Crisis response via dynamic capabilities: A necessity in CSOs´ capability building

Insights from a study in the European refugee aid

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Abstract

Dynamic capability research increasingly seeks to identify mechanisms founding dynamic capabilities because this microfoundation provides options for influencing the application of dynamic capabilities, which in turn support organizations to achieve continuous organizational change. We pursue deeper insight into the microfounding mechanisms of dynamic capabilities with regard to management-related variables. Survey data from hot spots of refugee crisis 2016 all across Austria allow us to examine, how managerial mechanisms on micro-level and dynamic capabilities on macro level are linked and particularly, how managers can influence the application of dynamic capabilities. Data evaluation is based on mediation analysis. Study reveals that participative leadership fosters dynamic capabilities of CSOs active in refugee aid. Further, we provide evidence, that the manager´s perception, how self-determined (s)he is and how impactful his/her actions are, enhance the application of dynamic capabilities.

Keywords

Dynamic capabilities, microfoundation, leadership, empowerment, refugee crisis

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1. Introduction

Civil society organizations (CSOs) represent as a central hub between individual actors and civil society (Meyer & Simsa, 2013). They play a vital role in communitarisation as well as in social integration and serve as innovators, advocates and essential service providers (c.f. Zimmer, 2014; Anheier, 2005). Particularly, in times of crisis and political upheavals CSOs take center stage in the public discourse (Simsa & Zimmer, 2014; Meyer et al., 2010). In the current 'refugee crisis' their significance as central civil society actor became especially evident. Coping with waves of refugees was very challenging for CSOs because (environmental) conditions were ambiguous, multidimensional, and dynamically changing, i.e. information was partly contradicting and fragmental (e.g., concerning the numbers of refugees to expect); CSOs were confronted with a variety of interests of numerous and highly diverse stakeholder groups; interests, context factors and information changed rapidly and dramatically (e.g. from 'refugees welcome' to 'building walls'). In sum, CSOs struggled with (re-)configuring their capabilities as fast as environment changed.

Thus, it became difficult for CSOs active in refugee aid to achieve the required organization-environment-fit legitimating their organizational existence. This situation was aggravated by the fact that 'common' organizational capabilities which have been used for dealing with environmental changes, e.g. change or flexibility management, were only partially successful in this respect (Eisenhardt et al., 2010; Volberda, 1999). Even though these approaches enable organizations to adapt to changed conditions *once* (for one specific purpose), they cannot provide *continuous* change, which is required to cope with dynamic, ambiguous and multidimensional environmental conditions, as found in refugee aid.

However, there are specific capabilities – called dynamic capabilities (DCs) –, which enable organizations to adapt to changing conditions *repeatedly* (Teece, 2014). Their 'value added' emanates from their nature as meta capability as they “govern other organizational activities (Teece, 2007, 2014). These capabilities are based on organizational members´ individual skills and collective learning (Teece, 2012, 1396) and they are only defined as *dynamic* if repeated building and reconfiguration of organizational resources can achieve organizational-environmental-fit under ambiguous, multidimensional, and dynamic conditions. Ambidexterity (Güttel & Kronlechner, 2009), absorptive capacity (Cohen & Leventhal, 1990;

Lewin et al., 2011) or sensing, seizing and transforming activities (Teece, 2007, 2014) are an illustration of dynamic capabilities.

There are numerous accounts showing positive relationships between DCs and organizational performance in for-profit organizations. Even if, empirical research of DCs in CSOs is scarce, it provides evidence, that there are positive effects in CSOs, too (Piening, 2013; KALTENBRUNNER, 2017). While there is research regarding performance effects of DCs, it remains largely unclear for CSOs (and for POs, too), which intra-organizational mechanisms foster the application of DCs (Pavlou & El Sawy, 2011; Sprafke et al., 2013). Particularly, the link between organizations as agent on a macro-level and managers as agents on a micro-level needs to be explored in detail (Di Stefano et al., 2014). Gaining insights into this link – the microfoundation of DCs – is crucial, though, because it provides options for influencing the application of dynamic capabilities (Felin et al., 2015). Dynamic capabilities in turn support organizations to achieve continuous organizational change – in other terms, to continously meet the changing needs of civil society.

Hence, we aim to explore the link between mechanisms on micro-level and DCs by answering research question, how management affects the application of dynamic capabilities in CSOs.

Based on the resourced-based view of the firm, we expect that CSOs coping successfully with refugee aid apply dynamic capabilities and that individual behaviour of managers can influence their application.

A quantitative study among staff members and managers deployed in refugee camps all across Austria was conducted to quantitatively answer these questions.

Our paper makes the following contributions: Firstly, it provides evidence, on how management and dynamic capabilities are linked, and thus, adds to the highly claimed microfoundation of DCs (Sprafke et al., 2013). We examine the microfoundation of DCs in CSOs, where research regarding the microfoundation of DCs is even more scare. In addition to the integrative illustration of management-related microfounding mechanisms, we particularly introduced participative leadership as 'new' DC enhancing leadership style. The illustration of microfounding managerial mechanisms provides opportunities for influencing or rather managing the application of DCs. This is particularly important because DCs enable

continuous organizational change, which in turn supports CSOs to meet civil society´s changing needs. Secondly, referring to CSO-practice, we point out, how managers can govern DCs.

2. Framing dynamic capabilities in refugee aid

Dynamic capabilities research is multidisciplinary (Peteraf et al., 2013). Correspondingly, definitions and understandings of dynamic capabilities differ considerably (see for Hsu & Wang, 2010; Wang et al. 2015). There is consensus in literature, though, that DCs refer to a universal purpose, which consists in balancing the organization´s, the employees´ and the customers´ needs as well as other 'business opportunities' (Baretto, 2010; Eisenhardt & Martin, 2000) in order to "maintain leadership in continually shifting business environments" (Teece, 2014, 329 f.). Scholars also agree that dynamic capabilities represent 'higher-level activities' (i.a. Teece, 2014; Güttel & Konlechner, 2009) or 'meta capabilities' (Baretto, 2010; Eisenhardt & Martin, 2000). DCs are *'meta capabilities*' or 'higher-level activities' because they govern other capabilities. DCs "enable the firm to integrate, build, and reconfigure internal and external resources" (Teece, 2014, 335). 'Higher-level activities' or 'meta capabilities' also refers to the fact that DCs are not directly observable or visible. DCs become visible as soon as 'ordinary' capabilities[3] and activities, such as leadership, knowledge management activities, operationalize them. *'Dynamic'* refers to the fact, „how the resource base is changed" (Ambrosini & Bowman, 2009). A capability is dynamic, provided the velocity of capability (re-)configuration corresponds to the velocity of environmental dynamics (Teece, 2007; Eisenhardt & Martin, 2000).

At its core dynamic capabilities govern other capabilities. This encompasses *building, integrating and reconfiguring* internal and external resources (Teece, 2007), whereby resource reconfiguring represents the core DC (Eisenhardt & Martin, 2000, 1106). There are various forms of reconfiguration (cf. De Hertog et al., 2010). This is i.a. bundling existent resources and capabilities in a new way, e.g. in refugee crisis, CSOs bundled their capabilities regarding setting up camps in a new way for building temporary homes. Reconfiguring also includes enriching existing resources and capabilities with new resources and capabilities, e.g. CSOs enriched emergency supply of clients with new resources and capabilities for providing continuous care. Furthermore, it refers to replicate resources and capabilities in new

[3] "Ordinary capabilities involve the performance of administrative, operational, and governance-related functions that are (technically) necessary to accomplish tasks" (Teece, 2014, 328).

organizational and market domains, or stretch capabilities, e.g. the CSO Red Cross stretched its capabilities in (international) tracing services to migration services.

The 'value added' of DCs compared to ordinary capabilities is that they govern other capabilities systematically and over time (Hsu & Wang, 2010). DCs facilitate organizations to adapt to changing environmental conditions *repeatedly* (Teece, 2007, 2014). This is what Teece (2014) defines as *'dynamic fit'.* In case of CSOs active in refugee aid, this fit consisted in translating the needs of refugees into services, such as providing food, setting up camps or doing lobbying as fast as needs were changing. The second 'added value' of DCs emanates from its potential to generate a *'multi-perspective fit'*, not only a 'strategic fit' in terms of Chandler (1962). This implies DCs know to solve multi-dimensional, partly conflicting interests, such as internal versus external stakeholder needs or corresponding dilemmata, e.g. preserving versus innovating or achieving task- versus staff-orientation[4]. DCs succeed in overcoming these abstract (meta) dilemmata by offering solutions on meta level (Teece, 2007), e.g. by (re-)configuring search processes such as semi-automatic and experimental search logics (Gavetti, 2005). In case of CSOs active in refugee aid this means relying on familiar standard procedures of disaster management in combination with experimental search logics, such as intuition or abstraction.

In short, DCs represent meta capabilities which govern other capabilities e.g. reconfigure them, which qualifies organizations to adapt its resources repeatedly to the dynamically changing environment. DCs also enable organizations to cope with abstract organizational dilemmata by offering problem-solving mechanismen on meta level. CSOs are confronted with both challenges in the context of refugee crisis, which makes the application of DCs necessary. In order to provide options for influencing dynamic capabilities in refugee aid, it is necessary to explore the mechanisms on micro-level, which found DCs.

3. Microfoundation of DCs in CSOs – research model and hypotheses

Even if, DC research in the *'CSO world'* in general is scarce, scholars provide evidence that DCs are appropriate for CSOs, too. Pablo (2007, 691) state that DCs are „providing synergistic benefits through internal processes irrespective of market structures, a condition that could

[4] Such dilemmata are particularly characteristic for CSOs, due to its association-logic (Lichtsteiner et al., 2015; Meyer & Simsa, 2013).

apply to either private or public organizations". Bryson et al. (2007) note that DCs particularly enable CSOs to meet their stakeholders' needs. Garrido & Camarero (2014) claim that CSOs' organizational existence similarly depends on sustainable competitive advantages, which in turn are influenced by DCs.

There is hardly research, which provides evidence regarding the microfoundation of DCs in CSOs (cf. KALTENBRUNNER, 2017). What refers to microfoundation of DCs in profit-organizations, Teece (2014) states that especially the role of individual action by […] managers, the role of resources, strategy, and […] have been omitted or poorly integrated into the dynamic capabilities literature (p. 328)". Similarly, Di Stefano et al. (2014) mention that research still lacks of empirical evidence regarding the linkage between leadership as micro-level phenomena and dynamic capabilities as macro-level phenomena; the scholars recommend focusing on managerial cognitions.

In light of these observations, this paper seeks to explore, how management affects the application of dynamic capabilities in CSOs active in refugee aid. As illustrated in figure 1, we assume that, management including managerial behaviour (illustrated by participative leadership) and managerial characteristics (illustrated by psychological empowerment) affect DCs.

Participative leadership and dynamic capabilities

Participative leadership encompasses that the manager "use[s] attentive listening and careful observation of nonverbal cues of member needs, feelings, etc.; serve[s] as a consultant, advisor, teacher, and facilitator, model, and encourage appropriate leader behaviors; establish[s] a climate that is conducive to expression of both feelings and ideas; encourage[s] the group to address its maintenance needs and process problems in its regular group meetings; and relinquish[s] control, allowing the group to make final decisions on appropriate issues" (Yukl, 1981, 246 f.).

In contrast to transactional and transformational leadership, there is hardly research dealing with the effects of participative leadership on dynamic capabilities; exceptions are i.a. Fillipini et al. (2012) or Saunila & Ukko (2014). Fillipini et al. (2012) provide evidence that i.a participative leadership promotes ambidextrous initiatives. Saunila & Ukko (2014) found that participative leadership, especially in small enterprises, has positive effects on dynamic

capabilities in terms of innovation capability. Similarly, Leskovar-Spacapan & Bastic (2007) examined that participative leadership promotes creativity, which in turn facilitates innovation.

Beyond DC and innovation research, also strategic management research addresses enablers for achieving organizational performance in dynamic environments. For instance, Lindenberg & Foss (2011) argue that joint motivation of team members relates to spontaneous knowledge exchange and overall to superior performance in dynamic environments. Likewise, Gottschalg & Zollo (2007) propose that the continuous adaption of individual motivation/interests to dynamically changing environments essentially determines organizational performance. We suppose that participative leadership represents a lever to achieve such an alignment. Thus, these findings support (at least implicitly) the DC fostering effect of participative leadership.

Thus, based on the discussion above, we predict following hypothesis:

H $_{1(+)}$ Participative leadership relates positively to dynamic capabilities.

Psychological empowerment and dynamic capabilities

It is well established that individual cognitions affect the application of dynamic capabilities (Helfat & Peteraf, 2015; Adner & Helfat, 2003).

Psychological empowerment represents a set of cognitions. Following Thomas & Velthouse (1990), Spreitzer (1995, 1443) defines psychological empowerment as „intrinsic task motivation manifested in a set of four cognitions reflecting an individual to his or her work role". Spreitzer (1995) states that empowerment fosters individuals to launch initiatives and to handle uncertainty and risks. These effects are fundamental for coping with dynamic environments. Moreover, psychological empowerment relates positively to learning and innovation (Sears & Baba, 2011) as well as to creativity (Deci et al., 1989). Learning, innovation, creativity etc. are capabilities, which in turn are positively associated with dynamic capabilities.

With regard to dynamic capabilities, Sprafke et al. (2013) provide evidence that psychological empowerment positively affects dynamic capabilities. This is due to the fact, that psychological empowerment improves individual level competences and perceided empowering working conditions enhance organizational capabilities. Psychological

empowerment also increases efficacy of individual actors because highly competent individuals enjoy increased autonomy and self-determination and less competent individuals are provided with confidence in acting (Sprafke, 2016). Moreover, Phoocharoon (2011) provides evidence that psychological empowerment enhances the relationship between team learning behavior and the dynamic capability 'absorptive capacity'. Further, Hopkins et al. (2013) discuss the relationship between psychological empowerment, commitment and strategic renewal and prove that empowerment positively effects strategic renewal. Hence, we advance the subsequent hypothesis:

$H_{2(+)}$ Psychological empowerment is linked positively to dynamic capabilities.

Participative leadership, psychological empowerment and dynamic capabilities

Following the discussion above, we propose that the direct relationship between participative leadership and dynamic capabilities is mediated by psychological empowerment, which is illustrated by the manager´s perception of his competence, impact and self-determination. We assume that the participation and integration of team members in decision processes allows the manager to benefit from the team´s knowledge, creativity, ideas in terms of expanding knowledge and acquiring new skills (Srivastava et al., 2006). This in turn enhances the manager´s perceived empowerment, especially his/her self-efficacy and impact of action.

Thus, we assume a positive relation between participative leadership, psychological empowerment and dynamic capabilities which results in following hypotheses:

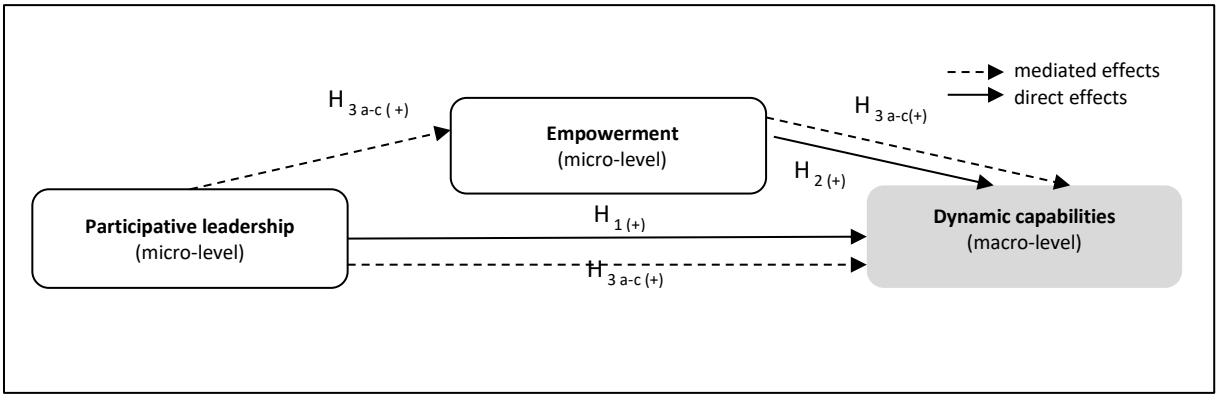
$H_{3a(+)}$ The positive effect of participative leadership on DC is mediated by self-determination.

$H_{3b(+)}$ The positive effect of participative leadership on DC is mediated by the leader´s self-perception of his/her impact.

$H_{3c(+)}$ The positive effect of participative leadership on DC is mediated by the leader´s self-perception of his/her competence.

Figure 1 illustrates our research model and the corresponding hypotheses.

Figure 1: Research model



4. Research design

4.1 Sample

In the context of the refugee crisis in 2016, we employed survey method for data collection. For revising the measures, we carried out four interviews; we interviewed two managers in two different CSOs and two scientists with expertise in strategic management respectively human resource management. In a next step, another four individuals from CSOs were asked to do pre-tests, which resulted again in small adaptions of the questionnaire.

In total, 727 individuals who were active at the hot spots of refugee crisis all over Austria, did (or rather started) the online-questionnaire. Finally, 340 questionnaires were valid. Among the 340 questionnaires, 90 respondents hold a management function and could consequently answer the set of management-related questions regarding DCs. Due to the fact, that 14 of the 90 questionnaires show more than 30% 'missing values' (cf. Cohen et al., 2003), we deleted these respondents which finally results in a sample size of 74 managers active in refugee aid.

Table 1 represents the descriptive statistics of the sample. In general, managers active in refugee aid are mostly male (79%). On an average the managers are about 40 years old and more than two-third are married or live in a relationship. The largest share of volunteers – about 45% – has a university degree. Predominantly, managers are paid staff (55%) and work about 39 hours per month in refugee aid.

Table 1: Respondent characteristics

Variables			
Gender	**%**	**Type of employee**	%
male	79.0	Voluntary leader	45.5
female	21.0	Paid leader	54.5
Age	absolute value	**Intensity of activity**	absolute value
mean (in years)	39.7	hours per month	38.9
Marital status	**%**	**Education**	**%**
single/divorced/widowed	2.8	University	45.9
relationship/married	66.1	High school (with A-level)	32.8
		High school (without A.)	21.3

N= 74

4.2 Measures

Dependent variables

For illustrating dynamic capabilities as dependent variable, we draw on the scale of Li & Liu (2014). We use this DC-scale because in contrast to most other DC-scales, it has already been used in a setting other than competitive market structures (e.g. no complete market conditions and much political influence) which in turn reflects the conditions of refugee crisis at least approximatively. Li & Liu (2014) define DCs as aggregated construct of three dimensions. These are 'sense-making capacity' (6 items), 'timely decision-making capacity' (4 items) and 'change implementation capacity' (5 items).

We also assessed organizational performance by relying on the 4-item-scale of Drnevich & Kriauciunas (2011), which has already been used in DC-context. Slightly modified to CSOs, it captures performance by assessing the overall performance of the organization, the quality of services and products, organizational processes and structures, and the impact on clients. .

Independent variables

For capturing the *predictor variable* participative leadership, we draw on the scale from Hoch et al. (2013). The scholars applied the scale in innovation context, which is similar to DC-context. This scale encompasses four items illustrating participative goal setting leadership.

Following previous DC-research (cf. Sprafke et al., 2013), we chose psychological empowerment according to Spreitzer (1995) as *mediator variable*. This scale measures empowerment by drawing on four dimensions with 3 items each. These are 'competence',

'self-determination', 'impact' and 'meaning'. Due to the fact, that refugee crisis represents an emergency-situation, where reflections about the meaning in terms of the “fit between the needs of one´s work role and one´s beliefs, values and behaviour“(Spreitzer, 1995, 603) are subordinate respectively hardly possible, we decided to exclude 'meaning' as empowerment dimension.

The study includes 'environmental dynamics' and 'task complexity' as *control variables*, which might affect the relation between participative leadership and DCs, particularly because these variables are context-dependent. We measured 'environmental dynamics' by the item 'environmental induced adaptions in services', relying on the scale of Jansen et al. (2006). The second control variable, 'task complexity', was assessed by the item 'degree of task difficulty', following Gaitanides & Stock (2004).

Factor analysis, reliability & validity

Due to the explorative character of DCs, we did a factor analysis of DC-scale. We identified two dynamic capabilities, not three dynamic capabilities, as proposed by Li & Liu (2014). These are sense 'sense making capacity' and 'change implementation capacity'. KMO values of these two scales exceed the recommended value of 0.6 (Weiber & Mühlhaus, 2014, 133; Backhaus et al., 2016, 398 f.). Reliability analysis produced Cronbach's α values ranging from .659 to .808. Thus, scales are above the minimum level of 0.6 (Bagozzi & Yi, 1988), which indicates internal consistency. Factor analysis of psychological empowerment resulted in the identification of the dimension 'impact_self-determination' and the dimension 'competence'. Again, KMO values of the scales exceeds the recommended value of 0.6. Reliability analysis produced Cronbach's α values ranging from .838 to .877. Finally, analysis of participative leadership scale demonstrate the scale is reliable, too (Cronbach's α =. 829). Furthermore, AVE, examining validity, exceeds the cutoff-value of 0.5 (Weiber & Mühlhaus, 2014, 64).

5. Findings

5.1 Direct effects of participative leadership, psychological empowerment and dynamic capabilities

Table 2 shows the results of the ordinary-least-square regression for the hypothesized direct effects. This includes the effects of participative leadership and psychological empowerment on dynamic capabilities as aggregated variable (model 3) as well as their effects on the specific DC 'sense-making' (model 1) and the DC 'change implementation capacity' (model 2). The illustration of these effects corresponds to H_1 and H_2. Complementarily, we added a model 4 illuminating the effects of all in- and dependent variables (participative leadership, psychological empowerment and dynamic capabilities) on organizational performance in order to re-examine, if dynamic capabilities effect organizational performance positively and hence support organizational legitimacy.

The results in model 3 indicate that participative leadership has a significant positive effect (ß= .355*; SE=.137; p≤.05) on dynamic capabilities as aggregated variable, thus supporting H_1. What refers to empowerment, we differentiated between the identified empowerment dimensions. Findings show that the effect of the empowerment dimension 'impact_autonomy' is significant (ß= .211*; SE=.098; p≤.05), whereas the effect of the empowerment dimension 'competence' is non-significant (ß= .103*; SE=.125; p=n.s.). Thus, findings only partly support H_2.

In order to substantiate the effects of participative leadership on dynamic capabilities, we added an analysis of the direct effects separating DCs in the two dimensions 'change implementation capacity' and 'sense making capacity'.

- Model 2 illustrates the effects on the DC 'change implementation capacity'. The effect of participative leadership on this DC is positive and significant (ß= .369*; SE=.161; p≤.05), thus supporting H_1. Further, the direct effect of the empowerment dimension 'impact_autonomy' on this DC is significant (ß= .268*; SE=.115; p≤.05), whereas the direct effect of the empowerment dimension 'competence' is non-significant (ß= .112; SE=.148; p=n.s.). Thus, findings only partly support H_2.
- What refers to model 1 showing the effects on the DC 'sense making capacity', again participative leadership affects this DC positively and significantly (ß= .345*; SE=.143;

p≤.05), thus supporting H_1. The effects of both empowerment dimensions on this DC, though, are non-significant; 'impact_autonomy' shows (ß= .190; SE=.102; p=n.s) and 'competence' shows (ß= .098; SE=.132; p=n.s.). What refers to DC 'sense making capacity', we have to reject H_2.

In sum, models 1-3 support without exception H_1. What refers to the effects of psychological empowerment the findings differ – depending which dimension of psychological empowerment and which DC is analyzed. Thus, the reported direct effects of empowerment are less appropriate for interpretation.

Finally, model 4 provides evidence that DCs have a highly significant effect (ß=.7555***; SE=.123; p≤.001), on organizational performance which enhance the importance of the application of DCs.

Table 2: Results of regression analysis for direct effects

	Dynamic Capabilities							
	Model 1 Sense-making		Model 2 Implementation		**Model 3 aggregated**		Model 4 Performance	
Intercepts	-.025	(.846)	1,313	(.951)	**.450**	**(.673)**	-.669	(.676)
Independent variables								
task complexity	-.204	(.447)	-.272	(.502)	**-.058**	**(.225)**	-.259	(.236)
environmental dynamism	1.848**	(.625)	.361	(.703)	**1.144**	**(.593)**	.954	(.601)
participative leadership	.345*	(.143)	.369*	(.161)	**.355***	**(.137)**	-.094	(.149)
competence	.098	(.132)	.112	(.148)	**.103**	**(.125)**	-.450	(.135)
impact_autonomy	.190	(.102)	.268*	(115)	**.211***	**(.098)**	-.015	(.108)
dynamic capabilities	---	---	---	---	**---**	**---**	.775***	(.123)
R^2	.316		.241		**.308**		.566	
F	6.286***		4.322**		**6.064*** **		11,317***	
N	74		74		**74**		59	

OLS with robust standard errors; unstandardized coefficients and standard errors (in parentheses), * p < .05; **p < .01; p*** < .001

5.2 Mediated effects of participative leadership, psychological empowerment and dynamic capabilities

Further, we ran mediation analysis, as described by Baron and Kenny´s (1986). This stepwise path procedure starts with a regression of the dependent variable (Y), dynamic capabilities, on the independent variable (X), participative leadership [c-path]. To continue mediation, the

independent variable has to affect the dependent variable significantly. In a next step, the mediators (M), dimensions of psychological empowerment, are regressed on the independent variable, participative leadership [a-path]. Again, the relationships should be significant. Third, we deployed a regression of the dependent variable, DCs, on both: on participative leadership as independent variable [c´-path] and on the dimensions of psychological empowerment as mediators [b-bath]. At this, the mediators´ effect on the dependent variable should be significant and the independent variable should effect the dependent variable either with none significance for indicating full mediation or with at least with less significance than in c-path for indicating partial mediation.

Table 3 shows the mediated effects of the independent variable participative leadership through the proposed mediators 'impact_autonomy' (H_{3ab})[5] and 'competence' (H_{3c}) on dynamic capabilities as dependent variable.

- In a-path, participative leadership influences 'impact_autonomy' significantly (ß=.517**; SE=.161; p≤.01), but 'competence' not significantly (ß=.138; SE=.132; p=n.s.). Hence, empowerment dimension 'competence' does not meet the requirements for continuing mediation analysis.
- The b-path for 'impact_autonomy' on DCs is also significant (ß=.211*; SE=.098; p≤.05), but again not for 'competence' (ß=.103; SE=.125; p=n.s.).
- The total effect of participative leadership (c-path) is significant (ß=.489**; SE=.131; p≤.01). C´path is less but still significant (ß=.355*; SE= .137; p≤.05).

Accordingly, based on a positive and significant a-path and b-path, findings imply a partial mediation for participative leadership through 'impact_autonomy'; this supports H_{3ab}. Due to the lack of significant a-path and b-path, H_{3c} is rejected.

[5] As mentioned in chapter 4.2 due to results of factor analysis composition of scales changed. This in turn modified the design of proposed hypotheses. Due to the fact, that 'impact' and 'self-determination' do not represent separate scales, but one, hypotheses H_{3a} und H_{3b} are merged to H_{3ab}.

Table 3: Results of regression analysis for the mediated effects on dynamic capabilities (aggregated)

	Impact_autonomy (a-path)	Competence (a-path)	DC aggregated (c-path)	DC aggregated (b- & c´-paths)
Intercepts	1.222 (.788)	1.838 (.612)	.921 (.642)	.450 (.673)
Independent variables				
task complexity	-.791** (.268)	-.0964 (.217)	-.251 (.219)	-.058 (.225)
environm. dynamism	.5264 (.737)	-.818 (.565)	1.182 (.601)	1.144 (.593)
participative leadership	.517** (.161)	.138 (.132)	.489** (.131)	.355* (.137)
Mediators				
Impact_autonomy		.203* (.091)		.211* (.098)
Competence				.103 (.125)
R^2	.222	.142	.240	.308
F	6.660***	2,858*	7,380**	6,064***
N	74	74	74	74

OLS with robust standard errors; unstandardized coefficients and standard errors (in parentheses), * p < .05; **p < .01; p*** < .001

As *table 4* shows, the bootstrapped results support these findings because the confidence intervals for 'impact_autonomy' is above zero (.0170 to .2746), whereas the intervals for 'competence' include zero (-.0158 to .1799); similarly, the simultaneous mediation of both psychological empowerment dimensions include zero (-.0059 to.0755), too.

Table 4: Bootstrapped results for the indirect effects of participative leadership on dynamic capabilities

Mediators	Effect	Boot SE	Boot LLCI	Boot ULCI
Total	.1339 .	.0680	.0339	.3228
Indicator 1	.1089	.0605	.0170	.2746
Indicator 2	.0108	.0164	-.0059	.0755
Indicator 3	.0160	.0404	-.0158	.1799

Ind1 : SKF_PART -> SKF_Auto -> SKF_Impl

Ind2 : SKF_PART -> SKF_Auto -> SKF_Comp -> SKF_Impl

Ind3 : SKF_PART -> SKF_Comp -> SKF_Imp

6. Discussion and conclusions

Refugee crisis of 2016 with its ambiguous, multidimensional and dynamically changing environmental conditions made evident, that dynamic capabilities represent a 'crucial asset' for CSOs because they facilitated CSOs to achieve the required continuous organization-environment-fit. In other terms, DCs enabled CSOs to meet continously civil society´s changing needs. In case of CSOs active in refugee aid, this fit consisted in translating the needs of refugees into services, such as providing food, setting up camps or doing lobbying as fast as needs were changing. Dynamic capabilities are said to accomplish such a fit due to their property as meta capabilities and thus governing other capabilities systematically and over time (Hsu & Wang, 2010; Teece, 2014).

In order to better understand the nature of DCs and particularly to provide options for influencing the application of dynamic capabilities in refugee aid, we aim to explore mechanisms on micro-level, which found DCs. This is what research defines as microfoundation of DCs (Teece, 2007; Felin et al., 2015). Following Di Stefano et al. (2014) and Teece (2014), research particularly lacks of an integrated consideration of management-related aspects, e.g. managerial behaviour and cognitions. Hence, we analyzed the link between micro-mechanisms and DCs on macro-level by examining, how management affects the application of dynamic capabilities in CSOs. In this context, we include managerial behaviour – by drawing on participative leadership – as well as managerial characteristics – by integrating psychological empowerment – into our research model.

What refers to the effects between *participative leadership* and dynamic capabilities, we assume, that participative leadership enables the manager to benefit from the team members´ knowledge, ideas, and creativity, as these aspects serve as 'input' for applying dynamic capabilities. We provide evidence for direct effects between participative leadership and dynamic capabilities as aggregated variable, illustrated via H_1. This is in line with previous research in the field of dynamic capabilities (cf. Saunila & Ukko, 2014; Fillipini et al., 2012) as well as with strategic management research in general (cf. Leskovar-Spacapan & Bastic, 2007; Gottschalg & Zollo, 2007; Lindenberg & Foss, 2011).

We suppose that CSOs active in refugee aid (or under comparable ambiguous, dynamically changing and multidimensional emergency-situations) use participative leadership in terms of interactive decision patterns as substitute for non-existing organizational structures

respectively coordinative mechanisms. For instance, participative leadership can serve as substitutive for routines, e.g. standard operation procedures, which do not or rather only partly exist in such emergency-situations. In this context, participative leadership is comparable to task forces or staff work.

Further, we deployed a differentiated analysis and explored the effects of participative leadership on the DC dimensions 'sense making capacity' and 'change implementation capacity' separately. Whereas the findings indicate a significant and positive effect regarding 'change implementation capacity', it was non-significant concerning 'sense making capacity'. This could be due to the fact that team members can only restrictively serve as 'sense-makers' because they are not primarily cognizant of the overall political, economic or humanitarian situation and its dependences; they are experts, though, in delivering services what makes team members predestinated to provide information regarding 'changes in implementation'.

In order to explore managerial influence on dynamic capabilities profoundly, we also explored the effect of *psychological empowerment*. Findings show, that the empowerment dimension 'impact_self-determination' affects dynamic capabilities significantly. Thus, the managers´ perceptions, how self-determined (s)he is and how impactful his/her actions are, foster dynamic capabilities. This is because managers perceiving such cognitions are more motivated to take initiatives, to innovate as well as to increase performance (Sprafke et al., 2013). Psychological empowerment shows that cognitions are strongly linked with motivation; Spreitzer (1995) actually defines psychological empowerment as intrinsic task motivation. It is particularly important for CSOs to consider psychological empowerment in their capacity building because mainly intrinsic motivated volunteers constitute their work force. The effect of the second dimension 'competence' was not significant, though.

Our research focus was to explore the linkage between participative leadership, psychological empowerment and dynamic capabilities. In this relationship, psychological empowerment is considered to mediate the effects of participative leadership on dynamic capabilities. Comparable to findings mentioned above, we could not find evidence for the effect of 'competence' ($H_{3c(+)}$) on DCs, but for the effect of 'impact_self-determination', supporting H_{3ab}. 'Impact_self-determination' mediates participative leadership partially. This implies, this empowerment dimension enhances the effect of participative leadership on DCs.

Table 4 provides an overview regarding the tested hypotheses.

Table 5: Overview of hypotheses support

Hypotheses		Support
Direct effects	***Predictor & outcome variables***	
$H_{1(+)}$	Participative leadership relates positively related to DC as aggregated variable.	✓
	Mediators & outcome variables	
$H_{2(+)}$	Psychological empowerment is linked positively to dynamic capabilities as aggregated variable.	~
Mediated effects	***Predictor, mediator & outcome variables***	
$H_{3ab(+)}$	The positive effect of participative leadership on DC is mediated by the leader´s self-perception of his/her impact_self-determination.	✓
$H_{3c(+)}$	The positive effect of participative leadership on DC is mediated by the leader´s self-perception of his/her competence.	✗

✓ hypotheses supported-, ✗ hypotheses not supported; ~ partly supported

Finally, we also provide evidence that DCs have a highly significant effect on organizational performance (cf. table 2). This implies that applying DCs increase CSOs performance in refugee aid or rather support them to positively impact civil society´s needs.

Contribution

Our paper makes the following contributions: Firstly, it provides profound evidence, on how management and dynamic capabilities are linked, and thus, adds to the highly claimed microfoundation of DCs (Sprafke et al., 2013). We examine this microfoundation in CSOs, where DC research is even more underrepresented. We found that managers represent a meaningful agent on micro-level concerning the application of DCs. This includes managerial behavior as well as managerial cognitions. In contrast to previous research, which particularly focused on transactional and transformational leadership, we introduced and empirically proved participative leadership as 'new' DC enhancing leadership style. The illustration of such microfounding mechanisms offers an enhanced understanding of the nature of DCs, a stable explanation for the phenomenon of DCs, and particularly, it provides opportunities for influencing or rather managing the application of dynamic capabilities. DCs in turn enable CSOs to meet continously civil society´s changing needs. This implies that the managers are asked to integrate DCs as additional governance mode in their management. Secondly, referring to CSO-practice, we point out, how managers can govern DCs. Our findings indicate

that providing continuous change is not only a matter of structures, processes and routines on macro-level, but also of micro-level mechanisms – prevailing it is a management issue. This is particularly crucial in situations where organization cannot rely on elaborated organizational structures or rather coordination mechanisms. We consider participative leadership as substitute for such mechanismen. Moreover, we show that participative leadership can evolve the 'dynamic potential' of their staff and thus enhance dynamic capabilities.

Limitations

Considering the limitations of the study, following aspects need to be mentioned. First of all, the results are based on the analysis of relatively small sample. Thus, the findings have limited generalizability. Moreover, our study is not based on a longitudinal study design, which can optimally display continuous change, associated with DCs.

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