
Culture beats leadership - first insights of the modul_or

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Abstract: This article contributes to a better understanding of the interplay between organizational culture and leadership. Based on the AGIL model of Parsons (1961), we created a questionnaire to examine if both constructs are connected to organizational performance, if a fit between them is of any importance and to what extent they influence each other. Results show that both are highly correlated with organizational performance. A fit between culture facets and corresponding leadership styles is also significantly related to performance. However, results from multiple regression uncover the outstanding of the role of organizational culture, which outperforms leadership. Finally, we outline our future research plans and welcome suggestions for improvements.

Keywords: Organizational Culture; Leadership; Fit; Differences, Regression

1 Introduction

Culture and performance

A lot of research has been done in the field of organizational culture examining the effects on organizational performance and innovativeness. Denison & Mishra (1995) for example showed, how facets of culture are highly connected to tangible outcomes. Scholl, Schmelzer, Kunert, Bedenk, Hüttner, Pullen & Tirre (2014) proved the same with subjective performance measures for organizational success and innovativeness (cf. Ahmed, 1998; Jaruzelski, Loehr & Holman, 2011; Khazanchi, Lewis & Boyer, 2007; Sharifirad & Ataei, 2012). A meta-analysis by Brown, Schmied & Tarondeau (2002) could show that even with varying definitions most studies found a significant link between an innovative organizational culture and organizational performance.

Leadership and performance

According to Hooijberg (1996), leaders play an important role in achieving innovativeness and organizational success. They are supposed to react adequately to different situations. Hooijberg describes four functions that leaders should be able to fulfil to guarantee the company's balance between retention and change. Those leadership functions are: Adaptive Leadership Function, Task Leadership Function, Stability Leadership Function, and People Leadership Function. He found a link between the overall repertoire of leadership styles and the leaders' success assessed by subordinates, colleagues, and supervisors. Rosing, Frese & Bausch (2011) support the hypothesis that leaders should master seemingly contradictory behaviours to contribute to organizational performance. Several authors report similar effects of leadership. For example, Yukl (2008) uncovered the influence of task oriented leadership behaviour on organizational efficiency, adaptation focused behaviour on change, and people oriented behaviour on climate. Overall, meta-analytical research proves the importance of leadership for various organizational outcome measures (cf. DeRue, Nahrgang, Wellman & Humphrey, 2011).

Interplay between Culture, Leadership and performance

Several literature reviews support interaction assumptions between various levels of analysis (cf. Crossan & Apaydin, 2010). Results are highly diverse. As Lok & Crawford (2003) show in their intercultural study, both organizational culture and leadership styles contribute to job satisfaction and organizational commitment. However, the interaction between values and supervisor behaviour was of no significance. Ogbonna & Harris (2000) found at least a mediating effect of culture on leadership (cf. Nystrom, Ramamurthy & Wilson, 2002). In contrast, Lau & Ngo (2004) neglect such an interrelation.

While most research in this field focuses on a single level of an organization there are some that incorporate various levels and elaborate for example on the interconnectedness of an organization's culture and the respective leadership styles that are applied and accepted within a certain organization. We aim to contribute to that research domain by presenting data from an integrative survey.

2 Methods

Scholl et al. (2014) invented a questionnaire for German speaking countries based on the AGIL model from Parsons (1961). The survey tests for four basic facets of organizational culture: Adaptation, Course, Trust, and Participation. They can be arranged on two dimensions: Stability vs. Flexibility as well as Internal vs. External focus (cf. Denison & Mishra, 1995). The model holds the assumption that all four poles should be evenly represented in an organization's culture for high organizational effectiveness. Furthermore, we integrated leadership styles, the survey tests whether leader behaviour supports organizational cultural facets (cf. Hooijberg, 1996). Outcomes are tested for organizational performance. Figure 1 shows the entire survey model.

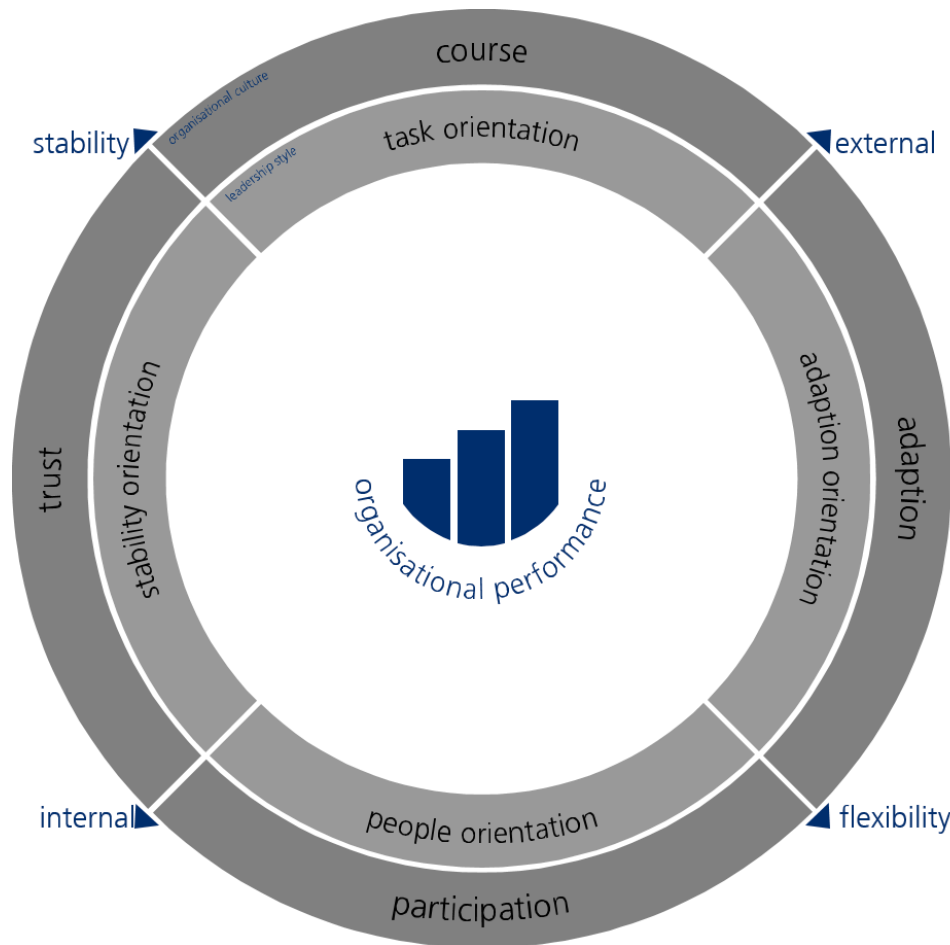


Fig. 1: Theoretical model of the modular organizational research inventory (modul_or) including facets of organizational culture, leadership styles, and organizational performance.

The number of items of each level is 16 (4 per scale, except trust, which was measured with 6 items for integrity, competence, and benevolence). Participants could answer on a 5 point Likert scale (1 = strongly disagree – 5 = strongly agree). The outcome was covered by another 8 items. They asked for subjective ratings, if competitors are generally better or worse regarding several aspects like economic success, market position, image and innovation. Participants could answer on a 7 point Likert scale (-3 = much worse, 0 = equal, +3 = much better). Completed by two demographic questions for seniority and leadership position, participants should answer 44 items. The average time to complete the questionnaire online was 15 minutes.

Reliability is sufficiently high (see table 1). Internal consistency of the entire questionnaire is $\alpha = .96$.

Sample

Our sample consists of $N = 483$ employees working in 25 different German small and medium enterprises. They came from various business domains like finance, health care, energy, and IT. 30% of the participants declared themselves as a leader. The majority of 47% was not longer than 5 years in their company.

Hypotheses

First, we assume, that all facets of the theoretical model (see figure 1) are related to organizational success.

H1a: All facets of organizational culture are correlated with organizational performance.

H1b: All leadership styles are correlated with organizational performance.

Furthermore, we assume, that organizational culture and leadership should correspond to mutually support each other.

H2: A fit between organizational culture and leadership is correlated with organizational performance.

At last, we want to show that organizational culture and leadership styles contribute equally to organizational performance.

H3: Organizational culture and leadership repertoire explain variation in organizational performance to the same extend.

3 Results

Hypothesis 1a & 1b

Results show that all four facets of organizational culture and all leadership styles correlate significantly with subjective measures of organizational success (see table 1).

Hypothesis 2

To evaluate if the fit between organizational culture and leadership is related to success, a sum of squared difference scores was calculated (cf. Su, Murdock & Rounds, 2015). For that, the ratings of the leadership styles were subtracted from those of organizational culture and subsequently squared. This value was then correlated with the assessment of organizational performance. Such a procedure was possible because culture facets match corresponding leader behaviour preferences. In addition, all items were answered on equal ordinal categories.

Analyses reveal minor but significant relevance of fit. Differences between the course facet and matching task oriented leadership behaviour is small but significantly correlated with organizational performance measures ($r = -.15, p < .01$) as well as the difference between participation and people oriented leadership style ($r = -.12, p = .02$). There is a trend according to the difference between adaptation and adaptation oriented leadership style ($r = -.1, p = .06$) whereas no significance appears with trust and stability oriented behaviour ($r = -.08, p = .11$). In conclusion, the smaller the misfit between culture and leadership the higher are success values.

Table 1: Correlation matrix of variables for organizational culture and leadership styles (Cronbachs α in principal diagonal).

	1	2	3	4	5	6	7	8
1 Course	.84							
2 Adaptation	.54	.67						
3 Participation	.65	.53	.81					
4 Trust	.7	.55	.75	.93				
5 Task orientation	.54	.47	.6	.6	.91			
6 Adaptation orientation	.51	.48	.63	.58	.68	.88		
7 People orientation	.54	.45	.62	.62	.76	.67	.89	
8 Stability Orientation	.53	.47	.59	.58	.83	.65	.78	.89
9 Organizational Performance	.53	.42	.52	.61	.43	.42	.39	.42

Note: All correlations are significant on 1% level.

Hypothesis 3

Overall, corporate culture correlates highly with organizational performance ($r = .72, p < .01$). The same does apply to leadership styles ($r = .5, p < .01$). Multiple regression analyses change the picture and reveal the outstanding role of organizational culture for organizational performance. Culture ($\beta = .52, p < .01$). suppresses the explained variance of leadership ($\beta = .05, n.s.$). The whole model explains 30% of the variance ($F = 105.6, p < .01$). That means, measures of organizational culture and measures of leadership repertoire do not explain organizational performance to the same extend.

4 Discussion

Our findings in hypothesis 1 regarding the relevance of organizational culture as well as leadership styles confirm earlier research in these two domains (Denison & Mishra, 1995; Hooijberg, 1996; Scholl et al., 2014). All facets are highly correlated with organizational performance. Furthermore, its supportive but not crucial when both fit to each other (hypothesis 2).

Results of regression analysis (hypothesis 3) uncover the outstanding of the role of cultural aspects in contrast to leader behaviour styles. According to that, culture beats leadership totally! These findings are not in line with researchers who support a mediating role culture (e.g. Ogbonna & Harris, 2000). Instead of leaders creating culture (cf. Kwantes & Boglarsky, 2007) rather culture determines what leadership style is tolerated. Main purpose of leadership is therefore fostering a supportive environment. That pushes leaders into a new, most updated role as an enabling institution (e.g.

Schermuly & Meyer, in print). Therefore, more coaching and rather guiding behaviour is requested (cf. de Jong & Den Hartog, 2007).

The questionnaire has proven its worth. The brief time to fill and the high reliability show its appropriateness. Major limitation is the small number of participants. Although all analyses were possible considering statistical requirements, more data would be necessary to conduct even more sophisticated techniques. Given the fact, that the data is highly nested, multilevel analysis would be necessary. Furthermore, differences as a measure of fit generally lack of quality. As Tinsley (2000) points out, this is “because the unreliability of the separate components is magnified in calculating the index.” (p. 153). Thus, further statistical analyses should prove the results.

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Areas for feedback & development

Over the next years, we aim to integrate 2 more domains, in particular group and individual level. They will be integrated in the framework of Parsons (1961). On group level, we want to ask participants if team climate promotes Outcome, Innovation, Quality, and Cohesion. On individual level, we will include scales for Sense, Change, Competence and Satisfaction. Figure 2 shows the future overall model.

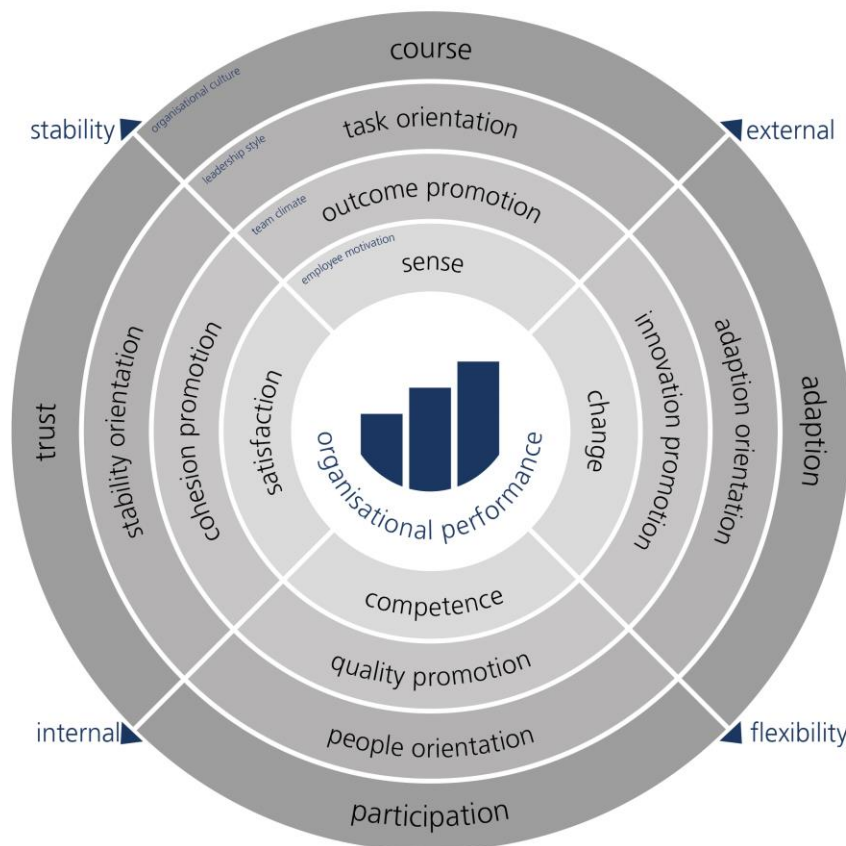


Fig. 2: Theoretical model of the modular organizational research inventory (modul_or) including facets of organizational culture, leadership styles, team climate, employee motivation, and organizational performance.

The aim is to examine, to what extent the four levels are interconnected, particularly: (1) What specific correlation exist between them? (2) Does organizational culture dominate all three other domains? (3) Is a fit of all four levels of any importance for performance? (4) What is the ideal distribution of all 16 facets? Furthermore, we aim to expand the data set. More participants will allow multilevel analysis to strengthen first findings. We hope to explain much more variation of performance than the actual 30%.