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Process-based leadership: Fair procedures and reactions to organizational change[☆]

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Abstract

The process-based model of leadership draws upon the procedural justice literature to hypothesize that leaders motivate their followers to accept change by exercising their authority via fair procedures. The model draws upon social identity theory to hypothesize that this procedural justice influence is linked to the identity relevance of procedural justice information. As a consequence, it is hypothesized that those who are more strongly identified with their company will be more influenced by procedural justice information. This hypothesis is tested in a merger situation in which leaders are seeking employee acceptance for a change in corporate structure in a situation in which their company is “taken over” by another. The study examines whether the fairness of the procedures managers use to implement the merger shapes employee’s subsequent reactions to the new company and whether this influence is stronger when identification is high as predicted by social identity theory. The results suggest that if leaders act in procedurally fair ways, they are viewed as more legitimate and more competent, and employees are more accepting of organizational change. This influence is stronger among those who identify more highly with the organization.

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1. Introduction

Organizations often seek to increase their viability and long-term prospects for survival by merging with other companies (Marks, 1997). Recent history makes it clear, however, that merging does not guarantee viability. For mergers to be successful those leading a company need to implement the merger in ways that successfully engage their employees in the new company created by the merger and in its culture. In other words, mergers present a challenge to leaders who must implement the change in ways that motivates the cooperation of their employees in the new company in a situation in which valued identities are threatened and may need to change (Anastasio, Bachman, Gaertner, & Dovidio, 1997; Haunschild, Moreland, & Murrell, 1994; Hogan, Curby, & Hogan, 1994; Skevington, 1980; Terry & Callan, 1998; Terry, Callan, & Sartori, 1996; Terry, Carey, & Callan, 2001; Terry & O'Brien, 2001).

The fact that during changes employees have to be empowered so that they are willing to work for the new company and are satisfied with the new identity that they will adopt suggests that leaders need to have qualities that facilitate employees to transform from one situation to another (i.e., transformational leadership; Shamir, House, & Arthur, 1993; Yukl, 1999). Indeed, transformational leadership has been argued to motivate people to go beyond their own self-interest and to pursue goals and values of the collective. As such, leaders should indeed be able to empower employees as demonstrated by research showing that these leader types positively influence (a) employees' organizational citizenship behavior, performance, and organizational commitment (Judge & Piccolo, 2004; Lowe & Galen Kroeck, 1996), and (b) employees' identity, self-esteem (Kark, Shamir, & Chen, 2003), and feelings of competence and self-confidence (Conger & Kanungo, 1998; Shamir et al., 1993).

Although a great deal of research has revealed supportive evidence of the effectiveness of this leadership style, it is also fair to note that leadership research, at the same time, has not explored further whether other important organizational dimensions (that may be related to transformational leadership) also lead to equally effective consequences during times of change (cf. De Cremer, van Dijke, & Bos, 2005).

In the present article, we suggest that one important organizational dimension that may play a role in this process (and one that has been neglected by the leadership literature) is whether leaders enact procedures in a fair manner or not (see Greenberg, 2004; Tyler, 1990; Tyler & Huo, 2002). Recently, it has been argued that procedural justice can also be seen an act of social influence (Tyler, 2001) and therefore could be considered an important component of leadership (Chemers, 2001; De Cremer & Alberts, 2004). Furthermore, research by Pillai, Schriesheim, & Williams (1999) pointed out that transformational leaders showed a strong relationship with employees' perceptions of procedural justice. Moreover, recently, Judge, Piccolo, & Ilies (2004) further suggested that insights from research on leadership styles high in consideration (such as transformational leadership) have to be integrated with insights from the justice literature.

Thus, it seems clear that it is time to examine whether procedural justice can also reveal positive consequences in terms of empowerment during times of change (just as transformational leaders do). Therefore, in the present research, we aim to identify procedural justice as an effective leadership tool that may help in motivating employees to cooperate with the new company and to identify with the company. Also, it will be examined to what extent, enactment of fair procedures affects the way employees look at the leader by focusing on ratings of leader's competence and legitimacy.

2. Leadership and procedural justice

Procedural justice can be referred to as the extent to which organizations and their leaders use correct and fair procedures in allocating outcomes (Tyler, 1988). Different operationalizations of procedural justice exist, such as, for example, giving group members voice in the decision making process, being accurate in evaluations leading to a decision, or acting in a consistent manner across time and people (Leventhal, 1980). In exploring the validity of this construct of procedural justice as an important leadership tool in times of change, this article makes two arguments about leadership.

The first is that leaders can gain acceptance for their vision and can motivate their followers through leadership via fair procedures. Following the arguments of the group engagement model (Tyler & Blader, 2000, 2003) we test the hypothesis that leaders can engage their employees in a new company through the policies and practices by which they implement the merger (Lind & Tyler, 1988; Tyler, 2000, 2003a, 2003b, 2004; Tyler & Lind, 1992; Tyler & Smith, 1998). This process-based style of leadership leads to self-motivated and intrinsic behavior to do well for the collective and organization (De Cremer & Tyler, 2005b).

The procedural justice hypothesis suggests that if leaders lead by exercising their authority in ways that their followers experience as being fair, then those followers become more supportive of their goals, and voluntarily act in cooperative ways that support the organization. This procedural focus is contrasted to a distributive focus, which includes the influence of employee views about changes in their own outcomes and opportunities resulting from the merger. Thus, from this perspective, the enactment of fair procedures is effective in enhancing cooperation not because it may reveal economic or instrumental benefits, but because it affects employees' motives in such a way that they become to see the goals of the company as their own (De Cremer & van Vugt, 1999; Van Knippenberg, 2000).

The second argument is that when leaders manage through fair procedures, they encourage people to identify with organizations, leading to voluntary and willing cooperation (De Cremer, 2004; De Cremer & Tyler, 2005b; De Cremer & van Knippenberg, 2002; Tyler, 2004; Tyler & Blader, 2000, 2003; Van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). The importance of identity in shaping people's relationships to organizations is widely acknowledged since it makes people live by the group rules and norms, makes them more satisfied within the company, and makes them consider the company as an important aspect of their own self-definition (Ashforth, 1998; Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; Elsbach, 1999; Hogg & Terry, 2000; Ibarra, 1999; Wrzesniewski & Dutton, 2001).

Even more interesting, within the social identity theory tradition (Hogg & Abrams, 1988; Van Knippenberg et al., 2004), research has directly addressed the role of identity in shaping reactions to change (Anastasio et al., 1997; Chreim, 2002; Terry & Callan, 1998; Terry, Callan, & Sartori, 1996; Terry, Carrey, & Callan, 2001; Terry & O'Brien, 2001). For example, Van Knippenberg, van Knippenberg, Monden, & de Lima (2002) conducted a field study of a merger in which they demonstrate that continued identification after a merger is linked to the judgment that one's own organization dominates the merger, a finding recently replicated within a laboratory setting (Van Leeuwen, van Knippenberg, & Ellemers, 2003). Thus, procedural justice is believed to be an important tool to shape employees' sense of identification with the company.

3. Procedural justice and identity

As argued earlier, the present study considers the role of two issues—procedural justice and identity—in shaping reactions to the merger and draws upon a theoretical framework which argues that these two issues are related. Procedural justice is suggested to play an important role in shaping people's attitudes, feelings, and cooperation because it shapes their identity and sense of themselves (De Cremer & Tyler, 2005b; Tyler & Blader, 2000, 2003; Tyler & Smith, 1999). The argument that procedural justice influences people through identity mechanisms is made in the group value model of procedural justice (Lind & Tyler, 1988); the relational model of authority (Tyler & Lind, 1992); the group engagement model of cooperation (Tyler & Blader, 2003); and the self-based model of cooperation (De Cremer & Tyler, 2005b).

The theoretical argument that procedural justice and identity are linked is supported by the findings of a wide variety of studies, including experimental and field studies showing that procedural justice shapes self-esteem (Koper, van Knippenberg, Bouhuijs, Vermunt, & Wilke, 1993; Tyler, Degoe, & Smith, 1996), leads to the merger of the self with groups and organizations (De Cremer, Tyler, & den Ouden, 2005) and makes the self more accessible (De Cremer, 2005). This theory is tested here as a moderation argument: that procedural justice will be more influential among those who identify more strongly with the group.

While it is important to establish a role of procedural justice in reactions to organizational change, the key contribution of this analysis is not the replication of the prior finding that procedural justice shapes reactions to change. Rather, it is in testing the argument that social identity processes are central to understanding the role of procedural justice. As noted above, process-based approaches to leadership argue that procedural justice is influential because it carries an identity relevant message.

The role of identity in shaping reactions to leaders argues for a moderation hypothesis. That hypothesis is that procedural justice should have greater influence upon people when they identify more strongly with the group, organization or society with which they are dealing. Indeed, prior research has convincingly shown that fair procedures significantly affect employees' identity and self (see De Cremer & Tyler, 2005b, for an overview). As a result, it follows that those who care most about feedback communicating identity-relevant information (i.e., procedural justice) should be influenced most strongly by this procedural feedback given by the leader. Thus, a moderation approach holds that people with high identification are supposed to interpret the given situation differently than those with low identification; that is, they will evaluate the situation more in terms of identity concerns. Consequently, if those high in identification are affected most by procedural fairness, it suggests that procedures carry with it information relevant to identity issues.

To summarize, to test the moderation hypothesis that procedural justice has greater influence when people identify more strongly with their organization, this study examines the influence of the interaction between social identification and the weight given to procedural justice when deciding whether to accept the changes associated with a merger. Those employees with higher levels of identification are hypothesized to show a stronger procedural justice influence on acceptance of the leader's vision and motivation to work for the new company.

4. Procedural justice affecting leadership characteristics during change

Of course, for procedural justice to be seen as an important leadership tool, it is important to demonstrate both that enactment of fair procedures leads to similar positive consequences (just as

transformational leadership styles do), and that leader's procedural justice affects important leadership characteristics. In the present context of change, we decided to focus on two characteristics that shape employees' belief that the leader is the appropriate person to lead the change. More precisely, in the process of change, leader's fair procedures should shape whether employees consider the leader to be a legitimate decision-maker and that the leader can be trusted to deal with matters in a competent way.

Legitimacy is the belief on the part of employees that the actions of their leaders ought to be accepted. Legitimacy reflects the view that leaders ought to be deferred to and their decisions and policies accepted (Tyler, *in press*). Such views are important because they lead employees to voluntarily accept the decisions and strategies chosen by their leaders (Tyler & Blader, 2000, 2003). In this case, employees are more likely to accept changes linked to a merger without opposition and undermining behavior if they believe that their leaders are entitled to have their strategic decisions accepted.

In the present article, we define trust in leader competence as reflecting the view that management understands how to keep the company successful and competitive. Thus, leaders have to be competent as well, because "only then will subordinates be confident that the leader's ideas are relevant and useful" (Salam, 2004, p. 274). As such, trust in leader's competence reflects a kind of practical trust that creates circumstances under which employees will be more creative and willing to deal with problems and change (e.g., Deluga, 1994; Robinson, 1996).

Taken together, using these legitimacy and competence judgments this study examines whether procedural justice shapes acceptance through influencing the degree to which employees view their leaders as legitimate and/or to trust that they are competent. In other words, we test whether changes in employee judgments about the leader mediate the relationship between procedural justice and acceptance of change.

5. The present research

To summarize, the focus of this study is on the actions taken by those leading the company during the merger process. Leadership is central to change and, in particular, to the ability to produce "constructive or adaptive change", as leaders "risk disorder and instability as they seek out opportunities for change" (Bedeian & Hunt, 2005). Leadership requires the development of a vision, communication of that vision, and the ability to set purpose or direction (Bedeian & Hunt, 2005). It also involves inspiration and motivation of followers, i.e., the ability to get people moving in the leader's desired direction (Bedeian & Hunt, 2005). Since this study focuses upon upper management, rather than on those in charge within an employee's workgroup, and focuses on the communication of a vision and the motivation of employees, we view it as a study of leadership. We distinguish it from management (Yukl, 2002), which involves the establishment of order, predictability, and regularity in organizations (Kotter, 1990), i.e., to the everyday implementation of the leader's vision. Leadership is defined in terms of the actions that are taken by upper management to implement the merger.

In this study, the situation examined is a merger in which the unit being studied was completely taken over by and incorporated into another company. The tenor of the takeover was "hostile" and at the time of the study the employees interviewed were concerned about whether or not they would be able to retain their jobs. These fears proved to be well founded, since in the ensuing months, many in the division were terminated or have their salary and job status lowered. Hence, this setting is one in which

employee's culture was being dominated by that of another organization, and their continued identification and loyalty was very much at issue.

The dependent variables assessed are reactions to the new organization. Drawing upon leadership theories that address leadership in the context of change (Kotter, 1990), two aspects of leadership are identified: acceptance of the leader's vision that the new merged company is desirable and motivation by employees to work on behalf of that new company.

6. Method

This study examines employee acceptance of a merger. All the employees were members of a group that was "taken over" by another corporation. Their leaders were encouraging them to accept the goals of the merger and to work for the success of the new company. This study focuses on two aspects of employee's reactions to the merger: their acceptance of the vision underlying the merger and their motivation to help the company succeed.

6.1. Sample

This study was conducted within the US division of a large multinational financial services company. Every employee in that division received a questionnaire assessing various aspects of their organizational attitudes and behaviors. Employees received the questionnaires via interoffice mail and were asked to complete and return them directly to the investigators using enclosed business-reply envelopes. Employees were permitted to complete the survey while at work and were assured confidentiality by both the investigators and the organization's management. A total of 1350 surveys were distributed and 540 were returned, resulting in a 40% response rate.

Of the 540 respondents, 44% were male, and 50% had pursued some post-bachelor's education. The mean tenure with the firm was 13 years and the mean age was 42 years. The sample was 69% Caucasian, 10% Latino, 5% African-American, and 6% Asian. The demographics of the sample closely resembled those of the overall sample. The average salary of the overall sample of 1350 was \$84,000, but salary information was not collected on the questionnaire itself for privacy reasons.

6.2. Questionnaire

The questionnaire asked respondents to evaluate the merger process.

6.3. Independent variables

The items for the procedural justice scale are drawn from previously validated scales reflecting the dimensions of procedural justice in the relational model of Tyler & Lind (1992) and validated in a work setting by Tyler & Blader (2000). Five dimensions are drawn from that prior work: overall procedural justice; voice; neutrality; interpersonal respect; and trust. A factor analysis using varimax rotation to maximize differentiation among items identified two distinct judgments; procedural justice and outcome change.

6.3.1. Procedural justice

A distinct section of the questionnaire asked respondents a set of questions about the merger process. Five aspects of the relational model of procedural justice were assessed. Those items are shown in Table 1. Exploratory factor analysis indicated that all five elements of procedural justice loaded on a single factor. As a consequence, a 14-item scale of procedural justice was created ($\alpha=0.95$).

6.3.2. Outcome change

A separate section of the questionnaire asked respondents to evaluate the consequences of the merger for outcomes in the organization. Prior research suggests that judgments about outcome favorability and outcome fairness are psychologically similar and can be viewed as reflecting the same psychology (Tyler, 1994; Tyler & Lind, 1992). In this case, indices of both outcome constructs were included in a factor analysis and found to load on a single factor (see Table 1). As a consequence, a single outcome scale was created (five items, $\alpha=0.88$).

6.4. Dependent variables

Two aspects of acceptance were measured: whether the merger was a good strategic move for the company and motivation to work for the new company. The items reflecting these two aspects of acceptance were factor analyzed using an exploratory analysis and yielded a two-factor solution. The items for both scales are shown in Table 2. The first scale indexes acceptance of the leader's vision that the merger is a good strategic decision (three items; $\alpha=0.90$). The second scale measured

Table 1

Factor analysis of the independent variables: the implementation of the merger

	Procedural justice	Outcome changes
Decisions were fairly made	.74	
Decisions were fairly implemented	.78	
Employees were treated fairly	.77	
Employees were kept informed	.65	
Employee views were considered	.75	
I received adequate information	.78	
Explanations were honest	.76	
Objective information was used	.73	
Decisions were unbiased	.78	
Employees rights were respected	.78	
Employees were treated with dignity	.68	
My needs were considered	.67	
The company tried to do what was best for me	.71	
The company was concerned about employee well-being		.44
In general, salary and benefit changes were fair		.50
My salary/benefit changes were fair		.54
My salary/benefit changes were satisfactory		.93
I have more opportunities		.92
My overall opportunities have improved		

Exploratory factor analysis used maximum-likelihood extraction and varimax rotation. All loadings above .40 are shown.

Table 2

Factor analysis of the dependent variables: reactions to change

	Accept leader's vision	Motivated to work for the company
I think the merger was a good move for [my company]	.85	
[The new company] is well positioned for the future	.84	
Combining companies created a better company	.86	
I do not like my job as much as I did before		.93
I do not do my job as well as I did before		.51

Exploratory factor analysis used maximum-likelihood extraction and varimax rotation. All loadings above .40 are shown.

employee's motivation to work for the new company (two items, $\alpha=0.68$). Both items in the motivation scale were reverse scored to create a scale in which high scores indicate voluntary acceptance and cooperation.

6.5. Moderator

This is the social identification with the new company (two items, $\alpha=0.91$). The items were: "I am less connected to [the new company] after the merger than I was to [the old company] before the merger (reverse scored)" and "I identify less strongly with [the new company] now than I did with [the old company] before the merger (reverse scored)".

6.6. Leadership evaluations

Employees were also asked questions about two aspects of their general views about higher level managers: legitimacy and competence. These questions about the legitimacy of leaders and trust in their competence were used because prior research (Tyler & Blader, 2000) showed that they are good predictors of behavior in work settings. A factor analysis indicated that these items loaded on a single factor, however, when separate scales were created, they were not strongly correlated ($r=0.30$). Therefore, two scales were used.

6.6.1. Legitimacy of leaders

A seven-item scale was used ($\alpha=0.78$). The first four items focused on the employee's supervisor. The items were: "Someone who disregards their supervisor's decisions hurts their work group"; "Work organizations are most effective when people follow the directives of their supervisors"; "People should usually defer to their supervisor's decisions even when they could go to other to try to change them"; and "It is wrong to ignore a supervisor's decisions, even if you can get away with it". The last three items focused on management. The items were: "People should follow organizational rules and policies, even when they think they are wrong"; "Respect for the organization is an important value for employees to have"; "In the long run, the organization is better off if workers willingly follow the rules".

6.6.2. Trust in the competence of leaders

The competence index assessed the degree to which employees believed that their leaders were capable and able to effectively manage the company. A two-item index was created ($\alpha=0.82$). The

items were: “I think that management is making competent decisions about how to solve problems in our organization” and “I trust management to make an effective plan that will keep the company competitive in the future”.

7. Results

Factor analysis of the items measuring procedural justice and outcomes was used to establish the two independent variables; procedural justice and outcomes. A similar factor analysis was used to identify the two dependent variables; whether the merger was a good strategic decision and motivation to work on behalf of the company. Varimax rotation was used to maximize the spread of items across factors. The factor analysis for the independent variables is shown in Table 1, and for the dependent variables in Table 2. The two leadership judgments of legitimacy and competence were also treated as distinct. The intercorrelations among the variables, as well as their means and standard deviations are shown in Table 3.

The hypothesis of process-based leadership is that the acceptance of change is linked to how leaders manage change—to the fairness of the exercise of authority during the merger process. Regression analysis was used to test this hypothesis. The analysis examined the role of the procedures using during the merger and merger based changes in outcomes on employee acceptance of the new company. In the analysis, all terms were entered into the equation simultaneously.

The results of a regression analysis including the procedural justice of the merger process and outcomes from the merger are shown in Table 4. They indicate that in the case of leader legitimacy, procedural justice was important ($\beta=0.21$, $p<.001$), but not outcomes ($\beta=0.09$, ns). When the issue was trust in leader competence, both procedural justice ($\beta=0.48$, $p<.001$) and outcomes ($\beta=0.22$, $p<.001$) shaped employee trust in the competence of their leaders.

With judgments about whether to accept the leader’s vision that the merger was a good strategic decision procedural justice had an influence ($\beta=0.37$, $p<.001$), as did outcomes ($\beta=0.27$, $p<.001$). In the case of motivation, procedural justice had a significant influence ($\beta=0.23$, $p<.001$), but not outcomes ($\beta=0.08$, ns). Finally, with identity, procedural justice had a significant influence ($\beta=0.30$, $p<.001$), as did outcomes ($\beta=0.25$, $p<.001$). Hence, procedural justice was generally the most important factor shaping reactions to leaders and to the new company, but outcomes also had some influence on employee reactions to the merger.

Table 3
Intercorrelations of variables

	<i>M</i>	S.D.	1	2	3	4	5	6	7
1. Procedural justice of the merger	2.85	1.04							
2. Outcomes during merger	2.52	1.01	.61						
3. Legitimacy	4.51	0.70	.27	.22					
4. Trust leader competence	3.53	1.25	.59	.51	.30				
5. Acceptance of vision	4.24	1.27	.52	.49	.26	.51			
6. Motivation	4.21	1.08	.26	.22	.20	.33	.36		
7. Social identification	3.49	1.21	.44	.43	.21	.38	.46	.44	

Entries are Pearson correlations. They are all significant at $p<.001$.

Table 4
Reactions to change

Measure	Leader legitimacy		
Coefficients	Unstandardized (standard error)	Standardized (beta)	
Procedural justice	.14 (.04)	.21	$t(515)=3.92^{***}$
Outcomes	.06 (.04)	.09	$t(515)=1.64$
Adjusted R^2	7%	$F(2,515)=20.93^{***}$	
Measure	Trust in leader competence		
Procedural justice	.58 (.05)	.48	$t(515)=11.25^{***}$
Outcomes	.27 (.05)	.22	$t(515)=5.71^{***}$
Adjusted R^2	41%	$F(2,515)=181.50^{***}$	
Measure	Accept leader vision about the merger		
Procedural justice	.45 (.06)	.37	$t(515)=8.02^{***}$
Outcomes	.33 (.06)	.27	$t(515)=5.76^{***}$
Adjusted R^2	32%	$F(2,515)=124.56^{***}$	
Measure	Motivation to work for the company		
Procedural justice	.26 (.06)	.23	$t(514)=4.24^{***}$
Outcomes	.09 (.06)	.08	$t(514)=1.43$
Adjusted R^2	8%	$F(2,514)=22.36^{***}$	
Measure	Social identification		
Procedural justice	.40 (.07)	.30	$t(514)=6.02^{***}$
Outcomes	.34 (.07)	.25	$t(514)=5.13^{***}$
Adjusted R^2	24%	$F(2,514)=81.64^{***}$	

Scales are scored so that high scores indicate fair procedures, good outcomes, high legitimacy, trust in competence, accepting the leader's vision, working for the new company, and identifying with the new company.

*** $p < .001$.

The second issue considered is whether procedural justice shapes acceptance because it shapes views about leaders. This involves a mediation analysis (Baron & Kenny, 1986), which will be conducted using structural equation modeling (Arbuckle & Wothke, 1999). In the model, individual items are used as indicators to create six latent constructs: procedural justice (14 indicators); outcomes (5 indicators); leader legitimacy; (7 indicators); trust in leader competence (2 indicators); acceptance of the leader's vision (3 indicators); and motivation to work for the new company (2 indicators).

One issue raised by the use of the questionnaire data upon which this analysis was based is whether the results might potentially be an artifact due to common method biases. A wide variety of approaches might potentially be taken to attempting to remove such variance (Lindell & Whitney, 2001; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This study uses the single-method factor approach recommended by Podsakoff et al. (2003, pp. 895–896). This approach was used within the context of the previously reported structural equation model. Each of the 29 items underlying the latent factors was also represented as one indicator of a large common variance factor. Hence, all of the results shown in Fig. 1 reflect this common method adjustment.

Fig. 1. Causal model for mediating role of leadership legitimacy and trust in competence (numbers are coefficients when common method variance is removed). All significant paths are shown.

The results of this analysis are shown in Fig. 1. The model shown is a good fit to the data ($CFI=0.86$). The results shown in Fig. 1 provide strong support for the argument that procedural fairness during the implementation of a merger shapes reactions to change. This influence occurs indirectly via legitimacy and competence. Those leaders who use fair procedures are viewed as more legitimate and trusted to be more competent, and legitimacy and competence shaped acceptance of the leader's vision and motivation to work. Hence, the influence of procedural justice on the acceptance of change was mediated by the ability of procedures to legitimate and increase trust in the perceived competence of authorities. In other words, procedural justice shaped reactions to leader's actions because it shaped views about leaders.

The findings outlined confirm that procedural justice shapes reactions to change. However, an additional key issue to be addressed in this article is whether this effect is linked to the role of procedural justice in providing identity-relevant information. This leads to a moderation hypothesis, i.e., a suggestion that procedural justice judgments have greater influence when people identify more strongly with the group.

A regression analysis was used to test the interaction hypothesis, with the interaction between the social identification variable and (1) procedural justice and (2) outcomes included in the analysis. The dependent variable was a combined index including measures of (1) whether the merger was viewed as a

Table 5

Results of hierarchical regression analysis of evaluations merger on procedural justice and identification

Coefficients	Unstandardized (standard error)	Standardized (beta)	
Procedural justice	.13 (.04)	.20	$t(502)=3.54^*$
Outcomes	.09 (.04)	.14	$t(502)=2.60^{**}$
Identification	.11 (.03)	.19	$t(502)=3.89^*$
Procedural justice $\times$ identification	.06 (.02)	.11	$t(502)=1.98^{***}$
Outcomes $\times$ identification	.04 (.03)	.08	$t(502)=1.48$
Adjusted R^2 38%	$F(5,502)=12.29^*$		

* $p < .001$.

** $p < .01$.

*** $p < .05$.

Fig. 2. The relationship between procedural justice and evaluations of the merger as a function of identification.

good strategic decision and (2) motivation to work. The results of the regression analysis are shown in Table 5. They show the predicted significant interaction between identification and the weight given to procedural justice ($\beta = 0.19$, $p < .05$; see Fig. 2). Simple slopes analysis was conducted to further analyze this interaction (Aiken & West, 1991; Cohen, Cohen, West & Aiken, 2003). When identification was high (one S.D. above the mean), the effect of procedural justice was significant, $\beta = .27$, $p < .001$, whereas this was not the case when identification was low (one S.D. below the mean), $\beta = 0.09$, $p < .19$. Since identity relevant information is communicated by procedural fairness, those who more strongly identify with the group are expected to be focused more upon their identity and more interested in and influenced by identity relevant information.

8. Discussion

The findings of this study provide support for the identity-based approach articulated in the group engagement model (Tyler & Blader, 2000, 2003). That model argues that during times of uncertainty and change people use procedural justice judgments to understand the identity-relevant implications of mergers and other types of reorganization. This study supports that argument by showing that when people identify more strongly with the organization, they make greater use of procedural justice information in reacting to a merger. In particular, judgments of leader legitimacy; trust in leader competence, and satisfaction with one's new company, were more strongly influenced by whether the merger was fairly implemented when people identified more strongly with the organization.

Because the influence of procedural justice has been linked in psychological models to influences on identity and the self, these findings support the argument that gaining voluntary acceptance is facilitated by the use of fair procedures because their use engages people's identities and leads them to want to act in ways that help the organizations to which they belong (De Cremer & Tyler, 2005b; Tyler & Blader, 2003; Tyler & Lind, 1992). In this study, there are two types of direct evidence to

support this identity-based view of the influence of procedural fairness. First, in the finding that procedural fairness is linked to social identification with the new company (Table 4). This finding indicates that those employees who experience the implementation of the merger as fair are more likely to indicate that they have merged their sense of themselves, and come to feel connected and identified, with the new company.

Second, the emergence of an identity by procedural justice interaction showing that the enactment of fair procedures by the leader matters most when employees identify more strongly with the organization. This finding thus provides evidence that procedural justice carries with it identity-relevant information (De Cremer & Tyler, 2005b; Tyler & Blader, 2000, 2003), as those who would care most about identity information relevant to the organization (i.e., high identifiers) were most influenced by procedural justice.

More generally, the findings support the argument of the process-based approach to leadership. The process-based approach to leadership focuses on influencing others by activating the internal motivations of followers. It views leadership as involving the ability to motivate followers to act, recognizing that the ability to successfully influence others is the essence of leadership (Yukl, 1999; Van Knippenberg et al., 2004). In particular, this study explores the ability to gain acceptance for the leader's vision (Chemers, 2001), as well as to motivate followers to work for the new company.

Such a perspective is consistent with the focus within social psychology on attitude change through mechanisms of social identification and internalization (Kelman, 1958; Turner, 1991), as opposed to securing compliance via the control of rewards and punishments. The key conceptual argument is that leaders want to activate people's own desires to act on behalf of their organization and leadership involves the ability to do so in effective ways.

The process-based approach to leadership argues that leaders can activate internal motivations by building on the finding that willingness to cooperate with others in organized groups is fundamentally linked to their assessments about the fairness of the procedures that those leading groups use to manage their groups (Tyler & Blader, 2000, 2003). This procedural justice effect has been widely demonstrated within work groups, as well as in legal, political, and educational settings (Tyler, 2000).

This study tests the key arguments of this process-based approach to leadership within a situation in which securing employee acceptance of a new company is key to leadership effectiveness. When companies merge to create a new company gaining employee buy in is crucial to the effectiveness of the new company, since employee willingness to work to make a success of the new company, to adopt its new culture, and to adjust their work styles and organizational unites, impacts upon whether the benefits of the merger will be realized. Of course, realizing such benefits is not a foregone conclusion, since many mergers are failures that damage companies and may even lead to bankruptcy or further mergers and acquisitions. Effective leadership is enhanced when leaders can inspire their followers to accept change by communicating a compelling vision of the future and motivating willingness to work in the new company. The situation studied here is of exactly this type and is a particularly difficult one for leaders because the company in this study was being taken over by another, with the presumption that employees who adopt the values and leadership style of the larger company into which they were being incorporated.

The implications of this finding for leadership are clear. When leading a merger, leaders do not gain acceptance simply by dispensing resources to employees. Giving people resources may have positive effects on their motivation, but people are also motivated by whether or not they experience

decisions about the merger as being made through fair procedures. One important gain that results from using a process approach is that there are clear and well developed models that provide a basis for understanding how to implement fair procedures (Tyler & Lind, 1992). Hence, there is a clear basis for building upon these findings to suggestions about how to lead. What do these findings suggest about what leaders should actually do to activate the internal motivations associated with acceptance of a new organizational situation? Most importantly, leaders need to be sensitive to the fairness of their decision-making procedures.

The findings of this study support the previously discussed group engagement model of procedural justice and suggest that issues of neutrality, factuality, and consistent rule application are central to procedures that employees experience as being fair (Leventhal, 1980). The widely used term “transparency” captures a general sense of procedures that have this quality, being made based upon clearly stated rules, consistently applied. In addition, it is important that decisions be made based upon criterion linked to quality and performance, i.e., that there be a factual basis for the decisions made.

It is also important that people receive decent and respectful treatment, i.e., that they experience politeness and dignity from leaders. This interpersonal aspect of treatment is clearly distinct from how decisions are made. Employees experience it as distinct, and it has a distinct influence on their acceptance of change. Polite and respectful treatment is important because it communicates that employees have standing within the group, and are respected and valued members of the organization (De Cremer & Tyler, 2005a,b).

Employees are also influenced by their inferences about the motives of the leaders making the change (see e.g., Lewicki & Bunker, 1996). If they believe that those authorities are interested in the well-being of employees, care about their needs and concerns, and are taking account of those issues when making decisions, they are more accepting. If, on the other hand, these inferred qualities are missing, then employees resist change. Again, evidence of benevolence and concern on the part of authorities communicates standing in the group and indicates that one is valued by the group.

Finally, providing employees opportunities to participate by having the chance to present their arguments so that those arguments can be considered and incorporated into management decisions is important to procedural justice assessments. Employees are more willing to accept change when they have input into the change process.

It is also important to acknowledge potential weakness of the study. Since the study is based upon correlations drawn from a study conducted at one point in time, particular care must be taken in interpreting the findings. There is the possibility that people who accept the leader’s vision retrospectively rate the merger as having been procedurally fair. A more definitive causal statement would require an experimental test of the model outlined.

9. Conclusion

It may not be possible for leaders to effectively assure employees that they will have desirable opportunities and will gain favorable resources in the future, especially when their company is in a transitional period such as a merger. Leaders move into a change situation, like a merger, with the hope of success. But, that hope is linked to the actions of followers. If followers embrace change, success is

more likely. How can leaders build support for a newly merged company? These findings highlight the importance of the procedures by which leaders act during the merger process. If leaders act fairly, then the fairness of their exercise of authority itself becomes a factor motivating employees to buy into changes and accept the new company. In other words, leaders can lead via the procedures they use to implement change.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. New York: Sage.
- Anastasio, P., Bachman, B., Gaertner, S., & Dovidio, J. (1997). Categorization, recategorization and common in group identity. In R. Spears, P. J. Oakes, N. Ellemers, & S. A. Haslam (Eds.), *The social psychology of stereotyping and group life* (pp. 236–256). Oxford: Blackwell.
- Arbuckle, J. L., & Wothke, W. (1999). *Amos 4.0 user's guide*. Chicago: SmallWaters Corporation.
- Ashforth, B. E. (1998). Becoming: How does the process of identification unfold? In D. A. Whetten, & P. C. Godfrey (Eds.), *Identity in organizations* (pp. 213–222). Thousand Oaks: Sage.
- Ashforth, B. E., & Mael, F. A. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20–39.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bedeian, A. G. & Hunt, J. G. (2005). *Academic amnesia and vestigial assumptions of our forefathers*. Unpublished Manuscript, Area of Management, Texas The University.
- Chemers, M. M. (2001). Leadership effectiveness: An integrative review. In M. A. Hogg, & R. S. Tindale (Eds.), *Blackwell handbook of social psychology: Group processes* (pp. 376–399). Oxford, UK: Blackwell.
- Chreim, S. (2002). Influencing organizational identification during major change: A communication-based perspective. *Human Relations*, 55, 1117–1137.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, New Jersey: Erlbaum.
- Conger, J. A., & Kanungo, R. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage Publications.
- De Cremer, D. (2004). *Leader fairness theory: The interplay between procedural fairness, leader behavior and self*. Invited talk at the pre-justice conference, society for personality and social psychology, Austin, January 31.
- De Cremer, D. (2005). *Procedural justice effects on self-focused attention under emotional certainty versus uncertainty*. Unpublished manuscript, Tilburg University, The Netherlands.
- De Cremer, D., & Alberts, H. (2004). When procedural fairness does not influence how good I feel: The effects of voice and leader selection as a function of belongingness needs. *European Journal of Social Psychology*, 34, 333–344.
- De Cremer, D., & Tyler, T. R. (2005a). Am I respected or not? Inclusion and reputation as issues in group membership. *Social Justice Research*, 18, 121–153.
- De Cremer, D., & Tyler, T. R. (2005b). Managing group behavior: The interplay between procedural justice, sense of self, and cooperation. In M. Zanna (Ed.), *Advances in Experimental Social Psychology*, vol. 37 (pp. 151–218). New York, NY: Academic Press.
- De Cremer, D., Tyler, T. R., & den Ouden, N. (2005). Managing cooperation via procedural fairness: The mediating role of self-other merging. *Journal of Economic Psychology*, 26, 393–406.
- De Cremer, D., van Dijke, M., & Bos, A. (2005). *When leaders are seen as transformational: The effects of organizational justice*. Unpublished manuscript, Tilburg University, The Netherlands.
- De Cremer, D., & van Knippenberg, D. (2002). How do leaders promote cooperation: The effects of charisma and procedural fairness. *Journal of Applied Psychology*, 87, 858–866.
- De Cremer, D., & van Vugt, M. (1999). Social identification effects in social dilemmas: A transformation of motives. *European Journal of Social Psychology*, 29, 871–893.
- Deluga, R. J. (1994). Supervisor trust building, leader-member exchange and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology*, 67, 315–326.

- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, 39, 239–263.
- Elsbach, Kim D. (1999). An expanded model of organizational identification. In B. M. Staw, & R. I. Sutton (Eds.), *Research in Organizational Behavior*, vol. 21 (pp. 163–200). Stamford, CT: JAI Press.
- Greenberg, J. (2004). Promote procedural justice to enhance acceptance of work outcomes. In E. A. Locke (Ed.), *Handbook of principles of organizational behaviour* (pp. 181–196). Oxford, UK: Blackwell Publishing.
- Haunschild, P. R., Moreland, R. L., & Murrell, A. J. (1994). Source of resistance to mergers between groups. *Journal of Applied Social Psychology*, 24, 1150–1178.
- Hogan, R., Curby, G. J., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. *American Psychologist*, 49, 493–504.
- Hogg, M. A., & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. London: Routledge.
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization process in organizational contexts. *Academy of Management Review*, 25, 121–140.
- Ibarra, H. (1999). Provisional selves. *Administrative Science Quarterly*, 44, 764–791.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–769.
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89, 36–51.
- Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, 88, 246–255.
- Kelman, H. C. (1958). Compliance, identification, and internalization. *Journal of Conflict Resolution*, 2, 51–60.
- Koper, G., van Knippenberg, D., Bouhuijs, F., Vermunt, R., & Wilke, H. (1993). Procedural fairness and self-esteem. *European Journal of Social Psychology*, 23, 313–325.
- Kotter, J. P. (1990). *A force for change: How leadership differs from management*. NY: Free Press.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27–55). New York: Plenum.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. M. Kramer, & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 114–139). Thousand Oaks, CA: Sage.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. N.Y: Plenum.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86, 114–121.
- Lowe, K. B., & Galen Kroeck, K. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7, 385–426.
- Marks, M. L. (1997). Consulting in mergers and acquisitions: Interventions spawned by recent trends. *Journal of Organizational Change Management*, 10, 267–279.
- Pillai, R., Scandura, T. A., & Williams, E. A. (1999). Leadership and organizational justice: Similarities and differences across cultures. *Journal of International Business Studies*, 30, 763–779.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research. *Journal of Applied Psychology*, 88, 879–903.
- Robinson, S. L. (1996). Trust and the breach of the psychological contract. *Administrative Science Quarterly*, 41, 574–599.
- Salam, S. C. (2004). Foster trust through competence, honesty, and integrity. In E. A. Locke (Ed.), *Handbook of principles of organizational behaviour* (pp. 274–288). Oxford, UK: Blackwell Publishing.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4, 577–594.
- Skevington, S. M. (1980). Intergroup relations and social change within a nursing context. *British Journal of Social and Clinical Psychology*, 19, 201–213.
- Terry, D. J., & Callan, V. J. (1998). Ingroup bias in response to an organizational merger. *Group Dynamics: Theory, Research and Practice*, 2, 67–81.
- Terry, D. J., Callan, V. J., & Sartori, G. (1996). Employee adjustment to an organizational merger: Stress, coping and intergroup differences. *Stress Medicine*, 12, 105–122.

- Terry, D. J., Carey, C. J., & Callan, V. J. (2001). Employee adjustment to an organizational merger. *Personality and Social Psychology Bulletin*, 27, 267–290.
- Terry, D. J., & O'Brien, A. T. (2001). Status, legitimacy and ingroup bias in the context of an organizational merger. *Group Processes and Intergroup Relations*, 4, 271–289.
- Turner, J. C. (1991). *Social influence*. Milton Keynes: Open University Press.
- Tyler, T. R. (1988). What is procedural justice? *Law and Society Review*, 22, 301–355.
- Tyler, T. R. (1990). *Why people obey the law*. New Haven: Yale University Press.
- Tyler, T. R. (1994). Psychological models of the justice motive. *Journal of Personality and Social Psychology*, 67, 850–863.
- Tyler, T. R. (2000). Social justice: Outcome and procedure. *International Journal of Psychology*, 35, 117–125.
- Tyler, T. R. (2001). Procedural strategies for gaining deference: Increasing social harmony or creating false consciousness. In J. M. Darley, D. M. Messick, & T. R. Tyler (Eds.), *Social influences on ethical behavior in organizations* (pp. 69–88). Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Tyler, T. R. (2003a). Procedural justice, legitimacy, and the effective rule of law. In Michael Tonry (Ed.), *Crime and Justice*, vol. 30 (pp. 431–505). Chicago: University of Chicago Press.
- Tyler, T. R. (2003b). Justice, identity, and leadership. In D. van Knippenberg, & M. Hogg (Eds.), *Leadership, and power: Identity processes in groups and organizations* (pp. 94–108). London, England: Sage.
- Tyler, T. R. (2004). Process based leadership: How do leaders lead? In R. Kramer, & D. Messick (Eds.), *New thinking about the psychology of leadership* (pp. 431–505). Mahwah, NJ: Erlbaum.
- Tyler, T. R. (in press). Legitimacy and legitimation. *Annual Review of Psychology*.
- Tyler, T. R., & Blader, S. L. (2000). Cooperation in groups. Philadelphia: Psychology Press.
- Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7, 349–361.
- Tyler, T. R., DeGoey, P., & Smith, H. J. (1996). Understanding why the justice of group procedures matters. *Journal of Personality and Social Psychology*, 70, 913–930.
- Tyler, T. R., & Huo, Y. J. (2002). *Trust in the law*. New York: Russell-Sage Foundation.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. *Advances in Experimental Social Psychology*, 25, 115–191.
- Tyler, T. R., & Smith, H. (1998). Social justice and social movements. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th edition), vol. 2 (pp. 595–629). NY: McGraw-Hill.
- Tyler, T. R., & Smith, H. J. (1999). Justice, social identity, and group processes. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The psychology of the social self* (pp. 223–264). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review*, 49, 357–371.
- Van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, 15, 825–856.
- Van Knippenberg, D., van Knippenberg, B., Monden, L., & de Lima, F. (2002). Organizational identification after a merger: A social identity perspective. *British Journal of Social Psychology*, 41, 233–252.
- Van Leeuwen, E., van Knippenberg, D., & Ellemers, N. (2003). Continuing and changing group identities: The effects of merging on social identification and ingroup bias. *Personality and Social Psychology Bulletin*, 29, 679–690.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job. *Academy of Management Review*, 26, 179–201.
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2), 285–305.
- Yukl, G. (2002). *Leadership in organizations* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.