, 2002; Van den Bos & Lind, 2002). The correlations between uncertainty and the other variables all were significant and in the expected directions (e.g., uncertainty is negatively correlated with all fairness types and with engagement, and were positively correlated with health complaints and absenteeism).


Test of the Hypotheses

In order to test our hypotheses, we executed stepwise regression analyses, the results of which are shown in Tables 2 and 3. All independent variables were centered before entering them into the analyses (Cohen, Cohen, West, & Aiken, 2003). Before entering the independent variables, three demographic control variables (gender, age, and managerial responsibility) were entered, as previous research has indicated that they may affect, for instance, employee motivation to attend work (Johns, 1997). These control variables are not displayed in the tables for reasons of economy (only the \( R^2 \) of the control variables are included in parentheses). Please note that all significant interaction effects that we found while including the control variables were also found when these variables were not included.

In the next step, procedural and interactional fairness were entered as independent variables. The unfavorable condition variables were entered next (uncertainty in Table 2 and outcome fairness in Table 3). In the final step the interaction effects were entered: procedural fairness \( \times \) uncertainty and interactional fairness \( \times \) uncertainty (see Table 2), and procedural fairness \( \times \) outcome fairness and interactional fairness \( \times \) outcome fairness (see Table 3). Following the procedure proposed by Aiken and West (1991), the nature of these significant interaction effects was examined (see Figures 2 to 7).

In Step 3 of the regression analyses (Table 2), the interaction between procedural fairness and uncertainty yielded significant results for all three aspects of employee well-being: behavioral well-being (absence frequency, \( p < .05 \)), affective-motivational well-being (engagement, \( p < .05 \)), and psychosomatic well-being (health complaints, \( p < .05 \)). The interaction between interactional fairness and uncertainty produced significant effects for health complaints only, \( p < .05 \). Both procedural and interactional fairness yielded a significant interaction effect with outcome fairness (Table 3) on absence frequency (both \( p < .05 \)). It is noticeable that uncertainty yielded more significant interactions than outcome unfairness. In our opinion, this is an interesting observation and future research may want to test the robustness of the differential impact of personal uncertainty and unfair outcomes we found in our study. Figures 2 to 7 display the nature of these interaction effects.

Hypotheses 1 and 1alt. In order to determine whether procedural fairness is more likely to positively or negatively affect the influence of personal uncertainty and outcome fairness on employee well-being (representing the normal procedural fairness effect and the reversal of the normal procedural fairness effect, respectively), Figures 2, 3, 4, and 6 should be inspected. Evidence for the reversal of the normal procedural fairness effect (supporting Hypothesis 1) can be found in Figure 2: when uncertainty increased, high procedural fairness (centered procedural fairness plus 1 standard deviation following the proposed method by Aiken & West, 1991) demonstrated a sharp increase of absence frequency, \( t(280) = 2.99, p < .001 \), whereas low procedural fairness (centered procedural fairness minus 1 standard deviation) was related to a decrease of absence frequency, \( t(280) = -.37, \text{ ns} \). Similarly, high procedural fairness was related to a sharper decrease of engagement, \( t(280) = -4.83, p < .001 \), than low procedural fairness, \( t(280) = -1.08, \text{ ns} \) (Figure 3). With regard to support for the negative effect of procedural fairness in the face of outcome fairness Figure 6 should be inspected. This figure illustrates that when outcome fairness decreased, high procedural fairness was related to an increase of absenteeism, \( t(280) = 2.19, p < .05 \), whereas low procedural fairness was related to a decrease of absenteeism, \( t(280) = 1.17, \text{ ns} \).
Table 1. Zero-order correlations, means, standard, and alpha reliabilities (on the diagonal) deviations.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Frequency absent</td>
<td>1.58</td>
<td>0.77</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Engagement</td>
<td>4.38</td>
<td>0.77</td>
<td>-2.0**</td>
<td>-93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Health Complaints</td>
<td>1.88</td>
<td>0.48</td>
<td>0.20***</td>
<td>-2.2***</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Procedural Fairness</td>
<td>3.98</td>
<td>0.84</td>
<td>-0.07</td>
<td>0.23***</td>
<td>-0.22***</td>
<td>-0.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Interaction Fairness</td>
<td>4.55</td>
<td>0.70</td>
<td>-1.13*</td>
<td>0.29***</td>
<td>-0.25***</td>
<td>-0.75***</td>
<td>0.40*</td>
<td>0.43***</td>
<td>0.96</td>
</tr>
<tr>
<td>6. Outcome Fairness</td>
<td>3.90</td>
<td>1.04</td>
<td>-1.12*</td>
<td>0.13*</td>
<td>0.45***</td>
<td>-0.43***</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Uncertainty</td>
<td>2.63</td>
<td>0.78</td>
<td>0.16**</td>
<td>0.38***</td>
<td>-0.39***</td>
<td>-0.41***</td>
<td>-0.37***</td>
<td>-0.19***</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Note. N = 291. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed).

Table 2. Results (standardized B-coefficients) of three stepwise regression analyses

<table>
<thead>
<tr>
<th>Criterion variables</th>
<th>Absence frequency</th>
<th>Work Engagement</th>
<th>Health complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
</tr>
<tr>
<td>Procedural Fairness</td>
<td>.10</td>
<td>.14</td>
<td>.12</td>
</tr>
<tr>
<td>Interaction Fairness</td>
<td>-1.18*</td>
<td>-1.16†</td>
<td>-1.15†</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>-</td>
<td>-1.14*</td>
<td>-1.15*</td>
</tr>
<tr>
<td>Procedural Fairness X Uncertainty</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Procedural Fairness X Uncertainty (#R² Control variables)</td>
<td>(0.045)</td>
<td>(0.087)</td>
<td>(0.097)</td>
</tr>
<tr>
<td>R² change after</td>
<td>.015</td>
<td>.016</td>
<td>.015</td>
</tr>
<tr>
<td>control variables (R²)</td>
<td>(0.060)</td>
<td>(0.076)</td>
<td>(0.091)</td>
</tr>
<tr>
<td>R² change without</td>
<td>.020</td>
<td>.017</td>
<td>.025</td>
</tr>
<tr>
<td>entering control variables (R²)</td>
<td>(0.020)</td>
<td>(0.037)</td>
<td>(0.062)</td>
</tr>
</tbody>
</table>

Note. N = 291. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed), † p < .10 (two tailed). # before entering the proposed independent variables, the control variables “gender”, “managerial responsibility” and “age” were entered into the regression analysis, but were left out of this table for clarity purposes.

Table 3. Results (standardized B-coefficients) of a stepwise regression analyses

<table>
<thead>
<tr>
<th>Criterion variables</th>
<th>Absence Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>Procedural Fairness</td>
<td>.10</td>
</tr>
<tr>
<td>Interaction Fairness</td>
<td>-1.18*</td>
</tr>
<tr>
<td>Outcome Fairness</td>
<td>-</td>
</tr>
<tr>
<td>Procedural Fairness X Outcome Fairness</td>
<td>-</td>
</tr>
<tr>
<td>Procedural Fairness X Outcome Fairness (#R² Control variables)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>R² change after</td>
<td>.015</td>
</tr>
<tr>
<td>control variables (R²)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>R² change without</td>
<td>.020</td>
</tr>
<tr>
<td>entering control variables (R²)</td>
<td>(0.020)</td>
</tr>
</tbody>
</table>

Note. N = 291. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed), † p < .10 (two tailed). # before entering the proposed independent variables, the control variables “gender”, “managerial responsibility” and “age” were entered into the regression analysis, but were left out of this table for clarity purposes.
On the other hand, Figure 4 shows evidence for the opposite reasoning, namely that procedural fairness may buffer the negative effects of outcome unfairness and personal uncertainty on employee well-being (Hypothesis 1alt). When personal uncertainty increased, low procedural fairness was related to a sharper increase of health complaints, $t(280) = 4.72$, $p < .001$, than for high procedural fairness, $t(280) = 1.39$, ns. All in all, however, more support was found for Hypothesis 1 than for Hypothesis 1alt.

Hypotheses 2 and 2alt. Figures 5 and 7 illustrate whether interactional fairness is related to a positive or a negative influence on the effects of personal uncertainty and outcome unfairness on employee well-being. Figure 5 indicates that under increasingly uncertain conditions, interactional fairness, in the same manner as procedural fairness, can be related to a reversal of the normal interactional fairness effect. That is, high interactional fairness
was related to a sharper increase of health complaints, $t(280) = 4.71$, $p < .001$ than low interactional fairness, $t(280) = 1.41$, ns, supporting Hypothesis 2. Figure 7, however, provides evidence that interactional fairness positively influences the relationship between outcome unfairness and personal uncertainty, and employee well-being (Hypothesis 2$_{alt}$). Low interactional fairness, combined with lower fairness of outcomes was related to an increase, $t(280) = 2.19$, $p < .05$, and high interactional fairness to a decrease of absenteeism, $t(280) = 1.29$, ns.

Figure 4. The interactive effect of procedural fairness and uncertainty on health complaints

![Graph showing the interactive effect of procedural fairness and uncertainty on health complaints.]

Figure 5. The interactive effect of interactional fairness and uncertainty on health complaints

![Graph showing the interactive effect of interactional fairness and uncertainty on health complaints.]

Taken together, these findings reveal that both procedural and interactional fairness are capable of producing both normal fairness effects and the reversal of normal fairness effects. Our results suggest that in the current sample reversals of the normal procedural and interactional fairness effects are more likely to occur than normal procedural and
interactional fairness effects, as indicated by the amount of occurrences of both types of effects reported here. This noted, and perhaps more importantly, the results also indicate that it is not so much a question of occurrence of one or the other effect, but that fairness can positively and negatively impact the effects of personal uncertainty and outcome unfairness on employee well-being simultaneously.

Figure 6. The interactive effect of procedural fairness and outcome fairness on absence frequency

Figure 7. The interactive effect of interactional fairness and outcome fairness on absence frequency

Discussion and Conclusions
The main goal of this study was to investigate, within an organizational context, in which way procedural and interactional fairness helps employees to make sense of experienced uncertainty and unfair outcomes, and in turn impact various indicators of employee well-being such as absenteeism, health complaints, and work engagement. Following suggestions by Brockner and Wiesenfeld (2005) we tried to pinpoint whether
both procedural and interactional fairness may help employees to make sense of experienced uncertainty and outcome unfairness, such that they either produce the often demonstrated normal procedural and interactional fairness effects, or rather the counterintuitive reversal of these normal fairness of treatment effect. The approach of this study thus is uniquely distinct for three reasons. First, unlike earlier studies known to us, we investigated whether interactional fairness is capable of generating reversals of the normal fairness effect in the same manner as procedural fairness. Second, we explored whether these reversal effects for interactional and procedural fairness occur on the same dependent variables. And, third, we examined whether differential sense-making processes may take place for the two treatment fairness; interactional fairness is related to positive sense-making processes and thus to a normal treatment fairness effect, while procedural fairness is related to negative sense-making processes and thus a reversed effect on the same dependent variable. In addition to this, we related these positive and negative sense-making processes to employee well-being, which we measured by using a multi-dimensional approach. Furthermore, the research took place within an organizational context.

We explicitly note that in examining the effects of treatment fairness, we find overall more evidence for negative than positive sense-making processes. Thus, we obtained more evidence for the reversal of the normal fairness effect than for the normal fairness effect. This said, an intriguing aspect of our findings is that although reversals of the normal procedural fairness effects were found for absenteeism and engagement in uncertain conditions, the normal procedural fairness effect was found for health complaints in the same uncertain conditions. Additionally, the interaction between uncertainty and interactional fairness reveals that interactional fairness is also capable of producing a reversal of the normal fairness effect on health complaints. This implies that both procedural and interactional fairness are capable of yielding negative sense-making processes, and thus that it is advisable to investigate both fairness types and their potential negative impact on employee well-being.

Furthermore, on top of indicating that both interactional and procedural fairness can be related to both positive and negative sense-making processes (normal and reversal treatment fairness effects), this study revealed that positive and negative interactions with unfavorable conditions may occur at the same time, within the same study, and on the same dependent variable. For instance, compare the uncertainty x interactional fairness interaction effect on health complaints (see Figure 5) with that of uncertainty x procedural fairness on the same dependent variable (see Figure 4). In the latter case a reversal of the normal interactional fairness effect occurred, whereas in the former case the normal procedural fairness effect was observed. Additionally, consider the distinct interaction effects of procedural and interactional fairness with outcome fairness on absence frequency (see Figures 6 and 7). In contrast, procedural fairness was related to higher absenteeism when outcomes were unfavorable (reversal of the normal procedural fairness effect), and interactional fairness was related to lower absenteeism rates (the normal interactional fairness effect).

As far as we know, finding evidence for both a normal fairness effect and a reversal effect on the same dependent variable has not been found before within the same organizational setting. This makes these findings particularly interesting for the understanding of how fairness may help employees to make sense of unfavorable conditions with which they are confronted, and thus positively or negatively affect their well-being. Both results supporting the fair process effect, such as the positive effect of
procedural and interactional fairness on uncertainty (Elovainio et al., 2005; Van den Bos, 2001) and results supporting this particular reversal of the fair process effect (negative moderating effect of procedural fairness on unfair outcomes; Gilliland, 1994), have been found on numerous occasions separately, but always on different dependent variables and in different studies. Although the current study adds to our understanding about how treatment fairness affects sense-making processes, further research is needed to pinpoint the precise nature of the relationship between procedural and interactional fairness and self-evaluations in the face of unfavorable conditions (Brockner & Wiesenfeld, 2005).

**Procedural and Interactional Fairness and the (Reversal of) the Normal Fairness Effect**

Brockner and his colleagues (2003) argue that, compared to interactional fairness, procedural fairness actually influences employees’ feelings of being able to make sense and thus of having some control over their situation. In their view interactional fairness concerns (such as respectful treatment of employees) are less likely to be seen as the cause of outcome concerns (Brockner and Wiesenfeld, 1996), and would merely accompany concerns about decision making. Interactional fairness will therefore not be likely to force employees to take responsibility for their unfair outcomes. Procedural fairness, however, directly concerns decision making about outcomes and following procedures accurately to distribute outcomes (Brockner et al., 2003). This may, for instance, be the case in decision making in personnel selection practices, where procedural fairness could be expected to actually have an effect on the outcome (Lind & Tyler, 1988; Thibaut & Walker, 1975).

Results from this study deliver important evidence that, although interactional fairness indeed can be related to positive sense-making processes (Figure 7), it can also be related to negative sense-making processes (Figure 5). In the latter case a reversal of the normal interactional fairness effect occurred in the same manner as a reversal of the normal procedural fairness effect. In line with our alternative hypothesis, an honest and clear explanation from one's supervisor about why you did not receive the outcome one thought one deserved, although it may be respectful, it may also trigger negatively sense-making processes, such that an individual feels personally responsible for his or her experienced uncertainty.

An additional conclusion we can draw from these differential effects of procedural and interactional fairness is that these results support the notion that the two fairness types are conceptually distinct (Barling & Philips, 1993; Bies & Shapiro, 1987; Skarlicki & Folger, 1997). The distinction between procedural fairness and distributive or outcome fairness has received wide acceptance, and for a long time this two-factor model has been quite popular (Greenberg 1990; Sweeney & McFarlin, 1993). However, there is more dispute about interactional fairness, as some authors consider interactional fairness a subset of procedural fairness (Moorman, 1991; Tyler & Bies, 1990), rather than a distinct fairness type in its own right (Thibaut & Walker, 1975). High correlations between the two original fairness types suggest that they indeed are related (see Table 1), but the different interaction patterns also illustrate the distinct nature by which they operate (see Figure 4 versus 5, and Figure 6 versus 7). From a psychometric perspective the confirmatory factor analysis also indicates that procedural fairness and interactional fairness indeed are two distinct concepts. For the uncertainty management model and investigations into how fair treatment can mitigate the negative of outcome unfairness, this implies that it is important to distinguish between procedural and interactional fairness, in order to fully understand how and when fairness actually helps people deal with the negative effects of unfavorable conditions.
EMPLOYEE WELL-BEING AND DIFFERENTIAL SENSE-MAKING PROCESSES

In order to understand why procedural and interactional fairness sometimes are related to positive sense-making processes and at other times to negative sense-making processes, we would like to explore some possible explanations. In line with Van den Bos and colleagues (1999), we reason that when evaluative concerns are strong enough, this may lead to negative sense-making processes. As not everyone is likely to be equally affected by their environment, we reason that the stronger the evaluative context, the more individuals within that context will experience being strongly evaluated. As we unfortunately did not measure the degree of evaluation, we can not establish whether this negative sense-making effect is stronger for those who experienced a high degree of evaluation, compared to those who were not so affected by the evaluative context. Had we been able to compare a highly evaluative group with a low evaluative group, we expect that we consistently would have found reversal effects for the highly evaluative group.

In addition, the apparently conflicting results that higher procedural fairness is related to higher amounts of absenteeism during uncertainty, but is related to relatively lower levels of health complaints, could be explained as follows. We reason that in an evaluative context, fair procedures may lead to employees making negative sense of uncertain situations, in the sense that these employees feel personally responsible for the uncertainty they experience. In turn, this negative sense-making then is related to withdrawal behavior such as lowered work engagement and higher absenteeism. On the other hand, more underlying psychosomatic (health complaints) employee well-being aspects may be less likely or may take more time to be influenced by an evaluative context, compared to immediate effects on these more superficial behavioral (absenteeism) and affective-motivational (engagement) employee well-being aspects. This could explain why the negative effects of uncertainty on health complaints are buffered by procedural fairness, even in highly evaluative contexts. This line of reasoning, however, remains speculative as long as it is not supported by empirical data. It thus appears important to distinguish between how sense-making processes may impact different aspects of employee well-being. Future research, including a measurement of the evaluative context and taking various different dependent variables into account, therefore is strongly needed and we hope the present chapter may provide impetus to this type of research on organizational justice.

The results from this study imply that the central approaches this research builds upon, being the normal treatment fairness effect (Brockner & Wiesenfeld, 1996), the uncertainty management model (Van den Bos & Lind, 2002) and self-evaluative concerns (Van den Bos et al., 1999; Van den Bos & Lind, 2002, 2009), may be linked. This could mean that it is more likely to find reversals of normal procedural and interactional fairness effects in organizations or environments where employees feel uncertain (Brockner & Wiesenfeld, 2005), as uncertainty and unfair outcomes could contribute to an evaluative context. Future research should therefore also address the nature of the relationship between on the one hand outcome fairness and personal uncertainty, and on the other hand evaluative contexts.

LIMITATIONS

A first limitation of this present study is that assumptions have been made regarding the presence of an evaluative context. Although we did not actually measure levels of evaluation concerns in this survey, we have some suggestive evidence (see the description of the organizational context under current study) that this was indeed a strongly evaluative organizational culture. We therefore only can assume that reversals we observed for both
procedural and interactional fairness were the result of the evaluative context. Future research should include measures of evaluative context and attribution in order to actually establish this pattern. This is not common practice in organizational justice research, and our research study is no exception to this. We hope that the current chapter, together with other attempts in the field, will help make the measurement of evaluative context and attribution measures standard practice in the future of organizational justice research.

Secondly, as this study is based on a cross-sectional design, this prevents us from making causal statements from the results presented here. Therefore, longitudinal research or controlled experiments are needed in order to identify the causality of the relationships of the investigated variables. This noted, it should be noted that the many interaction effects we found in this study can not be the result of this cross-sectional design (Evans, 1985). Additionally, this design can not explain the differential interaction effects we found within this study, especially not those on the same dependent variable.

Thirdly, due to its cross-sectional design, this study is potentially subject to common method variance issues. Common method variance may not have been detrimental to our research because other studies that examined the same effects using laboratory studies, found similar results. That is, as noted earlier, our study is part of an important recent research stream attempting to reveal the potential negative effects of fair treatment. The majority of these types of studies were conducted in experimental settings or with research designs such that they overcome common method variance issues (Brockner et al., 2003; Van den Bos et al., 1999), illustrating that these types of negative effects are not necessarily the effect of common methods. Furthermore, Podsakoff and colleagues (2003) suggest a number of statistical remedies and checks to establish whether common method variance is a problem for a particular data set. We conducted several of these suggested analyses and all of them indicated that common method variance is not likely to have influenced the outcomes of our study.

For instance, we executed the Harman's single-factor test, in which an unrotated factor analysis including all fifty-seven items of the seven scales used in the current study indicated that one general factor is not accountable for the majority of the variance (in fact, eleven factors with eigenvalues of more than 1 were found). We also repeated all analyses of this study, this time including the general factor of all the items of the current study to partial out the effects of a general factor method, revealing that this affected none of the significant relationships of this chapter. In addition, we conducted one more of the proposed remedies by Podsakoff and colleagues (2003), and established with confirmatory factor analysis that a seven-factor model significantly fits that data better than a one-factor model ($\Delta \chi^2 = 5,364,56$, df=21, $p < .001$). Taken together, the results of these three procedures make us feel rather confident that common method variance did not play a problematic role in our study.

A final point we would like to make on the subject of common method variance issues, is that they may not be as problematic as commonly assumed. That is, Spector (2006) found that three results may mitigate the problems associated with the exclusive use of self-reports: (1) using self-reports does not guarantee finding significant results; (2) potential underlying biasing variables (e.g. negative affectivity) do not generally inflate correlations; (3) mono-method correlations are not necessarily higher than multi-method correlations. Spector (2006, p.221) therefore concludes that “the popular position that common method variance automatically affects variables measured with the same method is a distortion and oversimplification of the true state of affairs.”
Despite these weaknesses, we would like to note that this current study also has the unique strength of ecological validity. Our research design makes it possible to overcome a number of issues that cannot be as easily addressed by the other, experimental, studies. By examining potential negative effects of fairness treatment of management in the real life context in which these processes are likely to occur, and by operationalizing our dependent employee well-being variables in such a multi-dimensional way, we connect the insights gained from earlier studies (Brockner et al., 2003; Van den Bos et al., 1999) to how this impacts a variety of tangible working behaviors.

A final weakness could be the operationalization of sickness absence with self-reports because it has been shown that self-reported sickness absence does not necessarily accurately reflect the company absenteeism records, which are usually seen to be superior (Van Poppel et al., 2002). In addition, self reports of sickness absence inherently measure prior absence spells and thus further prevents speculation about the causality of the results. Unfortunately, it was not possible to use company’s sickness absence records in this study so that our results should be replicated in future research using more objective absenteeism measures.

**Practical Implications**

Globalization, reorganizations, and acquisitions are an unavoidable reality in present day working life and for many employees this provides a large amount of uncertainty, outcome concerns and stress (Van den Bos & Lind, 2002). Although human resources issues within these larger (and larger) organizations increasingly appear to be taken seriously, it is our experience that particularly during these hectic and uncertain periods of reorganizations, mergers and acquisitions, attention is shifted towards organizing the more technical aspects of these changes. Due to this technical focus, there is the danger of becoming sidetracked from handling the human side when such organizational changes occur (Warner, 2002). Attention generally is prioritized towards rationalizing processes such as information technology, rather than addressing personnel issues (Hutchison, 2002). Studies have shown that successful mergers and acquisitions were carried out by organizations where human resources was involved in an early stage and there was more structural attention for the people issues, compared to organizations where this was not the case (Schmidt, 2001). This strengthens our belief that the uncertainty and outcome concerns accompanying these turbulent organizational changes may be extremely stressful and unsettling for employees (Hogg, 2000; Sorrentino, Holmes, Hanna, & Sharp, 1995). Therefore, in our view, good human resource practices should be seen as important, especially in these circumstances when one normally seems to get sidetracked from them. In order to effectively manage uncertainty and outcome unfairness it is therefore important to investigate how fairness can contribute to this.

Understanding how treatment fairness can help to manage or influence the effects of outcome unfairness and personal uncertainty requires research in organizational settings. The current study provides us with evidence that it is not just a matter of being fair towards employees and that the effects of outcome unfairness and personal uncertainty will then have been taken away. Employees who participated in this research, in some instances at least, appear to be in search of some opportunity to blame the uncertainty and experienced outcome unfairness on external factors. In contrast with predictions in previous studies (Brockner et al., 2003), procedural and interactional fairness both seem to be capable of enhancing the negative effects of outcome unfairness and personal uncertainty. This implies
that improving organizational fairness will not necessarily have a positive effect on employee well-being. This noted, the advice to organizations in uncertain circumstances cannot be to lower the standards of procedures and respectful management and to encourage unfair decision making practices. As mentioned above, our experience with this particular culture provides us with some evidence that we indeed can speak of a strongly evaluative organization, which could explain the occurrence of reversals of the normal procedural and interactional fairness effects. Solutions such as avoiding an evaluative culture, if this would at all be possible in the current result-oriented economy, appear unlikely to bring the answer. That is, evaluative contexts, and the internal attributions that result from them, in themselves are related to positive organizational behavior such as active problem-solving (Amirkhan, 1998). It appears more likely that it is due to the fact that unfavorable conditions provide a specific environment in which strong evaluations in combination with treatment fairness can have the potential to negatively impact employee well-being. Therefore, in the cases where fairness appears to reinforce the negative effects of personal uncertainty and outcome unfairness, it seems appropriate to both stress fair treatment as well as encouraging employees to engage in self-affirming activities (Wiesenfeld, Brockner, Petzall, Wolf, & Bailey, 2001). This may help employees to make positive rather than negative sense of unfavorable conditions. However, more field research within different settings and varying degrees of evaluation is needed to be able to draw practical and usable conclusions for all kinds of organizations.

To conclude, the current study provides us with intriguing evidence that treatment fairness does not necessarily have a positive effect on employee well-being. It illustrates, in contrast with general thinking, that both interactional and procedural fairness are capable of having a negative impact on the effects of experienced personal uncertainty and outcome unfairness on employee well-being. Additionally, the findings in this study indicate that fair treatment of employees may have quite different effects on different aspects of employee well-being. This is a valuable insight not only for further theoretical development, but also for everyday management practices.
CHAPTER 3: PLEASE DON’T BE NICE TO ME
HOW INTERACTIONAL FAIRNESS CAN BE NEGATIVELY RELATED TO WORK ENGAGEMENT
IN THE FACE OF UNFAIR OUTCOMES

Introduction

This study is the first to relate treatment fairness to work engagement. We consider this an important topic, as there are many indications that these two phenomena may be strongly related. In doing so, we distinguish two aspects of treatment fairness, namely procedural and interactional fairness. In addition, this study explores whether the relationship between treatment fairness and work engagement will necessarily be positive or whether it can also be negative. This relationship between treatment fairness and work engagement is investigated within a highly evaluative context in which employees face the unfavorable condition of unfair outcomes.

Treatment fairness clearly is relevant for a wide range of organizational behaviors, such as job satisfaction and affective commitment (Greenberg, 1993a; Folger & Konovsky, 1989; McFarlin & Sweeney, 1992; Moorman, 1991), turnover intention (Daily & Kirk, 1992, Konovsky & Cropanzano, 1991), organizational citizenship behavior (OCB; Moorman, 1991; Konovsky & Folger, 1991), absenteeism (De Boer, Bakker, Syroit, & Schaufeli, 2002; Gelattly, 1995), and for dealing with uncertainty and lack of trust (Van den Bos & Lind, 2002; Van den Bos, Wilke, & Lind, 1998). Additionally, work engagement is an emerging concept within the field of positive psychology (Seligman & Csikszentmihalyi, 2000) and focuses on the positive contribution of employees to organizations (Bakker & Schaufeli, 2008). In addition to scientific relevance, work engagement is receiving a lot of attention from the consultancy world as well (Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008; Bakker & Schaufeli, 2008). According to major consultancy firms, engagement of employees is related to the business outcomes of an organization (e.g., Mercer, 2007a) and consultants also report that organizations identify engaging their workforce as one of their top strategic challenges and priorities (e.g., Mercer, 2007b). From both basic and more applied perspectives it thus is important to invest in enhancing engagement levels and to understand what factors influence engagement. Therefore it is important to explicitly examine the role organizational fairness can play to accomplish this.

There thus are many indications that the concepts of fairness and work engagement are very likely to be related. For instance, there is a vast amount of research showing that organizational fairness increases various positive psychological states similar to work engagement, such as job satisfaction, organizational commitment, and organizational citizenship behavior (Greenberg, 1993a; Folger & Konovsky, 1989; McFarlin & Sweeney, 1992; Moorman, 1991). In addition, relating fairness to work engagement, the Job Demands-Resources (JD-R) Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004) lists a variety of job resources which enhance work engagement levels such as job control, performance feedback, task clarity and supervisory coaching. Intuitively treatment fairness would fit well in this list. The reason is these job resources refer to stimulating jobs. This noted, as far as we know, the linkage between treatment fairness -- which we assume to be an important aspect of a stimulating job -- and work engagement has not been empirically investigated up until now.

---

4 Chapter 3 has been submitted for publication as: Miles, P., Van den Bos, K., & Schaufeli, W. B. (2010b). Please don’t be nice to me: How interactional fairness can be negatively related to work engagement in the face of unfair outcomes. Manuscript submitted for publication.
The linkage between treatment fairness and work engagement described above thus would imply a positive relationship. On the other hand, recent studies — among which the one described in the previous chapter — have revealed that treatment fairness can sometimes have negative effects for employees. That is, an increasing amount of research is indicating that treatment fairness can sometimes have a negative influence on how employees respond to unfavorable conditions (Brockner, 2002; Brockner & Wiesenfeld, 2005; Brockner et al., 2003; Gilliland, 1994; Schinkel, Van Dierendonck, & Anderson, 2004; Van den Bos, Bruins, Wilke, & Dronkert, 1999). It appears that fair treatment, particularly in highly evaluative contexts (Van den Bos et al., 1999) can make that employees may feel forced to take personal responsibility for experienced unfavorable conditions, such as unfair outcomes. Questions about whether or not one is personally to blame for unfavorable conditions thus can lead to employees to respond more favorably to unfair than to fair treatment (Brockner et al., 2003; Brockner & Wiesenfeld, 2005). Therefore, this chapter sets out to investigate when treatment fairness may be positively, or rather negatively related to work engagement. This relationship between treatment fairness and work engagement is investigated with a longitudinal design so that — in principle — some of the limitations of the previous chapter are overcome.

**The Positive Relationship Between Treatment Fairness and Work Engagement**

Work engagement is a relatively new concept in the domain of organizational behavior and is emerging quickly as an important aspect within the field of positive psychology (Bakker & Schaufeli, 2008). An engaged employee is someone who displays behaviors and characteristics such as high levels of energy (vigor), strong involvement in one’s work (dedication), and high levels of concentrations and being contentedly engrossed (absorption; Schaufeli, Salanova, Gonzalez-Romá, & Bakker, 2002). These characteristics of work engagement are very valuable for organizations. That is, engagement is positively related to motivational aspects such as organizational citizenship behavior, personal initiative, proactivity, and a strong learning motivation (Schaufeli & Salanova, 2007) and to organizational outcomes such as productivity, profit, less turnover (Harter et al., 2002), more financial returns (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009), and higher quality of service (Salanova, Agut, & Peiró, 2005).

Following the recent and noteworthy upsurge in engagement research (Macey & Schneider, 2008), consultancy firms and organizations have been quick to catch on to this trend. They understand the potential positive organizational and financial benefits of increasing work engagement levels (Harter et al., 2002; Mercer, 2007a, 2007b). Employee engagement is a strategic priority for organizations and they believe high levels of employee engagement will be critical for future success and will provide them with competitive advantage (Mercer, 2007a, 2007b). Due to this unmistakable increase in popularity of work engagement we deem it important to contribute to the understanding of what drives work engagement. By examining the antecedents of work engagement, we also hope to add to its conceptual validity. Even though there has been a vast amount of research on work engagement, it has not yet been related to organizational fairness.

The JD-R model (Hakanen, Schaufeli, & Ahola, 2008; Schaufeli & Bakker, 2004; Schaufeli, Bakker, & Van Rhenen, 2009) is the most frequently used model to investigate the drivers of work engagement within organizations. As described above, it proposes a number of job resources, but overlooks organizational fairness as a potential job resource to increase work engagement. The two treatment fairness types we distinguish, procedural
and interactional fairness, are important for a variety of organizational outcomes (for an overview, see Conlon, Meyer, & Nowakowski, 2005; Van den Bos, 2005) and appear likely to be related to work engagement (outcome fairness is described later in this chapter, in the section about when fairness is most important for work engagement).

Procedural fairness is defined as the fairness of decision-making procedures which lead to outcomes (Leventhal, 1980; Thibaut & Walker, 1975), and has been shown to affect pivotal aspects of employee well-being, such that high levels of procedural justice are related to increased job satisfaction, decreased turnover intention, and absenteeism (Dailey & Kirk, 1992; De Boer et al., 2002; Lam, Schaubroeck, & Aryee, 2002; Konovsky & Cropanzano, 1991). Interactional fairness, usually described as fair and respectful interactions with key authorities (Bies & Moag, 1986), is positively related to increased job performance (Masterson, Lewis, Goldman, & Taylor, 2000), law suit decision acceptance (Lind, Greenberg, Scott, & Welchans, 2000), and negatively with work absenteeism (Gellatly, 1995). In comparison to past research, it is becoming increasingly commonplace to distinguish between these two fairness types in relation to organizational outcomes and behaviors (e.g., De Boer, et al., 2002; Elovinio et al., 2005). Further justifying our distinction between these two fairness types, Conlon and colleagues (2005) also advocate that fairness research should measure multiple forms of fairness in order to interpret correctly how fairness affects organizational outcomes.

We draw upon both social exchange (Homans, 1961) and social identity perspectives ( Tajfel & Turner, 1986) to understand the relationship between treatment fairness and work engagement. Prior research has related procedural and interactional fairness to organizational citizenship behavior (OCB) in just this way. That is, employees reciprocate fair treatment, and the trust they associate with this through fair treatment, by displaying positive organizational behavior (social exchange perspective; Konovsky & Pugh, 1994). In addition, employees may withdraw information about their social identity from fair treatment and display OCB in order to support the welfare of the group to which they identify (social identity perspective; Moorman & Byrne, 2005). OCB can be considered as a behavioral form of work engagement (Macey & Schneider, 2008) and thus may be seen as closely related to our more affective measure of work engagement. In a similar manner as OCB, we argue that employees could reciprocate fairness by working in an engaged manner or feel more engaged with their work when they strongly identify with their work due to fair and respectful treatment by their organization. This reasoning is underlined by perceived organizational support theory (POS; Rhoades & Eisenberger, 2002), which is a further extension of social exchange theory. POS theory reasons that fair treatment contributes to an employee’s general perception of being valued by their organization. In turn this perceived support results in a felt obligation to care about the organization’s welfare and to help the organization reach its objectives, as well as in a strengthened belief that the organization recognizes and rewards increased performance (Rhoades & Eisenberger, 2002). Aspects of work engagement, such as dedication and increased energy and efforts at work closely resemble the reciprocating behavior described by the POS theory.

In addition to these theoretical explanations, there is convincing empirical evidence that suggests that lack of fairness is an important determinant of burnout (Schaufeli, 2006). Work engagement is the opposite of burnout, and thus unfair treatment would also be expected to be related to lower levels of work engagement (and organizational fairness with higher levels of work engagement). In line with the vast amount of evidence supporting the positive relationship between treatment fairness and employee well-being
described above, we thus expect to find a positive direct relationship between treatment fairness and work engagement. In addition, following the recommendation of Conlon and colleagues (2005), we distinguish between interactional and procedural fairness as two types of treatment fairness. Relating these two fairness types to work engagement, we therefore propose the following hypotheses.

Hypothesis 3a:  
Procedural fairness is positively related to work engagement.

Hypothesis 3b:  
Interactional fairness is positively related to work engagement.

WHEN MAY TREATMENT FAIRNESS BE NEGATIVELY RELATED TO WORK ENGAGEMENT?  

As discussed above, a clear direct link between procedural and interactional fairness and a wide range of organizational behaviors has been established (for an overview, see Conlon et al., 2005). Recently, however, studies have revealed that specific unfavorable conditions such as unfair outcomes may have the potential to interact with treatment fairness (Brockner & Wiesenfeld, 1996, 2005; Van den Bos & Lind, 2002). More specifically, in some instances when employees faced unfavorable conditions, treatment fairness had a negative influence on employees (Brockner et al., 2003; Brockner & Wiesenfeld, 2005). Therefore, we feel that it is important to investigate how the experience of unfair outcomes may impact the relationship between treatment fairness and work engagement.

To elaborate on the potential of outcome fairness to interact with treatment fairness, unfavorable conditions such as unfair outcomes appear capable of instigating sense-making processes among employees. That is, following unfair outcomes employees are likely to seek answers about why they are experiencing these unfavorable outcomes (Brockner & Wiesenfeld, 2005). In line with this reasoning, some studies have revealed that treatment fairness helps employees to make positive sense of these unfavorable conditions (Brockner & Wiesenfeld, 1996; Van den Bos & Lind, 2002). More specifically, treatment fairness is believed to help employees to feel some sense of control and trust in their organization (Tyler & Lind, 1992; Van den Bos & Lind, 2002; Van den Bos, Lind, Vermunt, & Wilke, 1997) when they face unfair outcomes.

This noted, other studies have found that treatment fairness may force employees to make negative sense of the unfair outcomes they experience (Brockner, 2002; Brockner & Wiesenfeld, 2005; Brockner et al., 2003; Gilliland, 1994; Schinkel et al., 2004; Van den Bos et al., 1999). That is, in such instances, fair treatment appears to emphasize the personal responsibility of individuals for their unfavorable outcomes. Thus, ultimately this may lead to counterintuitive negative effects of treatment fairness. This negative effect of treatment fairness is often labeled as the reversal of the normal treatment fairness effect (Van den Bos et al., 1999).

Explanations for when or not this counterintuitive effect is likely to occur may lie in the context of the specific organization. More specifically, Van den Bos and colleagues (1999, Study 3) found evidence that a strongly evaluative context may be responsible for the occurrence of reversals of the normal fairness effect. Their study revealed that, in a highly evaluative context, employees preferred unfair to fair treatment following unfavorable conditions. This evaluative context thus appears to force employees to feel personal responsibility for the unfavorable conditions they experience. Fair treatment in such a
context only seems to reinforce this feeling of being personally responsible. On the other hand, unfair treatment seems to give employees the opportunity to place the blame elsewhere. Ultimately, feeling personally responsible for unfavorable conditions may result in stress for employees and in turn may lead to withdrawal behavior (Johns, 1997) such as lowered work engagement. The evaluative context thus may explain why the counterintuitive negative effects of treatment fairness sometimes are found.

The organization where we performed our study was going through a very tough and turbulent period at the time of the surveys. The business results of a number of key departments were problematic and in turn were putting pressure on the performance of the organization as a whole. With regard to staff, severe measures were being taken to reduce costs and increase productivity. For instance, employees were ordered to work weekend shifts without receiving the usual compensation for this. On top of that, there was a constant threat of redundancies or reorganizations due to the disappointing results. Moreover, changes were being made within the management team to increase its effectiveness. However, these changes only contributed to the turbulence and threats experienced by employees. All in all, it seems that these circumstances resulted in a highly evaluative context at the time of the surveys. It is in such an evaluative context that we would expect to find reversals of the normal fairness effect. Ultimately, this implies that we may be likely to find negative effects of treatment fairness on work engagement in the face of unfair outcomes. Before formulating our hypotheses we will first explore whether both procedural and interactional fairness may be related to reversals of the normal treatment fairness effect.

**INTERACTIONAL FAIRNESS AND SENSE-MAKING PROCESSES**

Most of the studies investigating the reversal of the normal treatment fairness effect focus on procedural fairness and overlook interactional fairness (Brockner et al., 2003; Gilliland, 1994; Van den Bos et al., 1999). That is, these studies assume that interactional fairness is less likely than procedural fairness to reinforce sense-making processes (Brockner et al., 2003). According to this speculation, elements of procedural fairness pertaining to the accuracy of information and decision making (Thibaut & Walker, 1975) are expected to be more likely to help employees explain why they are facing unfavorable conditions than interactional fairness elements such as respectful treatment (Bies & Moag, 1986).

We would like to challenge this assumption. First, we would like to note that to the best of our knowledge there is no evidence supporting the unique ability of procedural fairness to yield reversals of the normal fairness effect. Second, interactional fairness has also been assumed to provide information about the accuracy of decision making (Greenberg, 1993b). Finally, we would like to note that the sense-making reasoning is deeply nested in the relational model (Tyler & Lind, 1992). This model assumes that employees perceive procedural fairness as an indication of the trustworthiness of authorities and that they therefore will be more accepting of (unfavorable) decisions made by these authorities. In the current study we reason that interactional fairness is just as likely to instill trust in authorities as procedural fairness. To illustrate this, interactional fairness has been related to trust (Becerra & Gupta, 2003) and has shown to act as a heuristic for trust (Lind, 2001; see also Brockner & Siegel, 1996). Thus, it is our conviction that interactional fairness is just as likely as procedural fairness to reinforce both positive and negative sense-making processes. As the particular organization we are dealing with appears to be a highly evaluative context, this results in our final hypotheses.
Hypothesis 4a:
Outcome fairness interacts with procedural fairness such that when employees experience more outcome unfairness, high procedural fairness is negatively related to work engagement and low procedural fairness is positively related to work engagement.

Hypothesis 4b:
Outcome fairness interacts with interactional fairness such that when employees experience more outcome unfairness, high interactional fairness is negatively related to work engagement and low interactional fairness is positively related to work engagement.

Method

Respondents and Employee Survey Setting
Respondents in this study were employees from a wholesale organization with a majority of manual laborers. This survey was conducted in two consecutive years as part of the annual employee satisfaction survey. A total of 377 (response of 75%) took part at Time 1, 273 at Time 2 and in total 213 employees took part in both studies, consisting of a majority of men (respectively, 77.9% men, and 22.1% women) with an average age of 40.49 years (SD = 9.58). A clear majority (95.0%) was of Dutch nationality (compared to 5.0% non-Dutch), and only a minor section (9.9%) of the employees worked part-time (32 hours or less per week). The descriptive statistics at Time 2 were very similar to those at Time 1.

The survey was introduced to the employees in order to get a firmer grip on and improve matters such as work motivation, employee mobility and absenteeism. The employees were asked to fill in a paper-and-pencil questionnaire. For the employees with a lower education level (mostly only primary school), sessions were organized during working hours to fill in the survey with the researchers present in order to clarify any questions regarding the content of the survey-items. Participation was voluntary and confidentiality was emphasized in communication by the management of the organization, in the introduction letter and by the researchers present when respondents filled out the questionnaires.

Measures
Procedural fairness. Following Moorman (1991) two fairness scales were used (procedural and interactional fairness; cf. Adams-Roy & Barling, 1998; Gellatly, 1995; Skarlicki & Latham, 1997). The procedural fairness measure from Moorman was used. This measure consists of 7 items (example items: “How fair do you consider the manner in which information is gathered to make decisions?” and “How fair do you consider the manner in which different parties are involved in the decision making process?”). We used a six-point answering scale with the endpoints very unfair (1) and very fair (6). Cronbach’s α was .95, for both measurements.

Interactional fairness was measured with the 6 items from the Moorman (1991) interactional fairness scale. The same answering categories as for procedural fairness were used. Example questions were: “How fair do you consider the manner in which your superior takes your point of view into consideration?” and “How fair do you consider the manner in which your superior treats you?” The questions showed a good consistency (α = .93, for Time 1, and .96, for Time 2).
Outcome fairness. Again, following Moorman (1991), outcome fairness was measured with a five-item scale. An example of an item was “How fair do you consider the rewards (salary and recognition) you receive, considering the amount of effort you put into the organization?” A six-point answering scale was used with the endpoints very unfair (1) and very fair (6). The internal consistency was very good (α = .96, for Time 1, and .97 for Time 2).

Work engagement. A nine-item scale (Schaufeli, Bakker, & Salanova, 2006) was used to measure work engagement. Example questions for the engagement scale were: “When I am working, I feel strong and fit” (vigor), “I am proud of the work I do” (dedication), and “When I am working, I forget all other things around me” (absorption). All items could be answered with these 7-point scale answers, Never (1), Almost never (2), Rarely (3), Sometimes (4), Often (5), Very often (6), Always (7) (α = .94, for Time 1, and .95 for Time 2). Although work engagement consists of three sub-components (i.e., vigor, dedication, and absorption), particularly for the short nine-item version a composite score is recommended (Schaufeli et al., 2006; Seppälä et al., 2009). In addition, supporting the absence of theory predicting different effects for the three sub-components, they show empirical evidence that they are related to other variables such as burnout in the same manner (Schaufeli & Bakker, 2003). Work engagement thus can be seen as a unitary construct, with three distinguishable, but highly interrelated components (correlations between these components are often higher than .80; Schaufeli et al., 2002).

Results

Preliminary Analyses

The means, standard deviations and Pearson zero-order correlations of the variables assessed in the first and second measurements and the longitudinal correlation analyses are presented in Table 4.

All variables correlated significantly and positively with each other, including the correlations between the variables measured at the same time interval, but also all of the longitudinal correlations. The highest correlations were found between procedural and interactional fairness (r = .73, p < .001, at Time 1; r = .76, p < .001, at Time 2).

In order to test the factorial validity of our procedural, interactional, and outcome fairness scales, a Confirmatory Factor Analysis was performed for Time 1, using the AMOS 5 computer program (Arbuckle, 2003). The hypothesized model with three correlated fairness factors was compared with the one-factor model on which all fairness items loaded. The three-factor model showed a good fit to the data (χ² = 546.10, df = 132, NNFI = .92, CFI = .94). Both relative fit-indices (i.e. NNFI and CFI) satisfied their criterion of .90 (Byrne, 2001), whereas RMSEA is approaching its critical value of .08 (Browne & Cudeck, 1993). Moreover, the fit of the three-factor model was superior to that of the one-factor model (Δχ² = 2136.63, Δ df = 3, p < .001). In addition, we performed a confirmatory factor analysis including the three fairness factors and work engagement. This four-factor model also showed a satisfactory fit of the data (χ² = 1048.40, df = 318, NNFI = .89, CFI = .92), with CFI exceeding the criterion of .90 and NNFI approaching it. Hence, the factorial validity of the procedural, interactional and outcome fairness, and work engagement dimensions was demonstrated.
Table 4. Zero-order correlations, means, standard, and alpha reliabilities (on the diagonal) deviations.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Engagement (Time 1)</td>
<td>4.22</td>
<td>1.04</td>
<td>.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Engagement (Time 2)</td>
<td>4.29</td>
<td>0.99</td>
<td>.77**</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Procedural Fairness (Time 1)</td>
<td>3.97</td>
<td>0.94</td>
<td>.49***</td>
<td>.40***</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Procedural Fairness (Time 2)</td>
<td>4.08</td>
<td>0.86</td>
<td>.31***</td>
<td>.45***</td>
<td>.43***</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Interactional Fairness (Time 1)</td>
<td>4.47</td>
<td>0.89</td>
<td>.39***</td>
<td>.39***</td>
<td>.73***</td>
<td>.50***</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Interactional Fairness (Time 2)</td>
<td>4.43</td>
<td>0.95</td>
<td>.28***</td>
<td>.46***</td>
<td>.44***</td>
<td>.76***</td>
<td>.45***</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Outcome Fairness (Time 1)</td>
<td>3.85</td>
<td>1.11</td>
<td>.28***</td>
<td>.24***</td>
<td>.48***</td>
<td>.31***</td>
<td>.47***</td>
<td>.31***</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>8. Outcome Fairness (Time 2)</td>
<td>3.77</td>
<td>1.09</td>
<td>.24***</td>
<td>.27***</td>
<td>.38***</td>
<td>.46***</td>
<td>.35***</td>
<td>.40***</td>
<td>.66***</td>
<td>.97</td>
</tr>
</tbody>
</table>

Note. Time 1, N = 377, Time 2, N = 273, and for longitudinal data, N = 213. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed).

Table 5. Results (standardized B-coefficients) of the hierarchical regression analysis

<table>
<thead>
<tr>
<th>Criterion variables</th>
<th>Engagement (Time 1)</th>
<th>Engagement (Time 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Age: Young (dummy)</td>
<td>-.06</td>
<td>-.10†</td>
</tr>
<tr>
<td>Age: Middle (dummy)</td>
<td>-.05</td>
<td>-.08</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>.18**</td>
<td>.14**</td>
</tr>
<tr>
<td>Managerial responsibility</td>
<td>-.20***</td>
<td>.13***</td>
</tr>
<tr>
<td>Procedural Fairness (PF)</td>
<td>-.31***</td>
<td>.31***</td>
</tr>
<tr>
<td>Interactional Fairness (IF)</td>
<td>-.16*</td>
<td>.15*</td>
</tr>
<tr>
<td>Outcome Fairness (OF)</td>
<td>-</td>
<td>.02</td>
</tr>
<tr>
<td>PF X OF</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IF X OF</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>R2 change</td>
<td>.065</td>
<td>.186</td>
</tr>
<tr>
<td>R2</td>
<td>-</td>
<td>.251</td>
</tr>
</tbody>
</table>

Note. Time 1, N = 377, Time 2, N = 273, and for longitudinal data, N = 213. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed), † p < .10 (two tailed).

Table 5 (continued). Results (standardized B-coefficients) of the hierarchical regression analysis

<table>
<thead>
<tr>
<th>Criterion variables</th>
<th>Engagement (Longitudinal)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>Age: Young (dummy)</td>
<td>-.10</td>
</tr>
<tr>
<td>Age: Middle (dummy)</td>
<td>-.01</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>-.19**</td>
</tr>
<tr>
<td>Managerial responsibility</td>
<td>-.05</td>
</tr>
<tr>
<td>Procedural Fairness (PF)</td>
<td>-.22*</td>
</tr>
<tr>
<td>Interactional Fairness (IF)</td>
<td>-.21*</td>
</tr>
<tr>
<td>Outcome Fairness (OF)</td>
<td>-</td>
</tr>
<tr>
<td>PF X OF</td>
<td>-</td>
</tr>
<tr>
<td>IF X OF</td>
<td>-</td>
</tr>
<tr>
<td>R2 change</td>
<td>.051</td>
</tr>
<tr>
<td>R2</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. Time 1, N = 377, Time 2, N = 273, and for longitudinal data, N = 213. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed), † p < .10 (two tailed).
TEST OF THE HYPOTHESES

Our hypotheses were tested, using three separate hierarchical regression analyses (for Time 1, for Time 2, and for the longitudinal analysis, respectively). The results of these regression analyses are shown in Table 5.

As proposed by Cohen and colleagues (2003), all variables were centered before entering them into the analyses. Three demographic control variables (age, gender, and managerial responsibility) were entered into the analyses, as previous research has indicated that they can affect, for instance, withdrawal behavior (Johns, 1997). These control variables were entered as the first step presented in Table 5. In the second step presented in Table 5, the independent variables procedural and interactional fairness were entered. The moderating variable, outcome fairness, was entered next, and in the fourth step both interaction effects were entered (procedural fairness x outcome fairness and interactional fairness x outcome fairness). Work engagement (T1) was entered as an additional final step for the longitudinal analyses to control for base-line effects. In Step 4 of the regression analyses at Time 1 and Time 2, we can see significant interaction effects between interactional fairness and outcome fairness on work engagement at both Times 1 and 2.

Hypotheses 3a and 3b. To determine whether work engagement was positively associated with both procedural fairness (Hypothesis 3a) and interactional fairness (Hypothesis 3b), we inspected the results of Steps 2 to 4 in the regression analyses. The results of Step 2 indicated a significantly positive relationship between work engagement and both procedural fairness (for Time 1, $\beta = .31$, $p < .001$, and for Time 2, $\beta = .25$, $p < .01$, for the longitudinal analysis, $\beta = .22$, $p < .05$) and for interactional fairness (for Time 1, $\beta = .16$, $p < .05$, for Time 2, $\beta = .25$, $p < .01$, for the longitudinal analysis, $\beta = .21$, $p < .05$). These consistent findings lead us to accept Hypothesis 3a as well as Hypothesis 3b. It must be noted though that the significant longitudinal effects did not hold up when we controlled for base-line levels of work engagement (T1, Step 5) due to the high stability of work engagement over time.

Hypotheses 4a and 4b. The fourth step in the regression analyses allowed us to determine whether both procedural fairness and interactional fairness interacted with outcome fairness on work engagement such that when employees experience outcomes as more unfair, high interactional and procedural fairness would be negatively related to work engagement, whereas low interactional and procedural fairness would be positively related to work engagement. Table 5 shows that the interaction effects for procedural fairness with outcome fairness on engagement did not yield significant effects for any of the three analyses, and therefore Hypothesis 4a was not supported in the current sample. Interactional fairness, however, consistently did yield significant interaction effects for Time 1, Time 2, and the longitudinal analyses. The nature of these three significant interaction effects for interactional fairness were calculated and examined (see Figures 8, 9 and 10) following the procedures proposed by Aiken and West (1991), and provide supportive evidence that outcome fairness interacts with interactional fairness on work engagement in the expected manner.

Again, it must be noted that the significant longitudinal interaction effect unfortunately did not hold when we controlled for base-line levels of work engagement at Time 1 (Step 5). That is, results showed that in case of unfair interactions (low interactional fairness; centered outcome fairness minus 1 standard deviation following the proposed method by Aiken & West, 1991) decreased outcome fairness was related to an increase of engagement (for Time 1, $t(370) = -.34$, ns, for Time 2, $t(266) = -1.60$, ns, and for the
longitudinal analysis, t(206) = -1.13, ns). In contrast, when interactional fairness was high (plus 1 standard deviation), a decrease in outcome fairness was related to a significant decrease of work engagement for both analyses (for Time 1, t(370) = 2.13, p < .05, for Time 2, t(266) = 2.26, p < .05, and for the longitudinal analyses, t(206) = 1.03, ns). This consistent negative relationship between interactional fairness and work engagement in the face of outcome unfairness leads us to accept Hypothesis 4b.

**Figure 8.** The interactive effect of interactional fairness and outcome fairness on engagement for Time 1

**Figure 9.** The interactive effect of interactional fairness and outcome fairness on engagement for Time 2
Taken together, the findings from the current study show that both procedural and interactional fairness were directly positively related to work engagement. Additionally, the interaction effect between interactional fairness and outcome fairness clearly supported Hypothesis 4b. We hasten to note, however, that this relationship was not there when we controlled for base-line work engagement. The non-significant interaction effect between procedural fairness and outcome fairness did not support Hypothesis 4a. This implies that procedural fairness consistently is positively related to work engagement. On the other hand, this also implies that interactional fairness, in the face of unfair outcomes, has the potential to be negatively related to work engagement.

**Discussion and Conclusions**

With the current study we tried to integrate the domains of organizational fairness and work engagement by exploring the relationships between these two constructs. This is an attempt that according to our knowledge has not been made thus far. We believe this research contributes to existing findings in a unique manner for at least two reasons. First, we found that both procedural fairness and interactional fairness are clearly positively related to work engagement and should in future be included in the list of job resources of the JD-R model alongside supervisory support, training, feedback and job control which positively impact work engagement (Schaufeli & Bakker, 2004). Second, we built upon recent studies investigating the interactive effects of organizational fairness and outcome fairness (Brockner & Wiesenfeld, 2005) in order to help understand when fairness may have detrimental effects on work engagement. We found that when employees experienced unfair interactions, an increase of experienced outcome unfairness was related to an increase in work engagement. In contrast, fair interactions were related to a decrease in work engagement when employees were confronted with unfavorable outcomes. These counterintuitive findings provide evidence for the occurrence of a reversal of the normal treatment fairness effect (Van den Bos et al., 1999). However, we did not find such a significant effect for the interaction effect between experienced outcome fairness and
procedural fairness on work engagement. Results thus indicate that procedural fairness is consistently positively related to work engagement, whereas interactional fairness sometimes can be negatively related to work engagement. This differential effect of the two fairness types appears to support the reasoning that all fairness types are not the same (Colquitt, 2001). That is, our findings intriguingly attest to differential effects of procedural and interactional fairness and suggest that the relationship between organizational fairness and work engagement may be subtler that one intuitively would assume. We will now proceed to discuss and explain these points and their practical implications in more detail.

**Fairness and Work Engagement**

In line with previous research connecting fairness to a long list of organizational behaviors (for an overview, see Conlon et al., 2005), our results clearly indicate a positive direct relationship between work engagement and procedural and interactional fairness. Even so, as this relationship up until now is relatively unexplored, at this point we must speculate about what actually underlies this relationship. Fairness theories (e.g., Adams, 1965; Homans, 1961), social identity perspectives (Tajfel & Turner, 1986), and POS theory (Rhoades & Eisenberger, 2002) could provide possible explanations. According to social exchange perspective (Homans, 1961), employees see the organizational context and the time and efforts they invest in an organization as a give-and-take situation; if an organization invests in the individual, the individual will invest in the organization in return (Adams, 1965). Fair treatment of the employee in turn would be exchanged by engagement and the productive work behavior with which work engagement is associated (Bakker & Schaufeli, 2008). Social identity perspective (Tajfel & Turner, 1986) assumes that employees invest in organizations because they expect to find social relationships that reinforce their social identity within their working relationships. In return an employee could invest in the organization by supporting the welfare of the group and the organization they belong to by displaying engaged behavior. Building on social exchange theory, POS theory would reason that employees reciprocate a general perception of being valued by their organization due to fair treatment, such that crucial work engagement behaviors such as enthusiasm, dedication, and vigor (Schaufeli et al., 2006) are displayed. Unfortunately, which of these three, or possibly other theoretical explanations, is most accurate, cannot be established from our study. For instance, it may be so that fairness merely contributes to the necessary conditions for work engagement, but in itself it may not produce work engagement as such. That is, this study can not rule out that fairness is more of a necessity for work engagement, rather than an actual driver of work engagement. Therefore, at this moment we can only conclude that fairness is related to work engagement, but that further research is needed to uncover the psychological mechanism that explains the connection between both concepts.

**Interactional Fairness and Unfair Outcomes**

Moving beyond the direct relationship between fairness and work engagement, we found evidence to support the reversal of the normal treatment fairness effect reasoning. That is, results show that high interactional fairness is related to a decrease of work engagement in the face of increasing outcome unfairness. In contrast, low interactional fairness is related to higher work engagement when outcome unfairness increases.

As one intuitively would expect, Figures 8, 9 and 10 reveal that work engagement levels are highest when employees experience both fair interactions and outcomes. On the other hand, these consistent findings also indicate that interactional fairness potentially may
have harmful and counterintuitive effects on work engagement. The significant difference in direction of the simple slopes indeed suggests that outcome unfairness raises sense-making questions for employees. In turn, it appears to depend on whether employees experience interactions as fair or not, whether they respectively feel forced to take personal responsibility or are capable to place the blame elsewhere. That is, when interactions are unfair – and others can be blamed for the experienced unfair outcomes – an increase of work engagement can occur. On the other hand, not being able to blame others for the unfair outcomes due to fair interactions may result in a decrease of work engagement.

These findings correspond with our reasoning that interactional fairness is capable of reinforcing sense-making processes. In fact, what is striking is that these results indicate that interactional fairness may be more capable than procedural fairness to instigate questions for employees about who is responsible for the unfavorable conditions they are faced with. This appears to be in contrast with earlier studies, in which procedural fairness is usually examined interactively with outcome fairness (Brockner & Wiesenfeld, 1996; Brockner et al., 2003). On the other hand, as interactional fairness usually is not included in studies investigating sense-making processes, little is known about the potential of interactional fairness to instigate reversals of the normal fairness effect. Therefore, we hope that this study encourages future research on sense-making processes to differentiate between procedural and interactional fairness and to include measures of both fairness types.

The question remains why interactional fairness appears to yield more robust effects than procedural fairness, in terms of interacting with outcome unfairness? An explanation could be that interactional fairness is particularly relevant for social identity theory (Tajfel & Turner, 1986), as respectful and fair treatment will result in positive identity affirmation and trust and in turn influence sense-making processes. We reason that it could also depend on the specific organizational outcome or behavior that is examined as a dependent variable. For instance, interactional fairness could be more important for specific organizational behaviors such as work engagement, whereas procedural fairness could be more important for, for instance, absenteeism (Elasova et al., 2005). Another explanation could be found in the matching hypothesis theory (De Jonge, Le Blanc, Peeters, & Noordam, 2008) that states that job resources (such as organizational fairness) and job demands (such as outcome unfairness) need to match each other -- that is, pertain to the same domain -- in order to produce interactive effects. Therefore, it could be that interactional fairness is a better match with unfair outcomes than procedural fairness, to be able to influence work engagement. A final explanation could be that procedural fairness and outcome fairness are so closely related, especially over time, that procedural fairness is unlikely to moderate the effects of outcome fairness. That is, if procedures are executed in a fair manner, employees are also expected to view the outcomes they receive as fair, as a consequence of these fair procedures. Thus procedural fairness and the outcomes resulting from them may be so interwoven that interaction effects are unlikely to occur.

We would like to stress that although procedural fairness in this study was not significantly related to work engagement in interaction with unfair outcomes, this does not imply that procedural fairness is unimportant for work engagement. We can see in Table 5 that, even when outcome fairness is taken into consideration, procedural fairness is consistently and significantly related to work engagement. Therefore, these results imply that both procedural and interactional fairness are likely to have an important direct influence on work engagement.
Although the direct effects of interactional and procedural fairness and the interactive effects of interactional fairness and outcome fairness were found at the separate occasions of Time 1 and Time 2, we would like to point out that significant longitudinal effects were only found when we did not control for the base-line work engagement (T1). In line with studies that reveal high stability of work engagement of years (Seppälä et al., 2009), we found high correlations between work engagement at Time 1 and Time 2 ($r = .71, p < .001$). This implies that the stability of work engagement may prevent us from finding significant longitudinal effects, which otherwise appear likely to exist. This could be explained by the fact that measuring the work engagement of employees very much is an introspective matter. Introspective judgments have shown that they are less prone to change over time, compared to judgments of external matters such as the perception of fairness of leadership and decision making (Nisbett & Ross, 1980; Nisbett & Wilson, 1977). The introspective nature of measuring the work engagement of employees could thus account for the absence of changes of any consequence in work engagement over time. In addition, a recent study further underlines this stability, as work engagement appeared to be related to personality characteristics such as high extraversion and low neuroticism (Langelaan, Bakker, Van Doornen, & Schaufeli, 2006). This could explain the difficulty in establishing longitudinal effects when controlling for work engagement at Time 2. We therefore recommend that future research uses a sample in which work engagement is likely to differ strongly from Time 1 and Time 2 due to, for instance, organizational interventions. Additionally, alternative measures that do not correlate as highly and do not rely on self-measurements only could be considered.

**Limitations**

The sample of the employees studied leads to limitations regarding generalizability, as this study reports findings from one single organization and the majority of the respondents are men. Even though we do not expect gender differences, replications of this study with a more balanced sample in preferably more than one organization and not relying only on self-measurements is advised for future studies to help overcome these limitations.

Another limitation is the unavailability of data regarding the evaluative context. As described in the introduction, the circumstances surrounding this particular organization at the time of the surveys were very turbulent and threatening for the employees. Such circumstances are very likely to contribute to a context in which individuals feel strongly evaluated and feel extreme pressure to perform. Although we assume that the reversals we consistently found over the two measurements indeed are due to this evaluative context, we encourage future studies to include measures of evaluative context and attribution to directly test this pattern. Inclusion of such data often does not take place in organizational justice research, as is the case for this particular study. Therefore, we hope that the findings of this current chapter help convince research scholars that the measurement of evaluative context and attribution should be common practice.

The design of this study is longitudinal and therefore overcomes some of the cross sectional issues we encountered in our previous chapter. Even though the longitudinal analyses were not significant, we established very similar patterns over the two measurements. Moreover, we would like to note that the longitudinal analyses would have been significant if we hadn’t controlled for work engagement at Time 1 (see Step 4 in Table 4).
One final limitation may be that this study relies on self-reports and thus potentially
suffers from common method variance issues. This noted, the standpoint that common
method variance causes inflated correlations in itself is questionable and it may not be as
problematic as commonly assumed (Spector, 2006), as also noted in the previous chapter.

PRACTICAL IMPLICATIONS

Although work engagement may be a relatively recent concept within organizational
psychology, in recent years it has been eagerly embraced by organizations and consultancy
firms who reason that engaging employees will help organizations achieve their strategic
goals (Mercer, 2007a). More and more, human capital is seen to be the greatest asset of an
organization, and investing in engaging employees is believed to help organizations achieve
competitive advantage, ensure continuity of the organization, increase employee
performance and drive customer loyalty (Bakker & Schaufeli, 2008; Harter et al., 2002;
Mercer, 2007a; Salanova et al., 2005). This study illustrates the importance of procedural and
interational fairness for work engagement and thus for organizational outcomes.

We are entering an era where, due to demographic developments such as the aging
workforce, it is becoming a serious challenge for organizations to find sufficient amounts of
the right talent. Investing in the engagement of employees and thus in treatment fairness
therefore is critical. That is, this will help organizations create an attractive and productive
working climate which, on the one hand will help them retain employees and drive
productivity, and on the other hand will help them be an attractive employer for new
recruits. Work engagement, in fact, kills two birds with one stone.

The results of this study indeed reveal that work engagement is positively related to
both interational and procedural fairness. On the other hand, this study also reveals that
this positive direct relationship between treatment fairness and work engagement, may be
negatively impacted by unfavorable conditions such as unfair outcomes. This finding
illustrates that it is very important to consider the potential harmful interactive effects of
unfavorable conditions. In contrast with the consistent positive effects of procedural
fairness, simply assuming that interational fairness will always be beneficial for employees
and for their work engagement appears to be a simplification of the reality. That is,
interational fairness sometimes appears to enforce negative feelings of being personally
responsible for unfair outcomes. Organizations should be aware of these counterintuitive
harmful powers and invest in creating a culture in which disappointments are dealt with in a
constructive manner and in which there is attention for empowerment of employees.

All in all, this study contributes to the domains of both fairness research and work
engagement, as it clearly has established a relationship between procedural and
interational fairness with work engagement. It also establishes that interational fairness
may take on a unique negative role when employees experience unfair outcomes.
Awareness of this intriguing unique potential of interational fairness to be related to
reversal effects on work engagement is particularly valuable for organizations that need to
take severe and unpopular measures, such as layoffs and reorganizations. Therefore, one
clear advice to take away from this study is to emphasize respectful interactions alongside
with fair outcomes. That is, consistent with what one intuitively would expect, the highest
levels of work engagement are found when employees experience both interactions and
outcomes as fair. This noted, emphasizing fair outcomes is not always possible, as
organizations sometimes need to implement unfavorable changes. If such changes take
place within a highly evaluative context, these organizations need to be aware that this may
alter the positive role of interactional fairness. It thus appears that training programs should both focus on helping management to explain the need for disadvantageous changes in an honest, respectful, consistent and transparent manner, and at the same time should focus on empowering employees to deal with unfavorable conditions in a constructive and self-affirming manner (Wiesenfeld, Brockner, Petzall, Wolf, & Bailey, 2001). This should help maintain high levels of work engagement, even in times of turmoil.

Our findings are important for both enriching the thinking within the research domains of organizational fairness and work engagement, but also to help practitioners understand better how to most effectively use fairness to drive work engagement and to understand the potential harmful effects of interactional fairness in the face of unfavorable conditions.
CHAPTER 4: WHEN UNFAIR PROCEDURES HAVE POSITIVE EFFECTS ON EMPLOYEE WELL-BEING
INTERACTIONS BETWEEN PROCEDURAL FAIRNESS AND INTERNAL ATTRIBUTIONS

Introduction

In today’s dynamic and unstable working environments it is of great importance for organizations to understand how best to help employees to cope with concerns about unfair outcomes they may experience. Fair treatment of employees is often considered as a way to reduce the negative effects of these unfavorable outcomes (Van den Bos, 2005; Van den Bos & Lind, 2002). In addition, it is well documented that fair treatment of employees in organizations can have positive effects on important aspects of employee well-being such as absenteeism, health complaints, job satisfaction, and organizational citizenship behavior (see, e.g., Conlon, Meyer, & Nowakowski, 2005; Elovinio et al., 2005; Greenberg, 1990; Moorman, 1991). Moreover, unfair outcomes have also shown to impact employee well-being. For instance, unfair outcomes have been related to higher levels of absenteeism (De Boer, Bakker, Syroit, & Schaufeli, 2002) and turnover intention (Konovsky & Cropanzano, 1991).

In contrast with the positive effects of fair treatment, some recent studies suggest that fair events sometimes can have negative effects on employee’s reactions (Brockner, 2002; Brockner et al., 2003; Gilliland, 1994; Schinkel, Van Dierendonck, & Armstrong, 2004; Schroth & Shah, 2000; Van den Bos, Bruins, Wilke, & Drongkert, 1999). In these studies, employees appeared to react more positively toward unfair procedures than towards fair procedures. This positive effect of unfair procedures presumably takes place because unfair procedures give employees an opportunity to make external attributions concerning the causes of unfavorable outcomes. Fair treatment, on the other hand, forces them to feel personally responsible for these unfavorable outcomes (Gilliland, 1994; Schinkel et al., 2004; Schroth & Shah, 2000; Van den Bos et al., 1999). In this chapter we set out to explain the counterintuitive phenomenon that fair treatment of employees does not necessarily result in positive effects. That is, we set out to demonstrate that fair treatment may result in more negative reactions and unfair treatment in more positive reactions.

NORMAL FAIRNESS EFFECTS VERSUS REVERSALS OF THE NORMAL FAIRNESS EFFECT

For more than three decades, it is known that fair procedural treatment of employees can have a strong positive effect on how they respond to unfair outcomes (Folger, Rosenfield, Grove, & Corkran, 1979; Lind & Tyler, 1988; Thibaut & Walker, 1975). In this chapter we will call this the normal procedural fairness effect. Numerous studies reviewed by Brockner and Wiesenfeld (1996) indicated that employees will be less concerned about the outcomes they receive, when these outcomes are accompanied by fair procedures. This explains the intuitively expected positive effect of fair treatment in circumstances when employees have concerns about the fairness of outcomes (Brockner & Wiesenfeld, 1996).

Since the introduction of the normal procedural fairness effect (Brockner & Wiesenfeld, 1996) some studies found evidence for the opposite of the normal procedural fairness effect. This opposite effect is referred to as the reversal of the normal procedural fairness effect (Brockner et al., 2003; Gilliland, 1994; Van den Bos et al., 1999). A number of

---

5 Chapter 4 has been submitted for publication as: Miles, P., Van den Bos, K., & Schaufeli, W. B. (2010c). When unfair procedures have positive effects on employee well-being: Interactions between procedural fairness and internal attributions. Manuscript submitted for publication.
studies has shown that rejected job applicants, in fact, prefer to experience unfair procedures (Gilliland, 1994; Schinkel et al., 2004). The explanation for this counterintuitive finding is that highly self-evaluative contexts, such as personnel selection procedures, trigger attributional processes (Van den Bos et al., 1999; Weiner, 1985). As a result, when a rejection or unfavorable outcome is based on unfair procedures, a candidate is given an opportunity to attribute the causes of this rejection externally. Thus, unfair procedures can have a positive impact on employees’ affective states, because the employee is not forced to personally feel responsible for this outcome (Van den Bos et al., 1999). On the other hand, fair procedures reinforce internal attributions. Hence fair procedures can be related to negative sense-making and thus to the reversal of the normal fairness effect.

It is in self-evaluative contexts (Van den Bos et al., 1999), or negative sense-making conditions (Brockner, 2002), reversals of the normal effects of treatment fairness indeed are more likely. Fair treatment appears to obstruct the denial of personal responsibility, which people want to seek out in these strong self-evaluative contexts. In turn, this internal attribution of the responsibility could result in the enhancement of negative affective states and the experience of stress (Gosling, Denizeau, & Oberl, 2006). Ultimately, the experienced stress could lead to withdrawal behaviors such as turnover intention and absenteeism (Johns, 1997).

The research from Chapter 2 in a highly evaluative context that enforced internal attributions seems to support this line of reasoning. In this chapter we found the reversal of the normal procedural fairness effect in the face of unfair outcomes. That is, compared to unfair procedures, fair procedures were more negatively related to employee well-being. Therefore, we conclude that the combination of internal attributions and unfair outcomes is likely to be responsible for negative sense-making processes and thus the reversal of the procedural fairness effect.

**Differential Fairness Effects on Employee Well-Being**

In this chapter we distinguish between procedural and interactional fairness. Procedural fairness is defined as fair and consistent decision making and procedures (Thibaut & Walker, 1975). On the other hand, interactional fairness focuses on the fairness and respectfulness of interactions with key authority figures (Bies & Moag, 1986). Until now, interactional fairness is usually not studied as a potential buffer for outcome unfairness (Lind & Tyler, 1988; Thibaut & Walker, 1975; Van den Bos & Lind, 2002). As interactional fairness has also proven to be an important determinant of employee well-being (Geurts, Buunk, & Schaufeli, 1991; Greenberg, 2006), we propose to include both procedural and interactional fairness as potential instigators of sense-making processes. In this way we can tell whether these two types of fairness of treatment affect sense-making processes differently or not. Although both procedural and interactional fairness have shown similar effects on organizational behavior such as absenteeism (Elovainio et al., 2005) and organizational citizenship behavior (Mooiman, 1991), they also appear to be uniquely related to particular employee behaviors and responses. For instance, interactional justice has been related to the quality of supervisor relationship quality. In contrast, procedural fairness has been related to higher levels of organizational support (Roch & Shanock, 2006). Therefore, we aim to examine the novel issue of whether interactional fairness can reinforce internal attributions. More specifically, we will examine whether interactional fairness negatively impact employee well-being, like this is the case for procedural fairness.
There has been some speculation that, compared to interactional fairness, procedural fairness is more strongly related to a person’s self-evaluations (Brockner et al., 2003; Van den Bos et al., 1999). That is, procedural fairness aspects such as information accuracy are supposedly more likely to influence employees’ sense-making processes. Ultimately, procedural fairness thus would be more likely to enforce internal attributions than interactional fairness (Brockner et al., 2003). According to this line of reasoning, procedural fairness actually gives an employee input into the decision-making process and could reasonably be expected to tap into feelings of having some control over the outcomes of decisions (Lind & Tyler, 1988; Thibaut & Walker, 1975). Respectful treatment of employees, on the other hand, is seen as more likely to merely accompany the outcome. Subsequently, interactional fairness thus does not provide a sense of control over the fairness of the outcome. Fair interactions may even be expected to provide comfort to individuals who feel personally responsible for experienced outcome unfairness. That is, supervisors may provide individuals with the support needed to move forward in a constructive manner in case outcomes are unfair.

The field study in a highly evaluative context described in Chapter 2 supported the idea that procedural and interactional fairness can be related to different sense-making processes. That is, procedural fairness was more consistently related to reversals of the normal fairness effect, whereas interactional fairness was more consistently related to normal fairness effects. However, in contrast to the present study, the study described in Chapter 2 did not include a measure of attributions. Therefore we set out to assess, in conditions where employees make strong internal attributions and face unfair outcomes, whether differential effects for procedural and interactional fairness on employee well-being can be found.

The Current Research

This study aims to explain the counterintuitive finding that fair treatment can be negatively related to employee well-being. In order to do so, as suggested by Brockner and Wiesenfeld (2005), we integrate the thinking about the normal effects of treatment fairness (Folger et al., 1979) with that of the attributional account of fairness (Brockner et al., 2007). By linking unfair outcomes (Brockner & Wiesenfeld, 1996) to the attributional account (Brockner et al., 2007), we expect to be able to get a firmer grip on how and when fair treatment impacts employee well-being.

Until now, the majority of studies concerning the attributional account (Brockner et al., 2003) were conducted in laboratory settings (for exceptions, see Brockner et al., 2007, Study 3, and Gilliland, 1994). For reasons of ecological validity, we therefore tested our research hypotheses in an organizational context; that is the kind of setting to which most experimentally oriented organizational justice scholars ultimately would like to generalize their conclusions. In order to measure the effects of fair treatment on specific organizational behaviors, we used company absenteeism records as one of our central dependent variables in order to avoid common method variance. We also assessed two other measures of employee well-being in the survey that employees filled out to supplement this objective indicator of employee well-being.

Recent models of employee well-being emphasized its multifaceted nature, for instance by distinguishing between behavioral and affective-motivational components (e.g., Van Horn et al., 2004; Ryff & Keyes, 1995; Warr, 1994). In the current study, we used absenteeism as a behavioral indicator (Johns, 1997) of employee well-being, which reflects
absence behavior for which employees have some freedom of choice in deciding whether or not to stay away from work (i.e., voluntary absence; Ivanchevich, 1985). In addition to registered absenteeism, turnover intention and workaholism were measured as affective-motivational indicators of employee well-being. Compared to the other components of well-being, the introduction of workaholism is a new feature in fairness research. Workaholism, or work addiction, is defined as a potentially harmful tendency to work excessively hard out of a strong, irresistible inner drive (Schaufeli, Taris, & Bakker, 2008). Workaholism can be seen as learned behavior, or at least as behavior that can be triggered up to a certain extent (Brett & Stroh, 2003). We reason that when employees feel that they have no control over the fairness of the outcomes they receive, as would be predicted by reactance theory (Brehm, 1966) they will be strongly motivated to regain control. This would likely make them work harder, maybe even excessively hard, for instance, to try and impress their boss. In other words, we propose that employees are likely to work very hard in order to restore control over their situation, which might result in unhealthy compulsive workaholic tendencies. This particular organization (which resembles the Salvation Army) is of a religious nature and its employees are highly dedicated to providing healthcare to those who need it. Therefore, up to a certain extent, working within such an organization could be considered as a calling and may be associated with a level of dedication that resembles workaholism.

There is general consensus that the nature of normal versus the reversal of normal procedural or interactional fairness effects can be explained by sense-making processes and thus the attributional account (Weiner, 1985). Studies reveal, for instance, that procedural fairness is related to internal attributions when one experiences unfavorable outcomes (Van den Bos et al., 1999, Study 3; see also Brockner et al., 2003). However, there has not been much investigation into what this actually means for employee well-being (e.g., for absenteeism or workaholism). The focus in the previous studies was merely on establishing that attributional processes and reversal effects can occur, and less so on determining how internal attributions (and thus the reversal of the normal interactional and procedural fairness effect) can negatively affect employee well-being. In order to answer the questions regarding to when and how fair treatment is most important for employee well-being, we put forward the following hypotheses:

Hypothesis 5:
Procedural fairness, combined with experienced outcome unfairness, and feeling strongly inclined to attribute internally, will be related to lower employee well-being (behavioral and affective-motivational).

Hypothesis 6:
Interactional fairness, combined with experienced outcome unfairness, and feeling strongly inclined to attribute internally, will be related to higher employee well-being (behavioral and affective-motivational).

Method

Respondents and Employee Survey Setting
All respondents worked for the Dutch branch of a worldwide welfare and healthcare organization based in the Netherlands. A random sample of roughly one third of the
departments with a total of 980 employees of the organization was approached in order to have a representative population (response was 59% with 582 respondents). The majority of the sample was female (69%), the average age was 38.8 years (SD = 11.5), 91.5% was Dutch, and 73.7% worked 32 hours or less per week. A comparison with descriptive statistics from their annual social report reveals that the sample is representative as far as gender and age is concerned (in the whole organization 69.0% is female and the average age is 39.1 years).

The organization volunteered to cooperate with our research study. In return they received the study results that were used for their annual social report (a compulsory annual report covering social organizational and employee well-being aspects, and HRM initiatives and policies) and in order to identify problem areas in the organization that needed attention. All employees received a paper-and-pencil questionnaire by post with an introduction letter explaining the purpose of the study and a cover letter from the organization’s management, stating the importance of their participation. The participants received no further incentives. Communication by the researchers and management emphasized that participation was voluntary and that confidentiality was guaranteed.

Measures

Outcome fairness. Following Moorman (1991), outcome fairness was measured with a five-item scale. Examples of items were “How fair do you consider the rewards (salary and recognition) you receive, considering the work that you do?”, and “How fair do you consider the rewards (salary and recognition) you receive, considering the amount of effort you put into the organization?”, using a 6-point answering scale with the endpoints (1) very unfair and (6) very fair. Please note that in this study we specifically measured outcome fairness as our measure of negative outcomes. We did this because in this chapter we are interested in the specific effects of different types of fairness on people’s reactions, and we preferred to measure outcome fairness specifically rather than more global (and hence possibly more vague) assessments of outcome favorability (cf. Brockner & Wiesenfeld, 1996, 2005). The internal consistency was good (α = .97).

Internal attributions. A 5-item scale was used to measure the degree of internal attributions. Two example items were “I feel personally responsible for the outcome of important decisions that concern me”, and “I feel personally responsible for changes at work that concern me”, with answering categories ranging on a 6-point scale from strongly disagree to strongly agree. (α = .79)

Procedural fairness. Following Moorman (1991), the procedural fairness measure consisted of 7 items (example items: “How fair do you consider the manner in which information is gathered to make decisions?”, and “How fair do you consider the manner in which different parties are involved in decision making processes?”) using a 6-point answering scale with the endpoints (1) very unfair and (6) very fair (α = .95).

Interactional fairness. Again, following Moorman (1991), interactional fairness was measured with 6 items, using the same answering categories as for procedural fairness. Two example questions were: “How fair do you consider the manner in which your superior treats you (friendly and with respect)”, and “How fair do you consider the manner in which your superior takes your rights as an employee into consideration”, and showed a good consistency (α = .94).

Absenteeism. Absence was measured by using the company records of the registered absence of the employees. For a period of 6 months prior to conducting the survey we used the frequency of absence days reported in the company’s records. The study described in
Chapter 2 examined the effects of uncertainty and fairness using self-reported estimations of absenteeism. However, studies (Van Poppel, De Vet, Koes, Smid, & Bouter, 2002) have shown that self-estimations can be unreliable and that company records are superior.

Turnover intention. Turnover intention was assessed with 4 items. We used the turnover intention scale of the well-validated Dutch questionnaire to measure and improve labor conditions (VBBA; Van Veldhoven & Meijman, 1994). Example items were “At times I consider applying for a job within another organization” and “I intend looking for a job within another organizations within a year” with the 4-point answer categories (1) never, (2) sometimes, (3) often, and (4) always (alpha = .77).

Workaholism. Workaholism was measured with a well-validated 9-item scale (Schaufeli, Taris, & Bakker, 2008; Taris, Schaufeli, & Verhoeven, 2005). An example item is “I feel guilty when I am not working”, and “I have difficulty relaxing when I am not working”. All items were scored on a 4-point rating scale ranging from never (1) to always (4) (α = .84).

Results

Correlations and Confirmatory Factor Analyses

In Table 6 means, standard deviations and Pearson zero-order correlations of the study variables are presented. When exploring the correlations, all relationships between and within the dependent, independent, and moderating variables were in the expected direction. For instance, the moderating procedural and interactional fairness, as expected, correlated highly positive with the independent variable outcome fairness and negatively with the dependent variable turnover intention.

In order to test the factorial validity of the procedural, interactional and outcome fairness scales, a Confirmatory Factor Analysis was performed, using the AMOS 5 computer program (Arbuckle, 2003). The hypothesized model with three correlated fairness factors was compared with the one-factor model on which all fairness items were supposed to load. The three-factor model showed a good fit to the data ($c^2 = 503.80$, $df = 132$, NNFI = .95, CFI = .96). Both relative fit-indices (i.e. NNFI and CFI) satisfied their criterion of .90 (Byrne, 2001). Moreover, the fit of the three-factor model was superior to that of the one-factor model ($\Delta c^2 = 4450.26$, $\Delta df = 3$, $p < .001$). Hence, the factorial validity of the procedural, interactional, and outcome fairness dimensions was demonstrated.

Test of the Hypotheses

We executed a number of three-way hierarchical regression analyses in order to determine whether the combination of treatment fairness and internal attributions in the face of outcome unfairness was positively or negatively related to employee well-being. The results of these analyses are reported in Table 7. Before entering the independent variables into the analyses, they all were centered (Cohen, Cohen, West, & Aiken, 2003). The control variables (gender, age, and managerial responsibility) were entered before the first step as previous research has indicated that they can affect, for instance, an employee’s motivation to attend work (Johns, 1997). For clarity purposes, however, these variables are not shown in Table 7, and the $R^2$ of the control variables taken together are shown in parentheses.
Table 6. Zero-order correlations, means, standard deviations, and alpha reliabilities (on the diagonal)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Absence Frequency</td>
<td>.80</td>
<td>.10</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Workaholism</td>
<td>2.00</td>
<td>.54</td>
<td>.09*</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Turnover Intention</td>
<td>1.71</td>
<td>.58</td>
<td>.05</td>
<td>.14*</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Procedural Fairness</td>
<td>3.93</td>
<td>.09</td>
<td>.07</td>
<td>.02</td>
<td>-.24</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Interactional Fairness</td>
<td>4.61</td>
<td>.03</td>
<td>-.08</td>
<td>-.07</td>
<td>-.25</td>
<td>.65*</td>
<td>.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Outcome Fairness</td>
<td>3.54</td>
<td>1.25</td>
<td>-.11*</td>
<td>-.15***</td>
<td>-.32***</td>
<td>-.43***</td>
<td>-.37***</td>
<td>-.97</td>
<td></td>
</tr>
<tr>
<td>7. Internal Attributions</td>
<td>3.81</td>
<td>.90</td>
<td>.01</td>
<td>.08</td>
<td>-.02</td>
<td>.32***</td>
<td>.30***</td>
<td>.21**</td>
<td>-.79</td>
</tr>
</tbody>
</table>

Note. N = 582. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed).

Table 7. Results (standardized B-coefficients) of three three-way hierarchical regression analyses

<table>
<thead>
<tr>
<th></th>
<th>Absence Frequency</th>
<th>Workaholism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Procedural Fairness (PF)</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>Interactional Fairness (IF)</td>
<td>-.11*</td>
<td>-.11*</td>
</tr>
<tr>
<td>Outcome Fairness (OF)</td>
<td>-.05</td>
<td>-.04</td>
</tr>
<tr>
<td>PF X OF</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IF X OF</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Internal Attributions (IA)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PF X IA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IF X IA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OF X IA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PF X OF X IA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>R2 Control variables</td>
<td>.029</td>
<td></td>
</tr>
<tr>
<td>R2 change after</td>
<td>.010</td>
<td>.002</td>
</tr>
<tr>
<td>control variables#(R2)</td>
<td>(.039)</td>
<td>(.041)</td>
</tr>
</tbody>
</table>

Note. N = 582. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed), ! p < .10 (two tailed).

# before entering the proposed independent variables, the control variables “gender”, “managerial responsibility” and “age” were entered into the regression analysis, but were left out of this table for clarity purposes.

Table 7 (continued). Results (standardized B-coefficients) of three three-way hierarchical regression analyses

<table>
<thead>
<tr>
<th></th>
<th>Turnover Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>Procedural Fairness (PF)</td>
<td>-.15</td>
</tr>
<tr>
<td>Interactional Fairness (IF)</td>
<td>-.18</td>
</tr>
<tr>
<td>Outcome Fairness (OF)</td>
<td>-.26***</td>
</tr>
<tr>
<td>PF X OF</td>
<td>-</td>
</tr>
<tr>
<td>IF X OF</td>
<td>-</td>
</tr>
<tr>
<td>Internal Attributions (IA)</td>
<td>-</td>
</tr>
<tr>
<td>PF X IA</td>
<td>-</td>
</tr>
<tr>
<td>IF X IA</td>
<td>-</td>
</tr>
<tr>
<td>OF X IA</td>
<td>-</td>
</tr>
<tr>
<td>PF X OF X IA</td>
<td>-</td>
</tr>
<tr>
<td>R2 Control variables</td>
<td>(.050)</td>
</tr>
<tr>
<td>R2 change after</td>
<td>.086</td>
</tr>
<tr>
<td>control variables#(R2)</td>
<td>(.136)</td>
</tr>
</tbody>
</table>

Note. N = 582. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed), ! p < .10 (two tailed).

# before entering the proposed independent variables, the control variables “gender”, “managerial responsibility” and “age” were entered into the regression analysis, but were left out of this table for clarity purposes.
In the first step shown in Table 7, the independent variables procedural and interactional fairness were entered. Outcome fairness was entered in the second step. In the third step two interaction effects were entered: procedural fairness x outcome fairness and interactional fairness x outcome fairness. In the fourth step internal attributions was entered, followed by a fifth step including the interaction effects for attributions with all other independent variables (internal attributions x procedural fairness, internal attributions x interactional fairness, and internal attributions x outcome fairness). Thus, with Steps 3-5 all interaction effects of the lower order terms were entered. The final step in the regression analysis was to enter the two three-way interaction effects: procedural fairness x outcome fairness x internal attributions, and interactional fairness x outcome fairness x internal attributions.

**Figure 11.** The three-way interactive effect of procedural fairness, internal attributions, and outcome fairness on absence frequency

![Graph](image1.png)

**Figure 12.** The three-way interactive effect of procedural fairness, internal attributions, and outcome fairness on workaholism

![Graph](image2.png)
The final step of the regression analyses (see Table 7) shows that the interaction between procedural fairness, outcome unfairness and internal attributions yielded significant results on workaholism and on registered absenteeism. The interaction effects with interactional fairness and outcome unfairness yielded significant results on workaholism and on turnover intention. These significant three-way interaction effects reveal that procedural and interactional fairness interact with outcome fairness in a different way in high internal attribution conditions than in low attribution conditions. In order to understand the nature of the moderating effects, we now turn to Figures 11 to 14 that are put together following the procedures proposed by Aiken and West (1991).

Figure 13. The three-way interactive effect of interactional fairness, internal attributions, and outcome fairness on workaholism

Figure 14. The three-way interactive effect of interactional fairness, internal attributions, and outcome fairness on turnover intention
Hypothesis 5. Whether procedural fairness reinforces the potential negative effects of internal attributions during outcome unfairness and will be related to lower levels of employee well-being can be seen in Figures 11 and 12. The simple slope of high procedural fairness (+1 SD), together with high internal attributions (+1 SD), combined with decreasing outcome fairness, was related to a smaller decrease of absence frequency, t(506) = -.18, ns, compared to low procedural fairness, t(506) = -.80, ns (Figure 11). In other words, when employees make strong internal attributions for what happened, high procedural fairness was related to a more negative effect on absenteeism than low procedural fairness. In addition, the simple slope of high procedural fairness was related to a significantly sharper increase of workaholism, t(506) = -3.05, p < .01 (Figure 12), compared to low procedural fairness. Thus, both significant three-way interaction effects indicate that high procedural fairness was related to a more negative impact on employee well-being, compared to low procedural fairness. Hence Hypothesis 5 that refers to the reversal of the normal procedural fairness effect is supported.

Hypothesis 6. In order to determine whether interactional fairness, together with high internal attributions, is related to normal (interactional) fairness effects or rather to the reversal of normal interactional fairness effects in the case of unfair outcomes, we need to look at Figures 13 and 14. When employees experienced a decrease in fair outcomes, combined with strong internal attributions, the simple slope of high interactional fairness was related to less sharp increase of workaholism (Figure 13), and turnover intention (Figure 14), compared to significant simple slopes for low interactional fairness (respectively, t(506) = -2.73, p < .01 and t(506) = -3.68, p < .001). All in all, high interactional fairness combined with high internal attributions was consistently related to more positive (less negative) effects on employee well-being than low interactional fairness (normal interactional fairness effects) in the face of outcome unfairness. Hence, Hypothesis 6 is supported.

Discussion and Conclusions

The main purpose of the current study was to understand the counterintuitive phenomenon that fair treatment can have a negative impact on employee well-being. More precisely, we investigated how unfair outcomes can induce positive or negative sense-making processes, and hence influence the way employees respond to fair treatment in terms of various components of their well-being. As hypothesized, we can conclude that the combination of strong internal attributions and procedural fairness can indeed be negatively related to employee well-being (reversal of the normal fairness effect). In other words, procedural fairness reinforces negative sense-making processes about the causes of experienced outcome unfairness. In a way, fair procedures thus force employees to accept personal responsibility for their unfair outcomes. That is, we found that high procedural fairness in the face of unfair outcomes and internal attributions was related to more registered sickness absence, compared to low procedural fairness. This reversal of the normal fairness effect was also found when workaholism was our dependent variable. As predicted, our results also showed that the reversal of the normal fairness effect on employee well-being did not apply for interactional fairness. This last result supports the interpretation that interactional fairness is less relevant than procedural fairness for the attributional account of fairness (Brockner et al., 2003).

An important aspect of our study is that employee well-being was operationalized in a multi-dimensional manner. The fact that similar results were generated for all types of employee well-being, attests to the robustness of our findings. Past studies identifying the effects of the attributional account frequently were often limited to affective or intentional responses to experienced outcome fairness (Van den Bos et al., 1999) or to measures of self-
efficacy (Gilliland, 1994). Our study, in contrast, extends on these earlier studies by identifying the effects of unfair outcomes in a highly evaluative context on objective organizational behavior (registered absenteeism). On top of that, we confirmed the findings with absenteeism with two other two other employee well-being measures (turnover intention and workaholism, representing affective-motivational aspects of employee well-being). Additionally, these consistent results were found within an organizational context. The robust findings of this research thus contribute to our knowledge of how treatment fairness, in combination with internal attributions in the face of unfair outcomes, is related to employee well-being. Moreover, these findings have been obtained in an ecologically valid way.

**Differential Effects of Procedural and Interactional Fairness**

As mentioned above, this study provides convincing evidence that internal attributions combined with unfair outcomes yields normal interactional fairness effects, but reversals of the normal procedural fairness effect. However, what is even more striking than the conclusion that procedural and interactional fairness can have a different impact of employee’s responses to unfair outcomes is that this can occur for the same dependent employee well-being variable. For an example of such a differential interaction effect, see Figures 12 and 13. The three-way interaction effects reported there show that when employees make strong internal attributions, interactional fairness in the face of outcome unfairness is related to a less negative impact on employee well-being (lower workaholism). On the other hand, high procedural fairness is related to a more harmful impact on employee well-being (higher workaholism). This evidence of both the normal fairness effect and the reversal effect on the same dependent variable is very rare (for an exception, see the study from Chapter 2).

Another implication that can be taken from these findings is that procedural and interactional fairness may yield quite different effects. Thus, these differential effects support the conceptual distinction of the two fairness types. The distinction between procedural and distributive fairness (Thibaut & Walker, 1975) has received unanimous support over the years (Greenberg, 1990). Beyond the scope of this chapter, some authors even advocate a further splitting of interactional fairness into interpersonal and informational components (Colquitt, 2001). This noted, even now there still is some debate about whether interactional fairness is a sub-dimension of procedural fairness or should be seen as a separate fairness type (Colquitt, 2001; Colquitt, Greenberg, Zapata-Phelan, 2005; Van den Bos, 2005). The systematically differential three-way interaction effects in the current study clearly support the notion that, when studying normal and reversal effects of treatment fairness, a careful distinction should be drawn between interactional and procedural fairness. In addition, future research could also explore whether the interpersonal and informational components of interactional fairness proposed by Colquitt (2001) play the same role within employees who engage in sense-making processes, such as the processes we studied here.

**Workaholism, Sense-Making Conditions, and Fairness**

Within the relationship between fairness of treatment, attributions, and unfair outcomes, the results of this study show that workaholism appears to play an interesting role. To illustrate this, research has shown that high levels of internal attributions are related to active problem-solving behaviors and lower levels of internal attributions are related to
avoidance behaviors (Amirkhan, 1998). Strong internal attributions in the face of unfair outcomes, may very well stimulate a climate of working excessively hard, especially when fair procedures reinforce one's own responsibility for this outcome unfairness. In line with reactance theory (Brehm, 1966), workaholism then becomes an unhealthy behavioral attempt to gain some control over one's situation. This reasoning is underlined by the specific characteristics of this sample. The employees of this particular health care organization have a religious background and are highly dedicated to the well-being of their patients. Therefore, for these professionals a thin line may exist separating healthy work motivation from unhealthy work motivation (workaholism).

Internal attributions also play an interesting role in the relationship between fairness and unfair outcomes. Internal attributions show positive and highly significant correlations with the two fairness types and outcome fairness. Thus, high internal attributions in themselves appear to imply that employees feel in control of their environment and will sooner judge decisions and treatments as fair. This is consistent with findings revealing that internal attributions are associated with the tendency to actively engage in problem-solving behavior and feeling responsible for one's own well-being. In contrast, attributions of the cause of outcomes to uncontrollable factors are associated with negative organizational behavior such as avoidance behavior (Amirkhan, 1998). This also underlines that attributions in themselves are not damaging, but that it is the combination of internal attributions and unfair outcomes, in which procedural fairness can be harmful for employee well-being.

**Fairness and Low Internal Attributions**

The present study built further on previous research and theory and mainly focused on fairness when employees make strong internal attributions. Less attention was paid to circumstances when employees feel less forced to take personal responsibility. We can, however, speculate about how the two fairness types would affect how employees respond to unfair outcomes when they feel less inclined to make internal attributions. For procedural fairness, together with less strong internal attributions, we would expect to find normal fairness effects. On the other hand, we found it plausible to find no strong effects of the degree of internal attributions for interactional fairness. This would be the case because respectful treatment is speculated to be less relevant to the attributional account (Brockner et al., 2003). Hence we expected normal interactional fairness effects independent of respondents' level of internal attributions. We found evidence for these predictions for both significant procedural fairness interaction effects (Figures 11 and 12). Feeling less strongly forced to take personal responsibility, appears to provide employees with an escape from internally attributing for unfair outcomes. Therefore low internal attributions allow procedural fairness to generate normal fairness effects on employee well-being. These findings emphasize that the attributional account is indeed likely to be responsible for the reversal of the normal (procedural) fairness effects.

We note explicitly that some intriguing results were obtained when examining how not feeling a strong sense of personal responsibility affects the relationship between interactional fairness and employee well-being in the face of unfair outcomes (Figures 13 and 14). Contrary to our expectations, high interactional fairness (compared to low interactional fairness) in some cases was related to a sharper increase of workaholism and turnover intention (reversal of the normal fairness effect) in the face of unfair outcomes. At this point we can only speculate about the nature of these results. Possibly employees interpret the respectful treatment by supervisors as an indication that working (excessively) hard or
considering leaving an organization when one experiences unfair outcomes is an appropriate way to deal with these negative sense-making processes.

LIMITATIONS

Due to the multi-dimensional operationalization of our well-being variables, we were able to use objective company records of absenteeism and to compare them with self-reported measures (workaholism and turnover intention). It seems reasonable, therefore, to conclude that common method variance problems are mainly eliminated. This may especially be concluded, as the patterns of the analyses from the objective data from the company reports were supported by those with the self-reported data.

The specific culture of this organization may also limit the generalizability of our findings. That is, this study took place in a social service organization with a majority of female employees. Replications of these findings within different types of organizations therefore are welcome. In addition, replications relating the attributional process to treatment fairness in different national cultures are also encouraged, as attributional processes appear to differ across different countries (Mezulis, Abramson, Hyde, & Hankin, 2004).

Although the findings of this study are consistent and robust, we make some assumptions in order to interpret how attributions precisely interact with unfair outcomes and treatment fairness. Measuring the degree of internal attributions generally is considered good common practice (Brockner et al., 2007) to unravel the attributional account of fairness. However, additional research including more process data on how internal attributions influence the manner in which fair treatment impacts employees in the face of unfair outcomes is needed. This could help to further pinpoint the exact nature of these independent variables and how they jointly impact employee well-being.

PRACTICAL IMPLICATIONS

Modern working environments are not as stable as they used to be. It is an unmistakable reality that almost every employee at one stage in his/her career will have to deal with major changes, such as a merger, acquisition or a reorganization. For employees, this type of impactful events inevitably brings along concerns about the fairness of the outcomes they receive during these changes. The uncertainty involved in such changes can be extremely stressful and unsettling for employees (Hogg, 2000; Sorrentino, Holmes, Hanna, & Sharp, 1995), such that it can lead to all kinds of negative effects on employee motivation and behavior. Therefore, it is important to understand how management can effectively deal with unfair outcomes experienced by employees.

Most research investigating the direct relationship between fairness and employee well-being has come to the conclusion that fair treatment always is beneficial for employees (Greenberg, 1990). Additionally, lack of fair treatment will lead to negative behaviors such as withdrawal behavior or even company theft (Conlon et al., 2005). This noted, our study has shown that fair treatment does not necessarily always lead to more productive work behavior. Procedural fairness, that is, appears to have a unique impact on employee well-being when one strongly feels a sense of personal responsibility. We consistently found that, in the face of unfair outcomes, procedural fairness negatively reinforces the effects of internal attributions on employee well-being. On the other hand, high levels of interactional fairness generally had a positive effect on employee well-being in the same conditions.
The implication of this finding seems to be that procedural fairness reinforces internal attributions of the cause of unfavorable situations in which employees find themselves. Fair interactions seem much less likely (or not likely at all) to affect this attributional process. Thus, interactional fairness has a positive effect on employee well-being, even in adverse conditions. As interactional fairness appears to counteract the negative effects of outcome unfairness when employees attribute internally, it could also be considered to stress respectful treatment together with empowerment of employees. We reason that positive emphasis on the efforts of employees and encouragement to see unfavorable outcomes as opportunities may help them to deal with personal responsibility in a positive manner. Studies have shown that training managers to increase interactional fairness and empowerment of employees can in fact have this buffering effect on reactions to experienced unfair outcomes (Greenberg, 2006; Wiesenfeld, Brockner, & Martin, 1999). This noted, more opinions and debate about appropriate solutions on this matter are very welcome.

Conclusions
All in all, this study provides us with new insights into how fair treatment impacts employee well-being. In addition, it helps us understand the linkage between unfair outcomes and the attributional account. We have provided a framework with which to understand how, counterintuitively, fairness can be related to negative effects on employee well-being measures such as absenteeism and workaholism (reversal of the normal effects of fairness of treatment). This study has also attempted to explain why this counterintuitive reversal of the normal fairness effect can differ for procedural and interactional fairness. These results are not only important from a theoretical perspective. These results also aid the thinking of how to deal with fairness issues within the increasingly dynamic and uncertain contexts with which modern organizations nowadays are confronted.
CHAPTER 5: WHEN WEAK GROUPS ARE STRONG
HOW LOW COHESIVE GROUPS MODERATE THE EFFECT OF ABSENCE TOLERANCE ON VOLUNTARY ABSENCE AT THE INDIVIDUAL AND GROUP LEVEL OF ANALYSIS*

Introduction

Organizations today need to make sure they tap into the full potential of their human capital. Ever increasing pressure to improve productivity and efficiency for management means that organizations cannot afford to needlessly waste human resources due to unnecessary absenteeism. This study sets out to understand how an absence culture (Nicholson & Johns, 1985) may be related to absence behavior of individuals and of groups. More specifically, we investigate how voluntary absence is related to two central aspects of an absence culture, notably the norms and attitudes towards illegitimate reasons to be absent (i.e., absence tolerance; Haccoun & Jeannie, 1995), and the strength of informal ties within work groups (i.e., group cohesion; Sanders & Hoekstra, 1998; Xie & Johns, 2000). Furthermore, we examine whether the group has an effect on the absence behavior of its group members.

Quite often it is assumed that investing in the culture and psychological climate of an organization or department will result in a more productive environment where employees, for instance, are less likely to be absent (Sanders, 2004; Sanders & Hoekstra, 1999). This noted, from a considerable number of studies we know that viewing group cohesion and social ties within an organization in isolation, may result in an inappropriate analysis (Sanders & Hoekstra, 1998; Xie & Johns, 2000). These studies show that it is more fruitful and accurate to look at the way the cohesiveness of groups interacts with cultural and behavioral norms within that group. It is these cultural rules that, in fact, appear to influence the behavior of its members, and the cohesiveness of these groups determines just how this influence will take form.

Common reasoning proposes that strong, highly knit groups reinforce the influence of absence culture on the behavior of its individuals (Homans, 1951; Sanders & Hoekstra, 1998; Xie & Johns, 2000). Contrasting this common assumption, in this study we investigate how weak groups may reinforce the relationship between an absence culture and individual absence behavior. We reason that in modern organizations groups are increasingly becoming less tight and cohesive. Therefore, we will investigate how low cohesive groups may moderate the effect of absence tolerance on absence behavior. That is, we expect that a weak, loosely knit group will be more likely than a strong group to allow individuals to act according to their personal beliefs concerning what are legitimate reasons to be absent, and thus will influence voluntary absence behavior.

ABSENCE CULTURE

Roughly until 1980, absenteeism predominantly was seen as determined by individual factors such as job satisfaction, organizational commitment, and pay inequity (for an overview, see Johns, 1997; and for a recent example, see Podsakoff, Whiting, Podsakoff, & Blume, 2009). Since then, the focus in absenteeism research has gradually shifted towards investigating the impact of group and cultural processes on absence behavior (Bamberger & Biron, 2007; Chadwick-Jones, Nicholson, & Brown, 1982; Gellatly, 1995; Hausknecht, Hiller, &

---

* Chapter 5 has been submitted for publication as: Miles, P., Schaufeli, W. B., & Van den Bos, K. (2010). When weak groups are strong: How group cohesion moderates the effect of absence tolerance on voluntary absence at the individual and group level of analysis. Manuscript submitted for publication.
Chapter 5: When Weak Groups are Strong

Vance, 2008; Iverson, Buttigieg, & Maguire, 2003; Johns & Nicholson, 1982; Sanders, 2004; Xie & Johns, 2000). Nicholson and Johns (1985) were the first to introduce the concept of an absence culture, which assumes that individual absence behavior is influenced by peers through the conveyance of social information about beliefs and practices concerning what is expected group absence behavior. Aspects of an absence culture that have been related to the absence behavior of individuals and groups are the norms regarding what are acceptable absence rates (Gellatly, 1995), the transparency or salience of absence (Xie & Johns, 2000), absence tolerance (Haccoun & Jeanrie, 1995), and group cohesion (Sanders & Hoekstra, 1998). We focus on the latter two aspects of absence culture, as we feel that absence tolerance and group cohesion may represent attitudes and beliefs that may be shared by groups. Thus, as absence culture implies that absence behavior is, or at least partially is, a group phenomenon, we formulate the following hypothesis to establish whether this in fact is the case:

Hypothesis 7:
The voluntary absence of employees is positively related to that of the groups to which they belong.

Absence Tolerance and Absenteeism

A crucial issue in absence culture research is the collective norm of how employees perceive certain, more or less legitimate circumstances as tolerable reasons for absence (Bamberger & Biron, 2007; Gale, 1993; Geurts, Buunk, & Schaufeli, 1991; Haccoun & Jeanrie, 1995; Sanders & Hoekstra, 1998). From here onwards we shall refer to this collective norm as absence tolerance.

In line with equity theory (e.g., Adams, 1965), the absenteeism model proposed by Smit (1997) assumes that the balance between job resources and job demands (Bakker, Demerouti, De Boer, & Schaufeli, 2003) will influence an employee’s tendency to be inclined to be absent. More specifically, if an employee experiences that an organization demands more from him or her than the organization offers the individual in return, this could lead to withdrawal behavior in the form of absence in order to restore this social exchange imbalance (Johns, 1997). Building further on this reasoning, Smit’s absenteeism model (1997) also assumes that it will depend on the absence threshold (i.e., absence tolerance) of the individual whether he or she will actually decide to be absent (Veerman, 1993). A number of studies has indicated that employees’ normative expectations about to which extent one should tolerate different reasons for being absent clearly is related to individual and group absence levels (Bamberger & Biron, 2007; Gale, 1993; Geurts et al., 1991; Haccoun & Jeanrie, 1995; Van Yperen, Hagedoorn, & Geurts, 1994). In these studies, employees with a tolerant attitude towards reasons to call in sick were more absent compared to employees with more stringent views about when one is allowed to be absent. Here, we define absence tolerance as a permissive belief – held individually or collectively – of reasons for employees to be absent. Seen from this perspective, absence tolerance may be closely related to voluntary absence (Chadwick-Jones et al., 1982), as this permissive attitude is likely to foster voluntary absence behavior. In order to focus on voluntary absence, we control for health complaints and thus to some extent for the involuntary aspect of absence. In other words, we are interested in sickness absence above and beyond health complaints. This leads us to formulate the following hypothesis:
Hypothesis 8:
*Absence tolerance is positively related to individual voluntary absence.*

**GROUP COHESION AND ABSENTEEISM**

During the last decade, the potential impact of social or group cohesion on absenteeism has generated a considerable amount of interest (Sanders & Hoekstra, 1999; Xie & Johns, 2000). Cohesion within groups indicates the strength of the informal ties within these groups, and has often been related to affective commitment (Andrews, Kacmar, Blakely, & Bucklew, 2008), cooperation, information sharing and perceived performance (Beal, Cohen, Burke, & McLendon, 2003; Mesmer-Magnus & DeChurch, 2009; Mullen & Copper, 1994), and satisfaction with groups and group viability (Tekleab, Quigley, & Tesluk, 2009). Social exchange theory considers social control as an exchange of peer approval for following group rules and norms (Homans, 1951). According to social exchange perspective, people’s inclination to follow group norms will be determined by the strength of the informal ties within that group. Gale (1993), for instance, found that absence tolerance, and thus the norm for when a member is allowed to be absent, was lowest in highly cohesive groups.

Group cohesion, through its enforcement of behavioral compliance to norms (Locke, Latham, & Ere, 1988), is generally positively related to constructive work behaviors and to emotional support and satisfaction (Griffith, 1988), and negatively related to disruptive work behaviors such as, for instance, turnover rates (George & Bettenhausen, 1990). A number of studies also found that group cohesiveness has a direct negative effect on the rates of sickness absence, as well as on its frequency and duration (Buunk, 1990; Newsome, 1993; Sanders, 2004; Sanders & Hoekstra, 1998, 1999; Spink & Carron, 1992; Xie & Johns, 2000; Zaccaro, 1991). Following this reasoning, absence behavior is likely to be influenced by the degree of cohesion within the group, which leads us to formulate the following hypothesis:

Hypothesis 9:
*Group cohesion is negatively related to employee’s absence rates.*

**WHEN WEAK GROUPS ARE STRONG**

Homogeneity of values and opinions and mutual agreement about group behavior is supposed to determine the strength of a culture and thus also of an absence culture (Nicholson & Johns, 1985; Xie & Johns, 2000). This reasoning implies that the cohesiveness of a group will strongly impact the influence of an absence culture on the absence behavior of its members (Homans, 1951). In other words, the effect of absence tolerance on employee absence behavior would be expected to be most pronounced when group cohesion is strongest, compared to a relatively small impact on absence behavior when group ties are weak. Following this reasoning, this would mean that in cohesive groups, intolerance towards voluntary absence should lead to low levels of absence, whereas tolerance towards voluntary absence would lead to high absence rates.

In this chapter we would like to challenge this reasoning, because we feel group cohesion may not be encouraged by modern organizations. Modern organizations in which there often is a strong focus on individual performance and thus on the employee, may emphasize self-interest (Hofstede, 1991) and thus may be damaging for the cohesiveness of working groups. In addition, modern developments, such as high turnover levels, mergers and acquisitions and reorganizations are likely to be detrimental for the ties within a group.
We therefore consider it important to understand how the lack of cohesiveness within groups impacts an absence culture. That is, this study sets out to investigate the potential of low cohesion to moderate the relationship between an absence culture and absence behavior. As mentioned above, many studies have revealed the positive effects of strong groups (Andrews, Kacmar, Blakely, & Bucklew, 2008; Beal, Cohen, Burke, & McLendon, 2003; Buunk, 1990; Mesmer-Magnus & DeChurch, 2009; Mullen & Copper, 1994; Sanders, 2004; Sanders & Hoekstra, 1999; Tekleab, Quigley, & Tesluk, 2009; Xie & Johns, 2000). On the other hand, this positive effect of strong groups implies a negative effect of weak groups and a culture with less compliance to group norms (Locke, Latham, & Erez, 1988). Therefore we reason that low group cohesion may also impact how absence tolerance is related to voluntary absence behavior. That is, compared to strong ties within groups, weak ties will allow individuals to act more consistent with their personal values. Just as strong groups, weak groups also thus influence the behavior of its members. We thus reason that a culture with little group pressure and control also constitutes an absence culture.

In contrast with earlier studies (Sanders & Hoekstra, 1998; Xie & Johns, 2000), and more accurately reflecting today’s organizations, we thus argue that the lack of group cohesion may result in an absence culture with little social control. This implies that, contrary to what earlier studies have revealed, low cohesive groups may produce a culture in which individuals feel free and safe to act according to their own personal beliefs concerning legitimate absence behavior. Ultimately, this could lead to an absence culture in which the lack of cohesion determines whether the degree of absence tolerance actually translates into absence behavior. More specifically, in loosely knit groups, we would therefore expect high absence tolerance to be related to high levels of voluntary absence behavior. On the other hand, low absence tolerance would be expected to be related to low levels of voluntary absence behavior. This reasoning thus proposes that weak groups potentially are capable of having positive effects. Therefore, we present our final hypothesis:

Hypothesis 10:
Group cohesion interacts with absence tolerance such that in low cohesive groups, high absence tolerance is related to higher levels of voluntary absence among employees, whereas less absence tolerance is related with the lower levels of voluntary absence.

Method

Respondents and Employee Survey Setting

Employees from two Dutch organizations participated in this study. Organization 1 was a production and wholesale firm consisting predominantly of manual laborers. A total of 377 employees (response-rate 73%) took part, consisting mainly of men (80.9% men, 19.1% women) with an average age of 40.19 (SD = 9.76). The majority (95.8%) was of Dutch nationality (compared to 4.2% non-Dutch), and only a small section (11.1%) of the employees worked part-time (32 hours or less per week). In total 60 groups were distinguished with an average of 6.28 employees (SD = 4.91).

Organization 2 was the Dutch branch of a worldwide welfare and healthcare organization with in total approximately 3,500 employees in the Netherlands. A representative sample of roughly one third (980 employees) of the total of was drawn (response was 59% with 582 respondents). The majority of our respondents were women (69%), the average age was 38.8 years (SD = 11.5), 91.5% was Dutch, and 73.7% worked 32
hours or less per week. A comparison with the annual social report reveals that the sample is representative as far as gender and age is concerned; that is, as in the sample in the whole organization 69.0% is female and the average age is 39.1 years. Our sample consisted of 70 groups with on average 7.94 employees (SD = 4.36). With regard to the response rates in both organizations, it should be noted that both rates are well above what is considered to be the minimum response rate of 35% (Baruch & Holtom, 2008). All respondents from both organizations could be matched with the group to which they belong.

For Organization 1, the survey was introduced to the employees as an annual employee satisfaction survey that was used to assess and improve levels of work motivation, employee mobility, and absenteeism. Employees were asked to fill in a paper-and-pencil questionnaire. For the employees with a lower education level (mostly only primary school), sessions to fill in the survey with the researchers present were organized during working hours in order to clarify any questions regarding the content of the survey-items. Organization 2 was prepared to cooperate with this survey for which they received the results for their annual social report, and to identify organizational areas which needed attention. In both organizations, participation was voluntary and confidentiality was emphasized in communication by the management of the organizations.

**Measures**

Health complaints. The 13-item short version of the Questionnaire for Evaluating Experienced Health-Conditions (Dirken, 1967) was used to assess psychosomatic health complaints. This is a well-validated Dutch instrument (De Boer, Bakker, Syroit, & Schaufeli, 2002; Martens, Nijhuis, Van Boxtel, & Knotterus, 1999), which is also used by the Dutch Census Bureau (CBS) for National Monitor Studies, and includes items such as: “Do you often feel pain in your stomach?” and “Are you short of breath quickly?” Respondents were asked to answer how they experienced these health complaints with an extreme confirmation answer category (YES!), a normal confirmation category (yes), a normal rejecting answer category (no) or an extremely rejecting category (NO!) (for Organization 1, α = .89; for Organization 2, α = .88).

Group Cohesion. Following Lambooij and colleagues (2003), group cohesion was measured with a ten-item scale. An example of an item was “With how many people from your department do you have a good personal relationship?” All items could be answered on a 7-point rating scale: With no one (1), With almost no one (2), With a few (3), With half (4), With most (5), With almost everyone (6), With everyone (7). The internal consistency for both organizations was good (Organization 1, α = .81; Organization 2, α = .77).

Absence Tolerance. Absence tolerance was measured using a three-item scale version of a scale developed by Sanders and Hoekstra (1999). The three items all proceeded by the question: “What do you think of the following reason to call in sick?”, followed by these three reasons “Having private problems”, “Being fed up with your work” and “Just not feeling like working”. Our measure only used items referring to voluntary absence tolerance, generally referred to as grey or black absenteeism (Allegro & Veerman, 1990), as this is the type of absence behavior that is seen to be controlled by the employee (Judge & Martocchio, 1996). All items are scored on a 4-point answering scale, with an extreme rejecting category (BAD!), a normal rejecting category (bad), a normal confirmation category (good), or an extremely confirmatory category (GOOD!) (for Organization 1, α = .80, for Organization 2, α = .63).
Absenteism. Absence was measured by using the company records of the registered absence of the employees (means and standard deviations are provided in Tables 8 and 9). For a period of 6 months prior to conducting the survey we used the frequency of absence spells, as absence frequency is considered the best indicator of illegal or voluntary absence (Judge & Martocchio, 1996). Prior studies examining the interaction effects of group cohesion and absence tolerance (Xie & Johns, 2000) used self estimations of absenteism. However, studies (Van Poppel, De Vet, Koes, Smid, & Bouter, 2002) have shown that self estimations can be unreliable and company records are thus superior. Skewness was 1.81 for Organization 1, and 2.14 for Organization 2 and showed relatively minor deviations from the critical value of 1.96 Therefore, we conclude that skewness is not a problem.

To interpret the absenteism data properly, it is important to note that in the Netherlands employees are not allowed to take so called “personal days” for absences that are not related to health. Dutch employees also do not have a set amount of sick days, which they lose at the end of the year. That is, this typically is not the case, unless organizations make specific policies around these topics, which was not the case for the two organizations we studied here. These two organizations had very similar and straightforward policies regarding absence management at the time of the survey.

Table 8. Zero-order correlations, means, standard deviations, and alpha reliabilities (on the diagonal) for Organization 1

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Absence Frequency</td>
<td>0.77</td>
<td>1.01</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Health Complaints</td>
<td>1.80</td>
<td>0.59</td>
<td>.15**</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Group Cohesion</td>
<td>3.80</td>
<td>0.99</td>
<td>-0.05</td>
<td>-.08</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Absence Tolerance</td>
<td>1.43</td>
<td>0.49</td>
<td>.14**</td>
<td>.16**</td>
<td>-.06</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Age 1: Young (Dummy)</td>
<td>-</td>
<td>-</td>
<td>.15*</td>
<td>.02</td>
<td>.02</td>
<td>-.14**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age 2: Middle (Dummy)</td>
<td>-</td>
<td>-</td>
<td>-0.02</td>
<td>-.02</td>
<td>-.11</td>
<td>-.03</td>
<td>-.46***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Gender (Male)</td>
<td>-</td>
<td>-</td>
<td>-0.02</td>
<td>-.08</td>
<td>.04</td>
<td>-.05</td>
<td>.09</td>
<td>-.03</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Managerial responsibility</td>
<td>-</td>
<td>-</td>
<td>-.18**</td>
<td>.00</td>
<td>.22*</td>
<td>-.13*</td>
<td>-.18***</td>
<td>.11</td>
<td>-.15**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed).

Table 9. Zero-order correlations, means, standard deviations, and alpha reliabilities (on the diagonal) for Organization 2

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Absence Frequency</td>
<td>0.80</td>
<td>1.09</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Health Complaints</td>
<td>1.89</td>
<td>0.56</td>
<td>.19**</td>
<td>.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Group Cohesion</td>
<td>3.64</td>
<td>0.89</td>
<td>.00</td>
<td>-.11*</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Absence Tolerance</td>
<td>1.47</td>
<td>0.40</td>
<td>.11*</td>
<td>.17*</td>
<td>-.07</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Group Cohesion Group</td>
<td>3.64</td>
<td>0.42</td>
<td>-.04</td>
<td>.07</td>
<td>.48***</td>
<td>-.03</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Absence Tolerance Group</td>
<td>1.47</td>
<td>0.16</td>
<td>.15***</td>
<td>.06</td>
<td>-.03</td>
<td>.39***</td>
<td>-.07</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Age 1: Young (Dummy)</td>
<td>-</td>
<td>-</td>
<td>-.01</td>
<td>.00</td>
<td>-.01</td>
<td>.07</td>
<td>.06</td>
<td>.16***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Age 2: Middle (Dummy)</td>
<td>-</td>
<td>-</td>
<td>.04</td>
<td>.09*</td>
<td>-.03</td>
<td>-.04</td>
<td>-.04</td>
<td>.05</td>
<td>-.50***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Gender (Male)</td>
<td>-</td>
<td>-</td>
<td>.06</td>
<td>.04</td>
<td>-.06</td>
<td>.07</td>
<td>.02</td>
<td>.04</td>
<td>.15***</td>
<td>-.02</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>10. Managerial responsibility</td>
<td>-</td>
<td>-</td>
<td>-.15**</td>
<td>.09*</td>
<td>-.16***</td>
<td>-.14**</td>
<td>-.08*</td>
<td>-.13**</td>
<td>.15***</td>
<td>.06</td>
<td>-.12**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. * p < .05 (two tailed), ** p < .01 (two tailed), *** p < .001 (two tailed).
Results

Correlational Analyses

In Tables 8 and 9 means, standard deviations and Pearson zero-order correlations of the variables assessed in both organizations are presented. All relationships between the dependent variable – absence frequency – and the independent variables were in the expected direction. For instance, in both organizations, absence frequency was significantly and positively correlated with both absence tolerance and health complaints, but not group cohesion.

Table 10. Results (standardized B-coefficients) of the two-way hierarchical regression analysis for Organization 1

<table>
<thead>
<tr>
<th>Absence Frequency</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1: Young (Dummy)</td>
<td>.12</td>
<td>.11</td>
<td>.15*</td>
<td>.15*</td>
</tr>
<tr>
<td>Age 2: Middle (Dummy)</td>
<td>-.04</td>
<td>-.04</td>
<td>.05</td>
<td>.05</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>-.04</td>
<td>-.03</td>
<td>-.02</td>
<td>-.02</td>
</tr>
<tr>
<td>Managerial responsibility</td>
<td>-.17**</td>
<td>-.17**</td>
<td>-.14*</td>
<td>-.14*</td>
</tr>
<tr>
<td>Health Complaints</td>
<td>-</td>
<td>.15**</td>
<td>.13*</td>
<td>.12*</td>
</tr>
<tr>
<td>Group Cohesion (COH)</td>
<td>-</td>
<td>-</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Absence Tolerance (TOL)</td>
<td>-</td>
<td>-</td>
<td>.16**</td>
<td>.16**</td>
</tr>
<tr>
<td>COH X TOL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-11*</td>
</tr>
<tr>
<td>R² change</td>
<td>.042</td>
<td>.023</td>
<td>.024</td>
<td>.012</td>
</tr>
<tr>
<td>R² total</td>
<td>-</td>
<td>.065</td>
<td>.089</td>
<td>.101</td>
</tr>
<tr>
<td>Significance Model (F)</td>
<td>3.74**</td>
<td>4.70***</td>
<td>4.67***</td>
<td>4.68***</td>
</tr>
</tbody>
</table>

Note. N = 377. * p < .05 (two tailed). ** p < .01 (two tailed), *** p < .001 (two tailed).

Testing of Hypothesis 7

Our first hypothesis concerned whether a group structure was present in the absence rates investigated in these samples. Linear mixed model analyses help to determine whether a dependent variable (absence frequency) is nested within a group structure (group), which is a condition for performing multi-level analyses for models including the independent variables (Hox, 2002). The outcome of this initial analysis of whether absence frequency behavior is related to the group structure determines if multi-level analyses (as opposed to linear regression analyses) are appropriate for testing the remaining hypotheses. We examined this by means of linear mixed model analysis, determining whether including the grouping variable “group” was related to a significant improvement of the fit of the model explaining the variance of absence frequency. Therefore, we first entered “group” as a random grouping variable and absence frequency as the dependent variable into a linear mixed model analysis for both organizations separately. Following this, we repeated the analyses without “group” as the random grouping variable to determine whether a multilevel structure would be appropriate. The 2 Log Likelihood for Organization 1 did not increase significantly ($\Delta \chi^2 = 1.97$, ns), whereas it increased significantly for Organization 2 ($\Delta \chi^2 = 27.41$, df=1, $p < .001$). In addition we also performed a within and between-group analysis of variance for Organization 1, which indicated that absence behavior did not differ between groups ($F = 1.24$, ns). With these results we can conclude that Hypothesis 7 is only supported for Organization 2, and indicates that linear multivariate regression analysis is most appropriate for Organization 1, whereas multi-level analysis is most appropriate for
Organization 2. We will first describe the linear multivariate analyses we executed for Organization 1, followed by the multi-level analyses for Organization 2.

**Preliminary Analyses Organization 1**

For Organization 1 we executed hierarchical (3 steps) regression analyses. Results of these analyses can be found in Table 10. Before entering the variables into the analyses, they all were centered (see Cohen, Cohen, West, & Aiken, 2003). The control variables (gender, age, and managerial responsibility) were entered as the first step as previous research has indicated that they may affect, for instance, an employee’s motivation to attend work (Johns, 1997). Of the control variables, younger and non-managerial employees are significantly more absent (β = .32, p < .05, and β = .34, p < .05, respectively). The second step in Table 10 entered the independent variable psychosomatic health complaints. This variable was entered first in order to be able to determine the unique effects of the other independent variables on absenteeism above and beyond psychosomatic health complaints. The independent variables absence tolerance and group cohesion were entered in the third step. The final step was to enter the multiplicative interaction term of absence tolerance x group cohesion. Here we will proceed with discussing the remaining hypotheses after the preliminary analyses for Organization 2.

**Preliminary Analyses Organization 2**

After establishing that multilevel analyses are most suitable for investigating the effects of group cohesion and absence tolerance on absence frequency for Organization 2, we proceeded to determine whether aggregation of the two independent variables (group cohesion and absence tolerance) to group level is justified. Group cohesion was entered into a linear mixed model analysis as the dependent variable with “group” as a random grouping variable, after which we repeated this analysis without a random grouping variable. The significant increase in 2 Log Likelihood (Δχ² = 93.94, df=1, p < .001) indicates a clear group component in group cohesion and hence justifies aggregating the group scores (all individuals within a group are assigned the average score of their group for group cohesion). The same procedure was followed for absence tolerance as a dependent variable. The 2 Log Likelihood increased significantly (Δχ² = 23.28, df=1, p < .001), which also justified aggregating the group scores of absence tolerance.

Next, we executed four nested linear mixed model analyses with “group” as a random grouping variable to determine which model had the best fit and thus which variables are significantly related to absence frequency (Table 11).

The three control variables (gender, age, and managerial responsibility) were again entered first (managerial responsibility showed the only negative significant relation with absence frequency, e.g., in Model 2, t = -2.92, p < .01). In order to test Model 1 health complaints and the two independent variables, group cohesion and absence tolerance at individual level, were entered. The multiplicative interaction effect of group cohesion and absence tolerance at individual level was added in Model 2. Next, we included the aggregated independent variables of group cohesion and absence tolerance into Model 3 and finally the interactive effect of the aggregated variables in Model 4.

Looking at the fit scores, Model 2 showed the best fit as the 2 Log Likelihood improved significantly compared to Model 1 (Δχ² = 3.490, df=1, p < .05), whereas Model 3 and Model 4
did not further improve the relative model fit.\(^7\) Therefore, the results of Model 2 should be interpreted for testing the hypotheses.

Table 11. Results of the linear mixed model analysis with “group” as a random grouping variable for Organization 2

<table>
<thead>
<tr>
<th>Absence Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Age 1: Young (Dummy)</td>
</tr>
<tr>
<td>Age 2: Middle (Dummy)</td>
</tr>
<tr>
<td>Gender (Male)</td>
</tr>
<tr>
<td>Managerial responsibility</td>
</tr>
<tr>
<td>Health Complaints</td>
</tr>
<tr>
<td>Group Cohesion (COH)</td>
</tr>
<tr>
<td>Absence Tolerance (TOL)</td>
</tr>
<tr>
<td>COH X TOL</td>
</tr>
<tr>
<td>Group Cohesion Group (COHT)</td>
</tr>
<tr>
<td>Absence Tolerance Group (TOLT)</td>
</tr>
<tr>
<td>COHT X TOL</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
</tbody>
</table>

Model Fit (\(-2\times\log likelihood\))
- Model 1: 1479.690
- Model 2: 1476.250
- Model 3: 1475.264
- Model 4: 1474.402

Improvement of the Model Fit
- Model 1: 3.976 (3)
- Model 2: 3.490 (1)*
- Model 3: 0.986 (2)
- Model 4: 0.862 (1)

Note. \(N = 582\). * \(p < .05\) (two tailed). ** \(p < .01\) (two tailed). *** \(p < .001\) (two tailed).

**Testing of Hypotheses 8 to 10**

For Hypotheses 8 and 9 we inspected the third step of the 4-step regression analysis (Table 10) and the multi-level linear mixed model analysis of Model 2 (Table 11) in order to determine whether absence tolerance is positively related to absenteeism (Hypothesis 8), and group cohesion negatively (Hypothesis 9). The results of the regression analyses for Organization 1 indeed reveal a positively significant relation between absence frequency and absence tolerance (\(\beta = .16, p < .01\)), but no significant relationship between absence frequency and group cohesion (\(\beta = .09, \text{ns}\)). The multi-level analysis for Organization 2 indicates that when the group structure of “group” is taken into consideration, both absence tolerance and group cohesion are not significantly related to absence frequency. Although the results for Organization 1 show a significant positive effect of absence tolerance on absence behavior, the lack of a significant relationship from the multi-level results for Organization 2 only provides us with evidence at individual level for accepting Hypothesis 8. As both analyses from Organization 1 and 2 indicate that there is no direct relationship between group cohesion and absence frequency, we conclude that Hypothesis 9 must be rejected.

The final step of the regression analysis for Organization 1 and in Model 2 of the multi-level analyses for Organization 2 shows that the interaction effect of absence tolerance and group tolerance on absence frequency (Hypothesis 10) is significant for both organizations. In order to determine whether or not the effects of absence tolerance on absence frequency are most pronounced when group cohesiveness is high, we now turn to Figures 15

---

\(^7\) As proposed by Wasserman and Faust (1994), we also divided the aggregated scores of group cohesion and absence tolerance by their standard deviations in order for the aggregated scores to better reflect the degree of similarity of the respondents within the group. However, this did not lead to significant scores of the independent variables and their interactive effect on absence frequency.
and 16 for the exact nature of these interaction effects. Both figures were drawn according to the procedures proposed by Aiken and West (1991).

*Figure 15. The interactive effect of absence tolerance and group cohesion on absence frequency for Organization 1*

*Figure 16. The multi-level interactive effect of absence tolerance and group cohesion on absence frequency for Organization 2*

For both organizations, absence tolerance was significantly related to absence frequency in the low group cohesion (low group cohesion is determined by subtracting 1 standard deviation from centered group cohesion and high group cohesion by adding 1 standard deviation) condition (for Organization 1, \(t(343) = 3.60, p < .001\), and for Organization 2, \(t(506) = 2.42, p < .05\)). In contrast, absence tolerance was less strongly related to absence frequency in the high group cohesion condition (for Organization 1, \(t(343) = .76, \text{ns}\)), or even slightly negatively (for Organization 2, \(t(506) = -.32, \text{ns}\)). Both
interaction effects clearly support our line of reasoning that absence frequency is highest in highly cohesive groups with high absence tolerance, whereas absence frequency is lowest in highly cohesive groups with low absence tolerance. Therefore we conclude that Hypothesis 10 is supported.

**Discussion and Conclusions**

This study sets out to understand how group and social determinants influence absence behavior of its individual members. A new wave of absenteeism research and theory has influenced the thinking about how organizational and group culture (absence culture) may impact the values and norms of its members with regard to legitimate absence, and in turn how this influences actual absence behavior (Bamberger & Biron, 2007; Gale, 1993; Geurts et al., 1991; Haccoun & Jeanrie, 1995; Sanders & Hoekstra, 1998, 1999). Interestingly, for only one of the two organizations in our study we found that individual voluntary absence is related to that of the group they belong to (Hypothesis 7). For the other organization this implies that absence is not related to group culture and should be investigated as resulting from individual perceptions, as opposed to views transferred to them from the group. Explanations for these contrasting findings will be discussed later on. As predicted by Hypothesis 8, for one of the organizations investigated, using a linear regression analysis, we found a positive relationship between individual level absenteeism and absence tolerance; one of the central aspects of absence culture (Nicholson & Johns, 1985). Group cohesion, another important aspect within absence culture, which in other research often is associated with lower absenteeism (Buunk, 1990; Newsome, 1993; Sanders, 2004; Sanders & Hoekstra, 1998, 1998; Spink & Carron, 1992; Xie & Johns, 2000; Zaccaro, 1991), in our study was not directly negatively related to absenteeism for both organizations (Hypothesis 9). On the other hand, the interaction effects between group cohesion and absence tolerance we hypothesized were significant for both samples investigated. As predicted by Hypothesis 10, cohesion interacted with absence tolerance, such that in loosely knit groups high absence tolerance is related to the high levels of absenteeism and low absence tolerance is related to the low absence spells.

The findings in our study contrast earlier research. Counterintuitively, low cohesion appears to have the most influence on absence behavior. That is, weak groups seem to be related to a culture in which people experience little control and can act in line with their own personal convictions about what is acceptable absence behavior. These findings also support the as yet unexplored reasoning that there may be benefits to weak groups. That is, when individuals have strong strict personal views about what are acceptable reasons to be absent, they will not be obstructed by possibly different group norms to act according to their own views.

**Is Absenteeism a Group Phenomenon?**

Previous studies exploring absence culture, or social and group processes that influence absence behavior of its members, have applied multi-level and/or cross-level analyses in order to illustrate how group norms about behavior are transferred to individuals within groups (Dansereau, Alluto, & Yammarino, 1984; George, 1990; George & James, 1993; Johns, 1994b; Markham & McKee, 1995; Martocchio, 1994; Mathieu & Kohler, 1990; Sanders, 2004; Sanders & Hoekstra, 1998, 1999; Xie & Johns, 2000). The common thinking about cross-level and multi-level techniques is that they increase the likelihood of finding significant predictive results if social or cultural aspects play a role in determining individual behavior (Johns, 1997). Although our study does investigate the social dimension in
individual absence behavior, multi-level analyses, using linear mixed model analysis, revealed for one of our organizations that the group component did not significantly affect the absence rates. Relatively few other studies (Geurts et al., 1991; Haccoun & Jeanrie, 1995; Spink & Carron, 1992) have found significant common linear regression modeling effects of group predictors of individual absence behavior. Most previous studies have assumed a group structure in the voluntary absence data or group cohesion and absence tolerance variables, and subsequently applied multi-level techniques without explicitly testing whether this was justified (Sanders & Hoekstra, 1998, 1999; Sanders, 2004; Xie & Johns, 2000). Our study reveals that, at least in some organizations, the individual perception of supposedly group determinants of voluntary absence appears to be more dominant and meaningful than the shared perception. Why would this be the case?

A first partial explanation could lie in the different contexts of the two organizations in this research. The context of Organization 1 is such that it is a large employer within a small community, where many employees know each other socially outside of work, both within and between working groups. This could stimulate the emergence of an organizational culture that is very similar for all the separate groups. The structure of Organization 2, however, is such that group units are very autonomous and operate from different locations. This physical separation of the group and distance from headquarters could be responsible for unique cultures and group absence behavior patterns at group unit level.

The different characteristics of the two samples may also influence the degree in which individuals identify with the group they belong to. Organization 1, for instance, consists of considerably more female and part-time employees. One could reason that such groups are more strongly focused on the behavior and norms of their group, compared to those of the organization. Part-timers have limited time to invest in an organization and thus need to make (sub-conscious) choices about what is important for them at work, such that the tangible and visible norms of the group they belong to are likely to be more dominant than those of the organization. In addition, female employees may find the social and thus group-oriented aspects of working more important than males. It must immediately be noted that this reasoning is speculative and further research is clearly needed to clarify whether these group characteristics may be responsible for whether individuals are more prone to adhering to group norms. This noted, both of these explanations may explain the difference of the influence the group had on the absence behavior in these two samples, but do not account for the better fit of the individual level measures of group cohesion and absence tolerance, compared to when these variables were aggregated.

Another explanation of these findings may be that in the case of the current two organizations it could be that we may not be talking of cultural effects on individual behavior per se. Instead, it could be that certain environmental dimensions interact with individual dispositions or traits, such that it is possible to find a similar variance of behavior within and between different groups. In Organization 2, where we executed multi-level analyses, we indeed found that the independent variables absence tolerance and group cohesion at individual level showed a better model fit than the aggregated variables. The experience of cohesiveness could thus be a personal perception, rather than a collective perception of the cohesiveness of the group, and could therefore interact with personal attitudes towards absence tolerance at an individual level. This implies that the personal experience of a group culture may vary within the group and thus moderate the way absence tolerance impacts absence behavior differently according to the perception of the individuals. In earlier studies (Sanders & Hoekstra, 1998, 1999), in line with self-categorization (Hogg, 2000), social
identity appeared to be stronger than the individual identity of the employees. In contrast, the opposite appears to be the case in this study. Our results are in line with the observation that modern organizations have less and less cohesive groups and that these loosely knit groups may also impact absence behavior. The fact that the strongest effects of absence tolerance were found in weak groups only underlines this speculation. In fact, this dominant effect of weak groups over strong groups, as well as the lack of evidence for an influence of the group in the multilevel analyses, suggest that these concepts of group cohesion and absence tolerance may indeed be a matter of individual perception, rather than of a shared absence culture.

A final explanation could be that there is another variable responsible for absenteeism that is shared by the group. Other absence culture aspects such as norms about acceptable absence rates (Gellatly, 1995), or the transparency of absence (Xie & Johns, 2000) may have had an influence at group level, or interacted with the two absence culture aspects we measured in these particular samples. We therefore recommend that these absence culture concepts, as well as factors such as company and country absence policies, and management attitudes are included in future research.

**Cohesion and Absenteeism**

Why does cohesion not impact absenteeism in our study? Our results contradict previous theory and past studies, which did find support for this relationship (Sanders & Hoekstra, 1998, 1998; Xie & Johns, 2000). The research of Xie and Johns (2000) is one of the most influential studies on the topic of cohesion and absenteeism and took place in China. The authors drew upon theory about cultural differences (Hofstede, 1991) to explain why their findings were likely to be so pronounced in China. It is argued by these authors that the Chinese culture is collectivistic by nature and is likely to foster cohesiveness within its organizations. Our study, in contrast, was conducted in two Dutch organizations, where the national culture is considered to be more individualistic by nature (Hofstede, 1991). Individualistic cultures are less likely than collectivistic cultures to transfer behavioral rules about absence through the organizational or group culture (Xie & Johns, 2000). Therefore, in such an individualistic culture, it is plausible to find that a cohesive group does not automatically have to directly affect the absence behavior of the individuals within the group.

Other studies where such a direct relationship between group cohesiveness and absenteeism was found, often applied a slightly different research design. While we examined the absence patterns of all respondents from the company records, other studies compared extreme low absence groups with extreme high absence groups. In addition, theses studies only compared short-term absence spells with long-term absence spells (Sanders & Hoekstra, 1998, 1999). Designs comparing extreme groups of high and low absentees may capitalize on inflated effect sizes (Johns, 1997), and thus may be a less accurate design.

The role of organizational commitment may also be important to fully understand the relationship between group cohesion and absence behavior. That is, commitment has been found to increase the relationship between group cohesion and job performance (Mullen & Copper, 1994), and this may also be the case for absence behavior. For instance, if employees are highly committed to the organization, group cohesion may be more likely to reduce voluntary absence, whereas low organizational commitment (and presumably less concern about the organization’s outcomes), combined with strong groups may increase
absenteeism. Similarly, high organizational commitment may temper the interactive impact of absence tolerance with group cohesion on voluntary absence, whereas less organizational commitment may actually enforce this relationship and lead to high levels of voluntary absence. Future research including measures of organizational commitment is therefore recommended.

**Absence Tolerance and Absenteeism**

Our study clearly provides support for the existence of a positive relationship between absence tolerance and absenteeism for Organization 1, and the nature of this relationship appears clear in the sense that views and values influence absence behavior (Geurts et al., 1991; Veerman, 1993). This noted, an interesting result is that the multi-level analysis, taking the group structure into consideration, does not yield a significant relationship between absence tolerance and absence frequency. Even though multi-level analyses revealed that aggregation of absence tolerance to the group level was justified, the tolerance group score did not predict absenteeism better than the individual level tolerance score. At least for the two samples we investigated, this implies that tolerance views held at an individual level concerning illegitimate reasons for absence are more important for the actual employee absence than those transferred to them by the group they belong to. It appears that these individual views on absence, in combination with individual perceptions low cohesiveness within their group, best explain absence frequency in these two organizations. Instead of reasoning that this is an organizational phenomenon, this also could indicate that the perception of a low cohesive group provides employees with a lack of social control and the safety to feel comfortable acting consistent with their personal norms about absence behavior. As we can see in Figure 16, low levels of group cohesion may thus create a culture in which both positive (low absence tolerance) and negative views (high absence tolerance) on absence impact individual absence behavior accordingly.

If these personal absence tolerance views are not transferred through a shared culture, the question remains of how they do come to exist. Absence tolerance norms could be determined by an individual’s personal work ethics (Sanders, 2004) and thus by personal attitudes independent of group influence. On the other hand, Geurts and colleagues (1994) found that personal absence norms were influenced by pay inequity and thus by determinants which can be controlled and managed by an organization. Perceived inequity between job resources and job demands (Bakker et al., 2003), in line with Adam’s equity theory (1965), could probe employees to try and restore this imbalance by perceiving (voluntary) absence reasons more leniently, which, in turn, would lead to more frequent absence spells. In addition, the environmental context may impact the effect of absence tolerance on absence behavior. To illustrate this, withdrawal aspects such as satisfaction and commitment have been found to be more strongly related to absenteeism when there are plenty of job opportunities, compared to when jobs are less scarce (Hausknecht, Hiller, & Vance, 2008). As employees appear to be more careful to withdraw when job conditions are less favorable, this could also impact whether tolerant views regarding absence reasons translate into actual voluntary absence behavior. As the current study cannot reveal how absence tolerance is determined, and exactly how this leads to absence behavior, further research aiming at pinpointing these exact origins is encouraged.
LIMITATIONS

A limitation of this study is that the alpha reliability of the absence tolerance measure was somewhat low for Organization 2 (α = .63), as compared to Organization 1 (α = .80). This could indicate that within Organization 1, the employees differentiate less between their tolerance for different reasons of voluntary absence, contributing to a higher internal consistency. The lower internal consistency for absence tolerance in Organization 2, could suggest that a different measure with more applicable voluntary absence examples would have been somewhat more appropriate. On the other hand, we would like to note here that an internal consistency of more than .60 generally is considered to be appropriate, especially for scales with a few items only (Nunnally & Bernstein, 1994)

Another limitation of this study is that for both organizations we found relatively small correlations between absence tolerance and absence rates (for Organization 1, r(343) = .14 , p < .01, and for Organization 2, r(506) = .11, p < .05), and relatively little explained variation by the interaction effects between absence tolerance and group cohesion on absence (e.g., for Organization 1, R² = .012). Even though these results are moderate, they do support most of our hypotheses and thus our theory about the potential negative combined effect of absence tolerance and low group cohesion. Moreover, please note that sickness absence was measured by using objective (i.e. company records) instead of subjective (i.e. self-assessment) indicators, which restricts the size of the correlations. This study used company records of absence frequency as its dependent variable, and therefore we can be rather confident that common method variance issues have been avoided. However, unfortunately we could only get hold of absence frequency rates prior to the survey, so that they do not permit us to draw conclusions about causality. On the other hand, previous research has shown that this needn’t be such a big problem, as individual absence behavior is very stable over time (Farrel & Stamm, 1988; Rentsch & Steel, 1998), even when comparing an individuals absence behavior during high school with that during later employment (Brenner, 1968) and when comparing absence of before and after interventions (Ivanchevich, 1985). Therefore, we would expect the individual absenteeism rates after the survey to be very similar to those from before the survey.

This noted, we hasten to suggest that replicating these findings within a longitudinal research design and with absence data following the survey measurement is needed. This would further delineate the exact nature by which voluntary absenteeism is determined (group versus individual). We do, however, feel that the design of this study does overcome a number of limitations of previous studies. For instance, we used larger samples than earlier studies (Sanders en Hoekstra, 1999) and analyzed the absence of all respondents, rather than comparing only extreme groups with high and low absentee rates, which may have capitalized on inflated effect sizes (Johns, 1997).

PRACTICAL IMPLICATIONS

A current challenge for organizations resulting from pressure of share-holders to increase profit margins is to engage their employees as much as possible and to optimally utilize their talent. In such a competitive environment, unnecessary absence is not justifiable and can be a great concern for organizations. The most recent wave within the absenteeism literature assumes that culture and group processes are important factors in explaining voluntary absence (Johns, 1997).

Group cohesiveness and tolerance towards absence within a group are often seen as instrumental in understanding an absence culture (Johns, 1997; Nicholson & Johns, 1985).
Chapter 5: When Weak Groups are Strong

From the findings of our study we can conclude that for organizations these factors indeed are important to consider when trying to manage absenteeism. However, it also is important to understand in which way these factors interact to produce absence behavior, and in which way they do so each on their own. We found that absence tolerance in isolation may have a clear influence on individual absence behavior, whereas group cohesion in itself hardly impacts absence levels. This noted, low group cohesion certainly does have the unfortunate capability of raising absence in combination with a tolerant norm regarding absenteeism, whereas it also may have a discouraging effect on absence when tolerance is low. According to our consistent findings across both organizations, the ideal absence culture for organizations thus appears to be a combination of a strict tolerance norm together with a relatively low degree of group cohesion. This combination appears to allow individuals to behave in line with their personal strict views. These unique results thus reveal the potential strength of weak groups.

Other studies generally support the finding that a strict absence culture is related to a minimum amount of absenteeism (Johns, 1997; Nicholson & Johns, 1985; Sanders & Hoekstra, 1999; Xie & Johns, 2000). This noted, although Sanders and Hoekstra (1998) indeed found such a culture to be related to lower short-term absence, they actually also found a relation with increased long-term absence. On the other hand, the design of their study was different, as they compared intolerant groups with tolerant groups, whereas we studied the relative effects of absence tolerance on all respondents.

This point, however, raises the fundamental discussion about whether being too strict with regard to absenteeism may be harmful. An employee could experience fear of repercussions when overly strict absence norms are enforced. This could eventually lead to higher levels of absence. The first explanation for this higher absenteeism could be that it is due to the direct negative effects of stress caused by this fear (Buunk, 1990; Smulders, 1984; Van Yperen et al., 1994). Second, it could be caused by the negative effects of postponement of legitimate absence by employees who actually are sick, but choose not to be absent because of fear for repercussions. Our view is that an organization indeed can be too strict and intolerant about legitimate absence reasons. Subsequently, these overly strict norms could be detrimental from a long-term perspective. When organizations address what they consider acceptable absence reasons, we suggest they both emphasize when they feel absence is unacceptable, but also when they consider that it is acceptable. As far as our study is concerned, our measure of absence tolerance only included voluntary absence items about which there generally is consensus that these are unacceptable reasons for absenteeism. That is, we included items such as simply not feeling like working or being fed up with working. A low score on such a measure, as opposed to the measures of Sanders and Hoekstra (1999), does not indicate intolerance. Rather, it indicated a more healthy and strict absence culture in which we would not expect to find more (long-term) absence. In any case, the question remains of whether these absence tolerance norms are transferred by the group or rather originate from within the individuals. Our findings point to the latter and thus suggest that there is little danger of an overly strict culture being harmful for individuals. We would like to not that it is considered very difficult to influence Introspective judgments such as personal values (Nisbett & Ross, 1980; Nisbett & Wilson, 1977). Therefore, we reason that trying to correct an overly tolerant personal view on absence legitimacy appears to be more of a challenge and pressing issue for organizations.

The potential of weak groups to influence absence behavior is a relatively untouched subject. Therefore, we hope that our findings encourage future research to explore the
potential effects low group cohesion may have on how an absence culture is related to actual voluntary absence behavior. Based on the results of this study, we expect that investing in fostering strict but realistic views about acceptable absence behavior, and at the same time a culture that encourages individuals to act consistent with these views, will lead to the lowest possible levels of absence. With these novel insights and the practical implications of this study, we hope to have shown that this study is important from both managerial and scientific perspectives.
CHAPTER 6: CONCLUSIONS AND GENERAL DISCUSSION

Introduction

The focus of this thesis was on the effects of treatment fairness and group norms on employee well-being in times of turmoil. This research was conducted based on the heuristic model presented in Chapter 1 and was executed along the lines of three central research themes: First, this thesis investigated under which unfavorable conditions the effects of treatment fairness and group norms on employee well-being were most pronounced. Second, the research focused on whether the two treatment fairness types (procedural and interactional fairness) had the same potential to help employees to make sense of the unfavorable conditions they experience (uncertainty and unfair outcomes). Third, this research examined how an evaluative context that enforced internal attributions and personal responsibility has an impact on how treatment fairness was related to employee well-being in the face of these unfavorable conditions.

This concluding chapter describes the results of the studies presented in Chapters 2, 3, 4 and 5. These studies covered the central research themes, and were conducted according to the predicted relationships depicted in the model presented in Chapter 1. First, I discuss how treatment fairness is related to employee well-being and the role of unfavorable conditions and evaluative contexts therein. Subsequently, this chapter discusses the relationship between group norms and employee well-being and how this is influenced by the unfavorable condition of low cohesive groups. Finally, strengths and weaknesses of this research, the integrative heuristic model, suggested future research directions and practical implications are discussed.

Treatment Fairness and Employee Well-Being

Previous research has often established that treatment fairness is positively related to employee well-being (for an overview, see Conlon, Meyer, & Nowakowski, 2005). In previous research procedural fairness has been positively linked to, for instance, organizational commitment and satisfaction (Folger & Konovsky, 1989; Masterson, Lewis, Goldman, & Taylor, 2000; Sweeney & McFarlin, 1993), and rule compliance (Colquitt, 2001). On the other hand, interactional fairness has been shown to increase organizational citizenship behavior (Moorman, 1991) and decrease absenteeism (De Boer, Bakker, Syroit, & Schaufeli, 2002).

The results reported in this thesis supported the assumption that both procedural fairness and interactional fairness are clearly and positively directly linked to, for instance, work engagement (Chapter 3). This chapter attempted to bridge the research domains of treatment fairness and work engagement using the Job Demands-Resources (JD-R) model (Schaufeli & Bakker, 2004), as this has rarely been done until now. The JD-R model identifies a number of resources which impact work engagement such as supervisory support, training, and autonomy, but overlooks treatment fairness. Therefore, I argued in this thesis that two core components of treatment fairness (i.e., procedural and interactional fairness) should be included as job resources that increase work engagement, and thus employee well-being. As the JD-R model predicts that job resources may function as an antecedent of a motivational process (Schaufeli & Bakker, 2004), this thesis thus proposes that treatment fairness may act as a motivational factor for employees.
The Role of Unfavorable Conditions and Sense-Making Processes

Moving beyond the consistent positive direct relationship between treatment fairness and employee well-being, a number of conditions have been specified that may impact this relationship such as unfair outcomes and uncertainty (Brockner & Wiesenfeld, 1996; Van den Bos & Lind, 2002). Today’s times of economic turmoil may confront employees with precisely such unfavorable conditions that inherently result from harsh and unpredictable economic times. That is, employees may experience uncertainty regarding the future of their organization and job and of being confronted with unfair outcomes following disappointing organizational results (e.g., layoffs, salary cutback, less career opportunities). Therefore, organizations will need to manage their human capital adequately in the face of these unfavorable conditions. The research in this study sets out to provide organizations with valuable new insights to do just this.

The uncertainty management model (Van den Bos & Lind, 2002) and the normal fairness reasoning (Brockner & Wiesenfeld, 1996) both predict that fairness is most important for employees when they experience personal uncertainty or unfair outcomes. These two perspectives reason that treatment fairness will help employees to make positive sense of the uncertainty and unfair outcomes they experience. That is, fairness presumably helps employees to make sense of unfavorable conditions they experience and thus helps them to respond less negatively to these conditions. This phenomenon is often labeled as the normal fairness effect (Van den Bos, Bruins, Wilke, & Dronkert, 1999).

The results from the Chapters 2, 3 and 4 provided us with more insight into how an evaluative context may impact this sense-making power of treatment fairness. In most studies it is assumed that employee well-being will inevitably benefit from fair treatment practices (for overviews, see Brockner & Wiesenfeld, 1996; Greenberg & Colquitt, 2005). Contrasting with the normal fairness effect, however, an increasing amount of research counterintuitively reveals that this beneficial effect does not always occur. That is, when employees experience unfair outcomes, they sometimes prefer unfair treatment (Brockner et al., 2003; Brockner, Wiesenfeld, & Diekmann, 2009; Gilliland, 1994; Van den Bos et al., 1999). These studies imply that the organizational context and conditions play an important role in understanding in which conditions fair treatment results in positive sense-making processes for employees (Brockner & Wiesenfeld, 1996), and in which circumstances treatment fairness results in negative sense-making processes (Brockner & Wiesenfeld, 2005). It therefore is important to understand when employees respond more favorably to fair treatment, compared to unfair treatment. When employees find themselves in strongly evaluative contexts where internal attributions are common and simultaneously experience unfavorable conditions, such as uncertainty and outcome unfairness, fairness appears to reinforce the negative effects of such self evaluative concerns. Ultimately, this explains how negative effects of treatment fairness on employee well-being can occur (Van den Bos et al., 1999, Study 3). The results from Chapters 2, 3 and 4 support precisely this reasoning.

To illustrate this, Chapter 2 examined the effects of fair treatment on employee well-being in the face of unfavorable conditions in a highly evaluative context. It has been shown that due to these kinds of evaluative contexts, when employees are treated in a fair manner, they are likely to feel responsible for their outcomes and thus attribute the causes of these outcomes internally (Van den Bos et al., 1999). The majority of significant results obtained in Chapter 2 support this reversal of the normal fairness effect. For instance, absenteeism increased more following fair procedures when employees faced outcome unfairness, compared to unfair procedures. This implies that if an environment is sufficiently evaluative,
this can trigger internal attributions that prevent them from blaming others, and thus result in negative effects of treatment fairness.

The results presented in Chapter 3 replicate the reversal of the normal fairness effect with a longitudinal design. That is, high interactional fairness was negatively related to work engagement in the face of increasing outcome unfairness. In contrast, low interactional fairness was positively related to work engagement in the same conditions. Chapter 3 also illustrates the potential of interactional fairness to be related to reversals of the normal fairness effect.

The study in Chapter 4 included a measure of internal attributions respondents made and found supportive evidence for the assumption made in Chapters 2 and 3 that internal attributions can lead to the reversal of normal procedural fairness effects. From Chapter 4 it can be concluded that, when employees strongly attribute internally, procedural fairness indeed reinforces the negative relationship between unfair outcomes and employee well-being (reversal of the normal fairness effect). Furthermore, from Chapter 4 we can also conclude that the pattern of effects appears to be different for interactional fairness. That is, results reported in Chapter 4 suggest consistently that when employees strongly attribute internally, normal interactional fairness effects are likely to be found.

The results described in Chapter 4 contribute to our understanding of how treatment fairness impacts employee well-being for two important reasons. First, very similar reversals of the normal procedural fairness effects results were found on different employee well-being measures (workaholism and absenteeism). This attests to the robustness of these findings. Second, previous research on the effects of the attributional account frequently only focused on the affective response to outcome fairness (Van den Bos et al., 1999; Gilliland, 1994). Extending on those studies, the findings from the current thesis relate the attributional account to employee well-being and thus how this is linked to the actual behavior of employees within an (unfavorable) organizational setting. This contributes by supporting the ecological validity of these findings.

As suggested by Brockner and Wiesenfeld (2005), the results from the studies in Chapters 2, 3 and 4 appear to support a linkage between unfavorable outcomes, such as postulated in the uncertainty management model (Lind & Van den Bos, 2002) and the attributional account (Van den Bos et al., 1999). The assumption is that personal levels of uncertainty (or unfair outcomes) raise the importance of procedural fairness and, simultaneously raise questions for individuals about who is responsible for these unfavorable conditions. This complements the thinking about the uncertainty management model (Van den Bos & Lind, 2002) and about normal procedural and interactional fairness effects (Brockner & Wiesenfeld, 1996). On the one hand, fairness sometimes thus can have the intuitively expected positive effect on employee well-being in the face of unfavorable conditions (Brockner & Wiesenfeld, 1996; Van den Bos & Lind, 2002). On the other hand, it also appears important to consider internal attributions in order to establish when fair treatment may lead to counterintuitive negative consequences for employees (Brockner et al., 2003). Assuming that fair treatment of employees will always have positive effects on employees’ reactions thus seems to be a simplification of the reality.

**Differential Effects of Procedural and Interactional Fairness**

Previous research on both the positive effects of treatment fairness (Brockner & Wiesenfeld, 1996; Van den Bos & Lind, 2002) and the counterintuitive negative effects of fair treatment (Brockner et al., 2003; Brockner et al., 2009; Van den Bos et al., 1999) focused
predominantly on the fairness of procedures, whereas interactional fairness is often overlooked. This thesis distinguished between two treatment fairness types. Therefore, this thesis explicitly examined whether procedural and interactional fairness have the same potential to be related to negative sense-making processes, and thus to be negatively related to employee well-being.

**Differential Effects of Sense-Making Processes**

With regard to positive sense-making processes, procedural fairness generally is seen to have the power to help employees make sense of unfavorable conditions (unfair outcomes or uncertainty) they experience. That is, fair procedures and decision making processes are assumed to provide employees with information about the trustworthiness of authorities (Tyler & Lind, 1992). Trust in the relationship with these authorities is important, such that it generally makes employees more accepting of the experienced outcome unfairness or uncertainty. Following this reasoning, it appears to be an oversight not to include interactional fairness, as respectful and fair interactions are just as likely to result in trust in relationships with authorities. That is, previous research has indicated that interpersonal fairness works as a heuristic for trust (Lind, 2001) and can be related to trust as an outcome (Becerra & Gupta, 2003). Furthermore, leading fairness scholars have also argued that theoretical progress within fairness research will benefit from distinguishing between different fairness types (Colquitt, 2002; Greenberg, 1990). Including interactional fairness thus will help to understand how fairness helps employees to make positive sense of unfavorable conditions.

To the best of my knowledge, studies investigating negative sense-making processes have also overlooked that interactional fairness may act as a potential instigator of internal attributions. This noted, there has also been some speculation that procedural fairness would be more likely than interactional fairness to trigger feelings of responsibility and thus internal attributions (Brockner et al., 2003) in the face of unfavorable conditions. The reasoning is that the measure of procedural fairness includes elements such as consistency and decision making, which are believed to influence the perception of having a degree of control over the decisions concerning the outcome. Following this reasoning, the respectful and fair treatment aspects of interactional fairness are more likely to merely accompany a decision about the outcome.

This noted, Chapters 2 and 3 also provide some evidence that, in certain instances, interactional fairness appeared just as capable as procedural fairness to trigger feelings of responsibility and internal attributions. To illustrate this apparent potential of interactional fairness to be related to reversals of the normal fairness effect, results from Chapter 2 showed that when employees experienced personal uncertainty, interactional fairness was related to a reversal of the normal fairness effect. That is, compared to low interactional fairness, high interactional fairness was related to a sharper increase of health complaints. In addition, Chapter 3 revealed a reversal of the normal interactional fairness effect on work engagement in the face of outcome unfairness. This noted, Chapter 4 revealed that when internal attributions were taken into consideration, procedural fairness indeed was consistently related to reversals of the normal fairness effect. On the other hand, interactional fairness was consistently related to normal fairness effects when internal attributions were taken into account. These findings support precisely the reasoning that both procedural and interactional fairness can be related to sense-making processes. This noted, it can also be concluded that internal attributions are responsible for reversals of the
normal fairness effect in the case of procedural fairness, but not in the case of interactional fairness. That is, interactional fairness appears to be related to normal fairness effects, even when employees strongly attribute internally. It thus appears important to include measures of internal attribution to identify precisely how procedural and interactional fairness help employees to make sense of unfavorable conditions. More research is needed to test the precise psychological processes underlying these differential effects and all implications that may follow from these effects.

The research in Chapter 4 focused on the effects of internal attributions in relation to treatment fairness and outcome unfairness. This noted, less attention was paid to how fair treatment affected employee well-being when employees felt less inclined to attribute internally, and less is known about this relationship. To address this issue, this thesis would reason that if internal attribution is supposed to be responsible for reversals of the normal procedural and interactional fairness effects, the absence of internal attributions is not likely to enforce feelings of personal responsibility. When employees do not attribute internally, normal procedural and interactional fairness effects would appear most likely to occur. Results supported this line of reasoning for the effects of procedural fairness. This noted, interactional fairness was related to reversals of the normal fairness when employees felt less responsible for their outcomes. At this point it is only possible to speculate about the nature of these results. For instance, perhaps it is the case that interactional fairness enforces the in essence positive effects of internal attributions (Amirkhan, 1998). Extending on this reasoning, interactional fairness thus may also enforce the negative effects of lower internal attribution. At the same time procedural fairness enforces exact the opposite; as described above, procedural fairness is related to positive effects of low internal attribution and negative effects of strong internal attributions. It may be that interactional fairness complements and reinforces the, in itself, positive yet confrontational effects of employees being forced to take responsibility and be accountable. On the other hand, the supportive nature of interactional fairness may also reinforce the negative effects of low internal attributions. That is, (too) much understanding for employees may only emphasize the harmful effects of an ambiguous working culture in which there is no clarity about responsibility and accountability regarding the unfavorable conditions. To summarize, interactional fairness thus seems to mitigate the negative effects of unfavorable conditions in high attribution conditions, but strengthens the negative effects of the ambiguity of low attribution conditions during unfavorable conditions. In contrast, procedural fairness seems to force employees to take personal responsibility for unfavorable conditions in high attribution conditions, but provides them with an escape in low attribution conditions. Thus, even though procedural and interactional fairness both help employees to make sense of unfavorable conditions, it appears that they may do so in different ways.

The reasoning presented above could possibly explain why reversals of the normal interactional fairness were found in Chapters 2 and 3. Unfortunately, these studies did not include a formal measure of internal attributions. Therefore it can not be determined with total confidence whether the occurrence of reversals of the normal interactional fairness in those two chapters in fact is due to those individuals that attribute internally or those that tend not to. This thesis thus recommends that future research attempts to unravel exactly when the two fairness types within evaluative context where attributional processes take place are positively or rather negatively related to employee well-being.
**Differential Interaction Effects on the Same Dependent Variable**

In addition to establishing that internal attributions appear to be responsible for reversals of the normal procedural fairness effect and simultaneously for normal interactional fairness effects, this thesis reveals that it is possible for procedural fairness and interactional fairness to differentially influence the effects of the same unfavorable conditions, within the same study, and on the same dependent variable. Two of such differential interaction effects were found in the results presented in Chapters 2 and 4. For instance, in Chapter 2, interactional fairness in the face of unfair outcomes was related to a normal fairness effect on absenteeism, whereas procedural fairness was related to a reversal of the normal fairness effect on the same dependent variable. Additionally, in Chapter 4, taking internal attribution into consideration, procedural fairness when employees experienced unfair outcomes, was related to a reversal of the normal fairness effects on workaholism, compared to a normal fairness effect for interactional fairness in the same conditions.

To the best of my knowledge, such differential interaction effects with a normal and a reversal of the normal fairness effect have never been found before on the same dependent variable in the same study. Studies supporting the normal fairness effect (Brockner & Wiesenfeld, 1996), and the reversal of the normal fairness effect (Gilliland, 1994) have been reported before, but never have both effects been reported within the same study. This makes the findings presented in Chapter 2 and 4 unique. That is, they help us understand when to expect reversals or normal procedural and interactional fairness effects, and thus when procedural and interactional fairness will be related to positive or negative effects on employee well-being.

Another implication of these differential interaction effects is that they provide support for the conceptual distinction between procedural and interactional fairness. To date, there is still some debate about whether interactional fairness is a sub-dimension of procedural fairness or whether it should be seen as a separate fairness type (Colquitt, 2001; Colquitt, Greenberg, Zapata-Phelan, 2005). These differential effects for procedural and interactional fairness presented in Chapters 2, 3 and 4 clearly indicate that a distinction between these two fairness types is justified. These findings also provide important evidence to insist that, in contrast with the majority of recent research (Brockner et al., 2003; Van den Bos et al., 1999), it is important for future research to examine how both procedural and interactional fairness both influence employees’ responses to unfavorable conditions.

**Group Norms and Employee Well-Being**

Complementing the effects of treatment fairness, the manner in which group norms influence employee well-being in times of turmoil is also a central aspect of this dissertation. The roles individuals take on within work groups, and the security they feel within groups is impacted by whether or not these individuals feel treated in a fair manner (Tyler & Lind, 1992) and vice versa (Van Prooijen, Van den Bos, & Wilke, 2004). One could say that fair treatment is important because fair and unfair events are experiences that occur at the social interface where the individual meets the group (Van den Bos & Lind, 2009). In addition, similar to the counterintuitive fairness effect, group norms can also have unexpected effects on employee well-being (or in the case of this research, absence behavior in particular). Although it is generally assumed that group cohesion (Sanders & Hoekstra, 1998; Xie & Johns, 2000) and a strict norm concerning absence behavior (low
absence tolerance; Bamberger & Biron, 2007; Gale, 1993; Geurts, Buunk, & Schaufeli, 1991; Haccoun & Jeanrie, 1995; Sanders & Hoekstra, 1998, 1999) are related to less sickness absence, interactions between group cohesion and absence tolerance reveal that merely looking at these direct relationships results in insufficient analyses (Sanders & Hoekstra, 1998, 1999; Xie & Johns, 2000). Rather than expecting that low group cohesion is automatically related to more absence behavior, results of the study presented in Chapter 5 supported the reasoning that low cohesive groups have the potential to be related to a decrease in voluntary absence behavior. The reason for this counterintuitive negative potential of group cohesion is now described.

**GROUP COHESION AND ABSENCE TOLERANCE**

Chapter 5 set out to understand how group and social determinants influence absence behavior within groups. Whereas individual determinants such as organizational fairness (De Boer et al., 2002), job satisfaction, and organizational commitment (Farrel & Stamm, 1988) dominated research on absence behavior in the past, a new wave of absenteeism research and theory has emerged. This wave investigates how organizational and group culture can impact the values and norms of its members with regard to legitimate absence, and in turn how this influences actual absence behavior (Bamberger & Biron, 2007; Gale, 1993; Geurts et al., 1991; Haccoun & Jeanrie, 1995; Sanders & Hoekstra, 1998, 1999). Previous studies have shown that absence behavior is influenced by absence tolerance (Bamberger & Biron, 2007; Gale, 1993; Geurts et al., 1991; Haccoun & Jeanrie, 1995; Van Yperen, Hagendoorn, & Geurts, 1994) and group cohesion (Buunk, 1990; Newsome, 1993; Sanders, 2004; Sanders & Hoekstra, 1998, 1999; Spink & Carron, 1992; Xie & Johns, 2000; Zaccaro, 1991). A number of studies has also indicated that the relationship between absence tolerance and absence behavior will be strongest in highly cohesive groups (Sanders & Hoekstra, 1998, 1999). That is, it is commonly assumed that the impact of group culture on the behavior of the group members will be most pronounced when informal networks are strong. In contrast, this thesis argues that modern working conditions may bring along the unfavorable condition of less and less cohesive groups. This unfavorable development implies that it is important to investigate how low group cohesion impacts the relationship between absence tolerance and voluntary absence behavior. This thesis thus argues that modern organizations with increasingly individualistic cultures (Hofstede, 1991) may experience groups that have little influence on the behavior of its members. In such cultures, the personal views of individuals concerning acceptable absence behavior will be dominant, such that low cohesion in combination with low absence tolerance may lead to the lowest levels of absence behavior.

In Chapter 5 some support was found for the direct relationship between absence tolerance and voluntary absenteeism. Group cohesion, on the other hand, was not directly negatively related to voluntary absenteeism. However, a significant interaction effect between low group cohesion and absence tolerance on the absence rates of employees was found. As predicted, the effects of absence tolerance were strongest in low cohesive groups, such that high absence tolerance was related to the highest levels of voluntary absenteeism and low absence tolerance to the lowest levels. This thesis thus concludes that low group cohesion allows individuals to act consistent with their personal views about what is legitimate absence behavior. This conclusion would also explain why the unfavorable condition of low cohesive groups, in combination with strict personal views about what are acceptable reasons for being absent, may be related to the fortunate effect of little absence behavior.
IS GROUP COHESIVENESS ALWAYS A GROUP PHENOMENON?

Research examining absence culture generally applies multi-level and/or cross-level analyses to account for how the unique dynamics within a group influence its member’s absence behavior (Dansereau, Alluto, & Yammarino, 1984; George, 1990; George & James, 1993; Johns, 1994b; Markham & McKee, 1995; Martocchio, 1994; Mathieu & Kohler, 1990; Sanders, 2004; Sanders & Hoekstra, 1998, 1999; Xie & Johns, 2000). Multi-level techniques are supposed to enhance the likelihood of finding significant predictive results if group or cultural aspects play a role in determining the individual’s behavior (Johns, 1997). This noted, the data from the two organizations investigated in Chapter 5 of this thesis revealed that the influence of cohesion and absence tolerance on voluntary absence does not necessarily need to be a group phenomenon. In one organization analyses at the individual level appeared to be most appropriate for that sample. Having noted this, the individual level analyses did show that the individual perception of absence tolerance interacted with the individual perception of the cohesiveness of the group to influence voluntary absence behavior. In the other organization results indicated that the absence behavior was influenced by the group the individuals belonged to. This noted, these group level results also indicated that the analyses with individual perceptions of absence tolerance and group cohesion on absence behavior were most appropriate, compared to those shared by the group. Based on these results, I conclude here that the effect of the personal experience of a team culture on absence behavior can vary within the team. This implies that it is also important to investigate the individual perception of the degree of group cohesion and absence tolerance, and how they are related to absence behavior, in addition to that of the shared group perception. These findings underline the expectation that modern organizations produce less and less cohesive groups. That is, the findings support the notion that the individual perception of a less cohesive group can provide the safety for individuals to act in accordance with their own perceptions about legitimate or illegitimate absence behavior.

Strengths and Limitations

Four field studies within three organizations were conducted in order to explore the main research themes described above. The first organization was a Dutch branch of a global consultancy firm. The second organization provided us with a two-wave longitudinal study, with a year between the measurements, within a production and wholesale organization. The third and final organization was a welfare organization.

All of the studies I presented in this thesis used self-report questionnaires in order to measure perceptions of the employees of aspects of these organizations. Measures included perceptions of treatment fairness, the degree of tolerance towards illegitimate absence reasons, the unfavorable conditions mentioned above and the degree of internal attribution. The dependent variables included subjective evaluations of various measures of employee well-being (e.g., work engagement, workaholism, turnover intention, health complaints, self-reported absence rates). In addition company records of absence levels for the second and third organization were obtained. This means that common method issues (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) could be overcome for the majority of the studies. All studies controlled for gender, managerial responsibility and age, as previous research has indicated that they may affect, for instance, employee motivation to attend work (Johns, 1997).
The research presented in this thesis has a number of strong aspects. However, the findings presented in this thesis are not without limitations. The research described in Chapter 2 has the limitation that it is cross-sectional and may suffer from common method variance issues. Unfortunately, there was no access to company records of absence rates for this study. This study also did not include any measures of internal attribution. The study presented in Chapter 3 has a two-wave longitudinal design, which implies that there are indications of causality in the identified relationships. A limitation of this study, however, is that common method issues cannot be ruled out because the independent and the dependent variables are self-reported measures. In line with Chapter 2, this study also did not include a measure of internal attribution.

The limitations of Chapters 2 and 3 are mainly overcome by the study presented in Chapter 4. Here, company records of absenteeism levels were obtained and a measure of internal attribution was included. A limitation for this study is that the survey was only conducted once, which prevents drawing conclusions about causality. Additionally, more process data would have been welcome to identify the exact nature of how internal attributions influence the thinking of employees and lead to negative effects.

Although the studies presented in Chapters 2, 3, and 4 certainly have limitations, they have also helped us to try and pinpoint a number of issues that had not been addressed as clearly in earlier studies. For instance, one contribution of Chapters 2, 3 and 4 is that the linkage between unfavorable conditions and the attributional account is examined explicitly in organizational contexts on important organizational dependent variables pertaining to employee well-being. Furthermore, Chapters 2, 3, and 4 explicitly analyzed how sense-making processes are related to employee well-being, whereas earlier research usually was limited to employees’ responses to sense-making process (Van den Bos et al., 1999). Therefore, the three studies reported in Chapters 2-4 contribute to our thinking about how treatment fairness is related to employee well-being.

A limitation of the research presented in Chapter 5 is that both samples are based on a single measurement survey. Therefore it is not possible to draw conclusions about the causality of the relationships. Compared with earlier studies, however, this research also has a number of strong points. Previous research studying the effects of group norms on absenteeism used small samples of employees and only compared groups of employees with extreme low absence rates with those with extreme high absence rates (Sanders & Hoekstra, 1998, 1999). This research examined the effects of group processes on company record absence data, with two large samples and by analyzing all levels of absenteeism. It is therefore concluded that the consistent results that were obtained for two different types of analyses (common linear regression and multi-level analyses) across two different organizations (a commercial and a welfare organization) contribute to our knowledge of how group norms are related to employee well-being.

**Integrative Model**

The integrative model (Chapter 1) explicitly incorporates the specific unfavorable conditions and contexts, such as uncertainty, unfair outcomes, low cohesive groups, and internal attributions. In this way this thesis explores how both treatment fairness and group norms are related to employee well-being in times of turmoil. The research in this thesis delivers supportive evidence for the expected relationships as proposed in the model. Although this model brings a number of different research themes together and provides a useful heuristic framework for future research, there are other areas that could be included
into the model. That is, this research also indicates that the model could be more explicit and precise about the nature of the expected relationships. A couple of future additions to the model will now be discussed.

A strong point of this model is that it illustrates how the two core issues that I studied in this thesis (treatment fairness and group norms) are influenced by organizational or group contexts in very similar ways. Furthermore, this model may also help to further integrate these research topics and explore the linkages between the two issues. For instance, research indicates that employees’ reactions to procedural fairness can be moderated by their sense of group belongingness (Van Prooijen et al., 2004). In addition, work engagement can be seen as a collective workgroup phenomenon (Bakker, Demerouti, & Schaufeli, 2005; Salanova, Llorens, Cifre, Martinez, & Schaufeli, 2003). Further integration of the model presented here could thus improve our understanding of what happens when individuals are confronted with groups. Such insights may help to understand how treatment fairness and group norms jointly impact employee well-being.

Another element the model would benefit from is the inclusion of more process-related variables to understand even more exactly how fairness is related to employee well-being. From the studies examining the central research themes resulting from this model, this thesis concludes that specific conditions impact the effects both treatment fairness and group norms have on employee well-being. In addition, this thesis concludes that internal attributions play a role as well. This noted, this thesis must draw upon theory to illustrate exactly how these contexts and conditions impact this relationship. Actual process data that firmly links treatment fairness to attributions and the evaluative context, could help to pinpoint when and why to expect positive and when to expect negative effects of procedural and interactional fairness. Asking respondents questions such as “my manager makes sure you get what you deserve, even when this is not in your favor”, or “the strong emphasis placed on results within my organization can cause me stress or worry” may aid in doing this, as would the inclusion of social-cognitive process-oriented measures such as response latencies and reaction paradigms (Hafer, 2000; Ham & Van den Bos, 2008; Van den Bos & Van Prooijen, 2001).

In addition, the model could benefit from including elements that may mitigate the harmful impact of negative sense-making processes. Training focused on enhancing feelings of empowerment and self-affirmation may help employees to constructively deal with unfavorable conditions (Greenberg, 2006; Wiesenfeld, Brockner, & Martin, 1999). Therefore, items such as “I see difficult times as an opportunity to stretch myself and show others what I am capable of” or “I am capable of focusing on those things that I can change or improve, rather than on those that are outside of my control” may help explain when normal and when reversals of the normal fairness effect occur. Including variables such as these will help to understand the exact nature of attributional processes. Ultimately this will help to obtain insight into how we can best avoid negative effects of treatment fairness on employee well-being. This chapter will now elaborate on these suggested inclusions for future research directions.

**Future Research Directions**

Findings from the studies described here reveal that disregarding environments and contexts can lead to incomplete analyses. Including samples from environments in which uncertainty, unfair outcomes, low cohesive groups, and strong evaluations are prevalent, in
future studies thus will contribute to our understanding of the role specific conditions can play.

One direction for future research could be to further explore the linkage between evaluative contexts and unfavorable conditions. Brockner and colleagues (in press) described a number of reasons why treatment fairness can lead to sense-making processes, such as, for instance, the desire to feel good about oneself and to understand and feel secure about the future. In line with this, Brockner and Wiesenfeld (2005) have suggested that unfavorable conditions such as experienced uncertainty may enforce the degree of evaluation within organizations. Thus, unfavorable conditions may reinforce the negative effects of internal attributions (Brockner & Wiesenfeld, 2005). This relationship is supported by the results from the studies described in Chapters 2, 3 and 4. This noted, more research pinpointing the exact relationship between unfavorable conditions and internal attributions is encouraged. Research within a wide variety of organizations and within a wide variety of organizational contexts is also recommended. Organizational conditions such as mergers, acquisitions, and reorganizations and environmental factors such as economic uncertainty generally bring along a large amount of stress, outcome concerns and personal uncertainty for employees. Such conditions thus provide fruitful ways for researching theoretical models such as the uncertainty management model and the attributional account. Comparing results from such unfavorable conditions with more stable organizational environments will help determine the generalizability of the findings in this thesis. As mentioned in the section on the integrative model, more process data investigating exactly how treatment fairness, unfavorable conditions and attribution processes are related is also recommended. This would help to unravel some remaining questions regarding why we found reversals of the normal interactional fairness effect in the case of low internal attributions. More data on how attributional processes interact with interactional fairness in the face of unfavorable conditions would also be very valuable in this respect.

Another area for future research is to address theoretical questions concerning the exact nature of the relationship between fairness and employee well-being. For instance, it is recommended that more process data on how this relationship is impacted by unfavorable conditions is included. To illustrate this, results from Chapter 4 found supportive evidence that the reversal of a normal procedural fairness effect does occur when employees attribute internally. This noted, more process data would help to further pinpoint which cognitive processes are involved in determining the effects of fairness on employee well-being. Theories and models such as social exchange (Homans, 1961), social identity (Tajfel & Turner, 1986), stress and withdrawal models (Johns, 1997), and perceived organizational support theory (POS; Rhoades & Eisenberger, 2002) all provide frameworks to conceive the relationship between fair treatment and employee well-being. This noted, they have not explicitly been tested in this thesis.

Related to the point of the exact nature of the relationship between treatment fairness and employee well-being, is the point of whether treatment fairness may have different effects on different employee well-being types. For instance, in Chapter 2 the results reflect that in uncertain conditions, procedural fairness was related to a reversal of the normal fairness effect on absenteeism and work engagement. In contrast, procedural fairness was related to a normal fairness effect on health complaints. These differential results imply that attention needs to be spent on how these attributional processes may differ for the two different fairness types, the different unfavorable conditions and for the different dependent variables. The specific type of organization could also influence whether
or not reversals of the normal fairness occur. In addition, the particular characteristics of an organization may determine which type of employee well-being is impacted most. In Chapter 4, for instance, workaholism appears to play a prominent role. This particular organization is a welfare organization with a religious nature (comparable to the Salvation Army). In such an organization work can be considered as a calling. An environment with such an extreme working motivation may explain the particular results found for the relationship between internal attributions and workaholism. This reasoning is reinforced by studies that show that culture can have an influence on attributional processes (Mezulis, Abramson, Hyde, & Hankin, 2004). Therefore, this thesis recommends that future research addresses these types of culture/organization specific questions.

One more potentially interesting area for future research is that of the exact role of distrust within sense-making processes. The degree of trust is a central issue within relational models and uncertainty management (Lind & Van den Bos, 2002; Van den Bos & Lind, 2002). More specifically, the relational model (Tyler & Lind, 1992) states that treatment fairness provides information about the relationship and that fair treatment will result in trust in the relationship. In addition, Van den Bos and colleagues (1998) found that fair treatment of employees can help resolve interpersonal trust issues. That is, procedural fairness can act as a substitute for the lack of knowing whether an authority is trustworthy or not. Lack of trust or distrust thus appears likely to be another unfavorable condition capable of instigating sense-making processes. However, distrust in management was not included as a separate unfavorable condition in this thesis. Therefore, future research could benefit from investigating how distrust may impact the relationship between treatment fairness and employee well-being.

With regard to the effects of group cohesion, it would be valuable that future research focuses on low cohesive groups, as opposed to cohesive groups. In addition, results from this thesis suggest that future research should focus on when individual perceptions or rather the collective perception of group cohesion are most important for absenteeism. That is, both the common linear regression analyses and the multi-level analyses in this thesis support an individual-level interactive effect for group cohesion together with absence tolerance on absence behavior. This is in contrast with earlier studies, where group-level interactive effects were found (Sanders & Hoekstra, 1998, 1999). It is suggested that future research establishes under which conditions group norms, or rather the individual perceptions of group norms are important for employee well-being.

One objective of this thesis was to attempt to bring the academic world closer to the world of organizations and consultancy firms. Work engagement, for instance is receiving a considerable amount of attention from both organizational practitioners (Harter, Schmidt, & Hayes, 2002; Mercer, 2007a) and research scholars (Bakker & Schaufeli, 2008; Salanova, Agut, & Peiró, 2005). This noted, these two groups define work engagement in a conceptually different manner (Macey & Schneider, 2008). Consultants, for instance, operationalize employee engagement as something that closely resembles a combination of organizational citizenship behavior, loyalty, and affective commitment. The scientific definition of an engaged employee, on the other hand, is that of someone who is vigorous, dedicated and often happily absorbed by his or her work. If research findings are to be implemented into real life organizational practices, it is important to make sure there is a common understanding about the concept of work engagement. Therefore this thesis proposes that researchers and organizational practitioners will interact with each other more, as well more basic and more applied sciences (such as social and organizational
psychology, respectively). This collaboration will help to reach consensus about how work engagement exactly should be measured and what engagement research should set out to achieve.

As proposed above, the integrative model presented in Chapter 1 provides opportunities to further integrate the two research streams of treatment fairness and group norms (Van Prooijen et al., 2004). In future research it could be valuable to examine how group norms, such as group cohesion or belongingness may impact (reversals of) the normal fairness effect. Cohesion is related to commitment (Andrews, Kacmar, Blakely, & Bucklew, 2008) and perceived performance (Beal, Cohen, Burke, & McLendon, 2003). Therefore, it is conceivable that group cohesion may impact individual sense-making processes. That is, the degree of group cohesion may influence whether individuals feel personally responsible for what happens to them, or rather look at the group they belong to, to try and make sense of what is happening to them.

**Practical Implications**

Employees find themselves in dynamic and volatile times and organizations are having an extremely hard time managing these unpredictable conditions and providing their workforce with clarity and stability. Parallel to these harmful external conditions that impact organizations, fortunately, we can also see the development that organizations increasingly are realizing the critical importance of managing their workforce well. That is, more and more human capital is seen as an organization's greatest asset (Mercer, 2007a). The aim of this thesis is to provide practical insight into how to optimally manage employee well-being through these taxing times.

**Treatment Fairness and Work Engagement**

An important objective of this thesis was to investigate the relationship between treatment fairness and work engagement. The practical implication that can be taken from Chapter 3, but also from Chapters 2 and 4, is that both procedural and interactional fairness are directly positively related to work engagement. Treatment fairness thus appears to have the motivational potential to increase work engagement. Organizations are increasingly emphasizing the importance of work engagement (Mercer, 2007a). In addition, more and more studies are revealing the value of work engagement for organizational outcomes such as productivity, profit, less turnover (Harter et al., 2002), more financial returns (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009), and higher quality of service (Salanova et al., 2005). Most of this research examining the determinants of work engagement is conducted within the framework of the Job Demands-Resources (JD-R) model (Schaufeli & Bakker, 2004). The JD-R model has identified a number of job resources, such as supervisory support, training, technology and autonomy as antecedents of work engagement. This noted, treatment fairness is generally overlooked as a potential determinant. This thesis considers this to be an oversight and the results described in Chapter 3 provide supportive evidence to bridge these two research domains. That is, it illustrates the motivational power of treatment fairness on work engagement, and thus ultimately on business outcomes.

**Evaluative Contexts and Attributional Processes**

The research presented in Chapters 2, 3 and 4 demonstrates that evaluative contexts where internal attributions are enforced impact the effects of treatment fairness on
employee well-being. More specifically, results indicated that when employees attribute internally, procedural fairness was consistently related to reversals of the normal fairness effect on employee well-being. On the other hand, when employees were inclined to attribute internally interactional fairness consistently showed a positive relationship with employee well-being in the same unfavorable conditions. A practical conclusion that can be drawn from these findings for organizations is that simply ensuring that unfavorable conditions are communicated and introduced in a procedurally fair manner, will not always relieve the negative effects on unfavorable conditions on employee well-being. In a highly evaluative context it thus appears better to emphasize fair interactions than fair procedures. Possibly, fair interactions help employees to deal better with the disappointment of unfavorable conditions resulting from threatening changes, while fair procedures are more likely to give information about the accuracy of the decision concerning the unfavorable condition.

In addition, organizations could attempt to create a culture in which evaluation and competition is less prominent. That is, organizations could try to avoid strong internal attribution altogether. However, this goes against the current trend of increasing accountability and the economic need for competitive organizations that can justify their financial results every business quarter. In addition, results from the research in Chapter 4 consistently reveal that internal attributions, on their own, have a positive impact on employee well-being. The combination of internal attributions in the face of unfavorable conditions thus appears to be the origin of the problem.

In view of this, the ultimate suggestion is that organizations invest in training staff to adequately cope with the negative effects of unfavorable conditions such as reorganizations or acquisitions. It appears that these trainings should transfer two sets of skills. First, the training should focus on giving employees a sense of empowerment to actively and constructively respond to changes. Second, it should help employees to focus energy on the aspects within their environment that they can influence rather than trying to change aspects that are outside of their sphere of control (Wiesenfeld et al., 1999). This positive empowerment of employees seems plausible to help them to experience a more positive feeling of personal responsibility. That is, it should help employees to see internal attributions as an opportunity to regain control over the unfavorable condition they find themselves in. These suggestions can also be related to the uncertainty management model. That is, if employees are taught how to respond positively to feeling personal responsibility for their own uncertain conditions, this would lead to the desired positive effects of both procedural and interactional fairness in the face of these uncertain conditions.

**Group Norms**

With regard to how group norms are related to employee well-being in times of turmoil, the research presented in Chapter 5 delivers supportive evidence in two different organizations for the hypothesis that low group cohesion strengthens the impact of absence tolerance on absence behavior. Current organizational conditions often bring along low cohesive working groups. This implies that, more and more, organizations should try to establish a working culture or atmosphere in which individual employees feel safe and unrestricted by their team to act in line with their personal strict views on what is legitimate absence behavior. If an organization is capable of instilling a sense of personal responsibility in individual employees for their absence behavior, this combination with low cohesive groups will help organizations to ensure the lowest levels of absenteeism. These effects also
imply that, in addition to focusing only on treatment fairness, it is also important to consider group determinants and (individual perceptions of) cultural aspects concerning personal responsibility for absence behavior to optimally manage employee well-being.

**Conclusions**

The research presented in this thesis reveals that both treatment fairness and group norms impact employee well-being. This noted, it also reveals that it is important to consider how specific unfavorable conditions and contexts influence this relationship. In other words, this thesis proposes that organizations should, on the one hand, invest in management to foster fair procedures and interactions with employees. In addition, organizations should work towards establishing a culture in which individual employees feel safe and empowered to demonstrate constructive work behavior and take responsibility for their work behavior in a positive manner, even in the face of unfavorable conditions. Ultimately, this combination of measures will be beneficial to all parties involved. In today’s and tomorrow’s turbulent economic climate, organizations can not afford to manage their workforce poorly and to let these testing economic times negatively impact the motivation of employees. This will eventually lead to poor employee performance, while these times call for employees to act responsibly and put in their best efforts to turn the tide. Only this way it will be possible to respond adequately to changing environmental conditions and demands. Fair treatment of employees and a culture that fosters safety, empowerment, and a constructive sense of personal responsibility for individual employees thus will help to optimally manage the well-being of employees and eventually will pay off in multiple ways.

Employee well-being is an important issue, and considering the current turbulent times of turmoil, possibly now more than ever. The irony may be that these taxing times also make it harder than ever for organizations to actually invest in employee well-being in an effective and humane manner. Organizations tend to eagerly embrace fair treatment and good human resource practices in stable and prosperous times, and thus in times when it is relatively easy to do so. On the other hand, the focus of attention of management unfortunately appears to be less on fair treatment of employees in times of turmoil (Lind & Van den Bos, 2002). The insights from this dissertation therefore provide an important and valuable contribution. That is, this thesis helps understand the complex subject of how treatment fairness and group norms may be important to improve employee well-being, especially in times of turmoil.
References


George, J. M., & James, J. R. (1993). Personality, affect, the behavior in groups revisited: Comment on aggregation, levels of analysis, and a recent application of within and between analysis. Journal of Applied Psychology, 78, 798-804.


Greenberg, J. (1986). Organizational performance appraisal procedures: What makes them


References


References

76, 698-707.


schedules and mental and physical health: A study of a working population with non-
traditional working hours. *Journal of Organizational Behavior*, 20, 35-46.
Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and
social exchange: The differing effects of fair procedures and treatment on work
relationships. *Academy of Management Journal*, 43, 738-748.
satisfaction with personal and organizational outcomes. *Academy of Management
workaholism: Data synthesis, theoretical critique, and future design strategies.
Mercer (2007a). Engaging employees to drive global business success. Insights from
York.
Netherlands.
positivity bias in attributions? A meta-analytic review of individual, developmental, and
cultural differences in the self-serving attributional bias. *Psychological Bulletin*, 130, 711-
747.
Miles, P., Schaufeli, W. B., & Van den Bos, K. (2010). *When weak groups are strong: How group
cohesion moderates the effect of absence tolerance on voluntary absence at the individual and group level of analysis*. Manuscript submitted for publication.
Miles, P., Van den Bos, K., & Schaufeli, W. B. (2010a). *Fair treatment sometimes is not good: How treatment fairness can have negative effects on employee well-being*. Manuscript submitted for publication.
Miles, P., Van den Bos, K., & Schaufeli, W. B. (2010b). *Please don’t be nice to me: How interactional fairness can be negatively related to work engagement in the face of unfair outcomes*. Manuscript submitted for publication.
Miles, P., Van den Bos, K., & Schaufeli, W. B. (2010c). *When unfair procedures have positive effects on employee well-being: Interactions between procedural fairness and internal attributions*. Manuscript submitted for publication.


Summary

In this thesis I present the results of a number of studies investigating how treatment fairness and group norms are related to employee well-being. Employees today face the negative consequences of the current turbulent economic times and are confronted with uncertainty, unfair outcomes and low cohesive groups. With this thesis I attempt to understand how organizations can effectively manage employee well-being in these turbulent times. Therefore, I examine how procedural and interactional fairness impact well-being aspects such as work engagement, turnover intention, workaholism, health complaints and absenteeism. Additionally, with this research I explore how specific unfavorable conditions, such as experienced uncertainty and unfair outcomes, interact with fair treatment of employees to influence employee well-being. Taking the research another step further, with this thesis I examine how evaluative contexts and the internal attributions that result from them, impact employee well-being following fair treatment in the face of unfavorable conditions.

With regard to group norms and employee well-being, in this thesis I look at how the degree of group cohesion and absence tolerance both separately and in tandem are related to the absence behavior of employees.

The research population of the studies presented in this thesis includes a Dutch branch of a global consultancy firm, a Dutch wholesale and production organization, and the Dutch branch of a worldwide welfare organization. The research and analyses of the findings presented here are based on survey research within these three organizations. In addition to the self-evaluations from these surveys, this research managed to obtain company records of absenteeism rates for two of the three organizations. The second study within the wholesale and production organization, presented in Chapter 3, has a longitudinal design with one year separating the two measurements.

Chapter 1 is an introductory chapter, which presents a heuristic model that incorporates all the central research questions addressed in this thesis. Previous theoretical models and research with regard to these research questions are discussed.

Chapter 2 investigates whether normal procedural and interactional fairness effects or rather reversals of the normal fairness effect are likely to be found in a highly evaluative context. This study was executed in the Dutch branch of a global consultancy firm. The results reveal counterintuitive reversals of the normal fairness effect in the majority of cases. That is, both procedural and interactional fairness are more negatively related to employee well-being (e.g., absenteeism, work engagement, health complaints) than low procedural and interactional fairness, in the face of unfavorable conditions such as experienced uncertainty and unfair outcomes. It is reasoned that the evaluative context of this organization is responsible for the instances in which a negative impact of fair treatment on employee well-being are found. In previous studies, procedural fairness in evaluative contexts has been responsible for driving employees to internally attribute the causes of the unfavorable conditions in which they find themselves. This study, as far as I know, is the first to relate interactional fairness to this reversal of the normal fairness effect, however. In addition, this study is the first to find both normal fairness and reversal effects on the same dependent variables (health complaints and absenteeism).
Central research questions addressed in **Chapter 3** include whether procedural and interactional fairness have a direct impact on work engagement and in addition whether these relationships are impacted by experienced unfair outcomes. The study was longitudinal by design and was conducted two years consecutively within a Dutch wholesale organization. This research is the first to establish a relationship between both procedural and interactional fairness and work engagement, as these two research domains previously had not been connected. Moreover, results show that outcome fairness interacts significantly with interactional fairness to impact work engagement. That is, interactional fairness is negatively related to work engagement in the face of increasing outcome unfairness. These findings are in line with the findings in Chapter 2. This noted, significant interactive effects are found for outcome fairness with interactional fairness, but are not found for procedural fairness. This indicates that, in some conditions, interactional fairness may be more likely than procedural fairness to instigate reversals of the normal fairness effect. This is in contrast with dominant speculation, which often overlooks interactional fairness in relation to reversals of the normal fairness effect. The fact that these findings are consistent for the two separate measurements only make them more striking. This indicates a potential of interactional fairness to be negatively related to work engagement in the face of unfair outcomes.

The research in **Chapter 4** builds upon the findings of Chapters 2 and 3, in the sense that it also examines the interactive effects of organizational fairness and unfair outcomes on employee well-being. This noted, this time a formal measure of internal attribution is included. By including this measure, it is possible to determine whether the reversals of normal procedural and interactional fairness effects indeed occur when employees are inclined to attribute the causes of the unfavorable conditions internally. This study, within a Dutch social welfare organization, provides supportive evidence for the counter-intuitive phenomenon that fair procedures can have a negative impact on employee well-being during unfavorable conditions, and that the attributional account is responsible for this. Although, as predicted, reversals of the normal procedural fairness consistently occur when internal attributions are taken into account, now normal interactional fairness effects consistently occur.

These findings support that reasoning that procedural fairness is more likely to set off “sense-making” processes concerning who is responsible for the conditions employees find themselves in. On the other hand, the findings also provide supportive evidence that interactional fairness is more likely to “merely” accompany unfavorable conditions, and to rather be related to normal mitigating effects when internal attributions are taken into account.

Following the findings presented in Chapters 2, this study also reveals results in which normal fairness effects in addition to reversals were found for procedural and interactional fairness, on the same dependent variable and in the same unfavorable condition. Such differential interactive effects have rarely been found and add to uniqueness of the findings. Very similar results are found for the three different employee well-being measures (registered absence, workaholism, and turnover intention). Therefore this study concludes that the findings are fairly robust and ecologically valid.
Chapter 5 presents a study within a commercial production organization and a non-profit social welfare organization. This study investigates how group cohesiveness and absence tolerance separately and interactively impact company registered absenteeism rates. Previous studies have indicated that both absence tolerance and group cohesion have a direct impact on absenteeism rates. In addition, these studies often reveal an interactive effect of absence tolerance and group cohesion on voluntary absence.

The results of this study provide supportive evidence that absence tolerance has a direct impact on voluntary absence. This noted, in these results group cohesiveness is not significantly related to voluntary absence rates. Results do show that group cohesion interacts with absence tolerance to impact voluntary absenteeism, in the sense that in low cohesive groups, low absence tolerance is related to the lowest levels of absence, whereas high tolerance is related to the highest. It appears that low cohesive groups allow individuals to act according to their personal views and do not feel obstructed by strong group norms to do so. This accounts for the counterintuitive finding that low cohesive groups are related to the lowest levels of absenteeism. This findings contrast earlier studies that found absence tolerance to be more strongly related to voluntary absence behavior within highly cohesive groups. This thesis reasons that groups are becoming less and less cohesive in modern organizations. Therefore it may be more interesting to investigate how low cohesive groups interact with absence tolerance to impact absenteeism. The results from this study underline this reasoning.

Within this context, this study also discusses whether the interactive effect of group cohesion together with absence tolerance on voluntary absence needs to be seen as a group phenomenon? As results show that the unique variance within groups hardly predicts any additional variance in the absence rates, this study concludes that group cohesiveness could be an individual perception, rather than a shared group perception. This could imply that an individual perception of weak ties and group control may stimulate individuals within the group to act according to their personal beliefs about legitimate absence reasons. The conclusions drawn from these findings offer a new perspective within the research domain of group norms and absenteeism.

Chapter 6 pulls the empirical results of Chapters 2 to 5 together and draws general conclusions. Using the heuristic model introduced in Chapter 1, the results are discussed with regard to how treatment fairness and group norms are related to employee well-being and how this relationship is affected by specific conditions. This chapter concludes that both of the treatment fairness types, procedural and interactional fairness, indeed appear to be important for employee well-being. This noted, it also concludes that specific conditions such as an evaluative context, together with experienced uncertainty and unfair outcomes can sometimes counter-intuitively impact what organizational fairness means for employee well-being. In addition, results also show that the group norms absence tolerance and low group cohesion also interact to influence absence levels.

This chapter thus proposes that, in addition to establishing the existence of direct relationships between treatment fairness and group norms and employee well-being, it is important to view the impact of unfavorable conditions on these relationships. These interactive analyses are likely to reveal that both group norms and treatment fairness counter-intuitively sometimes can be negatively related to employee well-being. The practical implication this chapter draws from these interactive results is that merely investing in one aspect that influences employee well-being, may not be sufficient. This
chapter closes by advocating that organizations should invest in management to foster fair procedures and interactions with employees, and should invest in establishing a culture in which people feel safe and empowered to constructively deal with unfavorable conditions. Only then will the efforts of management lead to a productive and healthy working environment that is beneficial for employee well-being, even in times of turmoil.
Samenvatting

In dit proefschrift beschrijf ik de resultaten van een aantal studies naar hoe rechtvaardige behandeling en groepsnormen gerelateerd zijn aan het welzijn van medewerkers. Vandaag de dag worden medewerkers geconfronteerd met de negatieve consequenties van het huidige turbulent economische klimaat en ervaren onzekerheid, teleurstellende uitkomsten en weinig groepscohesie. Met dit proefschrift probeer ik te begrijpen hoe organisaties het welzijn van medewerkers het beste kunnen managen in deze tijden van beroering.

Om deze vraag te beantwoorden onderzoek ik hoe procedurele en interactionele rechtvaardigheid gerelateerd zijn aan aspecten van het welzijn van medewerkers, zoals bevlogenheid, verloopintentie, workaholism, ziekteverzuim en gezondheidsklachten. Daarnaast onderzoek ik hoe specifieke ongunstige condities zoals ervaren onzekerheid en oneerlijke uitkomsten interacteren met rechtvaardige behandeling van medewerkers om gezamenlijk het welzijn van medewerkers te beïnvloeden. Daarbovenop onderzoek ik hoe evaluatieve omgevingen en de interne attributies die hieruit resulteren invloed hebben op het welzijn van medewerkers wanneer ze geconfronteerd worden met deze ongunstige condities.

Met betrekking tot groepsnormen en het welzijn van medewerkers bekijk ik hoe groepscohesie en verzuimtolerantie zowel afzonderlijk als interactief gerelateerd zijn aan het verzuimgedrag van medewerkers.

De onderzoekspopulaties van de studies die in dit proefschrift worden gepresenteerd komen uit een Nederlandse vestiging van een wereldwijd adviesbureau, een groothandel- en productieorganisatie en een Nederlandse afdeling van een wereldwijde organisatie actief in de gezondheidszorg. Het onderzoek en de analyses die in dit proefschrift gepresenteerd worden zijn gebaseerd op vragenlijstonderzoek binnen deze drie organisaties. Naast de zelfevaluaties vanuit dit vragenlijstonderzoek, zijn de verzuimgegevens uit de personeelssystemen van twee van de drie organisaties meegenomen in de analyses. De tweede studie die beschreven wordt in hoofdstuk 3, uitgevoerd binnen de groothandel- en productieorganisatie, heeft een longitudinaal design met twee metingen uit twee opvolgende jaren.

Hoofdstuk 1 is een introductie hoofdstuk en presenteert een heuristisch model waarin alle centrale onderzoeksvragen van die proefschrift opgenomen zijn. Daarnaast worden in dit hoofdstuk ook gerelateerde modellen en belangrijk eerder onderzoek in het licht van deze onderzoeksvragen besproken.

Hoofdstuk 2 onderzoekt of het aannemelijk is dat in een sterk evaluatieve omgeving normale procedurele en interactionele rechtvaardigheidseffecten of eerder het omgekeerde van normale rechtvaardigheidseffecten gevonden zullen worden. Deze studie is uitgevoerd in de Nederlandse tak van een wereldwijd adviesbureau. In tegenstelling tot wat men intuitief zou verwachten, laat de meerderheid van de resultaten het omgekeerde van normale rechtvaardigheidseffecten zien. Dat wil zeggen dat wanneer medewerkers geconfronteerd worden met ongunstige condities zoals onzekerheid en oneerlijke uitkomsten, zowel procedurele als interactionele rechtvaardigheid meer negatief gerelateerd zijn aan het welzijn van medewerkers (bijvoorbeeld meer verzuim en gezondheidsklachten en minder bevlogenheid) dan lage procedurele en interactionele rechtvaardigheid. De gevallen van negatieve effecten van rechtvaardige behandeling op het
welzijn van medewerkers worden toegeschreven aan de sterk evaluatieve context van de organisatie. In eerdere studies is aangetoond dat procedurele rechtvaardigheid in sterk evaluatieve omgevingen ervoor kan zorgen dat medewerkers de ongunstige condities die ze ervaren intern kunnen attribueren. Echter, zover ik weet wordt in deze studie interactionele rechtvaardigheid voor de eerste keer in verband gebracht met het omgekeerde van normale rechtvaardigheidsgevallen. Daarnaast is voor het eerst zowel normale als het omgekeerde van normale rechtvaardigheidsgevallen gevonden op dezelfde afhankelijke variabele (gezondheidsklachten en verzuim).

De centrale onderzoeksvragen die in Hoofdstuk 3 behandeld worden, bekijken of procedurele en interactionele rechtvaardigheid een directe impact op bevlogenheid hebben en daarnaast of deze directe relatie beïnvloed wordt wanneer medewerkers oneerlijke uitkomsten ervaren. Het onderzoek design van deze studie is longitudinaal en de vragenlijst is twee jaar achter elkaar afgenomen binnen een Nederlandse groothandel en productie organisatie. Dit is de eerste studie waarin een directe relatie tussen zowel procedurele als interactionele rechtvaardigheid met bevlogenheid wordt aangetoond, aangezien deze twee onderzoeksdomeinen nog niet eerder met elkaar verbonden zijn. Daarenboven laten de resultaten zien dat oneerlijke uitkomsten samen met interactionele rechtvaardigheid een significant interactie-effect hebben op bevlogenheid. Dat wil zeggen dat interactionele rechtvaardigheid negatief gerelateerd is aan bevlogenheid wanneer medewerkers geconfronteerd worden met toenemende oneerlijke uitkomsten. Deze resultaten zijn in lijn met de resultaten die beschreven worden in Hoofdstuk 2. Hierbij moet echter wel vermeld worden dat de significante interactie-effecten die voor oneerlijke uitkomsten met interactionele rechtvaardigheid aantreffen, niet gevonden worden voor procedureele rechtvaardigheid. Een conclusie hiervan is, althans in sommige condities, dat interactionele rechtvaardigheid, eerder dan procedureele rechtvaardigheid, verantwoordelijk is voor het omgekeerde van een normaal rechtvaardigheidsgeffect. Dit contrasteert met dominante speculatie waarbij vaak over het hoofd wordt gezien dat interactionele rechtvaardigheid kan zorgen voor het omgekeerde van een normaal rechtvaardigheidsgeffect. Het feit dat deze resultaten consistent zijn voor de twee verschillende metingen maakt ze des te meer opvallend. Dit impliceert dat interactionele rechtvaardigheid de potentie heeft om een negatieve invloed te hebben op bevlogenheid wanneer medewerkers geconfronteerd worden met toenemende oneerlijke uitkomsten.

Het onderzoek in Hoofdstuk 4 bouwt verder op de resultaten die beschreven worden in Hoofdstukken 2 en 3, in de zin dat het ook de interactieve effecten van organisatierechtvaardigheid en oneerlijke uitkomsten op het welzijn van medewerkers onderzoekt. Echter, in deze studie is ook een formele meting van interne attributie meegenomen. Door ook interne attributie te meten was het mogelijk om vast te stellen of het omgekeerde van de normale rechtvaardigheidsgevallen plaatsvonden wanneer medewerkers geneigd waren om de oorzaken van ongunstige condities intern te attribueren. Deze studie is uitgevoerd in een Nederlandse gezondheidszorg organisatie. De resultaten laten evidentie zien voor het contra-intuïtieve fenomeen dat rechtvaardige procedures een negatieve impact kunnen hebben op het welzijn van medewerkers wanneer ze geconfronteerd worden met ongunstige condities, en dat interne attributies hier verantwoordelijk voor zijn. Hoewel, zoals was voorspeld, het omgekeerde van normale procedurele rechtvaardigheidsgevallen wordt gevonden als we rekening houden met
interne attributen, worden nu consistent normale interactionele rechtvaardigheidseffecten gevonden.

Deze bevindingen ondersteunen de redenering dat procedurele rechtvaardigheid ervoor kan zorgen dat medewerkers zich gaan afvragen of ze persoonlijk verantwoordelijk zijn voor de ongunstige condities waarin ze zich bevinden. Aan de andere kant laten de resultaten ook zien dat het aannemelijk is dat interactionele rechtvaardigheid de ongunstige conditie “slechts” begeleidt en eerder gerelateerd is aan normale rechtvaardigheidseffecten als rekening gehouden wordt met interne attributies.

In het verlengde van Hoofdstuk 2 laten deze resultaten zowel normale interactionele rechtvaardigheidseffecten als het omgekeerde van normale procedurele rechtvaardigheidseffecten op dezelfde afhankelijke variabele gedurende dezelfde ongunstige condities zien. Dergelijke differentiële interactie-effecten werden zelden gevonden en dragen bij aan de unieke waarde van deze bevindingen. Zeer vergelijkbare resultaten zijn gevonden voor drie verschillende vormen van het welzijn van medewerkers (ziekteverzuim, workaholism en verloopintentie). Deze studie concludeert hierdoor dat de bevindingen vrij robuust en ecologisch valide zijn.

**Hoofdstuk 5** beschrijft enerzijds een studie binnen een commerciële groothandel en productie organisatie en anderzijds binnen een non-profit gezondheidszorg organisatie. Deze studies onderzoeken hoe groepscohesie en verzuimtolerantie afzonderlijk en interactief van invloed zijn op geregistreerd ziekteverzuim. Eerdere studies tonen vaak een dergelijk direct verband tussen zowel verzuimtolerantie als groepscohesie met verzuimcijfers. Daarnaast laten die studies vaak een interactie-effect tussen verzuimtolerantie en groepscohesie op verzuimgedrag zien.

De resultaten van deze studie ondersteunen de eerder gevonden directe relatie tussen verzuimtolerantie en verzuimgedrag. Echter, een dergelijk significat direct verband wordt niet gevonden voor groepscohesie en verzuimgedrag. De resultaten laten daarentegen wel zien dat groepscohesie in interactie met verzuimtolerantie wel invloed op het verzuimgedrag uitoefent. Het interactiepatroon laat zien dat lage verzuimtolerantie in weinig cohesieve groepen gerelateerd is aan de laagste verzuimcijfers, terwijl hoge verzuimtolerantie in weinig cohesieve groepen gerelateerd is aan de hoogste verzuimcijfers. Het lijkt erop dat weinig cohesieve groepen individuen in staat stellen om zich te gedragen in lijn met hun persoonlijke normen aangaande verzuimgedrag en zich niet belemmerd voelen door groepsnormen. Hierdoor worden de contra-intuïtieve resultaten verklaard dat weinig groepscohesie gerelateerd is aan de laagste niveaus van verzuim. Deze bevindingen contrasteren met eerdere onderzoeken waarbij gevonden werd dat verzuimtolerantie sterker gerelateerd aan verzuimgedrag was in sterk cohesieve groepen.

In dit hoofdstuk wordt beredeneerd dat groepen steeds minder cohesief worden. Daaroor is het wellicht interessanter om te onderzoeken hoe weinig groepscohesie interacteert met verzuimtolerantie op verzuimgedrag. Deze resultaten onderstrepen deze redenering.

Vanuit dit perspectief bezien, bespreekt dit hoofdstuk ook de vraag of het interactie-effect tussen groepscohesie en verzuimtolerantie gezien moet worden als een groepsfenomeen. Aangezien de resultaten laten zien dat de unieke variantie binnen groepen nauwelijks additionele variantie in het verzuimgedrag verklaart, concludeert dit hoofdstuk dat groepscohesie wellicht eerder een individuele perceptie is dan een gedeelde groepsperceptie. Dit zou kunnen impliceren dat de individuele perceptie van geringe
groepsbanden en groepsdruk individuen zou kunnen stimuleren om zich in lijn te gedragen met hun persoonlijke normen aangaande wat ze als legitieme verzuimredenen beschouwen. De conclusies die getrokken worden vanuit deze resultaten bieden een nieuw perspectief binnen het onderzoeksdomein van groepsnormen en verzuimgedrag.

Hoofdstuk 6 brengt alle empirische resultaten van Hoofdstukken 2 tot 5 met elkaar in verband en trekt hieruit een aantal algemene conclusies. Aan de hand van het heuristische model uit Hoofdstuk 1 worden de resultaten behandeld voor wat betreft hoe rechtvaardige behandeling en groepsnormen gerelateerd zijn aan het welzijn van medewerkers en hoe deze relatie beïnvloed wordt door specifieke ongunstige condities. Dit hoofdstuk concludeert dat zowel procedurele als interactionele rechtvaardigheid inderdaad belangrijk blijken voor het welzijn van medewerkers. Echter, in dit hoofdstuk wordt ook geconcludeerd dat specifieke condities, zoals een evaluatieve omgeving in combinatie met ervaren onzekerheid en oneerlijke uitkomsten, soms op contra-intuitieve wijze invloed kunnen hebben op de relatie tussen rechtvaardige behandeling en het welzijn van medewerkers. Daarnaast worden de resultaten belicht waarin de twee groepsnormen verzuimtolerantie en groepsochoesie in interactie invloed uitoefenen op het verzuimgedrag van medewerkers.

Wanneer alle resultaten tezamen beschouwd worden, stelt dit hoofdstuk dat, naast de vaststelling dat er een directe relatie tussen groepsnormen en rechtvaardige behandeling met het welzijn van medewerkers is, het belangrijk is om de impact van ongunstige condities op deze relaties te bekijken. Dergelijke interactie-analyses zullen waarschijnlijk laten zien dat zowel groepsnormen als rechtvaardige behandeling soms contra-intuïtief negatief gerelateerd kunnen zijn aan het welzijn van medewerkers. Als praktische implicatie vanuit deze interactie-effecten stelt dit hoofdstuk vast dat het slechts investeren in één aspect dat invloed op het welzijn van medewerkers uitoefent wel eens onvoldoende zou kunnen zijn. Dit hoofdstuk sluit af door ervoor te pleiten dat organisaties erin moeten investeren dat het management geëquipeerd is om medewerkers procedureel en interactioneel rechtvaardig te behandelen. Echter, daarnaast is het ook belangrijk dat organisaties investeren in een organisatiecultuur waarin medewerkers zich veilig en gesterkt voelen om op constructieve wijze om te gaan met ongunstige condities. Alleen dan zal er een productieve en gezonde werkomgeving ontstaan dat het welzijn van medewerkers bevordert, ook in tijden van beroering.
Dankwoord

Het is vreemd om te bedenken dat deze periode van onderzoek en schrijven ten einde is. Wanneer je even de tijd neemt om terug te kijken op zo’n periode, dan valt pas echt op hoeveel mensen erbij betrokken zijn geweest en hoeveel je ervan geleerd hebt. Dit is dan ook het moment waarop ik deze mensen graag wil bedanken en ook even de ruimte neem om te reflecteren op welke lessen hieruit te trekken zijn.

Laten we beginnen bij het begin.
Mijn oud-manager en collega, Jürgen Hell. Je hebt mij vanaf het begin gesteund en gestimuleerd in mijn ambitie om te promoveren. Daarnaast heb je hiervoor, zowel binnen Mercer als op de universiteit, jouw ‘lobby-vaardigheden’ effectief voor mij ingezet. Op de kritieke momenten was je er altijd en kon ik voor zowel inhoudelijk als minder inhoudelijk advies bij je terecht. Zeker voor wat betreft de beginfase van mijn onderzoek en het opstarten, denk ik dat het een stuk lastiger was geweest om mijn ambitie te realiseren zonder jouw hulp. Uiteraard ben ik je daar erg dankbaar voor.

Natuurlijk wil ik ook alle organisaties en de medewerkers bedanken die hebben meegewerkt door de vragenlijsten in te vullen. Dankzij jullie ben ik er in geslaagd om interessante data te verzamelen en om mijn ideeën over hoe het eraan toe gaat binnen organisaties aan de hand van theoretische modellen te toetsen. Zonder data geen proefschrift.

Mijn ex-collega’s bij Mercer wil ik bedanken voor hun flexibiliteit en persoonlijke interesse. Ik heb regelmatig gewerkt met de balans tussen werken en onderzoek en van jullie kant was er altijd begrip op het moment dat ik mijn grenzen goed aangaf en me soms iets minder flexibel opstelde. Ik ben dankbaar voor de vrijheid en de tijd die ik heb gekregen om hieraan te kunnen besteden.

De leden van de beoordelingscommissie, Prof. Tanja van der Lippe, Prof. Toon Taris, Prof. Naomi Ellemers, Prof. Nico van Yperen en Prof. David de Cremer wil ik hierbij ook van harte bedanken voor de bereidheid om mijn proefschrift te beoordelen.

En dan natuurlijk mijn promotoren Kees van de Bos en Wilmar Schaufeli. Wilmar, dit project is begonnen bij jou omdat jij het hebt aangedurfd om je voor mij hard te maken. Kees, al snel werd jij bij mijn promotie betrokken en wat mij betreft vullen jullie elkaar goed aan als promotoren. Hoewel jullie het nauwelijks met elkaar oneens zijn geweest, hebben jullie toch best verschillende zaken benadrukt tijdens onze bijeenkomsten en besprekingen. Wilmar, jij stuurde vaak op de grote lijnen en wist zaken snel in een groter perspectief te plaatsen (overigens nooit ten koste van inhoudelijkheid en kwaliteit). Dit heeft mij zeer geholpen om gaandeweg het project de eindstreep altijd nog (ergens) aan de horizon te kunnen zien en heeft me gestimuleerd om vol te houden. Terwijl jij, Kees, een aantal keer met mij ervoor bent gaan zitten om mij te helpen om een noodzakelijk kwaliteitsslag te maken. Jouw perfectionisme in combinatie met jouw respectvolle manier om zaken aan mij uit te leggen, zijn op een aantal momenten van cruciale betekenis voor mij geweest. Ook tijdens (flinke) teleurstellingen was je altijd rustig, realistisch en ondersteunend. Hoewel ik als buitenpromovendus soms best op afstand van de universiteit aan het werk was, hebben jullie allebei die afstand een stuk verkleind door altijd snel op mijn vragen te

[125]
reageren, ongeacht hoe groot of klein ze waren. Nu ik een beetje op het project terugkijk, valt me op dat de consistentie van jullie feedback, en het effect hiervan op mij, op momenten parallelleken leek te vertonen met de uitkomsten van mijn onderzoek. Zo nu en dan had ik het best fijn gevonden als ik jullie had kunnen betrappen op oneerlijkheden of inconsistenties, dan had ik jullie de schuld kunnen geven van mijn frustraties. Gelukkig is hier natuurlijk nooit sprake van geweest. Hoewel het soms confronterend was, kreeg ik hierdoor wel telkens heel goed zicht op wat ik moest verbeteren en het vertrouwen van jullie dat het me zou gaan lukken.

Ten slotte wil ik jullie laten weten dat jullie me beiden ook als personen erg geïnspireerd hebben. De vanzelfsprekendheid waarmee jullie allebei een autoriteit op jullie eigen gebieden zijn en tegelijkertijd als individuen zeer benaderbaar en behulpzaam zijn, vind ik bewonderenswaardig. Ik ben trots en dankbaar dat ik dit samen met jullie heb mogen doen.


My parents. Dad, the two of us both started on our PhD projects more or less at the same time, and on top of that we both completed them more or less around the same time as well. Even though our subject matters are (very) different, there were plenty of parallels and similarities from which I could learn. Mum, thank you for always being patient with me (and dad) and for putting up with the fact that at times things seemed they were never going to end. Both of you, thank you for always listening, for being willing to check my faulty English and thanks for always being supportive, no matter what.

Laurenz. Er zijn momenten geweest waarop ik me afvroeg of het me ooit nog ging lukken om mijn promotieonderzoek af te ronden. Jij was altijd geduldig en wist altijd de juiste vragen te stellen of de juiste opmerkingen te maken, zodat ik het wel weer zag zitten. De leuke momenten hebben we gevieren en op moeilijke momenten heb ik erg veel steun aan je gehad. Bedankt.

Ten slotte zou ik willen opmerken dat ik dankbaar ben voor het doorlopen en meemaken van het hele proces en project op zichzelf. Je komt jezelf op een aantal momenten best tegen en het is lastig om na die momenten verder te gaan zonder dat je iets doet met wat deze spiegel je voorhoudt. Daarnaast heb ik mezelf altijd gezien als gedisciplineerd en als iemand met veel doorzettingsvermogen. Toch heb ik het als een behoorlijke opgave ervaren om mijn promotieonderzoek te combineren met ‘gewoon’ werken. Soms luikt het relatief makkelijk om die twee zaken te combineren, maar af en toe ook weer helemaal niet en kun je het gevoel hebben de controle compleet te verliezen. Door dan toch zo’n heel traject van begin tot eind af te lopen, met alle fasen die je hierin moet zien af te ronden, heb ik geleerd om beter met mijn grenzen om te gaan. Soms ben ik hier (ver) overheen gegaan en op
andere momenten heb ik mezelf ook echt tot de orde moeten roepen om met de juiste energie weer aan de slag te gaan. Van al deze aspecten heb ik veel geleerd en ook daar ben ik erg dankbaar voor.

Er zijn voor- en nadelen verbonden aan het zijn van een buiten-promovendus. Aan de ene kant geeft het je de mogelijkheid om een verbinding te maken tussen de wetenschap en de praktijk en om de kennis van beide ‘wereldjes’ te combineren en bij elkaar toe te passen – wat mij betreft een persoonlijke nevendoelstelling van mijn proefschrift. Aan de andere kant sta je op iets meer afstand van de academische wereld dan een gemiddelde aio, waardoor promoveren soms nog meer solistisch van aard kan zijn dan het gewoonlijk al is. Je bent veel op jezelf aangewezen, maar ik schat in dat ik hierdoor ook in hogere mate een beroep heb moeten doen op de begeleiding en ondersteuning van mijn omgeving. Vandaar dat het op deze plek zeker goed is geweest om de betrokken mensen hiervoor nog eens expliciet te bedanken.
Curriculum Vitae

