Mastering uncertainty with the Competing Values Framework– insights from multilevel research on employee motivation, team climate, leadership style, and organizational culture

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In this paper, I want to show the value of uncertainty and complexity for organisational performance as an intra-organisational image of the disorderliness in the environment. It is based on the Competing Values Framework of Quinn & Rohrbaugh (1983) that is widely used to evaluate the importance of balancing contradictory factors. This applies in particular for uncertainty as a condition of ambiguity, complexity, and inconsistency. I applied a survey study to reveal links between organizational culture, leadership style, team climate, and employee motivation. The questionnaire was conducted in k = 73 organisations with N = 1.359 employees. Results show that all facets are significantly related to organisational performance, even though not all levels of analysis contribute equally to organisational performance. Furthermore, organisations from rather dynamic business domains with higher demands of uncertainty are different to ones coming from rather stable, more predictable environments. Finally, organisations benefit from a fit between the 4 levels. Overall, the data shows the importance of a balance of flexibility-focused behaviour (for adapting on unforeseen changes) and stability-creating habits (for reducing organisational strain). All findings are discussed in detail and incorporated in the current state of research.

Introduction

Most organizational and managerial research has been focused on helping to reduce uncertainty and increasing predictability and control. This has led to widely known management tools and standards (e.g. ISO 21500 on project management or ISO 9000 on quality management) as well as prescriptions and guidelines (e.g. flow charts, Codes of Conduct). Most of them have their roots in factory management (Taylor, 1911) and bureaucracy (Weber, 1968) and are based on the precondition of stable environments. The overarching aim is absolute surveillance: "In principle, all things can be controlled by means of calculation" (Weber 1968, p. 593, in Böhle, 2011). In management, errors, defeats and misses are eliminated as much as possible. These aspects are opposite to best practice, customer promises, high quality, reliability, and safety, thus, they jeopardise reputation, credit, and survival. Whereas, when it comes to uncertainty, defined as unpredictable risks (Knight, 1922) in dynamic environments, these aspects become a means of management, a source of ideas, a necessity in scientific-based trial-and-error processes, and a valuable learning opportunity. Without the repetitive testing of new products, new services, new processes, the reputation, credit, and survival of a company is also in danger (von Stamm, 2018, cf. Böhle, 2011).

In economics, the ambiguous role of failure in the course of uncertainty is also well known. On the one hand, market failures threaten companies when customers reject entire product portfolios, banks stop providing credit to ensure liquidity, or public regulations inhibit founding and growing of enterprises. On the other hand, failed firms give way to more efficient ones, prove new concepts or products to be unmarketable, and resources and knowledge are released from where they do not add value. As a result, the benefits for the economy and society offset the costs (Knott & Posen, 2005). Accordingly, the life expectancy of firms has constantly decreased, from 90 years in 1935 down to an estimated 12 years in 2020 (Foster, 2012, cf. Foster & Kaplan, 2001).

In this paper, I want to show the value of uncertainty and complexity for organisational performance as an intra-organisational image of the disorderliness in the environment. I follow the definition of Brashers (2001, see Jalonen (2012) for a review on different definitions) who claims that uncertainty exists when "details of situations are ambiguous and complex; when information is unavailable or consistent". This is quite similar to what is known as complex problems in cognitive sciences¹.

Competing values framework as a mean for mapping uncertainty

A model that works very well for addressing uncertainty in organization sciences is the Competing Values Framework (CVF) of Quinn & Rohrbaugh (1983). This theory utilizes some general assumptions concerning organisations as social systems of interdependent people striving for the same aims, as stated by Parsons (1951, 1961). The CVF suggests that humans who repeatedly join each other have to build up structures and processes inside that guarantee viability and sustainability (internal functions). At the same time, they are supposed to manage the interaction with the environment at the system border (external functions). In addition, social systems must initiate activities, which create predictability, such as role descriptions, work flows, and infrastructure (stability function). At the same time, organisations must care for changes in the environment and create mechanisms for adaptation and renewal, such as corporate development, innovation projects, and idea management (flexibility function) (for more details see Hartnell, Ou, & Kinicki, 2011). The crucial point is to balance these 4 functions because all of them have strong reasons for existence (Quinn & Spreitzer, 1991). As soon as an organisation over-emphasizes one aspect, they are very likely to fail meaning they stop existing (Kunert & Staar, 2018).

¹ Characteristics of complex problems are: Complexity (large numbers of items, interrelations and decisions), Dynamics (changes over time), Intransparency (lack of clarity of the situation), and Polytely (multiple goals) (cf. Frensch & Funke, 1995).

Competing values framework as a predictor for performance under uncertainty

Several studies have used the CVF to show effects on objective and subjective measures of performance or success, respectively (Hartnell et al., 2011). Results are highly mixed.

On the national level, Dastmalchian, Lee & Ng (2000) investigated the interplay between behavioural preferences in countries and organisations. Based on a sample of 79 firms from Canada and Korea they found differences between business domains but failed to show companies reflecting the amount of uncertainty avoidance in their countries in emphasizing stability and flexibility, respectively.

On organisational level, the Culture and Effectiveness Model by Denison & Spreitzer (1991) is based on the CVF to show the impact of cultural aspects on organisational success (Denison & Mishra, 1995, Denison, Nieminen & Kotrba, 2014). Several times researchers found evidence for the need of balancing all 4 facets (for an overview see Yu & Wu, 2009). However, especially the facet *adaptability* as a competence to deal with uncertainty caused by dynamics in the environment appears to be the most critical cultural element in promoting firm performance (e.g., Chatman, Caldwell, O'Reilly, & Doerr, 2014; Kotter & Heskett, 1992). O'Reilly, Caldwell, Chatman, & Doerr (2014) proved this relationship for several subjective and objective performance indicators. Different to that, Dastmalchian et al. (2000) found a stability (and external) focus most appropriate for coping successfully with unpredictable environments.

Also, on the managerial level we can see the importance of balancing competing leadership styles. The effect of a behavioural repertoire that adjusts to the needs of a particular situation has been proven several times (Rosing, Frese & Bausch, 2011, cf. Tushman & O'Reilly, 1996; Wang & Rafiq, 2014). Hooijberg (1996, cf. Quinn, Bright, Faerman, Thompson, & McGrath, 2015) uses the CVF to describe four functions according to the four cultural aspects mentioned before. He emphasises the ability to perform all 4 functions in order to deal with uncertainty and provide exactly what employees need from their leader. Like others (cf. Yukl, 2008), he found a link between the overall repertoire of leadership styles and organisational success.

On team level, only few researchers used the CVF. Reagan & Rohrbaugh (1990, cf. Rohrbaugh, 1987) proved the general applicability of the model to show differences in group decision styles. Yang & Shao (1996) used the model for investigating shared leadership in self-managed teams. They found evidence for the importance of balancing all facets as well as for shifts among the facets depending on team maturity. But mostly, other models are used, which show high similarities to the Competing Values Framework. For example, West (1990, cf. Anderson & West, 1994, 1998) investigated the importance of balancing competing climate-related behaviour styles in his 4-factor-theory. Lubatkin, Simsek, Ling, & Veiga (2006) proved the capability of top management teams in mastering ambidexterity as associated with firm performance.

On the individual level, the CVF can also be found. Most research focuses on the Person-Environment-Fit (P-E-Fit) or Person-Organisation-Fit (P-O-Fit), respectively. For example, Gifford, Zammuto, & Goodman (2002) showed that organizational culture, measured with the CVF, does affect hospital nurses' quality of work life as well as their commitment, job involvement, empowerment, and job satisfaction. Rogers & Hildebrandt (1993) used the framework for analysing communication habits of top managers.

Despite the research mentioned above, the importance of balancing contradictory aspects in work environments is still expandable, especially when it comes to coping with environmental uncertainty. Also, the importance of a better understanding of interactions between various levels inside an organisation is undervalued and actually not taken into account enough in organisational research (Hartnell et al., 2011). In this paper I want to address both issues.

Hypotheses

As the Competing Values Framework (Quinn & Rohrbaugh, 1983) suggests and several authors confirm, not a single facet but all of them contribute to performance equally. Denison and his colleagues proved that on organisational level several times with samples from different business domains and countries. First, I want to test if my data set is in line with these findings:

H1: All competing values are related to organisational performance.

Furthermore, several literature reviews support interaction assumptions between various levels of analysis (cf. Crossan & Apaydin, 2010) but results are highly diverse (Hartnell et al., 2011, Schneider, Ehrhart & Macey, 2013). For example, Lok & Crawford (2003) show in their intercultural study that organizational culture and leadership styles contribute to job satisfaction and organizational commitment to the same extent. 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). O'Reilly, Caldwell, Chatman & Doerr (2014) uncovered even similarities between manager's personality and organizational culture. In contrast, Lau & Ngo (2004) neglect such an interrelation. I want to test the interaction, too, in order to contribute to that discussion.

H2: Levels of analysis are dependent on each other and predict performance not to the same extent.

As Burns & Stalker (1961) once showed, different kinds of organisations appear in different business domains. They assumed that companies adopt to their environment by expressing the same attitudes, which can be seen in their cultural characteristics. Accordingly, organisations from rather steady and conservative domains with little uncertainty should show higher values in stability oriented facets than the ones from rather dynamic and agile business areas (O'Reilly et al., 2014). The corresponding assumption is:

H3: Organisations reflect on all levels of analysis characteristics of their business domains as rather dynamic environments lead to higher focus on flexibility and rather stable environments lead to higher focus on stability.

Furthermore, I assume that it is of importance to create a misfit between cultural values, leadership repertoire values, team climate values and individual motivation values. For example, Hartnell, Kinicki, Lambert, Fugate, & Corner (2016) argue that leaders act as a substitute for untended cultural facets. In their meta-analysis data supports more such a dissimilarity assumption than a need for similarity. Furthermore, the resulting tension and

uncertainty among employees could lead to more ideas, better discussions and, finally, better results because people do not fall into the fallacy of illusion of knowledge. In contrast, Jun and Shin (1995) argue that the degree of fit between cultural facets in the CVF and according leadership styles relates positively to organizational commitment and job satisfaction of employees. This is because "*discrepancies between leadership behavior and cultural norms are expected to foster uncertainty and ambiguity among employees about how they should perceive, think, feel, and behave in relation to organizational events, resulting in a reduction in firm performance*" (Hartnell, 2016, p. 849). Such findings are supported by numerous studies on group level that show higher acceptance and team productivity when leaders behave according to group norms (e.g. Giessner, van Knippenberg, & Sleebos, 2009). The same holds true for individual motivation. Kristof-Brown, Zimmerman, & Johnson (2005) revealed in their metaanalysis hat the perceived congruence (corresponding individual and corporate values) is relevant especially for employee's satisfaction and commitment.

On the other hand, many case studies emphasize the value of a misfit, which is seen as a necessary factor of complementarity. For example, hospitals, fire and police stations as well as energy plants are seen as rather stable environments. However, they produce a high amount of uncertainty on the team level, because members are exposed to uncontrollable environmental influences (cases of emergency and danger). In order to compensate for such a high level of unpredictability and to prevent the teams from failure those organisations try to create a stable environment (Badke-Schaub & Hofinger, 2018). Taking into account all this earlier research, findings seem to support more the dissimilarity assumption. Thus, the hypothesis is:

H4: The misfit of the values in each dimension is related to organisational performance.

Methods

Questionnaire

Kunert (2016) invented a questionnaire for German speaking countries called Modular Organizational Research Inventory (modul_or), which is 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, Lawrence, Lenk, & Quinn, 2009). Also, we integrated the group level by asking participants if team climate promotes Outcome, Innovation, Quality, and Cohesion (cf. West, 1990). Lastly, on individual level, we included scales for Sense, Change, Competence and Satisfaction (cf. Kristof-Brown et al., 2005. Figure 1 shows the overall model.



Fig. 1: Theoretical model of the Modular Inventory for Organizational Research (modul_or).

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 (cf. Singh, Darwish, & Potocnik, 2016; Wall, Michie, Patterson, Patterson, Wood, Sheehan, Clegg, & West, 2004). 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, participants should answer 76 items. The average time to complete the questionnaire online was 20 minutes. The survey exists in German, English, French, Spanish and Turkish language in order to cover a variety of participant's mother tongues. The survey was internet-based, answers were not forced in order to reduce dropout rate. All answers were given voluntarily, there was no control for participation or accuracy in demographic items. Reliability is sufficiently high. Internal consistency of the entire questionnaire is $\alpha = .96$.

Sample

Up to now, the survey has been conducted in k = 73 organisations, 81% of them are small and medium-sized enterprises. The data was collected in various business domains like finance, health care, energy, production, consulting, media, and IT.

Sample size of the four levels is different because of historical reasons. When we started with the culture scales, the data set consisted of N = 1.359 employees. 25% of them declared themselves as a leader or manager. The majority of 51% was not longer than 5 years in their company. The number of participants per company ranges from N = 3 to N = 165 with an average of N = 19.

The opportunity sample for the leadership scales, which we added later to the survey, consists of remaining N = 669 employees coming from k = 34 organisations. Just recently, we completed the questionnaire by scales for team climate and employee motivation. The sample size is reduced to N = 439 respectively N = 380 people coming from k = 27 respectively k = 21 companies. The shares of SMEs, leaders, seniority and average participation was similar to the culture data set.

Findings

In the following, all results are reported along the hypotheses.

H1: All competing values are related to organisational performance.

In table 1 the intercorrelations are displayed. As can be seen in the lowermost row, all facets of organisational culture, leadership repertoire, team climate, and employee motivation are significantly related to organisational performance. They range from r = .33 (for three of the team scales) to r = .56 (for Employee Satisfaction). Thus, hypothesis 1 is not rejected.

H2: Levels of analysis are depending on each other and predict organisational performance not to the same extent.

In order to test hypothesis 2, a multiple regression analysis was conducted. The results show that only organisational culture ($\beta = .31$, t = 4.11, p < .01) and individual motivation ($\beta = .32$, t = 5.82, p < .01) can be associated to organisational performance whereas leadership repertoire ($\beta = .09$, t = -1.25, p = .21) and team climate ($\beta = .1$, t = 1.49, p = .19) are of no significance. This multiple regression model explains a significant share of variance in the outcome variable of organisational performance ($R^2 = .32$).

	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5
1.1 Course	.83	_				_											_
1.2 Adaptation	.49	.6															
1.3 Participation	.6	.47	.78														
1.4 Trust	.62	.48	.61	.93													
2.1 Task orientation	.55	.49	.6	.64	.9												
2.2 Adaptation orientation	.52	.49	.59	.61	.68	.88											
2.3 People orientation	.55	.47	.62	.64	.76	.66	.89										
2.4 Stability Orientation	.54	.47	.57	.6	.81	.63	.75	.88									
3.1 Outcome promotion	.58	.54	.51	.58	.56	.49	.51	.51	.8								
3.2 Innovation promotion	.37	.48	.42	.55	.5	.45	.46	.44	.54	.82							
3.3 Quality promotion	.39	.51	.43	.54	.54	.44	.5	.45	.59	.71	.83						
3.4 Cohesion promotion	.32	.39	.4	.54	.46	.41	.42	.34	.49	.69	.76	.89					
4.1 Sense	.36	.4	.45	.5	.48	.43	.44	.37	.42	.39	.43	.37	.84				
4.2 Change	.26	.36	.45	.43	.35	.44	.35	.27	.3	.34	.31	.31	.71	.86			
4.3 Competence	.36	.38	.36	.4	.41	.35	.38	.33	.42	.36	.43	.32	.56	.51	.74		
4.4 Satisfaction	.43	.39	.51	.59	.5	.47	.53	.44	.41	.37	.41	.4	.71	.67	.56	.88	
5 Organizational Performance	.45	.36	.44	.45	.4	.4	.4	.42	.39	.33	.33	.33	.41	.4	.37	.53	.82

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

Note: All correlations are significant on 1% level. Bold values in main diagonal are Cronbach's α .

H3: Organisations reflect on all levels of analysis characteristics of their business domains as rather dynamic environments lead to higher focus on flexibility and rather stable environments lead to higher focus on stability.

To test hypothesis 3, I split the data set into two subsamples of companies from rather dynamic (Research and Experimental Development, IT, Business & Management Activities, Media, and Advertising), and stable environments (Electricity, Gas, and Water supply, Manufacture, Recycling, Hotels & Restaurants, Construction, Health, Financial Intermediation & Insurance, Real Estate, and Retail). Results for means and standard deviation are listed in table 2. Except two, all tests for mean differences are significant. Against the hypothesis, companies from rather dynamic business domains not only show higher values in flexibility-associated facets but also in stability-oriented scales. Thus, the assumption of organisations reflecting their environment in a way predicted by theory must be rejected.

Dimensions	Scale	Environment	Mean	SD	F	р
	110	dynamic	3,61	,81	1 21	.25
Stability-External	1.1 Course	stable	3,54	,84	1,51	
		dynamic	3,78	,7	0.00	.01
Flexibility-External	1.2 Adaptation	stable	3,64	,68	8,09	
		dynamic	3,51	,77	14,05	>.01
Flexibility-Internal	1.3 Participation	stable	3,29	,83		
Stability-Internal	1.4 Trust	dynamic	3,93	,66	30,94	>.01
		stable	3,59	,86		
	2.1 Task orientation	dynamic	3,89	,79	11,12	>.01
Stability-External		stable	3,59	,94		
	2.2 Adaptation	dynamic	3,84	,84		>.01
Flexibility-External	orientation	stable	3,39	,95	23,51	
		dynamic	3,6	,89		
Flexibility-Internal	2.3 People orientation	stable	3,39	,99	4,89	.03
		dynamic	3,52	,83		.33
Stability-Internal	2.4 Stability Orientation	stable	3,44	,92	0,94	

Tab. 2: Comparison of companies from rather dynamic and stable environments.

Dimensions	Scale	Environment	Mean	SD	F	р
Stabilita Enternal	2.1.0	dynamic	3,87	,69	5.01	.03
Stability-External	3.1 Outcome promotion	stable	3,57	,81	5,01	
Electivities Entermal	2.2.1	dynamic	3,82	,66	8 01	.01
Flexiolity-External	3.2 Innovation promotion	stable	3,56	,83	8,01	
Elovibility Intornal	2.2 Quality promotion	dynamic	4.03	,59	6 52	.01
Flexionity-internal	5.5 Quality promotion	stable	3,81	,76	0,52	
Stability Internal	2.4 Cohosion promotion	dynamic	4,13	,75	12 91	>.01
Stability-Internal	5.4 Conesion promotion	stable	3,76	,88	15,81	
Stability External	4.1 Sansa	dynamic	4,38	,47	15,89	>.01
Stability-External	4.1 Sense	stable	3,92	,79		
Elovibility External	4.2 Change	dynamic	4,46	,5	40,52	>.01
Flexionity-External	4.2 Change	stable	3,61	,93		
Elovibility Internal	12 Competence	dynamic	4,28	,53	0.52	>.01
Flexionity-internat	4.5 Competence	stable	3,97	,68	9,55	
Stability Internal	4.4 Satisfaction	dynamic	4.03	,67	15.24	>.01
Stability-Internal	4.4 Satisfaction	stable	3,51	,9	13,24	
Quitcome	Organizational	dynamic	0,98	,94	0.18	67
	performance	stable	0,94	1,04	0,10	.07

Tab. 2: Comparison of companies from rather dynamic and stable environments (continued).

H4: The misfit of the values in each dimension is related to organisational performance.

To evaluate a relation between misfit and success, the variance of all facets on all levels was calculated. Then, this value was correlated with the assessment of organizational performance. Such a procedure was possible because all facets are theoretically matched to each other and, furthermore, are answered on equal ordinal categories.

Analyses reveal minor relevance of fit. As shown in table 3, the differences between a cultural facet, the corresponding leadership function, and elements of team climate and employee motivation are negatively related with organisational performance. Effects have proven to be small - the maximum of correlation is r = .17 - but significant. Therefore, hypothesis 3 must be rejected.

	1	2	3	4
1 Stability-External				
2 Flexibility-External	.3			
3 Flexibility-Internal	.38	.27		
4 Stability-Internal	.39	.27	.38	
5 Organizational Performance	17	14	16	15

Tab. 3: Correlation of facets variance with organisational performance.

Note: All correlations are significant on 1% level.

Discussion

Our findings regarding the relevance of organizational culture, leadership repertoire, team climate as well as employee motivation confirm earlier research in these four domains (Anderson & West, 1994, 1998, Denison & Mishra, 1995, Hooijberg, 1996, Kristof-Brown et al. 2005). All facets are significantly correlated with organizational performance (hypothesis 1). At the same time, stability and flexibility creating facets are equally correlated to success. That is in line with authors who stress the demand for balanced values within organisations as conceptualized by Quinn & Spreitzer (1991) (e.g. Kunert & Staar, 2018, Polychroniou & Trivellas, 2018).

Results of regression analysis uncover the outstanding role of organisational culture and employee motivation (hypothesis 2). This is in line with research focussing on these two diametrically opposed levels of analysis (see the seminal work of Payne & Pugh, 1976).

The balance assumption from hypothesis 1 remains valid when it comes to a comparison of domains (hypothesis 3). Companies from rather dynamic business environments show higher values in flexibility-promoting facets on all levels of analysis, but also in stability-creating behaviours. This finding is not in line with other researchers who assume organisational facets reflecting characteristics of the business domain (Burns & Stalker, 1961, Christensen & Gordon, 1999, O'Reilly et al., 2014, Lee & Yu, 2004). It seems more likely that companies from dynamic domains show generally more emphasis and effort in meeting the demands of uncertainty and changing conditions. Thus, values in all facets on all levels of analysis are higher.

Nevertheless, organisations from dynamic domains are not more successful than their counterparts. Other studies proved innovative organisations being generally more valuable (Rubera & Kirca, 2012). This is because a flexibility promoting culture encourages improvements in all areas of an organisation and especially process innovations were found to increase productivity (cf. Hall, Lotti, & Mairesse, 2009; Khazanchi, Lewis, & Boyer, 2007; O'Reilly & Tushman, 2008). But in the given dataset companies from both types of environment are seen as equally successful by their employees.

When it comes to the fit of the facets (hypothesis 4), results support the similarity assumption (cf. Hartnell et al., 2016). Effects are small but significant. This implies that tension coming from uncertainty and ambiguity among employees seems to be rather obstructive than productive. Taking results from prediction analysis (hypothesis 2) into

account, both suggest that shared norms and values as well as individual sensitivities determine what leadership style (cf. Hennessey, 1998, O'Reilly, & Chatman, 1996) or team behaviour is tolerated instead of being mediating factors (e.g. Ogbonna & Harris, 2000).

The questionnaire has proven its worth. The brief time to fill and the high reliability show its appropriateness. Furthermore, the sample of k = 73 organisations from various business domains is quite reliable as results in cultural research vary across industries (e.g., Christensen & Gordon, 1999). The results of hypothesis 1 in particular prove the Competing Values Framework (Quinn & Rohrbaugh, 1983) to be valuable on all the four levels of analysis.

However, high intercorrelations between the facets suggest that there is some kind of fallacy happening. Either participants can hardly distinguish the different concepts because the methods were not appropriate, or a powerful g factor is doing its work. This holds true especially for team climate and employee motivation. To the best of my knowledge, only meta-analyses tried to cover more than 2 conceptual levels simultaneously. At the same time, all items were adopted from proven instruments, incorporated into a widely used framework. As stated in system theory (Parsons, 1951, 1961), there are only 2 meaningful levels, one is the psychological system (humans), the other is a social system when many people join each other (organisation). All other levels are just possible variations of minor relevance.

Besides this, major limitation is the small number of participants. Although all analyses were possible considering statistical requirements, more participants would be necessary to conduct even more sophisticated techniques. Given the fact that the data is highly nested multilevel analysis would be recommendable. Furthermore, variance as an independent variable (used to test hypothesis 3) generally lack of quality because if its reduced scatter.

Conclusion

The aim of this contribution was to show the importance of balancing cultural facets that deal with uncertainty and facets focussing on stability. Usually, such research is done on one level of analysis (organisation, team, leadership, individual). Such studies lack of integration so it remains unclear if results are different on various levels, if they depend on each other and if effects are comparable. Therefore, this study applied a powerful theoretical model (Competing Values Framework CVF) and incorporated well-proven constructs from all 4 levels of analysis. I assumed, that all of them are valid for predicting organisational performance (hypothesis 1) but not to the same extent (hypothesis 2), are different in companies depending on their particular business environment (hypothesis 3), and should be different within a company to substitute shortcomings (hypothesis 4). To test these assumptions I used a questionnaire with 76 items covering 16 scientifically proven constructs depending on the level of analysis and the dimensions in the CVF.

Results show, that . all 16 constructs are correlated with organisational performance. However, especially corporate culture and individual motivation predict most variance on the outcome variable. At the same time, companies from rather dynamic environments have generally higher values in all facets. Lastly, organisation benefit from a fit between culture, leadership style, team climate and employee motivation. Further research should proceed yet further down this road. Studying the 4 most important levels in organisational research simultaneously is a promising way. Probably, a fifth interorganisational level could be incorporated by looking at networks. Collecting much more data makes it possible to use more appropriate data analyses for nested data. Finally, the ultimate conceptual proof of the Competing Values Framework is still awaiting. Hartnell and his colleagues (2011) collected studies that overall provide mixed support for the CVF's nomological validity and fail to support aspects of the CVF's proposed internal structure. In fact, the real nature of the model is still rather theoretical, its empirical test needs a huge dataset for different levels of analysis.

References

Anderson, N. R. & West, M. A. (1994). The Team Climate Inventory. Windsor: Berks ASE.

Anderson, N. R. & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. Journal of Organizational Behavior, 19, 235-258.

Badke-Schaub, P. & Hofinger, G. (2018). Failure in Teams - Why Successful Teams Do Not Fail (so often). In: S. Kunert (Ed.). Strategies in Failure Management. Heidelberg: Springer.

Bartram, D. (2005). The Great Eight Competencies: A Criterion-Centric Approach to Validation. Journal of Applied Psychology, 90 (6), 1185–1203.

Böhle, F. (2011). Management of Uncertainty – A Blind Spot in the Promotion of Innovations. In: S. Jeschke, I. Isenhardt, F. Hees, & S. Trantow (eds.). Enabling Innovation. Heidelberg: Springer, pp. 17-29.

Burns, T. & Stalker, G. M. (1961). The Management of Innovation. London: Tavistock.

Chatman, J. A., Caldwell, D. F., O'Reilly, C. A. & Doerr, B. (2014). Parsing organizational culture: How the norm for adaptability influences the relationship between culture consensus and financial performance in high-technology firms. Journal of Organizational Behavior, 35, 785-808.

Christensen, E. W. & Gordon, G. G. (1999). An exploration of industry, culture and revenue growth. Organization Studies, 20, 397-422.

Crossan, M. M., & Apaydin, M. (2010). A Multi-Dimensional Framework of Organizational Innovation: A Systematic Review of the Literature. Journal of Management Studies, 47 (6), 1154–1191.

Dastmalchian, Lee & Ng (2000). The interplay between organizational and national culture. Int. J. of Human Resource Management, 11 (2), 388-412.

Denison, D. R. & Spreitzer, G. M. (1991). Organizational culture and organizational development - a competing values approach. Research in Organisational Change and development, 5, 1-21.

Denison, D. R. & Mishra, A. K. (1995). Toward a Theory of Organizational Culture and Effectiveness Organization Science, 6 (2), 204-223.

Denison, D. R., Nieminen, L., & Kotrba, L. (2014). Diagnosing organizational cultures: A conceptual and empirical review of culture effectiveness surveys. European Journal of Work and Organizational Psychology, 23 (1), 145–161.

Frensch, P. A. & Funke, J. (Eds.) (1995). Complex problem solving: The European Perspective. Hillsdale, NJ: Lawrence Erlbaum Associates.

Foster, R. (2012). Creative Destruction Whips through Corporate America. INNOSIGHT Executive Briefing Winter 2012. Online available: https://www.innosight.com/wp-content/uploads/2016/08/creative-destruction-whips-through-corporate-america_final2015.pdf. Retrieved 10.06.2017.

Foster, R. & Kaplan, S. (2001). Creative destruction: Why companies are built to last and underperform the market—and how to successfully transform them. New York: Currency

Giessner, S. R., van Knippenberg, D., & Sleebos, E. (2009). License to fail? How leader group prototypicality moderates the effects of leader performance on perceptions of leadership effectiveness. The Leadership Quarterly, 20, 434–451.

Gifford, B. D., Zammuto, R. F., & Goodman, E. A. (2002). The relationship between hospital unit culture and nurses' quality of work life. Journal of Healthcare Management, 47 (1), 13-26

Hall, B. H., Lotti, F., & Mairesse, J. (2009). Innovation and productivity in SMEs: empirical evidence for Italy. Small Business Economics, 33 (1), 13–33.

Hartnell, C. A., Kinicki, A. J., Lambert, L. S., Fugate, M., & Corner, P. D. (2016). Do Similarities or Differences Between CEO Leadership and Organizational Culture Have a More Positive Effect on Firm Performance. Journal of Applied Psychology, 101 (6), 846–861.

Hartnell, C. A., Ou, A. Y. & Kinicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic review. Journal of Applied Psychology, 96, 677-694.

Hennessey, J.T. (1998). "Reinventing" Government: Does Leadership Make the Difference? Public Administration Review, 58 (6), 522–532.

Hooijberg, R. (1996). A Multidirectional Approach Toward Leadership: An Extension of the Concept of Behavioral Complexity. Human Relations, 49 (7), 917–946.

Khazanchi, S., Lewis, M., & Boyer, K. (2007). Innovation-supportive culture: The Impact of organizational values on process innovation. Journal of Operations Management, 25 (4), 871–884.

Kristof-Brown, A.L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of Individual's Fit at Work: A Meta-Analysis of Person-Job, Person-Organization, Person-Group, and Person-Supervisor Fit. Personnel Psychology; 58 (2), 281-342.

Kunert, S. (2016). Kultur fördert Innovationen - Organisationsdiagnostik im Zeiten des New Work. Wirtschaftspsychologie aktuell (2), 55 - 57.

Kunert, S. & Staar, H. (2018). Failure in Organizational Change. In: S. Kunert (Ed.). Strategies in Failure Management. Heidelberg: Springer.

Lau, C.-M. & Ngo, H.-Y. (2004). The HR system, organizational culture, and product innovation. International Business Review, 13, 685-703.

Lee, S. K. J. & Yu, K. (2004). Corporate culture and organizational performance. Journal of Managerial Psychology, 19 (4), 340-359.

Lok, P., & Crawford, J. (2004). The effect of organisational culture and leadership style on job satisfaction and organisational commitment. A cross-national comparison. Journal of Management Development, 23 (4), 321–338.

Lubatkin, M. H., Simsek, Z., Ling, Y., & Veiga, J. F. (2006). Ambidexterity and Performance in Small-to Medium-Sized Firms: The Pivotal Role of Top Management Team Behavioral Integration. Journal of Management, 32 (5), 646-672.

Ogbonna, E., & Harris, L. C. (2000). Leadership Style, Organisational Culture, and Performance: Empirical Evidence from UK companies. International Journal of Human Resource, 11 (4), 766–788.

O'Reilly, C. A., & Chatman, J. A. (1996). Culture as social control: Corporations, cults, and commitment. Research in Organizational Behavior, 18, pp. 157–200.

O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. Research in Organizational Behavior, 28, 185–206.

Jalonen, H. (2012). The Uncertainty of Innovation: A Systematic Review of the Literature. Journal of Management Research, 4 (1), 1-48.

Jun, S. and Shin. Y. (1995). An Empirical Study on the Behaviour Effectiveness by Fitness of Organizational Culture and Leadership. Korean Management Review, 24(4), 153-86.

Knight, F. H. (1921). Risk, Uncertainty and Profit. Chevy Chase: Beard Books Inc.

Knott, A. M. & Posen, H. E. (2005). Is failure good? Strategic Management Journal, 26 (7), 617-641.

Kotter, J. P. & Heskett, J. L. (1992). Corporate culture and performance. New York, NY: The Free Press.

Nystrom, P.C., Ramamurthy, K. & Wilson, A.L. (2002). Organizational context, climate and innovativeness: adoption of imaging technology. Journal of Engineering and Technology Management, 19, 221-247.

Ogbonna, E., & Harris, L. C. (2000). Leadership Style, Organisational Culture, and Performance: Empirical Evidence from UK companies. International Journal of Human Resource, 11 (4), 766–788.

O'Reilly, C. A., Caldwell, D. F., Chatman, J. A., & Doerr, B. (2014). The Promise and Problems of Organizational Culture - CEO Personality, Culture, and Firm Performance. Group & Organization Management, 39 (6), 595–625.

Parsons, T. (1951). The Social System. London: Routledge.

Parsons, T., Shils, E., Naegele, K. D. & Pitts, J. (1961a). Theories of Society. Foundations of Modern Sociological Theory. Vol. I. New York: Free Press.

Payne, R. & Pugh, D. S. (1976). Organizational structure and climate. In: M. D. Dunnette (Ed.). Handbook of industrial and organizational psychology. Chicago: Rand McNally, pp. 1125-1173.

Polychroniou, P & Trivellas, P. (2018). The impact of strong and balanced organizational cultures on firm performance: Assessing moderated effects. International Journal of Quality and Service Sciences, 10 (1), 16-35.

Quinn, R. E., Bright, D., Faerman, S. R., Thompson, M. P., & McGrath, M. R. (2015). Becoming a Master Manager: A Competing Values Approach. Hoboken: Wiley.

Quinn. R.E. & Spreitzer, G.M. (1991). The Psychometics of the Competing Values Culture Instrument and an Analysis of the Impact of Organizational Culture on Quality of Life. In: R.W. Woodman & W.A. Pasmore (Eds). Research in Organizational Change and Development (Vol. 5). Greenwich, CT: JAl Press, pp. 115-142.

Quinn, R. E. & Rohrbaugh, J. (1983). A Spatial Model of Effectiveness Criteria: Towards a Competing Values Approach to Organizational Analysis. Management Science, 29 (3), 363-377.

Reagan. P. and Rohrbaugh. J. (1990). Group Decision Process Effectiveness: A Competing Values Approach. Group and Organization Management. 15 (1), 20-44.

Rohrbaugh, J. (1987). Assessing the effectiveness of expert teams. In J. L. Mumpower, L. D. Phillips, O. Renn, & V.R.R. Uppuluri (Eds.). Expert judgment and expert systems. Berlin: Springer-Verlag.

Rogers, P. S. & Hildebrandt, H. W. (1993). Competing Values Instruments for Analyzing Written and Spoken Management Messages. Human Resource Management, 32 (1), 121-142

Rosing, K., Frese, M., & Andreas, B. (2011). Explaining the heterogeneity of the leadership-innovation rela-tionship: Ambidextrous leadership. The Leadership Quarterly, 22 (5), 956–974.

Rubera, G. & Kirca, A. H. (2012). Firm Innovativeness and Its Performance Outcomes: A Meta-Analytic Review and Theoretical Integration. Journal of Marketing, 76 (3), 130-147.

Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. Annual Review of Psychology, 64, 361-388.

Singh, S., Darwish, T. K., & Potocnik, K. (2016). Measuring Organisational Performance - A Case for Subjective Measures. British Journal of Management, 27 (1), 214-224.

Taylor, E. W. (1911). The principles of scientific management. New York: Harper.

Tushman, M. L., & O'Reilly III, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. California management review, 38 (4), 8-29.

von Stamm, B. (2018). Failure in Innovation: Is there such a Thing? In: S. Kunert (Ed.). Strategies in Failure Management. Heidelberg: Springer.

Wall, T., Michie, J., Patterson, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W.,& West, M. (2004). On the validity of subjective measures of company performance.Personnel Psychology, 57, 95-118.

Wang, C. L., & Rafiq, M. (2014). Ambidextrous organizational culture, contextual ambidexterity and new product innovation: A comparative study of UK and Chinese high-tech firms. British Journal of Management, 25 (1), 58-76.

West, M. A. (1990). The social psychology of innovation in groups. In M. A. West & J. L. Farr (Eds.). Innovation and Creativity at Work. Chichester, England: Wiley, pp. 309-333.

Yang, O. & Shao, Y. E. (1996). Shared leadership in self-managed teams: A competing values approach. Total Quality Management, 7(5), 521-534.

Yu, T. & Wu, N. (2009). A Review of Study on the Competing Values Framework. International Journal of Business and Management, 4 (7), 37-42.

Yukl, G. (2008). How leaders influence organizational effectiveness. The Leadership Quarterly, 19, 708–722.