






RESEARCH ARTICLE

Insights from local government managers: Navigating crises through organizational capacities and perceptions

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Abstract

Recent years have shown that strategic responses to crises by local governments (LGs) depend on the type of crisis, the institutional environment, but also internal capacities and sensemaking processes. However, such relationships have not been tested widely yet. Based on a survey of managers ($n = 590$) from cities with more than 15,000 inhabitants in France, Germany, Italy, and the United Kingdom, this study explores the role played by specific organizational capacities (critical thinking, bricolage, and financial capacities) and crisis perceptions (valence—i.e., threat vs. opportunity; and controllability) in shaping adaptive or regressive response strategies. Results show that these capacities are associated with how LGs' managers perceive crises and the type of responses adopted. Higher financial capacity, bricolage, and critical thinking are associated with stronger sense of organizational controllability, but they have different relationships with threat and opportunity perceptions. The study confirms the importance of distinguishing valence (threat and opportunity) from controllability perceptions.

Evidence for practice

- The article shows that to continue operating in an increasingly crisis-stricken environment, local governments (LGs) should nurture their critical thinking and bricolage capacities, while paying attention to financial capacities.
- Organizational capacities shape controllability perceptions and thus assist in avoiding regressive responses to crises.
- Critical thinking is needed to reduce regressive responses, enhance opportunity perceptions, and, through those, adaptive responses to crises.
- Cultivating an organizational culture that champions bricolage fosters more adaptive crisis responses and indirectly lessens reliance on regressive strategies.
- Financial capacities are important for reducing threat perceptions and regressive responses to crises. However, their effect is double-edged as they also contribute to reducing adaptive responses.

INTRODUCTION

As crises become the “new normal,” local governments (LGs) increasingly find themselves on the frontlines of efforts to tackle them. However, not all LGs react to crises in the same way. Qualitative evidence has shown that the way a LG responds is determined not only by the type and scope of the crisis and the LG's institutional

environment but also, crucially, by its internal processes and capacities (Barbera et al., 2017; Saliterer et al., 2021; Steccolini et al., 2017). This emerging literature has started to explore which organizational capacities enhance organizational resilience, that is, organizations' ability to respond and recover or even thrive during crises (Barbera et al., 2021; Elston & Bel, 2022). Still, to gain a more conclusive picture, scholars have called for more evidence on

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the relationship between specific capacities and strategic responses. Furthermore, literature has emphasized that sensemaking, perceptions, and interpretations of a crisis are factors situated at the interface between organizational capacities and actions and thus may play a key role in shaping responses to crises (see Hillmann & Guenther, 2021, p. 12). However, their relationship with crisis responses remains only insufficiently tested quantitatively (see Raetze et al., 2021): a large number of contributions remain conceptual, and results are often yielded from (single) case study research (see Barasa et al., 2018; Barbera et al., 2017; Bhamra et al., 2011; De Bruijne et al., 2010; Duit, 2016; Elston & Bel, 2022; Hillmann & Guenther, 2021; Linnenluecke, 2017; Williams et al., 2017).

The present study aims to address this gap by exploring (1) the relationship between specific organizational capacities (critical thinking, bricolage, and financial capacity) and crisis perceptions (perceptions of threat, opportunity, and organizational controllability of crisis), as well as the adoption of different crisis responses (regressive and adaptive strategies), and (2) how such relationship is shaped by the sense given to the crisis. The results are based on a survey of 590 public managers from LGs with a population of over 15,000 in four major European countries (i.e., France, Germany, Italy, and the United Kingdom), conducted during the COVID-19 pandemic. The study focuses specifically on public managers' perspectives and perceptions in exploring crisis response strategies. By examining the views and experiences of public managers, the study provides valuable insights into how perceptions about organizational capacities, crisis, and crisis response strategies are interconnected.

UNDERSTANDING THE RELATIONSHIP BETWEEN ORGANIZATIONAL CAPACITIES, CRISIS PERCEPTION, AND RESPONSE STRATEGIES: CONCEPTUAL MODEL AND HYPOTHESES

The conceptual model: Responses to crises, capacities, and sensemaking

Organizations deploy a variety of strategies when coping with shocks and crises (see Beeri, 2012; Boyne, 2004, 2006; Robbins & Pearce, 1992). Contributions to the literature about resilience (see Folke, 2006) and crisis management (see Rosenthal & Kouzmin, 1997) identify two main approaches to responding to crises. The first is a *regressive response strategy*: organizations may focus on retrenchment, buffering, downsizing, or cutback strategies, including reducing or even eliminating services (Barbera et al., 2017; Boyne, 2004, 2006; Rosenthal & Kouzmin, 1997; Steccolini et al., 2017). While such a regressive response strategy may be a useful starting point for coping with financial shocks (see Barbera et al., 2017; Milesi-Ferretti & Tille, 2011; Raudla, 2013) and often reflects the initial phase of turnaround strategies in the private sector

(Robbins & Pearce, 1993), the sole reliance on this strategy may be insufficient for addressing the multifaceted challenges of crisis situations.

Given their role in coordinating community responses in times of crisis, LGs are often required to ensure that public services continue to function despite changing conditions. This requires redefining and adapting modes of service delivery and core organizational activities while strengthening entrepreneurship and innovation on the path toward self-sufficiency (Barbera et al., 2017; Rosenthal & Kouzmin, 1997; Steccolini et al., 2017). Compared to the regressive response strategy, the *adaptive response strategy* may be more likely to ensure that LGs can continue operating in adverse conditions or a crisis (see Hood, 1991, p. 14). The demand for adaptive strategies was particularly magnified due to the distinctive challenges imposed by the COVID-19 pandemic. Unlike natural weather-related disasters, accidents, and man-made crises such as mass shootings, which call for swift responses, the creeping nature of the pandemic (Boin et al., 2020) together with measures intended to limit the spread of the virus, added a new dimension to the crisis. In particular, the latter was disrupting the usual ways of providing services and coordinating activities calling for continuous (and transformative) adaptation to its persistent and shifting challenges.

In identifying explanations for responses to crises, case study evidence has focused on the broader role of organizational capacities in LGs' responses to shocks and crises (see Barbera et al., 2017). This quantitative study examines three specific capacities that have been identified as relevant antecedents of responses to a crisis: critical thinking, bricolage, and financial capacity (see Barbera et al., 2017; Duchek, 2020; Hillmann & Guenther, 2021; Lengnick-Hall et al., 2011; Williams et al., 2017). These represent financial (financial capacity), cognitive (critical thinking), and behavioral (bricolage) dimensions among the overall capacities available to organizations. In the literature, they have been grouped under broader categories such as "capabilities for durability" or "resource endowments" (Williams et al., 2017), or as "resilience capabilities and antecedents" (Duchek, 2020) as well as "capacities for resilience" (Lengnick-Hall et al., 2011). While the definitions and terminology vary, they share a common underpinning: all refer to factors derived from a specific blend of resources, abilities, processes, and practices, enabling organizations to foster adaptation, positive adjustments, and respond effectively to crises (Duchek, 2020; Hillmann & Guenther, 2021; Lengnick-Hall et al., 2011; Williams et al., 2017).

This characterization is important as it differs from parallel literature on State, bureaucratic, or administrative "capacity," which mainly takes a "macro" perspective (see Ansell et al., 2021). In this literature, administrative capacity is seen as an overall feature of a public sector entity, whose internal dynamics generally remain unexplored, and often measured in terms of tangible human and financial resources (Terman & Feiock, 2015).

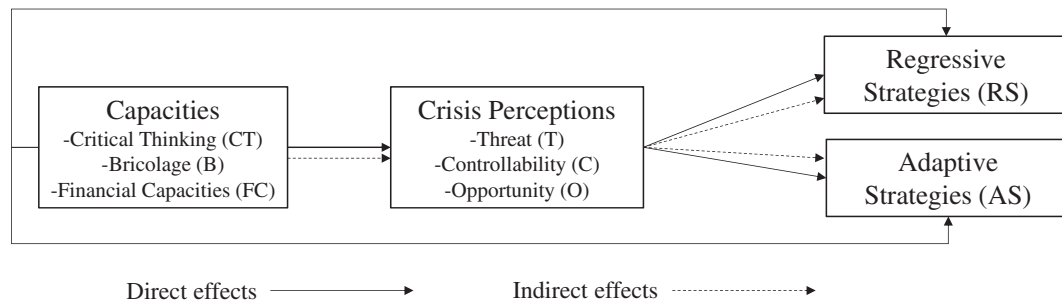


FIGURE 1 Conceptual framework.

Moreover, the perspective adopted here also differs from studies focusing on management capacities and their impact on public service performance (Andrews & Boyne, 2010). The latter interprets management capacities as the ability to effectively manage and control the financial, human, physical, and informational resources of a public organization (see Donahue et al., 2000; Ingraham et al., 2003). However, given their focus on the capacity–performance link (Christensen & Gazley, 2008), these studies do not consider the complexities and challenges of a crisis context, which may necessitate specific capacities for effective crisis responses, and to take a closer look at organizational and managerial dynamics and perspectives. As such, this study captures one traditional resource-related capacity (financial capacity), and, in addition, two (intangible) capabilities-related capacities (critical thinking and bricolage), which are assumed to shape how organizations interpret and respond to crises (Weick et al., 2005; Williams et al., 2017). In doing so, it embraces a focus on the internal workings and dynamics of organizations and individual managers' perceptions, which more explicitly draws on organizational studies literature that recognizes the importance of sensemaking and subjective perceptions of vulnerabilities and capacities in understanding crises and explaining responses to them (Weick, 1979).

The conceptual model derived from the above discussion and guiding the analysis is presented in Figure 1. It also incorporates sensemaking aspects, which play a key role in shaping responses to crises (see Barbera et al., 2017; Williams et al., 2017) and are situated at the interface between organizational capacities and the actions taken in response to a crisis (see Hillmann & Guenther, 2021, p. 12).

Hypothesis development

Critical thinking

Critical thinking has been described as a key organizational capacity to successfully manage the unexpected (Weick et al., 1999) and its effects become evident in practices that encourage an interactive, open, systematic

process of understanding and evaluating information and arguments (see Ray et al., 2011; Weick et al., 1999; Weick & Sutcliffe, 2001). Critical thinking is typically employed in cultures that encourage people to purposefully discuss and challenge existing assumptions and plans, identify potential problems, challenge the way things are done, and express different points of view (Ray et al., 2011). Such practices presumably encourage organizational actors to avoid simplistic interpretations of reality; to better observe, identify, manage, and control organizational vulnerabilities; and to anticipate potential shocks before they arise, thereby increasing their ability to cope with them more effectively (Barbera et al., 2017, 2021; Steccolini et al., 2017; Weick, 2009; Weick et al., 1999).

Studies in the public administration literature have not yet empirically tested the relationship between critical thinking and crisis responses. However, empirical studies in the private sector have found that critical thinking facilitates opportunity-seeking behavior and encourages innovation in times of crisis (Vogus & Welbourne, 2003). This suggests that critical thinking may be conducive to anticipatory approaches and the adaptation of internal processes to changes in the environment. It may also encourage public sector organizations to explore the different facets of unexpected events, including opportunities arising from them; listen to different voices and seek a plurality of innovative, creative solutions; and maintain an open mind in deciding how to cope with crises. Along these lines, critical thinking may however also discourage regressive strategies as it involves a thorough, evaluative approach that challenges conventional responses. While this relationship was not empirically investigated in previous studies, we tentatively assume that critical thinking may disenchant downsizing and service reduction, typical of regressive behavior, as measures to reduce complexity in the face of challenges. By promoting a thorough analysis and challenging common solutions, critical thinking may thus lead LGs away from traditional cutback measures and toward more adaptive, innovative responses. Therefore, we formulate the following hypothesis:

H1. Critical thinking has a negative association with regressive strategies (1a) and a positive association with adaptive strategies (1b).

Bricolage

Bricolage refers to the creative process of making efficient use of limited or scarce resources, and recombining them for new purposes when confronting unexpected situations (Jacob, 1977, pp. 1164–1165; Levi-Strauss, 1966). From an organizational perspective, bricolage refers to the presence of both specific organizational abilities to improvise by utilizing and reconfiguring existing resources (see Baker & Nelson, 2005) and a culture that encourages such improvisation by promoting flexibility, individual initiative, freedom, and spontaneity in employees (Desa, 2012). Scholars have argued that bricolage is a crucial coping capacity needed for confronting crises (see Coutu, 2002; Weick, 1993; Williams et al., 2017), and during recent decades, empirical studies have confirmed that view (Mallak, 1998; Talat & Riaz, 2020). Bricolage capacities allow available resources to be combined or recombined for purposes other than those originally intended (Baker & Nelson, 2005; Senyard et al., 2014), which facilitates the development of new solutions (Ray et al., 2011). In this way, they can fulfill the need to reconfigure governments and services, promote entrepreneurial approaches (Johansson, 2012; Kruyen & Van Genugten, 2020; Nederhand et al., 2018; van Meerkerk & Edelenbos, 2018), and rethink existing procedures. Conversely, since they allow to make the most of extant resources and use them in new ways, bricolage capacities may be expected to reduce the necessity to resort to reducing services or activities, and more generally, regressive strategies. Consequently, a LG with strong bricolage capacities may be more likely to embrace adaptive strategies and be less likely to resort to regressive strategies. Therefore, we make the following hypothesis:

H2. Bricolage has a negative association with regressive strategies (H2a) and a positive association with adaptive strategies (H2b).

Perceived financial capacity

Prior research on both organizational resilience and public financial management has emphasized the importance of strong financial capacities for anticipating and coping with crises (see Carroll & Stater, 2009; Duchek, 2020; Gittel et al., 2006; Hendrick, 2006; Maher et al., 2020; Williams et al., 2017). For instance, a large survey of LGs in the United States recently found that LGs with less fiscal capacity tend to be less ready for disasters, scoring lower on the disaster-preparedness scale than their financially stronger counterparts (Dzigbede et al., 2020). Randma-Liiv and Kickert (2018) found that poor fiscal situations, that is, low financial capacities, may constrain governments' ability to pursue reforms during times of crisis. This agrees with the result that building a reserve of financial resources in anticipation of adverse events enables

positive adjustments when such events occur (Carmeli & Markman, 2011; Williams et al., 2017). Similarly, Barbera et al. (2021) found that regressive strategies were more likely to be found in the presence of high levels of financial vulnerability, due to low financial capacity. Conversely, the adoption of proactive or adaptive strategies, such as changing service delivery or establishing new services, was found in LGs with low financial vulnerability, due to high financial capacity. In sum, these findings suggest that the lower an organization's financial capacity, the less likely it is to engage in adaptive strategies and the more likely it is to resort to regressive behavior. Therefore, we assume that:

H3. Financial capacity has a negative association with regressive strategies (3a) and a positive association with adaptive strategies (3b).

Sensemaking: Crisis perceptions and interpretations

In the context of crises, sensemaking refers to how people interpret a crisis and build an understanding of it. Organization and management studies have long highlighted the importance of sensemaking in shaping resilience (see Hillmann & Guenther, 2021, p. 12; Takeda et al., 2017; Weick, 1979, 1993) and crisis responses (Chattopadhyay et al., 2001; Dutton & Jackson, 1987; Thomas et al., 1993). Qualitative methods have dominated studies of sensemaking processes, intending to capture their complexity. Scholars have also conducted quantitative research, however, to address specific questions about sensemaking, such as whether organizations interpret the crisis as either a threat or an opportunity, and whether the organizations are able to control the consequences for the most part (Chattopadhyay et al., 2001; Dutton & Jackson, 1987; Fredrickson, 1985; Jackson & Dutton, 1988; Milburn et al., 1983). Building on those contributions, the present study examines three perceptions or interpretations of crises.

Opportunities and threats

Organizations usually perceive crises as threats rather than opportunities, bringing greater losses than gains (De Vries, 2004; Dutton & Jackson, 1987). As some scholars have noted, however, crises may also be seen as opportunities for positive change and therefore serve as catalysts for organizational adaptation and stimulate organizations to consider novel solutions (Duchek, 2020; König et al., 2021; Kuhlmann et al., 2021), allowing them to emerge from crises stronger than before (Brockner & James, 2008). The effect that opportunity perceptions have on encouraging the exploration of innovative, creative solutions (see also Milliken, 1987), has been

highlighted in different organizations and sectors over time (Thomas et al., 1993), suggesting that seeing opportunities in a crisis will be associated with more adaptive response strategies.

However, as for perceiving a crisis as a threat, the evidence about the consequences paints a more nuanced picture. Public administrations have been found to react to external crises, particularly those having substantial negative financial consequences, by focusing on efficiencies, cutting back resources, and reducing services while refraining from strategic change (Jick & Murray, 1982), which is regressive behavior (Dewald & Bowen, 2010). Such findings align with *threat rigidity theory* (Dutton & Jackson, 1987; Staw et al., 1981), which suggests that seeing a crisis as a threat discourages strategic action. However, other empirical studies also found opposing evidence, with high levels of threats being met by experimentation and adaptation (Barbera et al., 2017; Saebi et al., 2017). These findings agree with *prospect theory* (Kahneman & Tversky, 1979), which holds that an expectation of losses, together with an aversion to them, may encourage risk-taking behaviors. In light of this dichotomy, also highlighted by Van der Voet (2019) in his discussion of the “rigidity” and “invention” camp in the context of cutback management, it is plausible to assume that threat perceptions may be associated with both regressive and adaptive strategies. The above discussion translates into the following hypotheses:

H4. A higher level of opportunity perception has no association with regressive strategies (H4a) but a positive association with adaptive strategies (H4b).

H5. A higher level of threat perception is positively associated with regressive strategies (H5a) as well as adaptive strategies (H5b).

Sense of controllability

When facing a crisis, organizational actors might consider the source and/or consequences of the crisis to be controllable, at least to some extent (Matsuno & Kohlbacher, 2019; Plambeck & Weber, 2009). Scholars have found that this organizational sense of controllability plays a crucial role not only in how the organization interprets events (see Dutton & Jackson, 1987; Litt, 1988) but also in influencing organizational responses (Bandura, 1997; Chattopadhyay et al., 2001; Thomas et al., 1993). Empirical studies have shown that organizations that perceive a crisis as less controllable are also less likely to adapt to changing environments (White et al., 2003). In our research context, we tentatively suggest that feeling less in control or powerless may even translate into higher levels of regressive strategies (see also Barbera et al., 2017). This tendency to reduce or cut

services can be seen as a strategy to minimize exposure to uncontrollable events and unknown potential negative outcomes. Conversely, organizations with a greater sense of control may experience a diminished need for familiar, but defensive, measures.

Moreover, when actors believe they can manage a crisis and its consequences, they typically feel that their organization can control adaptive actions and their results, and therefore, they are more likely to take such actions (Matsuno & Kohlbacher, 2019). In light of the literature described above, higher perceived controllability may be expected to discourage regressive strategies and favor adaptive ones:

H6. A higher level of controllability is negatively associated with regressive strategies (H6a) and positively associated with adaptive strategies (H6b).

Indirect effects

In addition to analyzing the direct predictors of strategies, this study also explores the direct relationship between capacities and crisis perceptions and possible indirect associations with strategies that work through crisis perceptions (see Figure 1).

METHODS

Study context and sample

The survey focused on LG managers in four European countries: France, Germany, Italy, and the United Kingdom. All four countries are large economies and, when the study was conducted in December 2020, they were the largest members of the European Union by population and gross domestic product (GDP). With its referendum in June 2016, the United Kingdom embarked on the path toward Brexit, and its process of leaving the EU began in late January 2021. Despite differences in the countries' politico-administrative systems (see Pollitt & Bouckaert, 2017), with the United Kingdom and France being centralized states, Italy a centralized state with strong regionalization, and Germany a federal state (see Appendix 1), in each country, municipalities play a crucial role in people's daily lives by providing essential services (Kuhlmann et al., 2022; Steccolini et al., 2017).

To provide a basis for testing the model across the four countries, the study investigated municipalities having more than 15,000 inhabitants. This approach produced a reference population of 634 units in France, 981 in Germany, 897 in Italy, and 406 in the United Kingdom (see also Appendix 1).¹

The online questionnaire was administered from December 2020 to April 2021, during a critical period

when LGs had been grappling with the COVID-19 pandemic for nearly a year. The survey targeted two distinct groups of key LG decision-makers²: (1) chief financial officers, who are primarily involved in budgeting and financial management, and (2) “senior managers,” comprising chief executive officers or service department managers, who are generally responsible for operations and service delivery.

This “upper echelon” approach allows us to gain insights directly from those holding significant decision-making roles within LGs, especially in areas that are pivotal during crises. Moreover, this categorization takes into account the potentially different perspectives that financial and nonfinancial officers may have in managing crises.

Respondents received at least two reminders, sent to ensure the highest possible response rate. The usable responses ($n = 590$) comprise 136 LG managers in France, 259 in Germany, 101 in Italy, and 94 in the United Kingdom.

The sample comprises 32% chief financial officers and 68% senior managers. In terms of gender, males accounted for 66% of the sample, while females made up the remaining 34%. For a more detailed breakdown of sample characteristics and the distribution of responses across countries, refer to Appendix 1.

Measurement

All constructs presented in Figure 1 are operationalized as survey measures based on extant literature and scales (details are provided in Appendix 2). These measures encapsulate the respondents’ perceptions and align with the purpose to focus on internal organizational phenomena such as critical thinking and bricolage, emphasizing the significance of sensemaking, and individual managers’ perceptions of capacities in understanding crises and explaining responses to them (Weick, 1979). This not only applies to intangible capacities and sensemaking-related variables, for which clearly a survey instrument, focusing on respondents’ perceptions, is necessary, but also financial capacity. While the different country contexts and accounting systems in place do not allow to use comparable archival measures that capture the multiple facets of financial capacity, there are (even more) compelling reasons to employ subjective survey data. In this regard, previous studies have shown that public managers’ perceptions are important predictors of actions (Barbera et al., 2021; Leiser et al., 2021; Maher & Deller, 2007). These studies also indicate that important objective measures of fiscal condition are significantly related to subjective assessments (Donatella & Karlsson, 2024; Leiser & Mills, 2019; Maher & Deller, 2013). Still, they often fail to capture relevant aspects (i. e., infrastructure situation, reserves, long-term issues), where subjective measures (i. e., self-assessments) might contribute to a better understanding of the financial situation (Leiser & Mills, 2019).

In each country where English is not an official language, the survey was translated into the local language. To address the question of content validity, several steps were taken to ensure the suggested items were understood as intended. In each country, consultations and discussions with LG actors, and, when relevant, LG associations and professional bodies, took place. During this process, the survey was also pilot-tested and after further rounds of discussion among authors, adjustments, such as on translations and the clarity of questions, were made. All items were measured using a 5-point Likert scale.

Control variables included country (with Germany used as a baseline), organizational size (based on self-indicated or archival population figure), respondents’ age, gender, and organizational role, that is, operational executives and financial officers.³

In this study, data were collected using a single questionnaire, a method that inherently raises concerns about common method bias (CMB). To mitigate potential bias, procedural remedies were implemented, such as ensuring respondent anonymity and applying a question sequencing that distanced the independent and dependent variables. However, more robust approaches, like collecting independent and dependent variables from different sources or at different times (Jakobsen & Jensen, 2015; Podsakoff et al., 2023), were not feasible in our research context. This was primarily due to the lack of comparability of archival data and the anonymity of the respondents, which prevented us from re-contacting individuals for additional data collection.

Given these constraints, two methods were employed to statistically assess the presence of CMB. First, we applied Harman’s single-factor test, a commonly used method for assessing common method variance. This test revealed that the largest factor accounted for only 22% of the variance, significantly below the 50% threshold set by Podsakoff and Organ (1986), suggesting that CMB was not a predominant issue according to this measure. However, it is critical to note that this approach has also been repeatedly criticized for its insufficiency in identifying CMB in more recent contributions (Favero & Bullock, 2015; Jakobsen & Jensen, 2015; Podsakoff et al., 2003; Podsakoff et al., 2023). We thus also conducted a full collinearity assessment, increasingly employed in component-based structural equation models, as an indirect method for assessing not only vertical and lateral multicollinearity, but also potentially the presence of CMB (Kock, 2017). All variance inflation factor values were below 2.0, and well under the 3.3 threshold (Kock, 2015; Kock & Lynn, 2012), indicating minimal multicollinearity. It is however important to note that this does not directly measure CMB, as the absence of multicollinearity does not unequivocally equate to the absence of CMB.

While both widely applied statistical tests yielded satisfactory results, it is important to note that the critique of the latter as well as the debates regarding the need (Babin et al., 2016; Fuller et al., 2016) and the efficacy of

different statistical CMB assessment methods (Podsakoff et al., 2023; Spector et al., 2019) are ongoing.

Analysis

Partial least squares (PLS) path modeling⁴ was used, that is a nonparametric, component-based structural equation modeling (SEM) technique. In general, it is particularly apt for developing and testing models that have many components (Saebi et al., 2017) and provides detailed information on how components of a complex structural model (Ringle et al., 2022) are related to key target constructs (Hair et al., 2017). This aligns with the key objectives of this research to examine the direct relationships of the identified capacities and perceptions with response strategies and explore how capacities are indirectly related to response strategies via crisis perceptions (see Vandermissen et al. 2022, George, 2021 using a similar analytical approach). Moreover, PLS-SEM can better handle the use of two single-item variables (Hair et al., 2021) in this study, namely threat and opportunity perceptions.

Finally, although the cross-sectional design of the study limits its ability to make causal claims, SEMs allow for a comprehensive exploration of the direct and indirect associations between multiple factors (see also Jacobsen et al., 2022; Petrovsky et al., 2023; Zambrano-Gutiérrez & Puppim de Oliveira, 2022).

Two steps are required for evaluating PLS-SEM results. In the first step, the measurement (outer) model is assessed. Since all of the multi-item constructs that are considered are measured using reflective scales, the outer model's evaluation is carried out by considering the indicator reliability and internal consistency as well as convergent and discriminant validity (Hair et al., 2017, 2019).

To assess individual indicator reliability, the outer loadings of the items on the respective constructs were inspected. All factor loadings were above the threshold of .50 (Hair et al., 2017), which implies acceptable factor loadings throughout the model (see Table 2). Internal consistency was evaluated by calculating composite reliability statistics. The consistent reliability (CR) of all constructs exceeded the standard of .80, and the Cronbach's alpha and rho values were all above the threshold of

TABLE 1 Indicator reliability, internal consistency, and convergent validity.

	Mean value	SD	Cronbach's alpha	rho_a	rho_c	AVE
Regressive strategy (RS)	2.214	0.912	0.753	0.764	0.890	0.801
1 Reduction of services	2.546	0.988				
2 Elimination of services	1.908	1.047				
Adaptive strategy (AS)	3.731	0.685	0.821	0.822	0.882	0.651
1 Δ Work processes	4.019	0.859				
2 Δ Modes of communication	3.681	0.855				
3 Δ Modes of collaboration	3.803	0.840				
4 Δ Way of service delivery	3.444	0.846				
Critical thinking (CT)	3.574	0.788	0.888	0.890	0.923	0.749
Bricolage (B)	3.416	0.748	0.825	0.827	0.884	0.656
Financial capacity (FC)	2.906	0.848	0.930	0.934	0.943	0.705
Opportunity (O)	3.073	0.944	-	-	-	-
Threat (T)	3.019	0.945	-	-	-	-
Controllability (C)	3.479	0.660	0.748	0.778	0.855	0.663

TABLE 2 Discriminant validity: Fornell-Larcker Criteria (a) and HTMT (b).

	RSa	RSb	ASa	ASb	CTa	CTb	Ba	Bb	FCa	FCb	Oa	Ob	Ta	Tb	Ca
RS	<u>.895</u>														
AS	.199	.254	<u>.807</u>												
CT	-.104	.122	.214	.252	<u>.865</u>										
B	-.046	.076	.244	.294	.610	.711	<u>.810</u>								
FC	-.070	.083	-.009	.044	.046	.059	.045	.056	<u>.840</u>						
O	.017	.020	.0197	.216	.142	.151	.110	.119	.031	.034	<u>1.000</u>				
T	.132	.154	.190	.208	.024	.026	.031	.034	-.249	.252	-.026	.026	<u>1.000</u>		
C	-.121	.158	.102	.135	.340	.404	.406	.509	.188	.220	.215	.246	-.161	.190	<u>.814</u>

.70—and in most cases even above .80—indicating good internal consistency. The average variance extracted (AVE) was calculated to assess convergent validity. The AVE for each construct was higher than the general threshold of .50 (see Table 1). Table 1 also shows the mean value and standard deviation for each of the constructs.

The Fornell and Larcker (1981) criterion and heterotrait–monotrait ratio (HTMT) were applied to evaluate the discriminant validity of measurement. The AVE's square root of all constructs was greater than all respective squared correlations. Moreover, the results of the HTMT analysis show that all values are within the cutoff threshold of 0.90 (Henseler et al., 2015; see Table 2). In sum, the results provide strong support for the reliability and validity of measurement.

In the second step, the structural part (inner model) of the model was assessed, where the significance of path coefficients and coefficients of determination (R^2) are considered. In line with suggestions for structural model assessment (Hair et al., 2017), a two-tailed percentile-based bootstrapping procedure with a resample of 10,000 was applied to assess the sign, magnitude, and significance of path coefficients and coefficients of determination (R^2), as well as the sign, magnitude, and significance of the indirect effects. The results reveal that R^2 values range from low to medium-sized values (see Figure 2).

RESULTS

As outlined above, paths were run from capacities to perceptions, from capacities to strategies, and from perceptions to strategies. In addition to analyzing their direct relationships with strategies, this allowed exploring the

association of capacities and crisis perceptions as well as possible existing indirect relationships that work through mediators, namely, crisis perceptions.

Figure 2 shows the path coefficient and p-values for the significant paths, while Table 3 shows the full results.⁵ Moving along the conceptual model, and following the structure of the hypotheses section, the direct relationship between capacities and crisis perceptions on response strategies is first presented. Subsequently, the relationship with capacities and crisis perceptions and the indirect association between capacities and strategies that pass through crisis perceptions are discussed.

Capacities and strategies

Critical thinking showed a direct negative association with regressive strategies, supporting H1a. However, it showed no direct association with adaptive strategies, and therefore, contrary to expectations, the results did not support H1b. Bricolage is positively associated with adaptive strategies and shows no significant relationship with regressive strategies. The findings thus supported only H2b but not H2a. Finally, the results revealed that financial capacity has no direct significant association with either adaptive or regressive strategies, offering no direct support for H3a or H3b (see Table 3).

Crisis perceptions and strategies

In the next step, the relationships between crisis perceptions and response strategies were considered. All factors were significant, that is, threat and opportunity perceptions and a sense of controllability. However, their effect differed across response strategies. As expected, opportunity

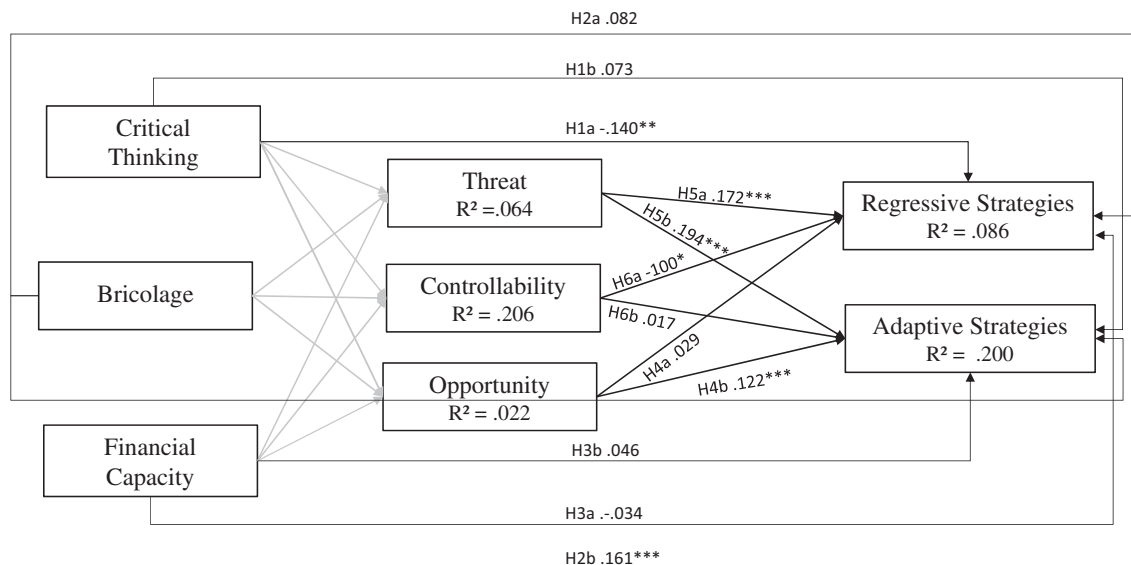


FIGURE 2 Main results linked to hypotheses: direct effects. $*p \leq .1$, $**p \leq .05$, $***p \leq .01$.

TABLE 3 Path analysis results—direct effects (PLS bootstrapping with 10,000 replications).

Hypotheses	Direct paths	β	SD	t	p	CI 95%		Result
						(LL—UL)		
H1a (–)	CT → RS	–.140**	0.054	2.590	.010	–0.244	–0.033	S
H1b (+)	CT → AS	.073	0.054	1.364	.173	–0.035	0.177	NS
H2a (–)	B → RS	.082	0.056	1.457	.145	–0.029	0.191	NS
H2b (+)	B → AS	.161***	0.054	2.955	.003	0.054	0.268	S
H3a (–)	FC → RS	–.034	0.044	0.764	.445	–0.120	0.052	NS
H3b (+)	FC → AS	.046	0.039	1.177	.239	–0.031	0.120	NS
H4a (–)	O → RS	.029	0.046	0.632	.528	–0.061	0.120	S
H4b (+)	O → AS	.122***	0.042	2.927	.003	0.040	0.204	S
H5a (+)	T → RS	.172***	0.047	3.686	.000	0.082	0.264	S
H5b (+)	T → AS	.194***	0.040	4.899	.000	0.117	0.271	S
H6a (–)	C → RS	–.100*	0.052	1.934	.053	–0.201	0.001	S
H6a (+)	C → AS	.017	0.050	0.333	.739	–0.083	0.115	NS
Controls	Age → RS	–.041	0.043	0.953	.341	–0.125	0.042	-
Controls	Age → AS	.035	0.042	0.834	.404	–0.051	0.115	-
Controls	Gender → RS	.028	0.092	0.305	.761	–0.152	0.209	-
Controls	Gender → AS	.210**	0.086	2.446	.014	0.042	0.377	-
-Controls	Position → RS	–.191**	0.084	2.267	.023	–0.355	–0.029	-
Controls	Position → AS	–.110	0.082	1.345	.179	–0.271	0.047	-
Controls	Pop → RS	.030	0.053	0.568	.570	–0.072	0.137	-
Controls	Pop → AS	.121**	0.047	2.549	.011	0.027	0.215	-
Controls	D France → RS	–.351***	0.115	3.066	.002	–0.578	–0.124	-
Controls	D France → AS	–.473***	0.103	4.577	.000	–0.681	–0.270	-
Controls	D Italy → RS	–.489***	0.109	4.475	.000	–0.700	–0.269	-
Controls	D Italy → AS	–.118	0.133	0.889	.374	–0.379	0.139	-
Controls	D UK → RS	–.349**	0.152	2.296	.022	–0.652	–0.051	-
Controls	D UK → AS	–.008	0.146	0.057	.954	–0.297	0.274	-

Abbreviations: NS, not supported; S, supported.

perceptions were a significant factor only for adaptive strategies, a result that supported H4a and H4b. Stronger threat perceptions were significantly and positively associated with both strategies, providing support for H5a and H5b. Controllability, however, is negatively associated with regressive but not adaptive strategies, therefore supporting H6a but not H6b.

Capacities, perceptions, and strategies

Turning to the second, exploratory, part of the analysis (Table 4), the results revealed that critical thinking was the only capacity to be positively related with opportunity perceptions. It also showed a positive association with controllability perceptions. Additionally, it showed an indirect positive association with adaptive strategies through opportunity perceptions, which provided indirect support for H1b.

Bricolage was found to be positively associated with crisis controllability perceptions but showed no association with threat or opportunity perceptions. Through its

positive associations with controllability, it showed a specific, indirect negative association with regressive strategies, therefore offering indirect support for H2a.

Finally, financial capacity enhanced crisis controllability perceptions and significantly reduced the level of threat perceptions, while showing no association with opportunity perceptions. Through threat and controllability perceptions, financial capacity in both cases shows a significant, indirect association with regressive strategies. The results therefore provide indirect support for H3a, that is, negative association with financial capacity and regressive strategies. However, it should be noted that financial capacity also showed a significant, negative indirect association with adaptive behavior via threat perceptions.

Control variables

Considering control variables, being female showed a significant positive association with adaptive strategies, while financial officers reported lower levels of regressive

TABLE 4 Capacities, crisis perceptions, and responses to crisis—direct and indirect effects.

Paths	β	SD	<i>t</i>	<i>p</i>	CI 95% (LL—UL)		Offering indirect support for
CT → O	.119	0.051	2.339	.019	0.019	0.218	
CT → O → AS	.015*	0.008	1.758	.079	0.001	0.034	H1b
CT → T	.016	0.053	0.292	.770	−0.088	0.121	
CT → C	.142	0.046	3.081	.002	0.050	0.234	
B → O	.036	0.054	0.661	.508	−0.067	0.142	
B → T	.032	0.052	0.622	.534	−0.070	0.134	
B → C	.312	0.049	6.357	.000	0.215	0.406	
B → C → RS	−.031*	0.017	1.868	.062	−0.065	0.000	H2a
FC → O	.024	0.043	0.564	.573	−0.060	0.109	
FC → T	−.251	0.039	6.496	.000	−0.328	−0.175	
FC → T → RS	−.043***	0.014	3.104	.002	−0.073	−0.019	H3a
FC → T → AS	−.049***	0.013	3.895	.000	−0.076	−0.027	
FC → C	.168	0.041	4.116	.000	0.087	0.247	
FC → C → RS	−.017*	0.010	1.671	.095	−0.039	0.000	H3a

strategies. Age showed no association with either regressive or adaptive strategies. Additionally, the analysis revealed that larger LGs tend to employ more adaptive strategies compared to smaller ones, while government size has no observable effect on regressive strategies.

Finally, the results revealed that, compared to Germany, which served as the reference group, LGs in France, Italy, and the United Kingdom showed less regressive behavior. However, only LGs from France showed lower levels of adaptive behavior than German LGs, while Italian and UK LGs revealed similar levels of adaptive behavior.

DISCUSSION

Against the background of the COVID-19 pandemic, the results of the survey conducted in LGs in four European countries offer insights into the role played by governmental capacities in tackling shocks. Focusing on critical thinking, bricolage, and financial capacities, the study reveals how those perceived capacities as well as perceptions of crises potentially shape responses to crises. The results suggest that the organizational capacities considered are associated with strategic responses, not only directly but also indirectly, through relationships with crisis perceptions.

In particular, critical thinking is found to play a possible role in avoiding regressive strategies. Although it does not directly encourage the adoption of adaptive strategies, it shows an indirect relationship with them; being the only capacity that is positively related to opportunity perceptions, and via this path with adaptive strategies. This aligns with previous literature, which suggested that an organizational context that supports reflection and learning positively impacts opportunity perceptions in times of crisis (Brockner & James, 2008; Wooten &

James, 2004). Stronger reliance on critical thinking may encourage openness to listening to warning signs, reflecting on them in less canonical ways, a stronger acceptance of exploration of less-taken explanations and paths, including mistakes, and, through this, foster a sense of better control over unexpected events. Along similar lines, the openness to stimuli and explorations typical of critical thinking will also be likely to explain a stronger emphasis on identifying the possible opportunities stemming from crises, which may, in turn, foster a more adaptive behavior.

Bricolage capacity, comprising the creative use of available resources to address challenges and promote flexibility and initiative among employees, is found to support adaptive strategies. While bricolage has no relationship with threat or opportunity perceptions, it is positively related to controllability perceptions. This may be because bricolage, characterized by proactive problem-solving and resourceful action, contributes to managers feeling less overwhelmed by the crisis. Moreover, via this path also a negative indirect effect on regressive strategies is shown. This suggests that bricolage capacity may be expected to encourage reliance on adaptive strategies and indirectly may also reduce the reliance on regressive strategies.

Financial capacities show no direct association with regressive and adaptive strategies. However, stronger financial capacities are related to a better sense of controllability and decreased threat perceptions; and through those paths, they are also related to decreased regressive behavior. This suggests that affluence, including reserve resources, may enable organizations to feel more in control of their environment and safer from threats, which may help them avoid reducing activities.

However, the results also reveal that financial capacity is related to a decrease in adaptive strategies through

threat perceptions. Thus, strong financial capacities may not help and could even indirectly counteract the pursuit of adaptive strategies in times of crisis. This finding however also challenges the assumptions of the resource-based view, which posits that organizational reserves foster adaptive behavior. Instead, it aligns with resource constraint theory, asserting that surplus resources may restrict efficiency and limit exploration (see Baker & Nelson, 2005; Chiu & Liaw, 2009). This notion is also supported by previous studies showing that a sound financial situation can lead to lower activity levels due to complacency during times of crisis (Barbera et al., 2017). Alternatively, it could be that organizations with strong financial capacities have previously invested in high-quality infrastructure, advanced technologies, or skilled personnel, thus equipping them better for unexpected events and reducing the need for adaptations. Further research is needed to disentangle these potential dynamics.

Overall, capacities appear to make a difference in how organizations perceive crises, that is, whether they feel in control and which type of responses they adopt. Interestingly, however, the organizational capacities differ in their direct relationships with responses and perceptions. Whereas critical thinking may be likely to play a role in avoiding regressive strategies, bricolage is positively related to adaptive strategies, and financial capacities show no direct association. All of the capacities are positively related to the sense of controllability in the organizations, yet, they differ in their links with making sense of the valence of events—that is, perceiving a crisis as either threat or opportunity. The findings suggest that greater financial capacities reduce the perception of threat, critical thinking enhances the perception of opportunities, and bricolage does not affect those perceptions. This confirms the importance of examining the role played by specific capacities and perceptions in how LGs cope with crises. It also confirms the need to distinguish perceptions of a crisis as either a threat or opportunity from controllability perceptions (König et al., 2021; Plambeck & Weber, 2009), which can be expected to have different antecedents and effects.

Finally, the results emphasize the integral role of perceptions in filtering the impact of capacities on responses to crises. They illustrate that the relationship between capacities and responses is mediated by how threats, opportunities, and controllability are perceived during crises. Concerning that last point, since the present study takes an exploratory stance, its results are more suggestive than conclusive. However, considering these aspects takes account of the inherent complexity in public management research and allows for more nuanced suggestions for management practice (see also Preacher & Hayes, 2008; Streukens & Leroi-Werelds, 2016). It also provides valuable theoretical insights and, therefore, a basis for explanatory designs in the future.

As with any study, this one is subject to limitations, which may be addressed in future research. First, as acknowledged in the method section, the potential for CMB could not be fully mitigated. Second, the study relies on a cross-sectional design, providing a snapshot of the strategies and the factors associated with them at a specific point in time. Therefore, no causal relationships can be inferred. Nevertheless, cross-sectional studies, informed by theories and previous literature, suggest associations or exclude some of them, and, in line with the cumulative nature of research, are therefore useful for comparison with other studies and further testing in longitudinal research. Future studies may therefore address these aspects, comparing the explanatory power of different cognitive, behavioral, and contextual factors. In accordance with its research aims, this study focused on the individual level of analysis, that is, public managers' perspectives within LG organizations across countries rather than on comparing countries. Moreover, the limited number of responses from each country constrained our ability to conduct complex country-level models with adequate statistical power and reliability. Consequently, we relied on a dummy variable approach to control for systematic country-level variations. Future research could greatly benefit from more detailed country-specific analyses, especially those focusing on complex cross-level interactions between manager-level and country-level variables, which were beyond the scope of this study. Such studies would offer deeper insights into the nuances of crisis response strategies within diverse national contexts. Finally, to gain a more comprehensive understanding of LG crisis response strategies, future studies may combine qualitative approaches (such as cases), as well as survey and archival data.

CONCLUSION

Governments are continuously confronted with emerging crises and shocks, and the COVID-19 pandemic and the Ukraine conflict are only the most recent of a long series. Although questions about how organizational capacities and crisis perceptions shape LGs' responses have started to attract more attention, more research is needed to improve understanding, as well as tackling, reactions to crises.

This study has addressed this research gap, investigating organizational capacities and perceptions in the context of the COVID-19 pandemic and explaining the conditions under which LGs tend to adopt either regressive or adaptive responses. In doing so, the study highlights in particular how responses can be shaped by the organizational capacities of critical thinking, bricolage, and financial capacities and the perceptions of crises as

either threats or opportunities and as either controllable or not.

The study underscored the complexity of the associations between capacities, perceptions, and responses. While financial capacities are not directly associated with any strategic response, critical thinking is found to play a possible role in avoiding regressive strategies, and bricolage in supporting adaptive strategies. All the capacities tend to have a positive relationship with the sense of controllability, but they show different patterns of relationships with the perceived valence of crises. Furthermore, the study revealed less-explored, indirect relationships between capacities and responses during crises, emphasizing the integral role of perceptions as mediators between capacities and crisis response strategies.

Understanding the relationships investigated in this paper has not only theoretical but also practical value. At a time when LGs and policy makers are trying to learn lessons from past crises to prepare for future ones, this study's results indicate the specific capacities that LGs must nurture to continue operating effectively in an increasingly crisis-stricken environment.

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ENDNOTES

- ¹ The size and number of municipalities differ across the four countries. In France, Germany, and Italy, the number of municipalities is relatively high: 34,955 in France, 10,798 in Germany, and 7904 in Italy. The United Kingdom, by contrast, has 410 local governments but their average size in terms of population is far greater than the populations of their continental counterparts (see Appendix 1).
- ² The process of gathering publicly available contact information across Germany, Italy, and the United Kingdom began in earlier projects, and a regular update of the database have been maintained ever since by accessing individual government websites to ensure its accuracy and relevance. For this study, the database was further enriched by incorporating contact data from 634 local governments in France.
- ³ While the unit of analysis is individuals, it is important to note that, out of a total of 590 usable responses, there were a few instances where multiple responses came from the same unit; only in one case, three responses were received and, in 41, two responses were received. Due to this relatively low number of such cases, the potential for any bias due to overrepresentation of certain units appears to be minimal. Additionally, as indicated above, we made provisions to control for the potential diversity in responses by accounting for the profile of the respondent groups.
- ⁴ Smart PLS Version 4.2.5.
- ⁵ Supplementary analyses at the country level are available in Appendix 3, providing an indicative snapshot of the relationships between the independent variables and strategies within each national context. These additional findings should be interpreted as context-specific explorations that offer preliminary insights into the generalizability of our model across different countries. However, due to variations in sample sizes and the inherent limitations of correlation analysis, these

results should be viewed with caution and not as definitive evidence of cross-national trends. They serve as a valuable starting point for future research that could employ more comprehensive analytical approaches to fully explore these nuances.

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APPENDIX 1: COUNTRY CONTEXT AND SAMPLE CHARACTERISTICS

Country context	France	Germany	Italy	UK
Population in mio. 2021	67.7	83.2	59.2	67.0
Government expenditure as % of GDP 2021	59.6	50.9	56.3	4.7
LG expenditure as % of GDP 2021	11.2%	8.6%	14.8%	10.6%
Administrative structure (level of decentralization)	Unitary	Federal	("Quasi") Unitary	Unitary
Administrative profile	Continental European Napoleonic	Continental European Federal	Continental European Napoleonic (Southern)	Anglo- Saxon Model
LG political autonomy** (institutional depth, policy scope, and effective political discretion 0–11)	Moderate 7.64	High 9.17	Moderate 7.50	Low 2.64
LG fiscal (tax) autonomy** (0 = low, 4 = High)	Moderate 2	High 4	Moderate 2	Moderate 2
No. of LGs (2020)	34,955	10,789	7904	410
No. LG pop >15,000	634	981	897	408
Sample characteristics	France	Germany	Italy	UK
No. of responding units	136	229	99	87
No. of responses	136	259	101	94
< 50,000	88	198	68	2
50,001–100,000	26	35	19	10
100,001–200,000	11	15	10	34
200,001–500,000	6	7	2	30
> 500,000	5	4	2	18

Source: Eurostat, 2021; OECD 2021, OECD/UCLG, 2022, Kuhlmann et al., 2022; HM Treasury, 2022.

** Ladner et al. (2021).

APPENDIX 2: SURVEY VARIABLES, ITEMS, AND SOURCE

Variable	Items	Source
<i>Strategies</i>		
Adaptive strategy (AS)	Thinking about the COVID-19 crisis, please indicate the extent to which you agree to the following statements. In your local government, to what extent the COVID-19 crisis is <ol style="list-style-type: none"> changing work processes (e.g., remote working, workflow management, and automating manual processes); changing communication with citizens/service recipients (e.g., social media,...); changing modes of collaboration (e.g., digitally enabled/virtual networks,...); changes in the way we deliver services (e.g., modes of service delivery, digital services, and online services). (1) <i>Not at all</i> —(5) <i>to a great extent</i>	Context-related ad hoc measures
Regressive Strategy (RS)	In your local government, the COVID-19 crisis has led to <ol style="list-style-type: none"> a reduction of services; a complete elimination of services (1) <i>Not at all</i> —(5) <i>to a great extent</i>	Context-related ad hoc measures (derived from Barbera et al., 2021)
<i>Capacities</i>		
Critical thinking (CT)	Please indicate to what extent you agree/disagree to the following statements about your local government. People are encouraged to <ol style="list-style-type: none"> express different points of view, point at potential problems, challenge the way things are done, purposefully discuss and challenge existing assumptions and action plans. (1) <i>Strongly Disagree</i> —(5) <i>Strongly Agree</i>	Adapted from Weick et al. (1999) and Ray et al. (2011)
Bricolage (B)	Please indicate to what extent you agree/disagree to the following statements about your local government/organization. <ol style="list-style-type: none"> We use any available resources that seem useful to responding to a challenge. We deal with challenges by combining existing and untapped resources. Employees are freely allowed to adopt alternative options to sustain operations. Employees are freely allowed to use their knowledge in novel ways. (1) <i>Strongly Disagree</i> —(5) <i>Strongly Agree</i>	Adapted from Witell et al. (2017) and Senyard et al. (2014)
Financial capacity (FC)	How would you compare the following financial capacity-related aspects of your local government to other similar local governments (in terms of size and service scope) before COVID-19 hit? <ol style="list-style-type: none"> Capacity to pay for the required level and quality of services over the long term. Capacity to generate sufficient revenues to pay expenditures. Availability of a sufficient and well-maintained public infrastructures. Capacity to generate sufficient revenues to pay expenditures. Level of financial reserves to absorb a small amount of shock. Level of financial autonomy (i.e., the share of our own revenue sources). Robustness of own revenue sources (i.e., in terms of stability). (1) <i>Much Worse</i> —(5) <i>Much Better</i>	Adapted from Jacob and Hendrick (2012), Maher and Deller (2011), and Wang et al. (2007)
<i>Crisis perceptions</i>		
Opportunity (O)	Thinking about the COVID-19 crisis, how much do you perceive it as an opportunity for your local government? (1) No opportunity at all—(5) a major opportunity	Adapted Milburn et al. (1983) and Jackson and Dutton (1988)
Threat (T)	Thinking about the COVID-19 crisis, how much do you perceive it as a threat for your local government?	Adapted from Milburn et al. (1983) and Jackson and Dutton (1988)

Variable	Items	Source
	(1) <i>No threat at all</i> —(5) <i>a major threat</i>	
Organizational controllability (C)	Most employees... 1. feel that we have the capabilities needed to deal with the consequences of the crisis; 2. feel that we are in control of the situation; 3. think that we have a good understanding of the crisis and its consequences for our local government. (1) <i>Strongly Disagree</i> —(5) <i>Strongly Agree</i>	Adapted from Thomas and McDaniel (1990). The items reflect the perceived collective capability of dealing with the crisis.
<i>Controls</i>		
Age	Up to 30 years (1), 31–40 years (2), 41–50 years (3), 51–60 years (4), and over 61 years (5)	
Gender	Male = 0; Female = 1	
Country dummies	0/1 Germany baseline category	

APPENDIX 3: CORRELATIONS OF INDEPENDENT VARIABLES AND STRATEGIES BY COUNTRY

Country	<i>n</i>	CT-RS	B-RS	FC-RS	O-RS	T-RS	C-RS
Overall	590	-.101*	-0,046	-0,068	0,017	.133**	-.119**
France	136	-.187*	-0.016	-0.013	-0.157	0.151	-.289**
Germany	259	-0.078	-0.051	-0.063	0.115	.206**	-0.087
Italy	101	-0.012	-0.035	-0.012	0.080	0.190	-0.014
UK	94	-0.195	-0.031	-.276**	-0.081	0.168	-0.123
Country	<i>n</i>	CT-AS	B-AS	FC-AS	O-AS	T-AS	C-AS
Overall	590	.217**	.242**	-0,009	.196**	.188**	.093*
France	136	.297**	.219*	0.079	0.090	.187*	0.044
Germany	259	.176**	.248**	0.011	.297**	.125*	.161**
Italy	101	0.187	0.160	0.156	0.044	0.186	0.067
UK	94	0.136	.267**	-0.061	-0.010	.252*	0.048

Abbreviations: AS, adaptive strategies; B, bricolage; C, controllability; CT, critical thinking; FC, financial capacity; O, opportunity; RS, regressive strategies; T, threat.

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