A Factorial Survey on Fair Leadership Behavior and the Role of Superiors

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ABSTRACT. This paper extends research on leader fairness to the perspective of his/her superior. While common research is focused on followers’ judgments of fair leadership behavior, I proposed to take into account the role of superiors due to their important position in organizational hierarchy influencing the relationship of leaders and followers considerably. To study these influences, I make use of a factorial survey design including two situations of leadership. Hierarchical linear modeling analyses shows that situational parameters which are important according to the perspective of superiors only have a weak influence on the justice judgments of respondents. Moreover, conclusions are drawn from the results in what directions the estimation of leader’s justice in the view of their superiors differ from the well-known perspectives of followers. Finally, the influence of personality attributes on justice perceptions is discussed and theoretical and practical implications for further research on fair leadership are revealed.

KEY WORDS: leadership; organizational justice; interactional justice; superior; leader of leaders; work situations; factorial survey; interactionism; quasi-experimental design; NEO-FFI; big five
Introduction

In the past, perceptions of justice regarding leaders or leadership behavior were mostly investigated from the perspective of followers. Accordingly, research on fair leadership is often focused on follower’s judgments of leadership behavior. Using this perspective seems to be quite naturally, as it is directly linked to the classical (i.e. dyadic) conception of leadership between leaders and followers (Yukl, 2006). Furthermore, it is evident, that follower’s perceptions of justice have strong influence in organizations as many studies have already revealed (e.g., Greenberg, 1990; Sparr & Sonntag, 2008; Van Knippenberg, De Dremer & Van Knippenberg, 2007). Yet, in accordance with a network perspective on leadership (e.g., Balkundi & Kilduff, 2006) not only followers are sources of justice perceptions, but also superiors, i.e. the leaders of leaders and other organization members working in other functions or departments. In general, superiors are important sources of influence on leaders and followers behavior because they serve as a role model for both of them and set in this respect good or bad examples in fair or unfair leadership. Additionally, they can also shape to a great extent the general sense of justice in an organization. Unfortunately, no studies are seriously taking into account the perceptions of these groups of persons and their impact on fair leadership in organizations by now.

In these circumstances, the study aims at shifting the perspective of justice perceptions from the traditional focus on followers to the perspective of superiors. Specifically, it investigates which principles underlie the justice perceptions of persons having only access to the information of a superior. Can superiors who obtain most times only limited information without much explanatory power as a result of their infrequent contacts and interactions with leaders and followers come to a decision about the justice of a leader at all? Usually, they are dependent on reports or stories from third parties. To put these questions into study, I make use of a method, so far not often applied in organizational justice research: a factorial survey. As this method is based upon artificial judgment situations, it seems to be very helpful to simulate efficiently the justice judgment process of superiors. Furthermore, I want to clarify at this point, how individual differences in the personality of respondents affect their perceptions of the fairness of leaders from the perspective of superiors.

Additionally, I expand my study by including the variable respectful behavior of a leader in the judgment process which is well known in organizational justice research for its strong influence on justice judgments. In doing so, I want to find out if the integration of respectful behavior of a leader will restructure the justice judgments of the respondents. Maybe it will be
Theoretical Background

Fair Leadership Research

Research on fair leadership is not in existence for a long time. Intensive research effort on this topic started in the beginning of the 1990s and has been steadily growing since then. At a first glance, this seems to be somewhat surprising because in organizational justice research it has been recognized a long time ago that the fairness of treatment received from authorities, influences people’s attitudes and behaviors in a strong manner (Adams, 1965; Lind & Tyler, 1988; Thibaut & Walker, 1975). But for many years the focus of research was directed on the dimensions of distributive and procedural justice. Actually, at this time justice of leaders was only seen as a part of procedural justice. Yet, as a result of the groundbreaking study of Bies and Moag (1986), conscientiousness was slowly developing to understand organization members justice (most times also called interactional justice) as a separate field of research. Today it is well known, that justice possesses great impact on people outside as well as inside of organizations. Especially, justice in organizations is positive associated with the acceptance of decisions (Thibaut & Walker, 1975), perceived legitimacy of authorities (Tyler, 1994), job satisfaction (Sweeney & McFarlin, 1993), and organizational citizenship behavior (Moorman, 1991). In this event, leadership research is increasingly engaged in understanding the role of justice in combination with leadership as well (Feldmann 2010; Van Knippenberg & De Cremer, 2008).

Beside the positive effects of leader’s fairness, there is, however, considerable disagreement about the way to measure the justice of a leader. In the last years, many researchers follow in this respect Colquitt’s (2001) conceptualization of distributive, procedural, and interactional justice. But until now, differences remain between researchers. For this study, I decided to choose a factorial survey to measure justice. This method is closely related to experimental research settings which implicitly constitute the judgment of justice of a leader as an event among situational influences. As Cropanzano, Bobocel, Byrne, and Rupp (2001) have pointed out, in justice research a fundamental distinction has to be made between the so-called event paradigm and the social entity paradigm. According to the social entity paradigm people are judging the fairness of
other people or groups over time and across different situations. Following the event paradigm means in contrast that participants evaluate the justice of a leader in face of the elements of the environment. As I have pointed out before, I selected a research design in accordance with the event paradigm.

Justice of Supervisors

In my research design the term *supervisor* connotes the leader of a leader and represents an expansion of the dyadic structure of leadership between a leader and a follower. While a specific term is missing in research, sometimes, a supervisor according to my understanding is simply called boss (Yukl, 2006). So far, not much attention has been paid to this position in the organizational hierarchy even though supervisors have a strong impact on leadership relationships and leadership outcomes (Weibler, 2009). Accordingly, there are only few studies which have taken supervisors into account. Thus, I hope to contribute to the expansion of justice research by referring to the position of a supervisor.

Situational Strength Approach

Mischel (1977) has developed his so-called situational strength approach in the mid-1970s. Based on his former landmark work *Personality and Assessment* (Mischel, 1968), for Mischel strong situations are those, in which most actors construe a situation in a same way. Then, most of them draw similar conclusions relating to appropriate responses, and are motivated and able to respond (Mullins & Cummings, 1999). Strong situations normally provide special kinds of incentives making it easier for respondents to give appropriate responses. They prompt similar responses in most people (Suls & David, 1996).

Conversely, weak situations are characterized by ambiguity about the meaning of the situation and the appropriateness of responses. For any particular response incentives are unclear. Therefore, individuals are uncertain about how to categorize the situation and so weak situations will evoke greater variation in their responses. They expected that any response is equally likely to be appropriate or inappropriate. Differences between individuals are playing a more significant role (Mischel, 1973, 1977).

The situational strength framework may be very useful to examine the role of personality differences among respondents by judging the justice of a leader when using a factorial survey. However, as in the beginning of the study nothing is known about the influence of the chosen situational parameters for the assessment of the justice of the described leader, due to the lack of empirical studies in this direction, the situation without the attribute respectful behavior can referring to Mischel (1977) regarded as a weak situation.
Insofar as in weak situations personality attributes will be having a stronger influence on interpreting the situation, I have included this consideration in my survey. By contrast, the situation which contains the attribute of respectful behavior maybe will be seen from respondents as a strong situation. Thus, it seems most likely that the respondents will be directing their estimation of justice—at least with regard to this attribute—in a similar order.

The Big Five Model

In order to measure the influence of personality on justice judgments, I used the Big Five Model of personality. This model represents a commonly used, generalizable taxonomy to studying individual differences of persons (Costa & McCrae, 1992). It contains five relatively independent dimensions: extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience.

The first dimension extraversion measures how sociable, talkative, assertive, ambitious and active an individual is (Shi, Lin, Wang & Wang, 2009). The second dimension neuroticism describes the emotional stability of an individual, represented by his/her differences in the ability to cope with encountered stressors (Brennan & Skarlicki, 2004; Costa & McCrae, 1992). Conscientiousness as the third dimension measures the extent to which an individual is responsible, dependable, organized, persistent, and achievement-oriented. The fourth dimension agreeableness reflects the humane aspects of an individual, including being good-natured, cooperative, trusting and courteous, soft-hearted, and tolerant. Core of the last dimension openness to experience is an open minded attitude towards feelings and new ideas, flexibility of thought, and a readiness to indulge in fantasy (Shi et al., 2009).

As a consequence of my basic assumption that perceptions of superiors can’t be referred to indicators which are normally used to measure leadership justice from the perspective of followers (Colquitt, 2001; Moorman, 1991), I decided to use situational parameters that are available for supervisors even if they are not known in general as meaningful for judging the justice of a leader. Furthermore, I was interested in the consequences of introducing respectful leader behavior in my situational setting. Finally, I wanted to prove the influences of control variables and personality attributes as well. As consequence, I postulated the following four hypotheses.
Hypothesis 1: Situational parameters are associated with ratings of the justice of leaders (JL) from the perspective of supervisors.

Hypothesis 2: Respectful behavior of a leader is strongly associated with ratings of the justice of leaders (JL) from the perspective of supervisors.

Hypothesis 3: Control variables of respondents are associated with ratings of the justice of leaders (JL) from the perspective of supervisors.

Hypothesis 4: Personality attributes of respondents are associated with ratings of the justice of leaders (JL) from the perspective of supervisors.

Method

Design

In my study I used a factorial survey (also called vignette analysis) in order to simulate the just or unjust behavior of a leader in his or her superior's eyes in a realistic manner. As a quasi-experimental design, a factorial survey combines the advantages of classical surveys as well as of laboratory experiments (Jasso, 2006; Rossi & Anderson, 1982). Similar like in a scenario experiment, but providing a larger number of variables, in this factorial survey two groups of respondents were asked to rate the justice of a leader in two separate situations (i.e., situational descriptions/vignettes) which are designed closely to organizational reality. These situations contain situational parameters that a superior could know regarding his typically limited access to information with respect to the just behavior of a leader in a workplace situation.

The point of departure for generating the situational parameters was the following question: What can supervisors know about the interaction between a leader and his or her follower? The two descriptions of leader’s behavior differ from each other only according to the attribute of respectful behavior of leader, being well known in organizational justice research (Colquitt, Conlon, Wesson, Porter & Yee Ng, 2001). Whereas in the description of the first participant group the superior possesses information about the respectful or unrespectful behavior of the leader, this is not the case in the description of the second participant group. Apart from the aspect of respectful behavior, both situations describe the distribution of work by a leader in general and contain identical situational parameters (i.e. mode of conversation, gender of staff member, quantity of distributed tasks and quality of distributed tasks).
In the past, these attributes haven’t been linked directly to perceptions of leadership justice or fair behavior. Yet, referring to the above mentioned reduced basis of knowledge that a superior usually obtains from a subordinate leader and with regard to the possibility of missing information, these attributes could possibly influence the estimation of justice of a leader. Additionally, as I know that justice plays an important role in situations combined with uncertainty (Lind & Van den Bos, 2002) and likewise that one key function of fairness is to cope with uncertainty (Nadisic, 2006), I decided to incorporate in the situations a process of organizational restructuring. Organizational restructuring includes many aspects of uncertainty for all organization members involved. After these decisions I specified the situations referring to an aspect of leadership a leader has to handle every day: distributing tasks. Interestingly, the distributing of tasks by a leader wasn’t often research object in the context of fair leadership studies (Feldmann, 2010).

Fig. 1: Situation 2 with Situational Parameters

Mister Meurer, representative head of a department in a textile enterprise, is designated successor of the head of the department who will be leaving in short. In face of the forthcoming staffing, Mister Volkert, the supervisor of both, receives the order from top management to assess if the staffing can be realized as intended.

Concurrently, the whole enterprise is undergoing a restructuring. Possibly this will imply layoffs and redistribution of tasks for many organization members. Thus, Mister Volkert has to control, how Mister Meurer usually arranges the distribution of tasks among his staff members. Based on documents and interviews the following picture appears to Mister Volkert.

Accordingly, Mister Meurer is distributing tasks regularly in [1]. Thereby, he is acting from the view of his staff members [2]. With reference to the restructuring within the last task distribution he assigns to [3] [4] [5] tasks.

[1] mode of conversation (one-on-one interviews / group sessions)

[2] respectful behavior of leader (most times respectless / most times respectful)

[3] gender of follower (Mrs. Jansen (female) / Mr. Jansen (male))

[4] quantity of distributed tasks (few / many)

[5] quality of distributed tasks (simple / ambitious)
In this study, all of the situational parameters that are nested in the situation 1 and 2 (see for example Fig. 1) are modeled with two values. The task of respondents was later to estimate the situations as a whole against the background of different combinations of the values of the situational attributes. In order to build up an effective research design I did not realize all possible combinations of values of situational parameters. Instead, I previously chose a sample of combinations that is based on a fixed order defined by an experimental plan. Especially, from the point of feasibility, costs and efforts such experimental plans, also called quota designs, are more useful than random designs (Dülmer 2007; exemplary for situation 1 Fig. 2).

A sample defined by an experimental plan is called a fractional factorial design. Given, that in this design all attributes are designed with only two values, it is called a fractional factorial design with two levels which formally is written $2^{k-p}$. In this formula k denotes the number of variables (i.e., in this study situational parameters; k=4 for situation 1 and k=5 for situation 2). The fraction of the full factorial that is to be run is $\frac{1}{2^p}$.

A fractional factorial realizes only a fraction of the number of design points of the corresponding full factorial and is therefore accompanied by some limitations (Montgomery, 2005; Ryan, 2007). Dependent on the chosen resolution of the fractional factorial design not all effects can later be estimated in analysis. I have selected in both situations the so-called resolution IV design. This means that only main effects can be estimated in the analysis for situational parameters even if two-factor interactions exist between them. As a consequence of this choice, I obtained an experimental plan with 8 runs for situation 1 and 16 runs for situation 2. Respondents taking part in judging situation 1 had to rate 8 situations with fixed combinations of the values of the situational parameters and respondents participating in situation 2 had to rate 16 situations (see for example the experimental plan for situation 1 in Fig. 2.).
Fig. 2: Experimental Plan for Situation 1

<table>
<thead>
<tr>
<th>run</th>
<th>mode of conversation</th>
<th>gender of staff member</th>
<th>quantity of distributed tasks</th>
<th>quality of distributed tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>one-on-one interviews</td>
<td>female</td>
<td>few</td>
<td>simple</td>
</tr>
<tr>
<td>2</td>
<td>group sessions</td>
<td>female</td>
<td>few</td>
<td>ambitious</td>
</tr>
<tr>
<td>3</td>
<td>one-on-one interviews</td>
<td>male</td>
<td>few</td>
<td>ambitious</td>
</tr>
<tr>
<td>4</td>
<td>group sessions</td>
<td>male</td>
<td>few</td>
<td>simple</td>
</tr>
<tr>
<td>5</td>
<td>one-on-one interviews</td>
<td>female</td>
<td>many</td>
<td>ambitious</td>
</tr>
<tr>
<td>6</td>
<td>group sessions</td>
<td>female</td>
<td>many</td>
<td>simple</td>
</tr>
<tr>
<td>7</td>
<td>one-on-one interviews</td>
<td>male</td>
<td>many</td>
<td>simple</td>
</tr>
<tr>
<td>8</td>
<td>group sessions</td>
<td>male</td>
<td>many</td>
<td>ambitious</td>
</tr>
</tbody>
</table>

Sample

The initial sample consisted of 44 university students of business administration for situation 1 (situation without respectful behavior of leader) and 46 students of business administration for situation 2 (situation with respectful behavior of leader). The average age of the respondents in situation 1 was 35 years ($SD = 6.4$). There were 14 women ($31.8\%$) and 30 men. 43 percent were leaders. Most of the respondents ($52\%$) had already a university degree. In situation 2 the average age of the respondents was 34 years ($SD = 7.1$). 41 percent were women and 59 percent men. 46 percent were leaders.

Measures

All items were presented to respondents in German language.

Justice of a leader. Justice of a leader (JL) in situation 1 and 2 was measured on 7-point scales ($1 = \text{not just}$ to $7 = \text{just}$).

Personality attributes. Personality attributes were measured with a short form of the NEO-FFI in German language by so-called mini-markers. Overall, the NEO-FFI contains 40 personality attributes (e.g., friendly, temperamental, and extraverted). For each attribute respondents have to decide, how strong from their point of view it corresponds to their own person (Costa & Mc Crae, 2002; Saucier, 1994; Weller & Matiaske, 2009).

Control variables. I controlled for age, gender, educational level, and supervisory experience. Educational level was coded as $1 = \text{certificate of secondary education}$, $2 = \text{general certificate of secondary education}$, $3 = \text{advanced technical college entrance qualification}$, $4 = \text{general qualification for university entrance}$, $5 = \text{university degree}$ and $6 = \text{Ph.D.}$.
Results

Analytic Strategy

Due to the hierarchical data structure of a factorial survey, a multilevel-regression seems to be appropriate for the data analysis (Hox, Kreft & Hermkens, 1991). This procedure is useful since all combinations of judged situations are nested in the judgment structure of single respondents (Wallander, 2009). This means, that the judgments maybe affected by intra-rater correlations (Rossi & Anderson, 1982). As a result, the data potentially leads to nonindependence among observations and as a further consequence observed judgments’ cannot be assumed to be stochastically independent. Accordingly, one of the primary assumptions of regression analysis is violated, namely that of the statistical independence of errors (Jasso, 2006). Underestimated standard errors again lead to an increased risk for incorrectly rejecting a true null hypothesis. To avoid these statistical problems, a multilevel-regression often also called structure hierarchical linear modeling (Raudenbush & Bryk, 2002) was applied.

I tested my hypotheses in four steps. First, in step 1, I estimated the intercept-only model without any explanatory parameters. After that, I introduced in Step 2 fixed effects on level 1 of the model (i.e., situational parameters). In step 3 I included the control variables of the respondents on level 2 of regression. By setting step 4, I additionally considered on level 2 personality attributes of respondents.

Descriptive Statistics

To get a first impression regarding the relationship between independent and dependent variables, means, standard deviations and correlations are calculated. Table 1 presents the descriptive statistics among the independent situational parameters and JL as dependent variable.
Table 1: Means, Standard Deviations, and Correlations Among Situational Parameters and Dependent Variable for Situation 1 and 2

<table>
<thead>
<tr>
<th>variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Situation 1</td>
<td>Situation 2</td>
<td>Situation 1</td>
</tr>
<tr>
<td>mode of conversation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one-on-one interview</td>
<td>4.42</td>
<td>3.83</td>
<td>1.39</td>
</tr>
<tr>
<td>group session</td>
<td>4.01</td>
<td>3.70</td>
<td>1.14</td>
</tr>
<tr>
<td>respectful behavior of leader</td>
<td>---</td>
<td>3.02</td>
<td>---</td>
</tr>
<tr>
<td>respectful</td>
<td>---</td>
<td>4.52</td>
<td>---</td>
</tr>
<tr>
<td>respectful behavior of leader</td>
<td>---</td>
<td>3.02</td>
<td>---</td>
</tr>
<tr>
<td>respectful</td>
<td>---</td>
<td>4.52</td>
<td>---</td>
</tr>
<tr>
<td>gender of follower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>4.27</td>
<td>3.73</td>
<td>1.28</td>
</tr>
<tr>
<td>male</td>
<td>4.16</td>
<td>3.81</td>
<td>1.30</td>
</tr>
<tr>
<td>quantity of distributed tasks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>few</td>
<td>4.11</td>
<td>3.66</td>
<td>1.26</td>
</tr>
<tr>
<td>many</td>
<td>4.31</td>
<td>3.88</td>
<td>1.31</td>
</tr>
<tr>
<td>quality of distributed tasks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simple</td>
<td>4.14</td>
<td>3.76</td>
<td>1.26</td>
</tr>
<tr>
<td>ambitious</td>
<td>4.28</td>
<td>3.78</td>
<td>1.31</td>
</tr>
</tbody>
</table>

Note. Dependent variable: Justice of a Leader (JL)
$N = 352$ (justice judgments) for Situation 1; $N = 736$ (judgments) for Situation 2
* $p < .05$.  ** $p < .01$.

The results show significant relations for mode of conversation in situation 1 and respectful behavior of leader as well as quantity of distributed tasks in situation 2. This seems to be a first indication for confirming hypotheses 1 and 2. Additionally, Table 2 gives an overview about the relationship between control variables, personality attributes and JL as dependent variable.
Table 2: Means, Standard Deviations, and Correlations Among Control Variables, Personality Attributes and Dependent Variable for Situation 1 and 2

<table>
<thead>
<tr>
<th>variable</th>
<th>M</th>
<th>SD</th>
<th>r</th>
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<th>M</th>
<th>SD</th>
<th>r</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Situation 1</td>
<td>Situation 2</td>
<td>Situation 1</td>
<td>Situation 2</td>
<td>Situation 1</td>
<td>Situation 2</td>
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<td></td>
</tr>
<tr>
<td>age</td>
<td>35.09</td>
<td>34.33</td>
<td>6.38</td>
<td>7.09</td>
<td>.03</td>
<td>.10**</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>gender a</td>
<td>1.68</td>
<td>1.59</td>
<td>.47</td>
<td>.49</td>
<td>.09</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>education b</td>
<td>4.70</td>
<td>4.52</td>
<td>.73</td>
<td>.80</td>
<td>-.03</td>
<td>-.13**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>leadership experience c</td>
<td>1.43</td>
<td>1.46</td>
<td>.50</td>
<td>.50</td>
<td>-.02</td>
<td>-.10</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>extraversion d</td>
<td>4.09</td>
<td>4.75</td>
<td>1.31</td>
<td>1.10</td>
<td>.25**</td>
<td>-.01</td>
<td></td>
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<tr>
<td>neuroticism d</td>
<td>3.11</td>
<td>3.43</td>
<td>.73</td>
<td>.96</td>
<td>-.08</td>
<td>.03</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>conscientiousness d</td>
<td>5.86</td>
<td>5.68</td>
<td>.72</td>
<td>1.03</td>
<td>-.16**</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>agreeableness d</td>
<td>5.55</td>
<td>5.45</td>
<td>.71</td>
<td>.98</td>
<td>-.03</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>openness to experience d</td>
<td>5.00</td>
<td>4.85</td>
<td>.58</td>
<td>.70</td>
<td>.08</td>
<td>.01</td>
<td></td>
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</tbody>
</table>

Note. Dependent variable: Justice of a Leader (JL); N = 352 (justice judgments) for Situation 1; N = 736 (justice judgments) for Situation 2

* 1 = female, 2 = male. a Higher values correspond to higher education levels (1 = certificate of secondary education high school degree/Hauptschulabschluss to 6 = Ph.D.). b 1 = without experience, 2 = with experience. c Higher values correspond to higher agreements with the attributes (1 = very inapplicable to 7 = very applicable).

Hypotheses tests

Before testing the hypotheses in detail, I examined the within- and between group variance in the outcome variable (Hofmann, 1997). Therefore, I assessed in the first step of the analysis the magnitude of between-group variance in JL by estimating an HLM model with no level 1 and level 2 predictors. This model partitions the variance in the outcome variable into its within-group (i.e., level 1 residual variance) and between-group (i.e., level 2 residual variance) components (Raudenbush & Bryk, 2002). The results show that 41 percent of the variance of JL resides between groups (i.e., respondents) in situation 1 and in 9.5 percent in situation 2. This is expressed by the so-called unconditional intraclass coefficient (Bickel, 2007).

Apart from the unconditional intraclass coefficient, several other formulas to estimate intraclass correlations (ICC) which reveals the magnitude of group effects in dependence of nested structure can be found in the literature (e.g., Hox, 2002). Commonly ICC (1) and ICC (2) are estimated (Bliese, 1998). The intrrater reliability index (ICC (1)) compares the variance between level 2 units (i.e. here, respondents and their attributes) to the variance within level 2 units of analysis referring to the individual justice ratings of each respondent. The reliability of group mean index (ICC (2)) assesses the relative status of between and within variability by using the average justice ratings of respondents within each unit. The ICC (1) for JL was .11 in situation 1 and .04 in situa-
tion 2. The ICC (2) for JL was .85 in situation 1 and .63 in situation 2. The ICC (1) is typically lower than ICC (2) which is considered to be higher (Bliese, 1998). All results indicate that applying a hierarchical linear modeling should be fruitful.

Table 3: Hierarchical Linear Modeling Results: Justice of a Leader (JL)

<table>
<thead>
<tr>
<th>variable</th>
<th>Situation 1</th>
<th></th>
<th></th>
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<td>-.21** (.05)</td>
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<td>-.05 (.05)</td>
<td>-.05 (.05)</td>
<td>.04 (.04)</td>
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Note. For Level 1 measures \( N = 352 \) (justice judgments) and for Level 2 measures \( N = 44 \) for Situation 1; For Level 1 measures \( N = 736 \) (justice judgments) and for Level 2 measures \( N = 46 \) for Situation 2; Values in parentheses indicate standard errors. * p < .05. ** p < .01.

Table 3 presents the results of the multilevel regression that I have conducted to test the hypotheses referring to the impact of situational parameters on JL (Hypothesis 1 and 2) as well as the impact of control variables on JL (Hypothesis 3) and the impact of personality attributes of respondents on JL (Hypothesis 4). Before estimated all level 2 predictors I employed a grand mean centered approach. While having an experimental plan for situation 1 and 2, grand mean centering wasn’t necessary to estimate for the situational parameters on level 1.
The reason for grand mean centering data on level 2 was some evidence in the literature, suggesting that grand mean centering will be a better choice than working with raw data (e.g., Bickel, 2007; Hofmann & Gavin, 1998).

In the first hypothesis I predicted an association of situational parameters with ratings of the justice of leaders (JL) from the perspective of supervisors. As the results reveal, this depends primarily on the parameters. In situation 1, situational parameters in all have a weak influence on JL. Only mode of conversation takes some influence. Choosing a one-on-one interview for the distribution of tasks, a leader is perceived as fairer as a leader who uses a group session for the same purpose. A much stronger influence on JL can be identified for respectful behavior of leader in situation 2. Indeed, the results only provide partial support for hypotheses 1, but they support hypothesis 2 which postulates a strong association of respectful behavior of leader to JL in full.

The results neither show support for hypothesis 3 in situation 1 nor in situation 2. None of the control variables develop a significant effect on JL. Yet, partial support is shown for hypothesis 4 which has predicted an association of personality attributes of respondents to JL in situation 1. A significant effect exists for extraversion on JL. However, this effect cannot be found in situation 2.

Finally, conclusions are drawn from the results in what direction the estimation of leader’s justice in the view of their superiors differs from the well-known perspective of followers. The influence of personality attributes on justice perceptions is discussed and theoretical and practical implications are revealed.

**Discussion**

The aim of the present study was to foster research on fairness and leadership which have evolved separately for a long time (Van Knippenberg et al., 2007). Taken together, as expected, the results emphasize that there are positive relationships between situational parameters, control variables, personality attributes and JL as a dependent variable. The main differences between the results focusing on the perspective of supervisors and the common knowledge about fair leadership research based on the perspective of followers can be summarized in short as follows.

Supervisors usually have to judge leaders justice on a much smaller basis of information, often only received from third parties. As a consequence of this central assumption, I have constructed in this research design a leadership situation including situational parameters
commonly not regarded as very meaningful for judging the justice of a leader, but which are under normal circumstances available for supervisors. To contrast and assess this situation, I generated a second situation in which I introduced respectful behavior of leader as a situational parameter as it is very well-known from conventional organizational justice research.

Actually, the results show that the situational parameters in situation 1 are not perceived by respondents as clear markers for judging the justice of the described leader. Only the situational parameter mode of conversation has a comparatively small but significant effect on leader’s justice. Compared to situation 2, selected situational parameters obviously give not many clues to respondents for judging the justice of the leader. Primarily, through introducing respectful behavior of leader as a situational parameter in situation 2, respondents received an anchor point for judging leaders justice. It marks a strong and significant effect on judging his justice. Based on these first results, I can conclude that according to the basis of information of supervisors it seems quite difficult for respondents to come to a decision with regard to the justice of a leader.

But what happens if supervisors have to judge leader’s justice – like in this example – while having only access to a small basis of information? Insofar, as situational parameters do not further help us at this point, I included the control variables in the analysis. Somewhat surprisingly, control variables like age, gender, level of education and leadership experience were not significantly related to leader’s justice. Even personality attributes did not show a significant additional effect – except of extraversion which influences the judgment of leader’s justice in a positive and significant way.

I decided to interpret this result with reference to Mischels situational strength approach (1977). If situations are perceived from individuals to be weak structured, personality attributes of the individuals are developing stronger influences in judging these kind of situations (i.e. here, judging the justice of the leader). For this interpretation I found additional support from the results of situation 2. Because of the introduction of respectful behavior as a situational parameter, this situation seems to be clearer for respondents in order to judge a leader’s justice. At the same time, no significant effects can be identified for personality attributes in this situation.
Implications

From a theoretical point of view, the research shows first of all that until now not enough attention has been paid to leadership fairness with regard to the perspective of supervisors. Given the importance of supervisors for a fruitful leader-follower relationship and for leadership success in organizations, this is quite surprising. As after all, apart from leaders and followers, supervisors are main actors in organizational life as well. Thus, I understand this study as a first attempt to find an access to this new area of research.

Secondly, by shifting the attention of fair leadership research to the perspective of supervisors, I want to point out the importance of personal attributes in the context of judging the justice of a leader especially in weak structured situations. Hence, it seems to be fruitful for future research to measure personality attributes in context of research on fair leadership.

The results have some practical importance as well. They imply advices for supervisors in order to make better decisions in the organizational context by referring to the notion of weak versus strong situations in combination with personality attributes. But before outlining this in detail, I want to draw at first attention to some more obvious advices for leaders resulting from the study.

In accordance with the insights about the estimation of the influence of the situational parameters on leaders justice, a leader who wants to be perceived as just, has to know at first for himself if he actually is to be perceived as respectful in context of a work situation (e.g. an appraisal interview, a settlement on objectives or a normal meeting). If he possesses this information, chances for him of being perceived as fair are high. But if he is not sure about, he will be better using a one-on-one interview instead of a group session to give orders to his followers.

Concentrating on the perspective of supervisors, the results revealed some more complicated insights. As I have seen, an adequate evaluation of the leadership situation depends on the supervisors’ extent of information. When getting the order from top management to evaluate, how just a leader is acting to his followers, he first has to verify, whether he can obtain reliable information about the respectful behavior of the leader (e.g. from reports or third parties). Especially in this study respectful behavior seems to be a good indicator for respondents to assessing the justice or injustice of a leader.

However, if the supervisor has no access to such information and the situation seems to be unclear or weak structured for him, he should reflect about his own personality. As I have seen before, there is a positive correlation between the personality attribute extraversion and judging the justice of the leader. Consequently, a supervisor with a high extraversion will
probably tend to judge the justice of a leader in a more positive way than a supervisor with low extraversion. However, followers with access to more information about the leader than the supervisor maybe could come to a more negative judgment with respect to the justice of the leader. Thus, for example in this case, it could happen that the supervisor reports to the top management that the leader seems to be just when distributing tasks. But this judgment would be biased as a result of the high extraversion of the supervisor. As a consequence, when the top management would then accept the designated staffing, problems will later occur if the discrepancy between the judgment of the supervisor and the followers differ to such an extent that the employees refuse to follow their new head of the department.

To avoid such a false staffing decision, supervisors must have a good assessment about their own personality before they are going to evaluate other organization members. Depending on the basis of knowledge and personality attributes, they could decide if they have the ability to judge the justice of a leader or if they better ask someone else to support them.

Limitations
The following discusses some limitations of the study. First off all, there are some objections against the factorial survey as method. In general, it seems to be problematic that the situational parameters which are used in situation 1 and 2 are at every point of time visible for respondents. Usually in experimental designs researchers are trying to hide the variables which they are interested in (Borg, 1992). In spite of that, continuous transparency of variables was deliberately accepted in the study, i.e. that respondents weigh their ratings in face of the presented situational parameters.

Another objection refers to the problem that judgments of fictional situations do not necessarily correspond to judgments respondents are making in real life situations (Ambrose, 2000; Blader, 2007). One possible reason for this is the lack of emotional involvement by judging a leader in a fictive situation. Ham and Van den Bos (2008) have recently discussed the importance of personal relevance in deciding on the justice of a situation coming to the insight that controlled and explicit justice judgments are not necessarily influenced by the grade of personal relevance for respondents.

Furthermore, it is important to recognize certain limits of generalizability. With regard to the sample I studied a selective population. Insofar as the sample consisted of part-time students of programs in further education and distance education, the participants on the one hand don’t correspond to regular university students (being younger, having less work or leadership experience). On the other hand they are not fully comparable to a sample of
business managers/organization members. Therefore, generalizability of the present findings should be examined in future research by using other types of respondents and organizations with mixed gender, other education level and more heterogeneous samples. Finally, it is worth considering that the German cultural context might also have affected the generalizability of the results. Despite from these limitations, the findings are in sum encouraging and maybe stimulate further research on this topic.
References


