

Organization Structure, Operational Leadership and Job Quality

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ABSTRACT

Despite a proliferation of organizational forms that challenge the hierarchical, unity-of-command characteristics of organizations, leadership research still today takes the centrality of the line managers in employee-manager relations as given. Here, we study the interplay of leadership behavior and organizational structure on three job quality outcomes: Skill development, work intensity and job satisfaction. The empirical setting of the study is an organization that partly is a unitary hierarchy, partly a resource/task matrix. Based on a survey of 4.971 employees (response rate: 92%) we find that a) the job quality outcomes are similar between the unitary organization and the matrix, b) in the unitary context the impact of the line manager (combines the role of resource and task management) is positive, c) in the resource/task matrix, the impacts of leadership behavior of resource and task manager are positive and of similar strength, d) the impact of the line manager in the unitary structure is significantly stronger compared to the two impacts of management in the resource matrix structure. The present study is, to our knowledge, the first study of how variation in organizational structure (line vs matrix) interacts with leadership behaviors to explain employee job quality outcomes. There are several research avenues for further research, including further exploration of the mechanisms related to one vs two frontline manager(s), the impact of line manager leadership behavior in different structures, as well as the interaction and combined impact of two managers in a resource/task matrix.

Keywords: Operational leadership, organizational structure, matrix, job quality

1. INTRODUCTION

Despite a proliferation of organizational forms that challenge the hierarchical, unity-of-command characteristics of organizations, leadership research still takes the centrality of the line managers in employee-manager relations as given (Derue et al., 2011). The (often) unstated assumption is that employee and supervisor have stable one-to-one dyadic relationships (Rousseau, 1997), rather than employees reporting to two (or more) managers in a matrix organization. Here, we argue that such *variation in structure matters*, both for the content of leadership roles, their challenges and for the impact of leadership behavior.

There have been a few studies of leadership in a matrix-like, multi-management context (Keegan & den Hartog, 2004; Yousaf, Sanders, Torka & Ards, 2011; Sandvik, Espedal & Selart, 2015), but no study of how variation in organizational structure interacts with leadership behaviors to explain employee outcomes. Here, we study whether employee job quality outcomes and the impact of frontline managers behavior *differ between two structural contexts* in the same organization; unitary hierarchy (one-line structure) vs a resource matrix structure where each employee has two managers.

Operational leadership refers to leadership behavior that is oriented toward goal attainment, such as clarifying task responsibilities (of the leader and of subordinates), providing direction, and letting subordinates know what is expected of them (Bass & Stogdill, 1990. Fleishman, 1973). Judge et al. (2004) found that operational leadership correlates strongly with criteria related to performance. For employee outcome variables, we have chosen three employee job quality outcomes; skill development, work intensity and job satisfaction. Job satisfaction is an important construct for companies because it has been linked to task performance, organizational citizenship behavior, and reduction of turnover (e.g., Judge, Thoresen, Bono & Patton, 2001; Organ & Ryan, 1995; Tett & Meyer, 1993). Previous meta-studies report that operational leadership has a positive impact on these

employee outcomes (Derue et al., 2011; Judge, Piccolo & Ilies, 2004). A limitation of the studies of the effect of leadership behavior is the one-employee-one boss assumption. To enhance our knowledge on the effects of operational leadership on employees, it is therefore timely to take into account variation in the structural context (cf. Keegan, Huemann & Ringhofer, 2017; Bredin & Söderund, 2011). Here, we study a large global organization with an internal variation in structure, where operational leadership is mainly executed in two different frontline contexts. Some employees are situated in a traditional line organization where they have one frontline manager that is responsible for both resource- and task leadership. Other employees are situated in a resource/task matrix organization where frontline management is split between separate resource and task managers. Thus, we will be able to analyze how leadership and organization structures are associated with the employees' job quality outcomes.

2. EMPLOYEE OUTCOMES, OPERATIONAL LEADERSHIP AND ORGANIZATIONAL STRUCTURES

2.1 Employee outcomes

There are many aspects of work that may constitute relevant rewards or outcomes for employees (Kalleberg, Nesheim & Olsen, 2015). The concept of job quality captures many of these dimensions. such as "... wages, the job's prospects (career prospects and job security), features conducive to a good work-life balance, and several intrinsic aspects of jobs – including the quality of the work itself, its physical environment and its pace or intensity, and the social relations at work (which can be supportive or abusive)" (Green et al., 2016: 23). Job quality is a multi-disciplinary and multi-dimensional concept (Dahl, Nesheim & Olsen, 2009) and a broad analyzes of the phenomenon is beyond the aims of this paper. We have chosen

three subjective indicators for job quality for this study: skill development, work intensity, and job satisfaction.

Continuous development of skills in specific areas of expertise is crucial both for the competitiveness and survival of large global companies and their employees' professional development, experience of control and mastery and feeling of worth. Skills refer to both the ability to perform specific tasks as well as the degree of complexity of work (Dahl, Nesheim & Olsen, 2009). It is a vital aspect of job quality because skill development is an end, in addition to being a means to an end. In complex production processes both conception and execution of the job is required (Green, 2006). According to Felstead, Gallie, Green and Henseke (2019), the use of skills encompasses the level of skills required of workers to carry out their jobs, whether they actually use the skills and abilities, and the extent to which workers receive training that develops job-related skills.

Employees care about the *intensity of their work* during a working day: "Too little effort, and boredom can set in; too much, and exhaustion, stress, and ultimately threats to health and safety will arise" (Farries, 2004: 1). Green (2006) defines work intensity synonymously with work effort; the compression of labor activity during time of work, which is distinguished from performance and productivity. Work intensity may include elements such as rising pressures of pace, a high workload, tight deadlines, harder work, lack of "mind rest" and unpredictable tasks (Dahl, Nesheim & Olsen, 2009; Burke, Singh & Fiksenbaum, 2010).

Job satisfaction is a global or general assessment of a job. It assumes that employees can balance out the various aspects of job characteristics to come up with an overall assessment of job quality (Dahl, Nesheim & Olsen, 2009). Job satisfaction refers to "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). Job satisfaction is an important construct for companies

because it has been linked to task performance, organizational citizenship behavior, and reduction of turnover (e.g., Judge, Thoresen, Bono & Patton, 2001; Organ & Ryan, 1995; Tett & Meyer, 1993).

2.2 The impact of operational leadership

Operational leadership is a task-oriented leadership style that assigns responsibility, specifies procedures to follow, clarifies expectations and plan work (House, Filley & Kerr, 1981, p. 321). Overall meta-studies report that operational leadership is an important leadership style for work performance (Derue et al., 2011; Judge et al., 2004). We follow Lambert et al. (2012) and conceptualize operational leadership behavior as an organizational supply that facilitate employees goal attainment. For example, leaders impact acquiring new skills development, since employees need leadership support to progress professionally. Further, structuring behavior from leaders is important to master their work intensity; and finally, employees need leaders' praise to raise employees' job satisfaction. Conceptualizing leadership as an organizational supply means that leadership is one potential source for desirable task assignments (e.g., pay, benefits, opportunities for advancements, and desirable task assignment). Employees also varies to a certain degree on how much and from whom leadership they need. Leadership needed is the amount that employees perceive they need (Lambert et al., 2012, p. 915).

In studies of leadership behaviors and its effect on employees, it is usually assumed that an employee report to one (and only one) operational leader (e.g., Derue et al., 2011). Studies of leadership and employee outcomes tend to place these line managers in a central role. The key design for these studies is to measure leadership behaviors from the employee's nearest leader or direct report. A general assumption then is that line managers are the key actors in influencing employee goals, providing direction and supporting their goal attainment

(Bass & Stogdill, 1990). For example, by setting goals, monitoring progress, evaluating, appraising, and giving employees feedback on their performance. Thus, we believe that operational managers will have an influence on both job performance and employee outcomes such as skill development, work intensity, and job satisfaction. Through operational leadership they will know what is expected of them, which will enable employees to use and develop their skills toward goal attainment (Locke & Latham, 1990). For example, Kim et al. (2016) found that operational leadership led to more perceived organizational skill development (e.g. competence). Successful goal completion also helps leaders to keep the work intensity at appropriate level (Locke & Latham, 1990). Furthermore, we also expect that employees that know what is expected from them are more satisfied with their jobs (DeRue et al., 2011).

2.3 Organizational structures: Unitary hierarchy vs resource/task matrix

As is well known from the research on organizational structure, contexts of operational leadership often differ from the presumption of unitary management (Mintzberg, 1979; Ford & Randolph, 1992). Inside organizational boundaries the changes in authority relations are reflected in self-managed teams and shifting configurations of specialists working on short term projects (Keegan & van Hertog, 2013). In organizations with flexible structures (matrix, adhocracy, project teams etc.), vital leadership tasks are undertaken by the team manager and the project manager in question, rather than the line manager (cf. Larsen & Brewster, 2003).

As such, we argue that managerial leadership behavior may be supplied by multiple organizational sources. For example, Erez, LePine and Elms (2002) found in a quasi-experimental study of 38 self-managed undergraduate teams, that teams that rotated leadership performed better than teams that relied on leader emergence. Furthermore, while the operational manager in the line organization is responsible for HRM such as performance

appraisals and allocation of resources, their ability to elicit performance related behavior through leadership behavior may be limited by the “competing” influence of other managers. The increased importance of projects as a way of structuring work actualizes such challenges. A vital tension in such organizations is the relation between the project’s autonomy requirements related to the task on the one hand, and the long-term development of human capital in a specialized functional field on the other hand (Bredin & Söderlund, 2011).

Bredin and Söderlund (2011) argue that HRM should be addressed and understood as dependent on its context, and that project-based organizations represents one such context. They have developed the idea of a HR quadriad that identifies the key roles in HRM in project-based organizations, the project worker, the line manager, the project manager and the HR specialist. HRM is a collective endeavor and requires interplay between these actors. Bredin and Söderlund (2011) note that when employees carry out most of their work in projects, the line manager role tend to shift towards competence management, such as staffing, skill development and career counseling. The project manager is typically responsible for the management of the project task, but may also have a role in personnel flows, employee development and performance appraisals.

Thus, we identify two different structures which serve as the context of operational leadership. In the first instance, the organization unit at the operational level is part of a task hierarchy, where there is a successive decomposition of tasks into more specialized ones that on the lowest level can be performed by an individual or a team (Simon, 1962; Kolbjørnsrud, 2018). As described by Martela (2019): “Having established the necessary broader tasks for the accomplishment of organizational goals, the top management allocates these to the next level of management, which in turn makes the allocation decisions in regard to their subordinates. Thus, each leader is responsible for making the task allocation for the layer of employees directly below themselves” (Martela, 2019: 9). The implication is that an

operational organizational unit shares both a set of tasks *and* the personnel resources required to perform these tasks. Thus, the resource hierarchy is matched upon the task hierarchy.

Based on the concept of secondment matrix (Knight, 1977) as well as research on the intersection of Human Resource Management and Project Management (Huemann, Turner & Keegan, 2007; Bredin & Söderlund, 2011), a resource/task matrix are identified. Here, there are specialized roles for resource management and for task management. Thus, many employees work in an organizational structure where they have relations with two managers; one resource manager that is responsible for resource allocation to tasks and projects, skill work development and career counseling; and one (or more) task manager (s) that is responsible for the management of the task in question, which may be a set of interdependent activities, a larger project or a more continuous operation.

The variation in organizational structures, and by implication variation in frontline managerial roles, begs several questions for research. Firstly, how does organizational structure (unitary hierarchical organization vs a matrix structure) affect the job quality of employees? There are different mechanisms in the two contexts. In a unitary hierarchy, an employee primarily relates to one line manager. The manager influences the employee through the quality of operational leadership and leader-member exchange. The authority of the line manager is hierarchical and derived from their combined resource and task management role and responsibilities. In a resource/task matrix context, one is a member of a resource unit and a task unit, such as a project, and report to two (or more) managers. Thus, there are more actors and stakeholders involved, and one needs to handle more relationships, compared to a unitary organization (Bredin & Söderlund, 2011). In addition, project-based organizations are characterized by repetitive temporality (Prencipe & Tell, 2001), as well as ongoing temporalities and new encounters (Bresnen, Goussevskaia & Swan, 2005). The well-

known challenges of matrix organizations such as misaligned goals and unclear roles and responsibilities (Ford & Randolph, 1992) may strengthen such complexity.

While complex, the matrix context will not be unknown to employees and managers. If the structure and the related roles and relationships have become institutionalized over time, practices have been developed that may reduce the impact of relational complexity. One would therefore expect the organization to develop capabilities and mechanisms to handle the challenges of the “double leadership model” (cf. Daft & Anand, 2007), such as formalizing mechanisms for allocation of personnel and task managers participation in performance appraisals.

The two structures also represent different contexts for leadership roles and impact of operational leadership. In a unitary organization, each employee is related to one single operational manager. Based on previous studies on operational leadership in these contexts, one would expect a positive impact on job quality outcomes (Durue et al., 2011). Studies of leadership in a matrix context are rare, but there are some empirical support for a positive impact of project managers in a resource/task matrix (Sandvik, Espedal & Selart, 2015). Here, we will analyze the impact of operational leadership in both contexts and compare such impacts between a unitary structure and a matrix.

3. DATA AND METHODS

Our data came from an annual internal survey of employees in a large global company with headquarter in Scandinavia. The survey was administered by a third party. Through the survey employees assess key organizational and individual enablers such as leadership behavior, working environment, engagement, and development. The data collection period was 9th of October 2018 to 20th of November 2018. The population of 5.394 employees excluding the

leaders are organized in two large divisions, divided into 6 areas consisting of more than 500 frontline units. We obtained answers from 4.971 employees, a response rate of 92%.

Structure: Unitary hierarchy vs resource/task matrix

69% of the total population of employees had mainly one manager handling both the resource and task leadership (unitary organization). 31% of the employees were over a longer time period allocated from their resource unit to a task unit in another part of the organization (resource/task matrix). The employees in the first category were asked to answer questions on operational leadership related to their (resource *and* task) line manager, while employees in the resource/task matrix were asked to answer questions on operational leadership for their separate resource and their task manager.

In the sample, average tenure was 14 years, and average age was 46 years. There were 68% males and 32% females in the population. Most employees were Scandinavian. There were only minor differences among these criteria between the population and the sample. Table 1 describes population and respondents distributed by unitary organization vs resource/task matrix.

TABLE 1

Measures. Apart from the structure variable, all other variables were measured from the questionnaire.

Skill development. Subordinates rated their skill development using a 1-10 scale from 1 (strongly disagree) to 10 (strongly agree). The items are “I am satisfied with my development opportunities in [the company]”, “My job gives me sufficient challenges”, and “My job makes the best use of my skills and competence”. The Cronbach alpha was .85.

Work intensity. Subordinates rated their work intensity using a 1-10 scale from 1 (strongly disagree) to 10 (strongly agree). The items are “I feel good about the workload in

my job”, “Normally, I am able to complete my work tasks within normal working hours”, and “I can influence my workload”. The Cronbach alpha was .83.

Job satisfaction. Subordinates rated their job satisfaction using a 1-10 scale from 1 (very dissatisfied) to 10 (very satisfied). The item is “overall, how satisfied are you as an employee at your place of work?”.

Operational leadership. The two leadership variables were the employees’ perception of his/her line manager (applicable for all employees) and the perception of his/her task manager separately (applicable only for the resource/task matrix). Line and task managers leadership behavior were measured by the same four items. Two items are linked to initiating structure; “Has clearly explained how I am expected to contribute to achieving the goals of my unit” and “Provides me with the constructive feedback I need to do my job well”. The other two items are linked to consideration; “Motivates my unit to exceed expectations” and “Creates a working culture in my unit characterised by trust and openness”. The Cronbach alpha was 0.96 for line managers leadership behavior and 0.95 for task manager leadership behavior.

Control variables. Following Bernerth and Aguinis (2016), we included control variables only when it was theoretically rational to do so. Age, gender, tenure, hierarchical level, span of control and divisions were included.

As the data came from a single questionnaire, common method variance may have occurred and this is an obvious limitation of survey-based measures (Chang et al., 2010). To test for common method variance, we performed statistical analyses to assess the severity of common method bias. A Harmon’s single-factor test indicated that common method bias does not seem to be a concern in our study as the factor structure was detected and the variance did not stem only from the first factors (Podsakoff & Organ, 1986). As such, we conducted linear

regression analyses, with work effort and work quality as the dependent variables in the two samples.

4. EMPIRICAL ANALYSIS

We first compared job quality outcomes between the unitary sample and the matrix sample (Table 2). For skill development and job satisfaction, the outcomes are similar between the two structural contexts. For work intensity, the outcome is more favourable in the matrix (66,73) compared to the unitary context (64,56). The difference is significant at the .01 level.

TABLE 2

Then, we conducted analysis on the two samples, separately. The means, standard deviations, sample sizes and correlations are shown in Table 3 (unitary) and 5 (matrix). Table 4 and 6 present the hierarchical regression results for the two samples in question. In addition, Figure 1 presents additional information on the interaction between the two leadership variables, for the matrix sample.

TABLE 3

TABLE 4

The regression analysis in Table 4 shows the associations with employee outcomes in the unitary organization. From models 2, there are positive significant relationships the line manager's leadership behavior on employee's skill development ($\beta = .59, p < .01$); work intensity ($\beta = .45, p < .01$); and job satisfaction ($\beta = .64, p < .01$).

TABLE 5

TABLE 6

Table 6 shows the associations with employee outcomes (regression analysis) in the matrix. From models 2, there were positive significant relationships of both the resource and task manager's leadership behavior on employee's skill development ($\beta_{\text{resource}} = .36, p < .01$; $\beta_{\text{task}} = .33, p < .01$), work intensity ($\beta_{\text{resource}} = .22, p < .01$; $\beta_{\text{task}} = .24, p < .01$), and job satisfaction ($\beta_{\text{resource}} = .34, p < .01$; $\beta_{\text{task}} = .39, p < .01$). Here, the impacts of leadership behavior of the two separate managerial roles are of similar strength.

Models 3 in Table 6 include the interaction variable between operational resource leadership and operational task leadership. The introduction of the interaction variable has no significant effect on skill development and job satisfaction. There is, however, a significant positive effect on work intensity ($\beta = .20, p < .05$). When the interaction effect is introduced, the impact of line manager leadership is no longer significant. In Figure 1, the interaction effect is visualized. Here it is shown that the impact of the resource manager on work intensity is stronger, the higher the level of task management leadership behavior is.

Comparing the two contexts, Tables 4 and 6 show that the impact on line manager behavior (unitary, Table 4) is stronger than the impact of the behavior of each of the two management roles in the resource task matrix (Table 6).

5. DISCUSSION

Here, we have analyzed the associations of organizational structures and operational leadership behavior with three job quality variables: skill development, work intensity, and job satisfaction. Unlike previous studies of leadership, we have accounted for structural variation between a unitary hierarchy and a resource/task matrix in the same organization.

The first finding, from the bivariate analysis, is that there are no differences as regards skill development and job satisfaction, and a significant (but relatively small) difference in

work intensity between the two contexts, the line and the matrix. One possible explanation is that the challenges for employees of extra complexity are offset by other mechanisms. First, the matrix in the empirical context is institutionalized, and most employees are expected to be familiar with the “dual management” model. We also know from other sources that employees that are situated in the matrix context, tend to work for in projects to a larger extent than employees situated in the unitary context. Projects are characterized by time-limited tasks and a high degree of uniqueness of tasks, and work in such context tends to differ from ongoing, continuous tasks. From the literature on project work, it is well known that employees experience both a high level of “energy”, development opportunities and dynamism (Lindquist, Söderlund & Tell, 1998; Bakker, Boros, Kenis & Oerlemens, 2012; Nesheim, 2019) as well as more negative aspects such as time pressure and uncertainty (f.ex. Zita-Viktorsson, Sundstrøm & Engwall, 2006). One possibility is that the developmental and other aspects of project work have, *ceteris paribus*, positive impacts on skill development, work intensity and job satisfaction.

In a line organization, resource and task management responsibility is handled through a line manager role, while there are separate manager roles for these dimensions in a resource matrix. Leadership behavior has an impact on all three job quality outcomes, but the mechanism differs between the two contexts. The impact of the line manager in the unitary organization is stronger than the impacts of the separate resource and task management leadership behaviors in the resource matrix. In the matrix, work intensity is partly explained by a positive interaction effect of the two leadership behaviors. Thus, in this context there are additive or positive interaction effects of separate leadership behaviors, rather than opposite or competing effects.

Here, we have empirically documented the existence of different managerial roles in two structural contexts, as well as the impact of leadership behaviors among role incumbents

on skill development, work intensity and job satisfaction. While one cannot generalize statistically beyond the organization studied here, we would like to point out favourable traits of the present context (as a starting point for empirical research). The two-manager resource matrix and a line organization have co-existed over time and been institutionalized in the firm (Nesheim, 2019). The key concepts of front-line management such as resource manager and task manager are well known in the firm and are used in a manner consistent with the theoretical concepts (Nesheim, 2019). Thus, the study has benefited from reduced “noise”, related to unclear or fuzzy concepts and evolving development of structures and roles, that otherwise may have been threats to the reliability and validity of the study.

6. CONCLUSION

This paper contributes to research by examining the association of frontline operational management and organizational structure. The main idea, supported in the empirical analysis, is that conditions and impacts of operational leadership differ between a unitary organization and a resource/task matrix. The present study is, to our knowledge, the first study of how variation in organizational structure interacts with leadership behaviors to explain employee job quality outcomes. There are several research avenues for further research, including further exploration of the mechanisms related to two vs one frontline managers, the impact of line manager leadership behavior in different structures, as well as the interaction and combined impact of two managers in a resource/task matrix. Here, one may use empirical studies across sectors, expand contexts to include other and more complex structures than the ones studied here, including other employee outcomes as well as considering project work vs ongoing continuous operations.

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Table 1: Population and responses

	Total	Unitary organization	Resource/task matrix
Sent	5394	3737	1657
Answers	4971	3430	1541
Response rate	92%	92%	93%

Table 2. Comparing means in the full sample

Factors	<u>Mean</u>		<u>Std. Deviation</u>		T	Sig.
	Line	Matrix	Line	Matrix		
Skill development	70.60	70.40	20.35	20.96	.32	.75
Work intensity	66.73	64.56	21.36	21.73	3.29	.00
Job satisfaction	71.09	71.81	19.85	19.43	-1.19	.23

Note. 1 = Strongly disagree, 100 = Strongly agree.

Table 3. Descriptive Statistics and Correlations of Studied Variables in Unitary Sample

Variable	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	3430	45.47	10.19	1														
2. Gender	3430	.32	.47	-.11**	1													
3. Tenure	3430	13.11	9.28	.69**	.02	1												
4. Executive	3430	.00	.06	.07**	-.02	.08**	1											
5. Manager	3430	.03	.18	.15**	-.07**	.18**	-.01	1										
6. Leading professional	3430	.20	.40	.35**	-.12**	.30**	-.03	-.09**	1									
7. Principal professional	3430	.40	.49	.15**	-.06**	-.05**	-.05**	-.15**	-.40**	1								
8. Professional	3430	.27	.44	-.36**	.11**	-.22**	-.04*	-.11**	-.30**	-.49**	1							
9. Associate	3430	.08	.27	-.28**	.15**	-.14**	-.02	-.06**	-.15**	-.24**	-.18**	1						
10. Span of control	3430	19.39	13.06	.01	-.05**	.03	.01	-.05**	-.04*	-.03	-.04*	.00	1					
11. Business area	3430	.48	.50	.00	-.01	-.01	.06**	.08**	.10**	-.11**	.01	.01	-.02	1				
12. Line manager lead.beh.	3382	72.72	22.10	-.07**	.03*	-.04*	.01	.04*	.02	-.08**	.04*	.06**	-.07**	.07**	1			
13. Skill development	3428	70.60	20.35	-.02	.04*	.00	.06**	.05**	.00	-.07**	.01	.06**	-.03	.01	.58**	1		
14. Work intensity	3426	66.73	21.36	.01	.02	.03	-.02	-.01	.01	-.07**	.01	.10**	-.02	.03	.45**	.42**	1	
15. Job Satisfaction	3423	71.09	19.85	-.06**	.03	-.02	.02	.03*	.00	-.09**	.03	.09**	.00	.07**	.64**	.69**	.49**	1

Table 4. Results for hierarchical regression analyses on Job quality in Unitary sample

	<i>Skill development</i>		<i>Work intensity</i>		<i>Job Satisfaction</i>	
	<i>Model 1</i> β	<i>Model 2</i> β	<i>Model 1</i> β	<i>Model 2</i> β	<i>Model 1</i> β	<i>Model 2</i> β
<i>Control variable</i>						
Age	.01	.04 ⁺	.03	.06*	-.04	.00
Gender	.04*	.02 ⁺	-.01	-.02	.02	.00
Tenure	-.00	-.01	.04 ⁺	.04*	.01	.01
Executive	.06**	.04**	-.03 ⁺	-.04*	.02	.01
Manager	.04	-.01	-.04	-.07*	.05	.00
Leading professional	-.01	-.07	-.04	-.08 ⁺	.04	-.03
Principal professional	-.06	-.09 ⁺	-.07	-.09	-.01	-.04
Professional	-.02	-.07	-.01	-.05	.04	-.02
Associate	.04	-.02	.09*	.05	.09*	.03
Span of control	-.03	.00	-.03	.00	.00	.04*
Business area	.00	-.04*	.03 ⁺	.01	.06**	.02 ⁺
<i>Independent variable</i>						
Line manager leadership behavior (LM)		.59**		.45**		.64**
Adjusted R ²	.010	.346	.013	.210	.016	.410
ΔR^2	.014	.334	.017	.196	.019	.393
F	4.244**	149.914**	5.168**	75.792**	5.963**	196.810**
ΔF	4.244**	1728.362**	5.168**	838.513**	5.963**	2252.236**
N	3381		3378		3376	

Note. Standardized regression coefficients are shown.

⁺ $p < .10$ * $p < .05$. ** $p < .01$.

Table 5. Reliability, Descriptive Statistics and Correlations of Studied Variables in Matrix Sample

Variable	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	1541	47.94	9.60	1																
2. Gender	1541	.32	.47	-.07**	1															
3. Tenure	1541	14.88	9.80	.62**	.04	1														
4. Executive	1541	.01	.08	.08**	-.02	.12**	1													
5. Manager	1541	.05	.22	.19**	-.08**	.22**	-.02	1												
6. Leading professional	1541	.25	.43	.37**	-.11**	.25**	-.04	-.13**	1											
7. Principal professional	1541	.39	.49	0.03	.01	-.20**	-.06*	-.18**	-.45**	1										
8. Professional	1541	.23	.42	-.37**	.14**	-.13**	-.04	-.12**	-.31**	-.43**	1									
9. Associate	1541	.04	.19	-.18**	.11**	-.11**	-.02	-.04	-.11**	-.15**	-.11**	1								
10. Span of control (resource)	1541	29.34	32.99	-.07**	-.11**	.06*	-.01	-.03	-.10**	-.12**	-.10**	-.00	1							
11. Span of control (task)	1541	24.37	13.80	-.03	.00	-.01	-.05	-.10**	.03	-.03	.04	-.04	-.02	1						
12. Business area	1541	.75	.43	.15**	.04	.05*	.03	.05	.08**	.01	.07**	.00	-.34**	.21**	1					
13. Line (resource) manager leadership behavior	1517	71.38	22.63	-.04	-.05	-.07**	.00	-.07**	.02	.02	.01	.03	-.07**	-.01	.03	1				
14. Task manager leadership behavior	1495	74.07	21.08	.03	-.07*	.01	.04	.01	.05	.00	-.03	.01	.00	-.05	-.03	.45**	1			
15. Skill development	1541	70.40	20.96	.00	-.02	.04	.03	.01	-.01	-.06*	.03	-.02	.08**	.02	-.05*	.48**	.47**	1		
16. Work intensity	1540	64.56	21.73	.02	-.05*	.02	.04	-.03	-.03	-.03	.04	.02	.06*	-.02	-.11**	.31**	.34**	.35**	1	
17. Job Satisfaction	1541	71.81	19.43	-.02	-.02	.01	.05	-.02	-.01	-.05	.02	.03	.06*	-.02	-.02	.50**	.53**	.68**	.43**	1

* $p < .05$. ** $p < .01$.

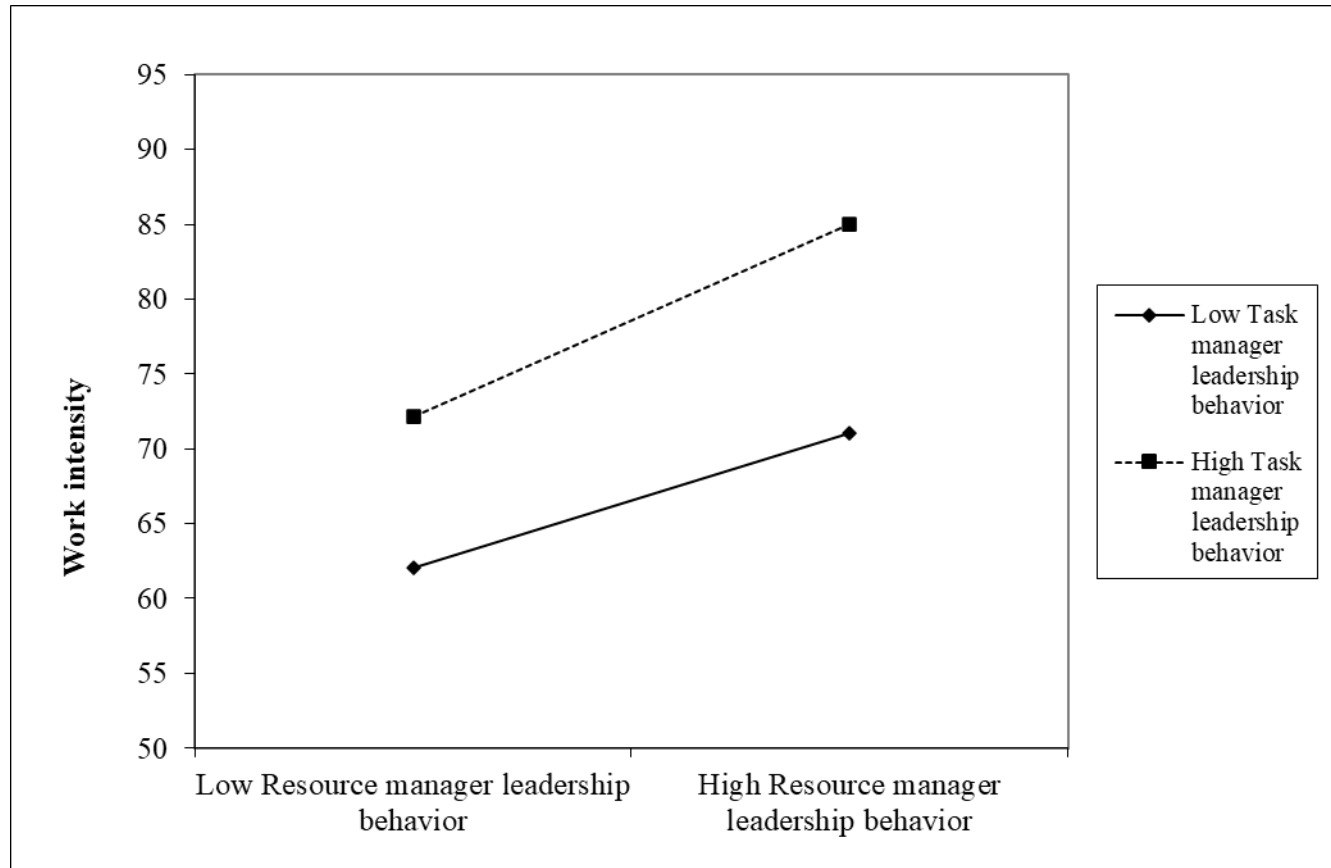
Table 6. Results for hierarchical regression analyses on Job quality in matrix sample

	<u>Skill development</u>			<u>Work intensity</u>			<u>Job Satisfaction</u>		
	Model 1 β	Model 2 β	Model 3 β	Model 1 β	Model 2 β	Model 3 β	Model 1 β	Model 2 β	Model 3 β
<i>Control variable</i>									
Age	-.01	.00	.00	.11**	.11**	.11**	-.01	.00	.00
Gender	-.01	.03	.03	-.07*	-.04 ⁺	-.04 ⁺	-.02	.03	.03
Tenure	.05	.06 ⁺	.06 ⁺	.00	.01	.01	.02	.03	.03
Executive	.01	-.02	-.02	.02	.00	.00	.03	-.01	-.01
Manager	-.05	-.09*	-.09*	-.07 ⁺	-.10*	-.10*	-.05	-.10**	-.10**
Leading professional	-.12	-.26**	-.26**	-.09	-.19**	-.19*	-.07	-.23**	-.23**
Principal professional	-.14 ⁺	-.28**	-.28**	-.07	-.17*	-.17*	-.10	-.26**	-.26**
Professional	-.07	-.18**	-.18**	.03	-.05	-.04	-.04	-.17**	-.17**
Associate	-.06	-.13**	-.13**	.02	-.03	-.03	-.01	-.08**	-.08**
Span of control (resource owner)	.03	.02	.02	.01	.00	.00	.03	.02	.02
Span of control (task owner)	.03	.04 ⁺	.04 ⁺	.00	.01	.01	-.02	-.01	-.01
Business area	-.03	-.02	-.01	-.10**	-.09**	-.09**	.02	.03	.03
<i>Independent variable</i>									
Line (resource) manager leadership behavior (LM)		.36**	.31**		.22**	.10		.34**	.37**
Task manager leadership behavior (TM)		.33**	.29**		.24**	.14*		.39**	.42**
<i>Modereation</i>									
Lro x Lto			.08			.20*			-.05
Adjusted R ²	.007	.340	.340	.020	.168	.170	.001	.386	.386
ΔR^2	.015	.332	.000	.028	.148	.003	.009	.383	.000
F	1.837*	55.495**	51.859**	3.524**	22.352**	21.223**	1.081	67.448**	62.946**
ΔF	1.837*	371.865**	.970	3.524**	131.555**	4.647*	1.081	461.574**	.343
N	1478			1478			1478		

Note. Standardized regression coefficients are shown.

⁺ $p < .10$ * $p < .05$. ** $p < .01$.

Figure 1. Matrix sample: Resource manager leadership behavior and task manager leadership behavior impact on work intensity



Despite a proliferation of organizational forms that challenge the hierarchical, unity-of-command characteristics of organizations, leadership research still today takes the centrality of the line managers in employee-manager relations as given. Here, we study the interplay of leadership behavior and organizational structure on three job quality outcomes: Skill development, work intensity and job satisfaction. The present study is, to our knowledge, the first study of how variation in organizational structure (line vs matrix) interacts with leadership behaviors to explain employee job quality outcomes.

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