Leading innovative endeavours:
The role of leadership for learning and interpersonal justice

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Abstract

To remain competitive, organizations have to increasingly rely on employees doing more work than is required by their formal job description. Therefore, it is important to understand the conditions under which employees are likely to go beyond their formal job description and engage in innovative work behaviour (IWB). Innovative work behaviour implies that employees voluntarily generate, promote and implement new ideas aimed at increasing organizational success. In this research, we investigated the interactive effect of leadership for learning and interpersonal justice on IWB in a sample of 209 employed participants by means of an online survey. As predicted, we

found a positive association between leadership for learning and IWB. Importantly, we found that leadership for learning was more strongly related to IWB at higher levels of interpersonal justice than at lower levels of interpersonal justice. In practical terms, workplaces can be designed for innovation to take place. To achieve this, managers should focus on creating an environment that is supportive of learning and live up to their responsibilities of treating employees with dignity and respect.

Introduction

Many organizations tend to see innovation as providing the key to organizational success. For instance, a 2013 study by Bain and Company among 1.208 chief executives showed that 74% regard innovation to be more important than cost-reductions for the long-term success of their companies (Rigby & Bilodeau, 2013). Previous research has indeed linked innovation to improved organizational performance (Agars, Kaufman & Locke, 2008) and increases in efficacy (Zhou & Shalley, 2003).

Importantly, innovation is no longer the sole responsibility of research and development laboratories. To maintain their competitive edge, organizations have to rely on employees doing more work than their formal job description asks for. That is, organizations increasingly need their employees to be willing to engage in behaviours that are not part of their official job duties, namely extra-role behaviours, such as innovative work behaviour (Anderson, Potočnik & Zhou, 2014). Innovative work behaviour (IWB) has been defined as the creation, promotion, and implementation of new ideas, which benefit the organization. Importantly, after generating ideas, individuals need to garner internal support and seek sponsorship for the implementation of their ideas – the so-called idea promotion stage. Finally, during the idea realization phase these newly generated, developed, and supported ideas need to be implemented in order to benefit the organization (Janssen, 2004).

Typically, IWB is not seen as being part and parcel of employee job descriptions and therefore, tends to be classified as extra-role behaviour (Katz & Kahn, 1978). In this sense, IWB implies engaging in action beyond the call of duty that is potentially fraught with the risk of failure, a need to experiment with new approaches and a certain amount of learning. In this context, learning is defined as an iterative process where taken actions are reflected upon and modified in an on-going way (Kolb, 1984).

Importantly, IWB is not formally recognized by the formal reward system, is generally not regulated by formal rules and regulations and requires significant amounts of cooperation, coalition-building and the garnering of internal support and sponsorship (Katz & Kahn, 1978).

Previous research has related IWB to a number of positive outcomes at the organizational, group, and individual level (cf. Janssen, van de Vliert & West, 2004). At the organizational level, for instance, IWB has been associated with increases in organizational performance and innovativeness (Anderson et al., 2014). At the team level, IWB has been associated with increased participation in work teams, group cohesion, effectiveness, and receptivity to future innovation. Moreover, at the individual level, employee IWB has been related to better work performance, increased job satisfaction, better relationships with colleagues, higher personal growth, and psychological well-being (Janssen et al., 2004).

In terms of predictors of IWB, earlier work has focused primarily on individual characteristics like personality, motivation, and cognitive abilities. For instance, tolerance of ambiguity, self-confidence, proactivity, intrinsic motivation, an above average general intellect, and task-specific knowledge have been positively associated with IWB (see Anderson, DeDreu & Nijstad, 2004, for a review). More recent work has emphasised the importance of the team, the organizational climate as well as the leaders in shaping IWB. Concerning the work group, team climate variables such as participation and vision have been linked to IWB (West & Anderson, 1996). Moreover, support for experimentation, tolerance of idea failure, and risk-taking norms have been shown to enhance innovative behaviour (Anderson, et al., 2014). Importantly, certain leader behaviours have been consistently linked to employee engagement in IWB. For instance, a democratic and participative leader style has been shown to promote IWB (Tierney, Farmer & Graen, 1999) and leader's openness to idea proposals has been found to facilitate IWB (Nystrom, 1990).

Given that IWB seems to be integral to organizational success, it is essential to understand the conditions that prompt employees to engage in IWB. Since leaders play a key role in shaping organizational and team culture and are able to influence employee behaviours across all stages of the IWB process, in this research we focus on the role of leader behaviours in promoting IWB. Specifically, we will focus on the effects of

leadership for learning and leader displays of interpersonal justice on employee engagement in IWB.

From Leadership for Learning to Innovative Work Behaviour

Previous research has already shown that leadership is essential for employee creativity and innovation processes. For instance, leader support in terms of time, resources and space has been found to be critical for innovation (Amabile, 1988). Moreover, it has been shown that leaders could support innovation by providing guidance, initiating structure, supporting ideas, employing motivating tactics, and championing desired behaviours (Beeler, Shipman & Mumford, 2011).

One specific category of leader support behaviours that has not received a lot of attention in the context of IWB is leader behaviour that reinforces learning. Since IWB requires learning, we deem leader behaviour that supports learning to be especially likely to promote IWB. Whereas, to date, there is no research directly linking leader behaviour that reinforces learning to IWB, there has been some work that would lead us to believe that it does. For instance, some researchers have argued that efficient learning of abilities, know-how, and skills is essential for innovations to take place (Alegre & Chiva, 2008). In addition, Park, Song, Yoon, and Kim (2013) found in a study among 305 employees that a culture of organizational learning fostered individuals' IWB. Since leaders play a key role in directly shaping employee behaviours as well as organizational culture, below we will argue that leader behaviour that reinforces learning should positively impact IWB.

Previous research has identified the following leader behaviours as being crucial to reinforcing learning in employees: being open to alternative points of view, providing time for problem identification, facilitating knowledge transfer, allowing time for reflection, and engaging in active questioning and listening (Garvin, Edmondson, & Gino, 2008). Given that engaging in innovative behaviour encompasses not only learning new things but also takings risks, leaders need to create an environment where employees feel safe and comfortable in taking these risks and are encouraged to learn (Edmondson, 2003). Leaders can fulfil this need by introducing, guiding and realizing structures for reflection, providing support for different points of view, and facilitating the implementation of changes in daily work activities (Edmondson, 2003).

In sum, leader behaviour that reinforces learning has been associated with employee learning behaviour, experimentation and feedback-seeking, which are crucial elements of IWB (Edmondson, 2003). Therefore, we argue that leadership that reinforces learning should be positively associated with IWB.

However, leadership behaviour that supports and reinforces learning may not be enough to prompt employees to engage in IWB. Since IWB is not part of the formal job description it requires an active impetus on the part of the employee to go above and beyond the formal call of duty. To this end, there is reason to believe that the quality of the interpersonal treatment by the leader might have an impact on IWB. Indeed, previous investigations have linked interpersonal justice,that is, treating employees with dignity and respect, to increases in extra-role behaviour (Colquitt, Conlon, Wesson, Porter & Ng, 2001). In the following section, we discuss the role of interpersonal justice in promoting IWB.

From Interpersonal Justice to Innovative Work Behaviour

Interpersonal justice, defined as the extent to which supervisors treat their direct subordinates "with politeness, dignity, and respect" (Colquitt et al., 2001, p. 427) has been associated with increases in job satisfaction supervisory satisfaction, trust in management, commitment, affective attachment, organizational citizenship behaviour, and performance. Furthermore, interpersonal justice has been negatively related to stress and counterproductive work behaviours. Lower levels of interpersonal justice, which lead employees to experience their supervisors' behaviour as unfair, have been linked to increases in turnover intentions and absenteeism (see Colquitt et al., 2001, for a review).

Although interpersonal justice has been associated with all these positive effects, to date, there has been little research investigating the link between interpersonal justice and IWB. However, there is reason to believe that interpersonal justice might be related to IWB.

For instance, Simmons (2011) found in a number of experiments that the experience of procedural justice (vs. injustice) led to higher levels of creativity. In her studies, 225 business students were led to experience either procedural justice or procedural injustice and then participated in a creative performance in-basket exercise.

She explained her findings by taking a motivational perspective: she argued that the experience of procedural injustice led to decreases in motivation and, consequently, to decreased motivation to perform due to feelings of devaluation. This decreased intrinsic motivation, in turn, was associated with lower levels of creativity. We could reasonably expect that the observed effects of procedural justice on creativity in Simmons' (2011) studies would function similarly for interpersonal justice and IWB, since interpersonal justice is a particular form of procedural justice (Brockner, Siegel, Daly, Martin & Tyler, 1997).

Additionally, interpersonal justice has been associated with enhanced creativity (Hannam & Narayan, 2015) and creativity is indispensable for the innovation process. Moreover, interpersonal justice has been shown to lead employees to feel valued (Lind & Tyler, 1988) and safe to challenge the current situation (Moon, Mayer, Kamdar, & Takeuchi, 2008), both necessary components for the occurrence of IWB. Therefore, we posit that interpersonal justice should be positively associated with IWB.

Does Interpersonal Justice and Leadership for Learning enhance Innovative Work Behaviour?

So far, we have argued that leader behaviour that supports learning and the interpersonally fair treatment of employees should be positively related to employee engagement in IWB. As stated before, IWB entails on the one hand engaging in experimentation and learning and on the other hand actively engaging in extra-role behaviour that requires effort, motivation and the expectation that one's efforts will be valued. Hence, leaders need to focus both on enabling employees to engage in IWB and on motivating them to go the extra mile. One way leaders can enable employees to engage in IWB is by engaging in behaviours that support learning. This leadership approach supportive of learning should afford time for experimentation, minimise the risk-taking involved in being innovative, and increase the likelihood that employees engage in it. In addition, one way in which leaders can motivate employees to engage in IWB is by treating them with dignity and respect and by making them feel valued for their efforts.

In sum, we argue that neither leadership for learning nor interpersonal justice are sufficient on their own in predicting employee IWB. Instead, we believe that employees' engagement in IWB is more likely if managers do the best they can to focus on both: providing support for engaging in learning behaviours (e.g., give people the space and

the means to learn and experiment with new things) and on maintaining the quality of the relationship (e.g., treat their workers at an interpersonal level in a fair manner and make them feel valued). Consequently, the more leaders engage in both types of behaviours, the stronger the effects on IWB should be. In other words, we predict that leadership for learning and interpersonal justice interact in predicting employee engagement in IWB. Specifically, we posit that the effects of leadership for learning on IWB will be stronger at higher levels of interpersonal justice (vs. lower levels of interpersonal justice).

The Present Study

This study investigates the interactive effect of leadership for learning and interpersonal justice on IWB. First, we predict a positive relationship between leadership for learning and employee engagement in IWB. Second, we argue that interpersonal justice will be positively associated with IWB. Finally, we predict that interpersonal justice serves as a moderator in the leadership for learning IWB relationship. Particularly, we argue that the effects of leadership for learning on IWB are stronger with increasing levels of interpersonal justice. To test our hypotheses, we conducted a cross-sectional field survey among German employees. We chose for a field survey since we were interested in finding out whether the proposed relationships hold in organizational settings. In addition, we focused on a German sample due to the fact that the principal investigator was based in Germany and therefore had access to potential employed respondents.

Method

Procedure

The study was conducted on-line with a German sample. We approached a panel of 549 employed people per email to participate in our study. To increase our response rate, we also asked the participants to share the study with prospective participants who fulfil the inclusion criteria. Inclusion criteria to participate were full-time or part-time employment as well as having a manager/supervisor.

Before releasing it, we tested the layout of the survey using different browsers on a number of computers, which differed in screen resolutions to eliminate possible response differences due to technical disparities. Assigning each respondent a unique

session ID prohibited multiple participations. Respondents took part individually and were informed that completing the questionnaire would take around 20 minutes. We informed them that the purpose of the study is to investigate how individuals function in their jobs and to find out their job-related attitudes. Further, we guaranteed the anonymity and confidentiality of their responses. Moreover, respondents could stop the research at any time and ask for their data to be removed from the analyses.

The survey was conducted in line with current recommendations in the field (Birnbaum, 2004), leading us to be as confident about the quality of our data as we would have been had we conducted a traditional paper and pencil questionnaire.

Since German-speaking employees were our respondents of interest, a first translator translated all measures from English into German and a second translator independently translated all items back into English following the procedure recommended by Brislin (1980). Resulting variations between the original measures and the back-translated version were handled by adjusting the German version via discussion between native speakers of both languages and a student of English.

Measures

The measures we employed are the most commonly used and accepted measures in the literature and research field of innovation, leadership for learning and justice.

Leadership for Learning. Our leadership for learning scale consisted of 6 items adopted from the Garvin et al. (2008) Leadership that reinforces Learning Subscale of the Learning Organization Scale and was measured on a 7-point Likert-scale (1 = highly inaccurate, 7 = highly accurate). Two sample items are "My manager invites input from others in discussions" and "My manager provides time, resources, and venues for identifying problems and organizational challenges". Items were averaged into a composite leadership for learning score (Cronbach's α = .89).

Interpersonal Justice. We measured interpersonal justice with the 4-item Interpersonal Justice Scale of Colquitt (2001) on a 7-point Likert-scale (1 = not at all, 7 = to a very great extent), which assesses whether leaders treat their employees with dignity and respect. Sample items are: "Does your manager/supervisor treat you in a polite manner?" and "Does your manager/supervisor treat you with respect?". All responses were averaged to form an interpersonal justice index (Cronbach's α = .93).

Innovative Work Behaviour. The nine-item scale from Janssen (2001) was employed to measure IWB. The scale consists of three items each to measure idea generation (e.g., "I create new ideas for improvements."), idea promotion (e.g., "I mobilize support for innovative ideas."), and idea realization (e.g., "I transform innovative ideas into useful applications."). The items were measured using a 7-point Likert-scale ranging from never (1) to always (7). All items were averaged to form an IWB index (Cronbach's α = .94).

Demographic Variables. At the end of the survey we asked participants to report their gender, age, work experience, tenure, greatest educational achievement, whether they held a managerial function or not, number of direct subordinates, industry and size of the organization.

To test our hypotheses, we conducted a hierarchical regression analysis as well as simple slope analyses. In addition, we conducted a principal-component analysis to check whether our items loaded on the intended scales. In the following section we provide the results of our analyses.

Results

In this section, we first provide some information about our sample, next we present the results of our principal component analysis and finally we outline the results of our hierarchical regression analyses testing our hypotheses.

We obtained two hundred nine completed surveys (38% response rate). The sample's mean age was 34 years (SD = 10.47) ranging from 18 years to 61 years and women made up 62% of the sample. Respondents' average work experience was 12.1 years (SD = 10.3) and their average organizational tenure on the current job was 6.8 years (SD = 7.57). Respondents with a higher education degree (i.e., Bachelor degree or higher) made up 38.8% of the sample. Furthermore, 37.8% worked in small companies with less than 50 employees, 18.2% worked in businesses of 50 to 249 employees and almost half of the respondents (44%) worked in companies with more than 250 employees. At the time of the survey, only 48 respondents (23%) had managerial responsibilities, supervising three people on average (SD = 11.52). The sample was very heterogeneous in terms of job functions held, ranging from finance, marketing, legal, IT to customer service positions.

We performed a principal-component analysis (PCA) with OBLIMIN rotation of our predictor variable items (i.e., leadership for learning and interpersonal justice), which yielded a two-factor solution with all items loading |.58| or higher on the intended scale and all cross-loadings lower than |.30|. Next, we performed a PCA of the items comprising our dependent variable IWB, which yielded a one-factor solution with item loadings of |.73| or higher. These analyses suggest that our items did indeed load satisfactorily on the intended scales.

Means, standard deviations, intercorrelations, and internal consistency estimates are presented in Table 1.

To test our hypotheses, we conducted a hierarchical regression analysis in which IWB was predicted by control variables (gender and supervisor position) at Step 1, main effect terms (leadership for learning and interpersonal justice) at Step 2, and the interaction term for the two-way interaction at Step 3.
Following Aiken and West (1991) leadership for learning and interpersonal justice scores were centred and the interaction terms as well as the main effects were based on the centred scores. We controlled for gender and supervisor position since previous research has found gender differences in terms of engagement in IWB (Rietzschel, 2011) and holding a supervisory position has been shown to enhance feelings of autonomy and therefore to be related to IWB (Axtell, Holman, Unsworth, Wall, Waterson & Harrington, 2000).

Table 2 shows the regression results for our dependent variable IWB.

Table 1. Means, Standard Deviations, and Intercorrelations

Model variables	M	SD	(1)	(2)	(3)	(4)	(5)
(1) Gender	1.62	.49	-				
(2) Supervisor Position	1.77	.42	.184**	-			
(3) Leadership for Learning	4.41	1.35	.042	.058	(.892)		
(4) Interpersonal Justice	5.57	1.32	.026	.112	.722**	(.928)	
(5) Innovative Work Behaviour	4.14	1.14	-.195**	-.350**	.359**	.276**	(.941)

Note:
Gender was coded as
1 = male,
2 = female.

Supervisor was coded as
1 = yes,
2 = no.

Cronbach's alphas are displayed on the diagonal in parentheses. All constructs were measured by Likert-scales ranging from 1 to 7.

N = 209.

** $p < .001$.

Table 2. Summary of Regression Analysis for Leadership for Learning and Interpersonal Justice predicting Innovative Work Behaviour

Variable	Step 1			Step 2			Step 3		
	b	SE b	β	b	SE b	β	b	SE b	β
Gender	-.316	.154	-.135	-.342	.141	-.146	-.387	.140	-.165**
Supervisor Position	-.881	.178	-.326**	-.952	.163	-.352***	-.969	.161	-.358***
Leadership for Learning				.274	.072	.324***	.264	.071	.312***
Interpersonal Justice				.074	.074	.085	.156	.080	.181†
Interpersonal Justice x Leadership for Learning							.084	.033	.173*
Constant	6.210	.372		6.378	.340		6.373	.336	
ΔR²					.152			.022	
R²		.140			.292			.314	
F(df)		16.819 *** (2)			21.001 *** (4)			18.558 *** (5)	

Note:
Note. Gender was coded as
1 = male,
2 = female.

Supervisor was coded as
1 = yes,
2 = no.

N=209.
† p < .10.
* p < .05.
** p ≤ .01.
*** p ≤ .001.

Predicting IWB, step 1 explained a significant proportion of variance and we found a negative relationship between gender and IWB (95% CI [−.62, −.01]) as well as a positive relationship between supervisor position and IWB (95% CI [−1.23, −.53]). As predicted, step 2 explained an additional significant proportion of variance and revealed a positive effect of leadership for learning (95% CI [.13, .42]) and a non-significant effect for interpersonal justice (95% CI [−.07, .22]). More importantly, step 3 explained an additional significant proportion of variance in IWB and revealed our predicted interpersonal justice × leadership for learning interaction (95% CI [.02, .15]). Figure 1 shows the plotted interaction for low and high interpersonal justice (± 1 SD) predicting IWB. In line with our hypothesis, post hoc simple slope analyses indicated that leadership for learning positively affected IWB at higher levels of interpersonal justice (1 SD above the mean; β = .443, p = .000, 95% CI [.21, .53]), but not at lower levels of interpersonal justice (1 SD below the mean; β = .181, p = .074, 95% CI [−.02, .32]).

To summarise, we predicted and found a positive relationship between leadership for learning and IWB. The hypothesized relationship between interpersonal justice and IWB could not be supported. In line with our third hypothesis, we found that leadership for learning positively impacted IWB at higher levels of interpersonal justice but not at lower levels of interpersonal justice. Furthermore, we found gender to be negatively related to IWB meaning that women are less likely to engage in IWB than men. Additionally, supervisory position was positively related to IWB, suggesting that those holding supervisory positions are more likely to engage in IWB.

Discussion

One of the top priorities of organizations today is to maximise the innovative potential of their employees in order to keep their companies competitive. For instance, a Centre for Creative Leadership survey among 247 senior executives found that 50 % of the respondents did not think that their organizations were operating at a high level of innovative capability (Criswell & Martin, 2007). Given that IWB has been associated with organizational competitive advantage, long-term survival and long-term organizational performance, it is important to understand the conditions under which employees are likely to engage in IWB.

In the present study, we aimed to investigate the relationship between leadership for learning, interpersonal justice and IWB. By marrying insights derived from the leadership for learning literature (e.g., Edmondson, 2003; Garvin et al., 2008) and from the

interpersonal justice literature (e. g., Colquitt et al., 2001), we posited that leadership for learning and interpersonal justice should interact in predicting IWB. Specifically, we first predicted and found a positive relationship between leadership for learning and IWB. Second, we predicted a positive effect of interpersonal justice on IWB; however, we did not find support for this hypothesis (see Khazanchi & Masterston, 2011, for more details). Importantly our main hypothesis of interest was about the interaction between leadership for learning and interpersonal justice in predicting IWB. As predicted in hypothesis 3, we found that interpersonal justice moderates the relationship between leadership for learning and IWB. More precisely, the results of our study indicate that leadership for learning positively impacted IWB at higher levels of interpersonal justice but not at lower levels of interpersonal justice. This suggests that to increase the chances that employees engage in IWB, both high levels of leadership for learning and interpersonal justice would need to be present.

In our analyses, we also found a positive relationship between holding a supervisory position and engagement in IWB. A possible explanation for this relationship might be that supervisors are generally more skilled in problem solving which is a central feature of innovative work behaviour. In addition, we found a negative relationship between gender and IWB. This negative relationship is congruent with research by Rietzschel (2011) who found that women were less likely to engage in idea promotion, which is a part of the innovation process.

Our results offer theoretical advancements for the body of literature on IWB, leadership and interpersonal justice, which are going to be discussed in the next section.

Theoretical Implications

With this research we provide, to our knowledge, first empirical evidence that the interplay between leadership for learning and interpersonal justice can serve to enhance IWB. Especially relevant for the current analysis, research on leadership behaviours has found employee support to be positively associated with IWB (Amabile, 1988). Whereas previous research has looked at leadership support in general, we extend previous analyses by specifically considering the effects of supportive leadership behaviours that promote learning. Future research might benefit from taking a longitudinal perspective investigating the effects of leadership for learning on actual employee learning and subsequently on IWB.

Figure 1. Effect of Leadership for Learning on Innovative Work Behaviour for high and low Interpersonal Justice
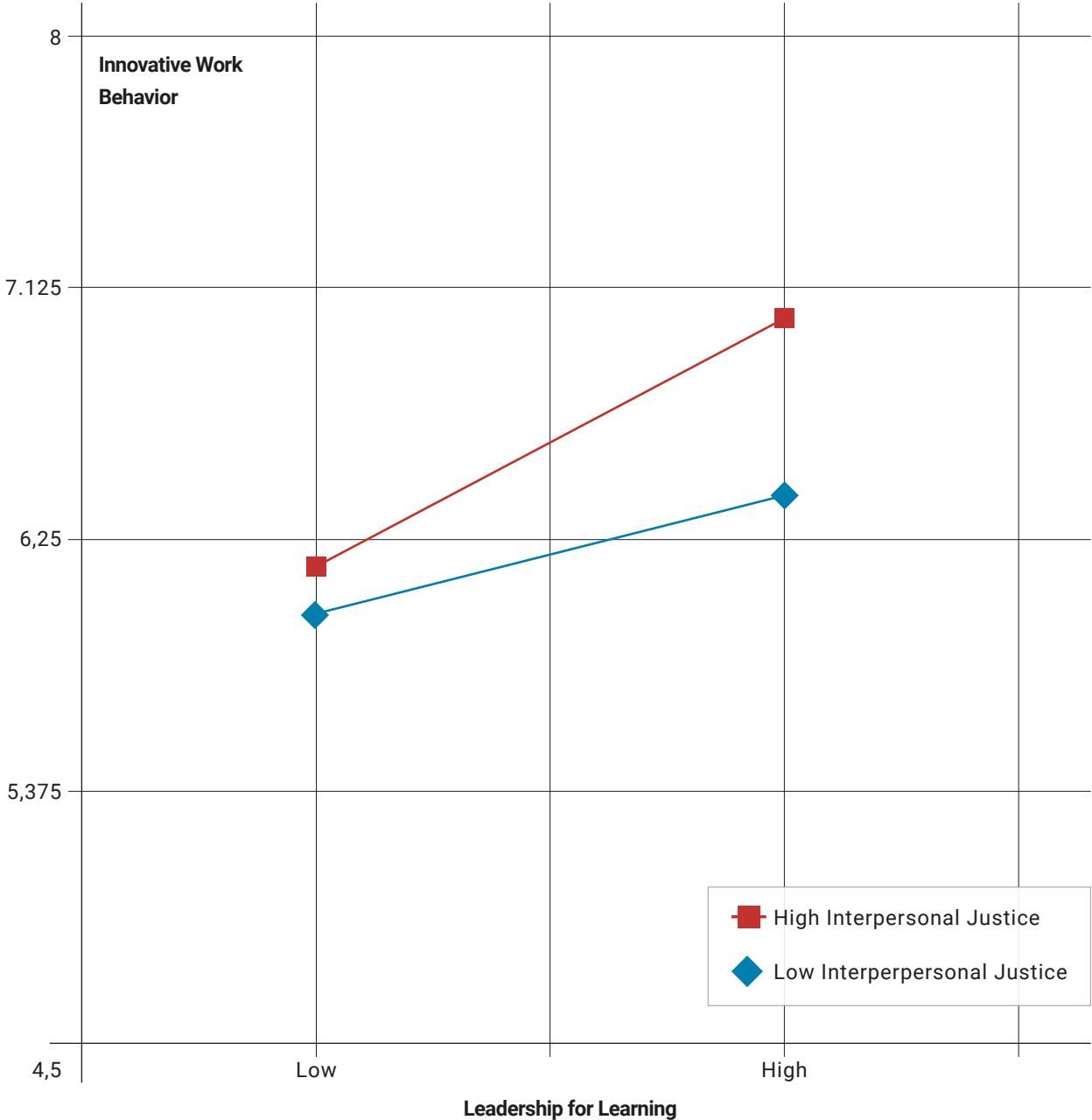
Previous studies on innovation have largely neglected the role of interpersonal justice. Similarly, whereas some earlier justice research has investigated the relationship between procedural justice and creativity (e.g., Simmons, 2011), research on interpersonal justice has mostly disregarded its possible effects on IWB. This is quite surprising given that a large body of work has focused on the effects of interpersonal justice on other types of extra-role behaviours (e. g., Colquitt et al., 2001). Future research could, for instance, focus on identifying the potential underlying mechanisms of the interpersonal justice and IWB relationship.

In sum, our study identifying leadership for learning and interpersonal justice as potential antecedents of IWB, contributes to the increasing body of knowledge on leader behaviours that could foster employee engagement in IWB by not only considering their main effects but also by delving deeper and exploring their interactive effect. However, to increase confidence in our results, future research should address the following limitations of our investigation.

Limitations and Future Research

Some limitations of our study have to be acknowledged. First, since the study is a relatively small-scale cross-sectional survey, causal inferences regarding the relationship between our predictor and criterion variables cannot be drawn. Moreover, we consciously chose for this design, because correlational studies are typically high in external validity (Mook, 1983), and we were primarily interested in finding associations between our variables of interest. Second, social desirability and common method bias could both be a possible threat to our conclusions, since we used self-reported data. Participants typically want to present themselves in a favourable light in self-reports. Due to common method variance, it is possible that main effects have been overestimated, however, this does not pose a threat to our interaction findings (Spector, 2006). In fact, common method bias can lead to an underestimation of the effect size of the found interaction between interpersonal justice and leadership for learning, which further bolsters confidence in our findings (cf., Evans, 1985).

Several researchers have emphasised the importance of distinguishing between the different dimensions of IWB (de Jong & Den Hartog, 2010). In more practical terms this implies that managers may have to act with caution if they want to promote IWB,

because a situation, which could foster one aspect of the innovation process, does not need to be beneficial for another.

Notwithstanding the above, the present findings reflect situational characteristics of German companies and therefore we may face a generalisability issue. Hence, it would be interesting to look at other cultures and see in how far our findings are generalisable. To this end, research in Eastern cultures could be noteworthy. According to research by Zhou (2006) paternalistic organizational control is central for promoting teams' creativity in Eastern cultures, whereas organizational control impedes creativity and innovation in the West. Prospective investigations should pay more attention to cultural differences between the East and the West, because cultural differences could have important implications for management practice, international business, and economic development (cf. Anderson et al., 2014).

Practical Implications

Even though we have to be careful with inferring practical implications due to the single-study cross-sectional nature of our research, this research can have practical value for organizational practice in terms of leader selection, leadership training, and organizational procedures.

In terms of selection, organizations could choose applicants for management positions who treat their employees respectfully, given that leadership plays a significant role in the innovation process. Leaders contribute to employees staying motivated and involved and they manage the innovation processes through planning and the provision of support and resources. Furthermore, leaders who are open to questions, ready to experiment, willing to offer help, give feedback, and able to engage in perspective-taking could be selected (cf. Galinsky, Magee, Rus, Rothman & Todd, 2014). For instance, in a potential job interview these abilities could be assessed with situational judgment tests. In an assessment centre setting, potential leaders could face situations where they are under pressure to get their teams to engage in IWB and their supportive learning and interpersonally fair behaviours could be rated by other participants and observers.

Of course, human resource development (HRD) would be able to make a contribution to fostering IWB, too (Prieto & Pérez-Santana, 2014). They can contribute to creating

workplaces that promote cultures of learning and support innovation processes. The current findings suggest that HRD could design leadership training programmes where managers, for instance, could be trained in giving feedback, encouraging multiple points of view, posing open questions, and reflecting on ways to enhance their leadership for learning skills. Additionally, a focus on developing leader communication skills, negotiation abilities, listening behaviours, and mediating abilities could be fruitful in counteracting potential emerging work conflicts as a result of innovative behaviour.

However, despite all these admirable outcomes of IWB, a note of caution is due, since IWB is no panacea for all evils and IWBs do not always benefit all parties involved. Innovation is inherently unpredictable and controversial. Engaging in IWB is risky and can entail unintended costs for the innovators. Consequently, engaging in IWB can have dysfunctional consequences such as conflicts with co-workers, increased stress and the experience of increased job demands, frustration, antagonism, and animosity, resistance to change from colleagues, and higher turnover intentions (Janssen et al., 2004). This suggests that HRD and managers would need to be aware of these possible negative consequences and try to pro-actively mitigate them by supporting these innovators wherever possible.

In addition, CEOs and senior management might benefit from paying attention to organizational procedures and systems such as accountability systems and procedural justice systems, since failures of major organizational innovation efforts have been traced back to improper organizational procedures (for instance lack of consultation with workers; e.g., James, 1990). First, systems of procedural justice and accountability combined with flatter hierarchies and more democratic decision-making systems could enhance respectful contact between leaders and workers and thereby foster interpersonal justice (Rus, van Knippenberg & Wisse, 2012). Second, procedural justice systems and accountability systems could nudge leaders to engage in encouraging multiple points of view and acknowledging the leaders' own limitations, since each member of the organization could be expected to justify his/her decisions and behaviour to all others and thereby showing supportive learning behaviours.

Finally, organizations and supervisors can place a premium on innovation and promote the creation of norms that favour learning, are tolerant of failures, and open to

change. Moreover, supportive managers which provide time and space for generating ideas, promoting, and finally implementing them have been shown to foster IWB. For instance, both Google and 3M offer their employees certain amounts of working time per week (Google – 20%, 3M – 15%) to pursue innovative endeavours autonomously or in self-chosen teams. Indeed, the resulting innovations are striking – gmail, GoogleSky, GoogleNews, and the Post-It note to name only a few.

In conclusion, workplaces can be designed for innovation to take place. To achieve this, managers should focus on creating an environment that is supportive of learning and live up to their responsibilities of treating employees with dignity and respect.

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