# Adaptive learning in cross-sector collaboration during global emergency: Conceptual insights in the context of COVID-19 pandemic

**Ahmad Arslan**
Oulu Business School, University of Oulu, Finland
Email: ahmad.arslan@oulu.fi

**Ismail Golgeci**
Aarhus University, Denmark
Email: i.golgeci@btech.au.dk

**Zaheer Khan\***

University of Aberdeen, UK

Corresponding author Email: zaheer.khan@abdn.ac.uk


**Omar Al-Tabbaa**

University of Kent

Canterbury CT2 7NZ, UK

Email: ofoa@kent.ac.uk


**Pia Hurmelinna-Laukkanen**
University of Oulu, Finland
Email:
pia.hurmelinna-laukkanen@oulu.fi

**Abstract**

**Purpose**

The purpose of this paper is to examine the role of cross-sector partnerships and collaboration in global emergency management, relevant in situations such as the ongoing COVID-19 pandemic.

**Design/methodology/approach**

The paper utilizes exploratory historical methods and examine cross-sector partnerships from emerging markets. The context of the emerging markets is important given the institutional fragility such markets encountered.

**Findings**

We offer a conceptual discussion that explicates the vital role of such partnerships in global emergencies. We also highlight the instrumental role of adaptive learning in cross-sector partnerships, which can help multiple stakeholders create and deliver value in response to an emergency like a global health pandemic caused by the COVID-19. Along with the conceptual discussion, we further offer practical examples of cross-sector partnerships in emerging economies of Pakistan, Turkey, and Nigeria—undertaken in response to the recent pandemic—emphasizing that such partnerships are crucial to mitigate the emergencies and their consequences on society. Finally, the paper offers theoretical and practical implications for cross-sector collaboration and partnerships in response to the global crisis.

**Research limitations/implications**

The research is limited to emerging markets context and further research is needed on this important topic.

**Originality**

The paper is relevant given the current global pandemic caused by the COVID-19. There is relatively limited research on the cross-sector partnerships and their role in global emergencies and crisis, thus the paper offers important insights on cross-sector partnerships and their value creation in global crisis situations.

**Plain language summary**

Cross-sector partnerships are important to mitigate global crisis and grand challenges. In this paper, we highlight the vital role of adaptive learning in the context of cross-sector partnerships, which can help multiple stakeholders to create and deliver value in response to an emergency like a global health pandemic caused by the COVID-19.

**Keywords:** COVID-19, Grand challenges, Cross-sector partnerships, Collaboration, Emergency Management, adaptive learning

# 1    Introduction:

Cross-sector partnerships are partnerships involving actors from a range of organizations such as businesses, government, and non-profit organizations. They are essential to address grand societal challenges and create value for a range of stakeholders (e.g., Al-Tabbaa *et al.*, 2019; Clarke and Crane, 2018; Seitanidi, 2008). Through collaboration, partners can augment their collective capacity by mobilizing their shared pool of resources, capabilities, and experience (Ritvala *et al.*, 2014), which is needed to deliver novel and more effective solutions for societal problems (Xing *et al.*, 2018). However, research shows that cooperation and learning are fundamental drivers for creating value through such arrangements (Rao-Nicholson *et al.*, 2017). Their role is particularly significant in understanding and responding to complex societal problems (Tulder *et al.*, 2016), especially during global emergencies (Lindgreen *et al.*, 2009; Simo and Bies, 2007). In such circumstances, no single organization has the means and resources to address the issues related to poverty or health (Selsky and Parker, 2005). Hence, the only option that emerges is for different actors from diverse sectors to join their forces in order to create value for a range of stakeholders and mitigate grand challenges.

Driven by their potential, global partnerships that bring together diverse groups of actors have emerged. Their role is vital, particularly in the emerging and developing markets, where formal institutions are not well-developed (Peng *et al.*, 2008). As such, governments in these domains cannot address national issues in societies on their own, given their limited resource and knowledge bases (e.g., Rao-Nicholson *et al.*, 2017). In such contexts, existing studies have examined the value creation drivers and how different organizations could co-create value independently using such partnerships and collaborations (Compagnucci and Spigarelli, 2018; Vestergaard *et al.*, 2018).

Clarke and Crane (2018) looked at cross-sector collaboration as a phenomenon more widely. They suggest that a central theme in cross-sector partnership literature has been examining the effectiveness or performance of such partnerships, especially considering achieving specific organizational and societal goals, and in terms of meaningful impact on intended beneficiaries. However, there is limited research that has focused on how such partnerships create value for its stakeholders through learning routines and processes (Al-Tabbaa *et al.*, 2019; Bai and Wei, 2019; Dentoni *et al.*, 2020), and this remarkable gap is particularly pronounced in the context of emerging markets. At the same time, Koschmann *et al.* (2012) provide important insights into the role of collective agency and communication processes in generating value from cross-sector partnerships, which suggest that this is an issue to be reckoned with. Indeed, it has been

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established that one of the critical aspects of cross-sector partnerships is the sharing of resources, experience, and vital knowledge for value creation (Al-Tabbaa *et al.*, 2019; Seitanidi, 2008). Aligning different backgrounds, values, ideas, and resources is highly challenging (Clarke and Crane, 2018), however, especially considering the very different motivations, myriad or even conflicting goals, and different capabilities and jargon embedded in different sectors (Austin and Seitanidi, 2012; Bryson *et al.*, 2006).

In such a context, cooperation and learning are inherently needed to overcome the obstacles (Le Ber and Branzei, 2010). However, the role of adaptive learning in value creation through cross-sector partnerships across different institutional contexts is relatively underexplored (e.g., Al-Tabbaa *et al.*, 2019; Le Ber and Branzei, 2010). In this context, we define a*daptive learning* as the cross-sector partners' ability to sense changes in the environment and learn from other partners' experiences to create and capture social/economic value (Luo, 2020) while responding to external changes and risks (Szijarto, 2019). There is value in accessing complementary resources and capabilities through cross-sector partnerships as this can enable the creation of social value and, in turn, addressing societal problems (Klein *et al.*, 2010). More recent discussion has focused on the role of dynamic capabilities within the cross-sector alliances to create value (Al-Tabbaa *et al.*, 2019). Nevertheless, the mechanisms through which adaptive learning can impact social value creation in cross-sector partnerships remain underexplored (e.g., Caldwell *et al.*, 2017).

COVID-19 pandemic has been referred to as the most significant disruption for countries and organizations in recent years (Entress *et al.*, 2020; Mckibbin and Fernando, 2020). This pandemic further revealed stark differences in the levels of preparation of different countries and organizations in dealing with it (Carnevale and Hatak, 2020, Kano and Oh, 2020). Even the developed economies like the USA, UK, and Italy—along with many others, are finding it challenging to amicably address the disruptions caused by it and provide necessary services to different communities. Likewise, the situation in most emerging and developing economies affected by the pandemic is getting starker due to the limitations of their institutions, as well as their public bodies in dealing with such an unprecedented emergency (Gilbert *et al.*, 2020). Hence, the importance of cross-sector collaboration becomes even higher in such a condition where the three sectors (public, business, and non-profit) are incapable of tackling individually the severe challenges imposed by the COVID-19. In turn, this highlights the importance of adequately understanding how these diverse organizations can adapt and co-evolve their practices to develop their collective capacity to deal with the pandemic effectively.

Keeping in view the lack of specific research on this topic in the context of COVID-19 pandemic, our paper aims to bring insights from multiple streams of literature and addresses the topic of adaptive learning and social value creation. In doing so, it focuses on the role of cross-sector partnerships in response to global emergencies—in this case, the COVID-19 pandemic. Against this backdrop, the paper aims to answer the following research question: How adaptive learning contributes to addressing a global pandemic like COVID-19 by enhancing the effectiveness of cross-sector collaboration among different actors, including multinational enterprises?

Along with the critical and conceptual discussion, we introduce illustrative examples from three key emerging economies—Pakistan, Turkey, and Nigeria, to substantiate the presented conceptual arguments. The choice of these three countries is supported by the fact that they represent relatively large developing economies with different levels of institutional development. Due to institutional weaknesses and voids in these countries, the importance of cross-sector collaborations to address different societal issues, including disaster response, has been highlighted in the prior studies (e.g., Husselbee, 2000; Idemudia, 2018; Hermansson, 2019). As the paper aims to analyze a currently ongoing phenomenon, such conceptual work is expected to enrich extant literature by setting bases for further empirical exploration of this topic in different contexts during and post-pandemic world.

The rest of the paper is organized as follows. The next section offers an overview of cross-sector collaboration and discusses adaptive learning and social value creation. This is followed by a section specifically discussing cross-sector partnerships in emergency management, where practical examples concerning the current COVID-19 pandemic are also presented. The paper concludes with the section discussing the implications, limitations, and future research directions.

## 2    Cross-sector collaboration in response to social problems

In an increasingly complicated and dynamic world, no socioeconomic actor has all the know-how or ownership of all resources and experience needed for creating relevant value (Borgatti and Halgin, 2011). This is most visible when grand challenges with wide reach are of concern (Berrone *et al*., 2016), where, quite often, governments are the key actors to take the lead in responding to such challenges. The action is taken at the national and transnational levels when facing climate change, environmental issues, or sustainability. Simultaneously, governments'

actions may not be efficient without practical solutions and implementation being enacted at the local level among individuals, organizations, or communities (Quayle *et al*., 2019).

The different organizations and actors have different advantages and challenges when they try to tackle complex societal grand challenges. For example, the fundamental function of private sector firms is economic value creation, and their primary objective is profit and growth for a relatively narrow set of shareholders (Gubbi *et al*., 2010). The private sector for-profit actors have the benefit of being able to attract investments, which allow them to gather, generate, and exploit resources efficiently. At the same time, private sector firms' core functions, along with specific objectives and organizational logics, rarely render them as appropriate actors for single-handedly dealing with greater societal problems and creating social value.

Limits are faced by other types of organizations also. Not-for-profit or non-governmental organizations (NGOs) have become pivotal players in serving and shaping society *(Vachani et al*., 2009). In this vein, the rise of NGOs offers opportunities for finding solutions to grand challenges that society faces today (Al-Tabbaa *et al.*, 2014). Particularly, NGOs may prevent public and private-sector failures by advocating for and giving an effective voice to the disadvantaged actors and groups and providing unique value to societal stakeholders that cannot be created by the public- and private-sector actors (Teegen et al., 2004). Therefore, NGOs have increasingly gained an important place in creating greater social value and assumed a particularly conspicuous role in shaping the interaction between business and public actors over business rules, norms, and practices (Doh and Teegen, 2002).

Nonetheless, given their structures and organizational logics (Villani *et al*., 2017, Quélin *et al*., 2017), not-for-profit NGOs face the mirror image of the challenges that private-sector firms face (Yaziji and Doh, 2009). They may embody cumbersome processes and lesser economic efficiency (Scholten *et al*., 2010). Therefore, and by recognizing the idiosyncratic limitations of actors in each sector, cross-sector collaborations have become an important strategy for overcoming these limitations.

Cross-sector collaboration (or partnerships) can be defined as "a distinctive form of working together, characterized by intense and interdependent relationships and exchanges, higher levels of cohesion (density) and requiring new ways of behaving, working, managing and leading" (Keast and Mandell, 2014, p. 9). It entails linking and sharing information, activities, resources, experience, and capabilities by organizations residing in two or more sectors. It inherently involves pursuing an outcome that organizations in one sector could not achieve

separately (Bryson *et al.,* 2015). Likewise, it generates innovative solutions to complex societal problems by combining different yet complementary organizational logics of different actors (Villani *et al.*, 2017). As such, partners can co-develop new capacity to resolve complex public policy problems (Selsky and Parker, 2005; Quayle *et al.,* 2019) and generate public value (Van Tulder and Keen, 2018).

Therefore, cross-sector collaborations are increasingly referred to as an effective tool to address many social problems, especially in emerging and developing countries, where institutions are weak and lack capacity in many cases (Curnin and O'Hara, 2019, Lu and Li, 2020, Vopni, 2020). When such countries face emergencies like COVID-19, the importance of cross-sector collaboration becomes even more paramount; the public sector (state) lacks the capacity to deal with and control the spread of the virus. At the same time, there is ample evidence in the literature that third sector organizations tend to deal with social and economic problems effectively in such contexts (Gunn, 2018, Vachani *et al.,* 2009). Nevertheless, they fall short in mobilizing the necessary resources for scaling up their intervention and response *(Bryson et al.,* 2015).

However, cross-sector collaborations are often problematic to organize due to discrepancies in partners' missions, incentives, and management practices (Caldwell *et al.,* 2017). Governments, businesses, and not-for-profit NGOs have notably varying goals, motivations, and stakeholders, which easily generates and intensifies tensions that may negatively affect collaboration effectiveness (Herlin, 2015, Googins and Rochlin, 2000, Ritvala et al., 2014). Different problems rooted in the relative emphasis on public vs. private goods across public and private actors, the level of the external stakeholders' voice, and cultural distance between collaborating actors render the management of cross-sector collaborations a challenging task (Al-Tabbaa *et al.,* 2014, Rivera-Santos *et al.,* 2017).

Accordingly, the acknowledgment and adoption of hybridity in governance and organizational logics (Quélin *et al.*, 2017), as well as relationship coordination became vital requirements (Yaziji and Doh, 2009) so that these collaborations could successfully adapt to partners' discrepancies and emergent constraints over their lifespan (Caldwell e*t al.*, 2017). However, as Quayle *et al.* (2019) suggest, there is still relatively little knowledge of the inter-organizational adaptation dynamics when varying sectors actually work together. In addition, developing effective collaborations in response to a crisis at the scale of COVID-19 can be even more complicated. When coupling the myriad difficulties associated with typically cross-sector collaborations with the characteristics of crisis (mainly uncertainty in scope, a rapid increase

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in demand and resources, and fast-track due diligence) it can be realized that designing an agile response can be a real challenge. This, in turn, highlights the need to investigate the functioning of these collaborations under such conditions.

## 2.1 Cross-sector partnerships in global emergency management

Large-scale emergencies like the COVID-19 pandemic are once-in-a-life-time incidents that greatly impact every aspect of life, including politics, education, socioeconomics, culture, and the natural environment (Huynh, 2020). Accordingly, they necessitate a response by multiple stakeholders and entail disaster and emergency management practices that include diagnosis, prevention, mitigation, recovery, control, and delivering value to the affected communities. In fact, a notable issue is that notwithstanding the ubiquity of natural and human-made emergencies and the growing toll in human lives and financial costs, much research continues to be concentrated on physical infrastructure–centered approaches to such incidents (Aldrich and Meyer, 2015). However, softer and collaborative factors in responding to emergencies and disasters are essential in most cases. Extant research gradually acknowledges collaborative processes, in which affected stakeholders navigate the social and emotional responses to the symbolic and material changes to a community or country that result from disasters or emergencies (Cox and Perry, 2011). As such, collaborative processes across multiple sectors linking a network of adaptive resources and capabilities with dynamic attributes to adaptation after a disaster or adversity are vital for a community and region to withstand, endure, and thrive in the face of unprecedented disasters and emergencies (Norris *et al.,* 2008). In fact, scholars increasingly tie cross-sector collaborations to a wide range of sustainability standards, survival from disasters (Perez-Aleman and Sandilands, 2008), and provision of collective goods to the society (Boddewyn and Doh, 2011).

Cross-sector collaborations enable integrating diverse strengths of different actors while overcoming their weaknesses in disaster and global emergency management situations. For example, increasing pressure on NGOs to use their resources more strategically leads them to collaborate with private sector firms and adopt management principles to achieve leanness and agility in responding to disasters (Scholten *et al*., 2010). These issues can become quite visible in developing countries where the NGOs already play an important role. Cross-sector collaborations can be an essential foundation to combine the efficiency and effectiveness of private sector firms with the dedication and societal focus of NGOs to face and overcome emergencies with the support of the public sector emergency response. We discuss the notion of adaptive learning in the next section now.

## 3 Adaptive learning in cross-sector collaboration for crisis management: towards a conceptual framework

Considering that many grand challenges necessitate an understanding of not only the problem itself (and its consequences and potential solutions) but also the operations logics of other actors to be able to address the problem at all, learning at different levels emerges as a relevant issue (Wittmayer et al., 2014). Particularly, adaptive learning is vital in cross-sector collaboration where organizations with different purposes, leadership styles, experience, and structures learn how to work collectively in addressing complex global challenges.

Adaptive learning (AL) is rooted in organizational learning (OL) literature (Zuo et al., 2019). The latter seeks to explain the nature of this learning, specify the actors involved and the dynamics of their roles, and identify the conditions that can either stimulate or suppress organizations potential to benefit from their learning activity (Chiva et al., 2010, Chiva et al., 2014). AL can be perceived as a distinctive extension from organizational learning as it integrates and emphasizes learning with adaptation (Levinthal and March, 1981). As such, AL has been generally conceptualized as the ability to recognize changes in the environment, then consequently, initiate adaptation processes (Luo, 2020).

To better understand the AL concept, several scholarly attempts have been made to specify the key components of AL, namely *organizational learning* and *adaptation.* In principle, organizational learning reflects the process of developing new ways of "seeing things or understanding them within organizations" that typically materialize into new tacit/explicit organizational knowledge (Levinthal and Rerup, 2006). Within the context of AL, *organizational learning* has been conceived as an organizational capability that builds on four key mechanisms (Luo, 2020): 1) developing absorptive capacity (by building the ability to identify new external information/knowledge and its value, assimilate, transform and exploit it in forms of economically rewarding products and services (Zahra and George, 2002)); 2) escape the trap of learning myopia (by balancing between long vs. short-run learning objectives and learn how to learn from failure (Levinthal and March, 1993)); 3) activating experiential learning (by engaging in iterative trial-and-error knowledge development attempts –learning by doing—to explore and understand new domains (Holmqvist, 2004)); and 4) adopting learning mindfulness (by developing the ability to view things from multiple perspectives and be sensitive to unexpected events and thus mitigate the risk of being routine-driven (Lu and Li, 2020)).

Following the activation of these learning foundations, an organization becomes able to absorb and respond to the external changes in its environment by triggering an adaptation process (Levinthal, 1997). Here adaptation refers to an organization's capacity to deliberately adjust and reconfigure its systems and processes to fit with exogenous changes and remains aligned with the external environment without endangering its operating model (Emerson and Gerlak, 2014). This implies that adaptation, as part of the AL, entails the "refinement and improvement of existing competencies, technologies and paradigms without necessarily examining or challenging [existing] underlying beliefs and assumptions" (Chiva et al., 2010, p. 122). However, such adaptation demands adequate utilization of the newly learned knowledge, which suggests a strong reinforcing (or coupling) between the two components (i.e., *organizational learning* and *adaptation*) (Levinthal, 1991). Research on adaptation suggests two features for this organizational changing process: 1) adaptation is complex as it is enacted in an interconnected system that comprises the organization and its multiple stakeholders (Levinthal, 1997);   and 2) adaptation is more than the creation and utilization of new knowledge; it "involves speciation – the application of existing technology to a new domain of application" (Luo, 2020, p. 12).

Building on the previous conceptualization, within the context of cross-sector collaboration, we define the AL as a mutual learning process that is established in a complex system (i.e., the domain of addressing a social problem), which aims to co-create and leverage new knowledge to create socioeconomic public value. AL engages each partner in cross-sector collaborations to mutually learn from each other and adapt their behaviors accordingly to succeed in the joint socioeconomic enterprise (Weber et al., 2017). This highlights the critical role of AL as cross-sector collaborations are challenging endeavors, and they demand each actor to recognize the collective context of partners and learn how to be adaptive and accommodative to other actor's organizational logic and priorities. Through AL, firms, and NGOs can form the joint socioeconomic enterprise to overcome/mitigate their liabilities and transcend challenges ingrained in creating social value efficiently and effectively (Zollo et al., 2016, March, 1991).

However, and despite their potentials, the nature and dynamics of AL in cross-sector collaboration for global crisis response have received very little attention (Dentoni et al., 2020). In other words, the current literature on AL does not explain how organizations can realize the changes in the environment and how the learning and adaptation processes can actually unfold in responding to a global crisis. Therefore, we address this gap by drawing on three illustrative cases about cross-sector collaborations in response to COVID-19.

## 3.1 Illustrative cases

In Pakistan, our first case, the state lacks resources and capacity. However, after being hit by the pandemic, the pressure on the government has increased massively as many households started to suffer "loss of income that would push them further into poverty and deter them from self-isolating to contain the spread of the virus" (Hrm, 2020). Therefore, local non-profit organizations (NPOs), in collaboration with the state, have identified the need to exchange and integrate their unique expertise, experience, and knowledge in areas including food delivery and healthcare provision (Express Tribune, 2020).

More specifically, the NPOs have shared and capitalized on their subtle understanding of the complex communities in different regions in Pakistan and tap on their extended knowledge on local networks functioning to co-develop a rapid distribution system with the government. Through this identification and transformation of this bespoke knowledge, both parties could exploit co-learning and effectively address multiple human dynamics associated with health emergencies like COVID-19 (Times, 2020; Tribune, 2020). Recognizing the potential of this learning process, the United Nations for development programs (UNDP) and, in collaboration with the government, developed an urgent response strategy following the outbreak, which identifies four critical mechanisms for delivering the emergency response. Two of them emphasized cross-sector learning and adaptation. In specific, these include: "1) the establishment of coordination and collaboration forum (to ensure that the Government of Pakistan, donors, and the UN Agencies have mobilized their technical and financial resources to deliver a joint response to COVID-19), and 2) a research and learning platform (to ensure the most up-to-date data, information, and analytics on the socioeconomic impact of COVID-19)" (UNDP, 2020, p. 81).

These two mechanisms are mainly designed to enhance mutual learning across the partners. Importantly, they reflect several learning mechanisms. For example, the establishment of a forum (as mechanism one) was essential for the partners to mutually perceive the full picture of the crisis (e.g., identify all related parties when designing an intervention) and appreciate its extended ramifications (i.e., avoid learning myopia). This forum was also much needed to encourage the partners to continuously review and adapt their actions to ensure compatibility across the collaboration board. For example, the forum facilitates the communication between the government and financial institutions to rethink typical banking procedures (i.e., learning mindfulness). This, in turn, was essential to adopt several fiscal policy measures to facilitate

women entrepreneurs and thus protect this venerable sector from collapsing due to the lockdown and freezing of economic activity (Undp, 2020, p. 58).

Similarly, and regarding the other mechanism (research and learning platform), several partners, including the Ministry of Health, Local government departments, Municipal services, Ministry of Science and Technology, Academia, Research Institutes, and UN Agencies, have leveraged their knowledge and experience. They co-develop information sharing platforms such as an open-access database on scientific research results and data (to offer Roadmap developed for the open-access database) and the 'tele-medicine' information platform (for the provision of healthcare-related information to the public). Both interventions were underpinned by partners' ability to adapt their typical practices (e.g., academics would simplify their knowledge base to become accessible by other partners).

Another example in Pakistan's context can be seen from the collaboration between the local government of one of the provinces in Pakistan (Balochistan), NGOs, and firms operating in that province. There, through a collaboration with an NGO, the local government co-created social value for the COVID-19 affected community by offering basic food supply to vulnerable individuals who became unemployed due to the lockdown (Dawn, 2020). If the government would have tried to do it on its own, there are chances of the initiative to fail as in the past such initiatives undertaken by provincial governments resulted in a loss for the exchequer while not delivering promised food to deserving people. Therefore, by actively working with the private and non-profit sector organizations, the local government developed IT-enabled applications to reach the affected communities. Through the cross-sector partnerships, a mobile application was co-developed rapidly by leveraging the knowledge residing in each sector, which organized and facilitated the registration of affected and needy communities for the effective delivery of humanitarian aids (financial and in-kind) and other health and social services.

Similar to Pakistan, Turkey also witnessed cross-sector collaboration experiences to address the challenges posed by the COVID-19 pandemic jointly. The country was able to leverage the adaptive learning and co-design of activities in cross-sector collaboration and integrate these as a central part of their response strategy. More specifically, Ilim Yayma Vakfi (Science Dissemination Foundation) —a non-profit organization, collaborated with the Turkish government initiative #EvdeKal (stay at home) and private firms to foster community feeling and solidarity in times of the COVID-19 pandemic. This collaboration was useful to develop a comprehensive schedule that included a reading list, family play, cooking recipes for men, virtual museum visits, and online libraries to support families psychologically and enabled

them to use their time at home more effectively (IYV, 2020). IYV's community experience and comprehensive knowledge of local networks in Turkish cities beyond large ones like Istanbul and Ankara enabled the state institutions and private firms to collaborate and access to the local population in their COVID-19 relief efforts. As such, technical expertise of state institutions, financial resources of private-owned firms, and local knowledge of IYV as an NGO was combined to foster and leverage cross-sector adaptive learning in the face of the pandemic and successfully respond to social and health-related challenges posed by the COVID-19.

This national partnership between IYV, state institutions, and private-owned firms also provided online seminars to IYV's members and the community about the pandemic and coordinated with the government to open online resources, such as libraries and archives for the public to access. These provisions of online resources were augmented by virtual meetings where participants shared their experiences and brain-stormed over potential solutions and means of easing the challenges of the lockdown. The aim was to enable community members to utilize their free time at home by gaining new knowledge and developing their skills. One of the main challenges driven by the COVID-19 pandemic was the sudden and imposed requirements of altering people's lifestyle and daily habits that eventually led to new psychological and health-related problems (Mattioli *et al.*, 2020; Rossi *et al.*, 2020). The lack of physical activity, potential loneliness, and dietary irregularities have created collateral psychological and health-related problems that required the attention of public authorities as well as relevant NGOs. At this juncture, the collaborative initiatives instigated by IYV, state institutions, and private-owned firms helped ease psychological tensions of staying at home, provided means for staying healthy, and supported community resilience for the Mediterranean society that is otherwise fond of outdoor activities, especially in the springtime, when the pandemic hit Turkey.

In Nigeria, our third illustrative case, and after the outbreak in this country, the Joint Support Framework was established to bring together all social sectors, including the national governmental authorities, non-governmental organizations, UN agencies, academic and training institutes, and donor agencies aiming to develop the response strategy for COVID-19 (Health, 2020). Apart from the control and treatment measures, it has been realized that COVID-19 stigma is a critical issue that can complicate the response strategy. As the Nigeria Health Sector Coordinator highlighted, "one major priority is to address the misconceptions and stigma around COVID-19, both for patients and healthcare workers" (Who, 2020). This

stigma concerns blaming and shaming certain groups of people who may pose a threat of infection (such as COVID-19 survivors, frontline healthcare workers) (Clinic, 2020). This behavior has a detrimental effect on any response strategy/actions as it creates cracks in the social fabric of society (i.e., the stigmatization is likely to pose a challenge to social cohesion), where stigmatized people can feel isolated and even abandoned, and thus refuse to be involved in any pandemic control measures.

Additionally, stigmatization can "affect both humanitarian personnel and affected populations; those perceived to be infected, including new arrivals, may be attacked and/or evicted". As such, "research from past epidemics has shown that stigma undermines efforts to test for and treat disease. People who are worried about being shunned or worse may be less likely to get tested or seek medical care, which increases infection risks for them and for others" (Clinic, 2020). Therefore, many players in society came together to co-design flexible and decentralized remedies for his challenge. In specific, a national level partnership has been formed comprising the Health Sector, a community mobilization-working group managed by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), community teams in the Water, Sanitation and Hygiene (WASH) Sector, and community healthcare workers in the Polio eradication programs (Polio is an infectious disease caused by the poliovirus). The aim was to collectively develop a public service campaign (community outreach) using the networks, skills, and region-specific knowledge embedded with the partners. In specific, the government authorities have collaborated at local levels with civic leaders; women's organizations and networks; and religious and traditional leaders) to better understand and learn how to adapt the health-related communication strategies with the public to account for culturally sensitive issues (i.e., understand and refute the misconceptions and stigma around COVID-19). Accordingly, the campaign involved several destigmatizing activities, for example, celebrating discharged COVID-19 patients as heroes for having defeated the disease, and utilizing local influencers (e.g., religious figures) to convey health authority messages adequately and educate the community on the consequences of this behavior on the outbreak of the pandemic. At the same time, the partners in the collaboration were collecting and monitoring "perceptions, rumors and feedback" from the campaigns "through trusted communication channels" to understand better the negative behavior and social stigmas associated with the outbreak and introduce long corrective measures to the outreach policy (Who, 2020). This implies that by continuously evaluating these strategies, adaptation and structural changes can occur via "learning by doing" (Luo, 2020).

Given the above-mentioned attributes of cross-sector collaborations, effective and well-run adaptive learning (within the collaborations) could be the key to withstand large-scale global emergencies like the COVID-19 pandemic, find new ways to tackle and overcome these challenges and maintain a proper level of resilience in the community.

## 4    Adaptive learning in cross-sector collaboration for emergency response: toward a conceptual framework

Overall, the illustrative cases show how such collaborations have provided vital adaptive learning opportunities to the partners involved in dealing with emergencies and creating social value by fostering society's socioeconomic resilience. This is also in line with the argument presented in recent Wharton social impact discussion, where it is argued that COVID-19 can only be effectively addressed by cross-sector collaboration between public, private, and third sector (NGO) organizations as each has certain competitive aspects, which others can learn and utilize (Wharton, 2020).

Next, we aim to extend the literature by proposing a conceptual framework for adaptive learning in the context of cross-sector collaboration for emergency response. The proposed framework identifies three interrelated aspects: emergency cross-sector collaboration triggers, AL in cross-sector collaboration, and innovative crisis response to foster society resilience (social value creation as an emergency response) (Figure 1).
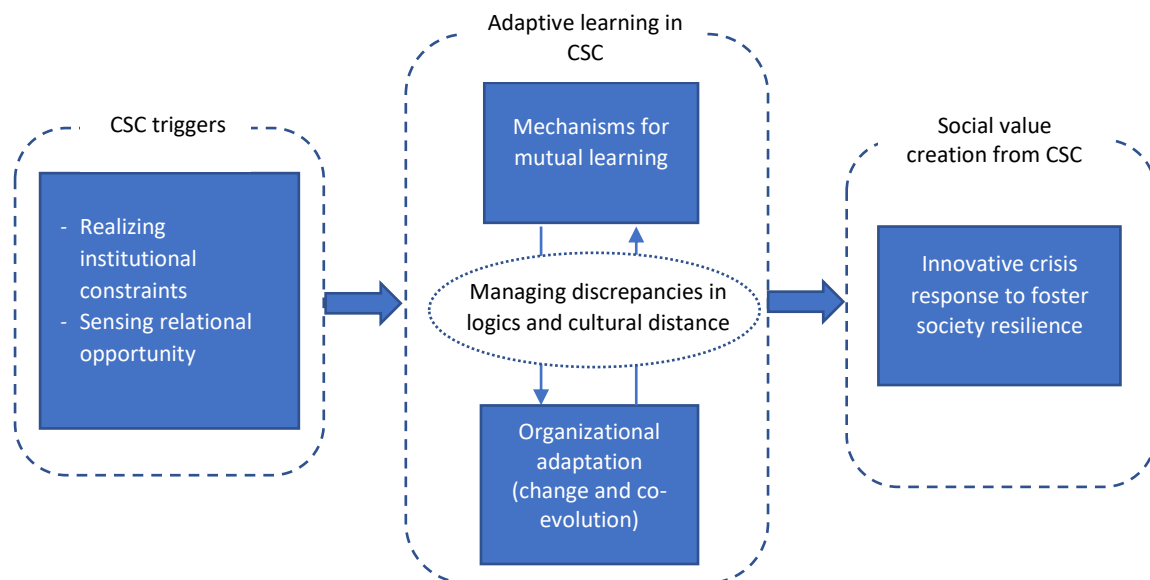


Figure 1: Conceptualizing adaptive learning in cross-sector collaboration (CSC) for global crisis intervention

As illustrated in the cases, two factors act as triggers for adaptive learning in a cross-sector collaboration for crisis response. These include realizing institutional constraints and sensing relational opportunities for the co-creation of value. For the former, partners under the pressure of crisis realize their knowledge gap and the need to internalize knowledge and information beyond the boundaries of their sector to co-create effective response strategies. For instance, and as illustrated in our first case, the federal Pakistani government has realized their lack of knowledge needed to swiftly and effectively manage the process of supporting the households who lost their income due to the national lockdown. This, in turn, has signalled the need for collaborating with the local non-profit organizations (who possess extended knowledge on local networks functioning and well understanding of food delivery and healthcare provision) to rapidly co-design a regional distribution system with the local government. This implies that this factor is likely to be more evident in the context of developing economies, given the limitation in tangible and intangible resources that face all sectors (especially the public sector) in these economies (Yaziji and Doh, 2009). At the same time, those partners and following the realization of their institutional and sector constraints, they started exploring relational opportunities to bridge this gap and design better interventions. As such, the public authorities, in the third illustrative case, have realized an opportunity in leveraging the capabilities of the international NGOs and the domestic communities to learn how to design and co-deliver interventions that can tackle the issue of pandemic-related stigmatization.

Influenced by the triggers, adaptive learning process takes place using the different mechanisms for reciprocal learning, see Figure 1. These mechanisms develop new ways of seeing things and understanding the crisis and its ramifications from different perspectives, which typically materialize into new tacit/explicit organizational knowledge. Such knowledge can be extremely important for organizational adaptation (cf. Hedlund, 1994). Table 1 offers evidence from the three illustrative cases that further shed important lights on the four adaptive learning mechanisms.

[insert table 1 here].

Consistent with the conceptualization of adaptive learning (Levinthal and March, 1981), organizational adaptation (change and co-evolution) is a fundamental part of the setting of cross-sector collaborations. As such, we have identified several forms for organizational adaptation and change in the cases. Importantly, it becomes evident that the learning process strongly influences the adaptation process. In this respect, partners co-develop a collective vision for the change as informed by their mutual learning. For instance, the Nigerian public

authorities were able to change their outreach policy based on the learning and interaction process with the local parties comprising civil societies and religious leaders. Also, and as illustrated in the first case, the adaptive learning between the public institutions and local banks resulted in changes in the banking procedures which was urgently needed during the crisis to prevent the micro-enterprise sector from collapsing. Notably, the relationship between the two components of adaptive learning (learning mechanisms and organizational adaptation) is bidirectional (Luo, 2020); the new adaptation in organizations' behaviors is likely to influence the mechanism through which partners co-learn and vis-versa. Moreover, the three offer preliminary evidence (as illustrated above) on the interplay between the learning mechanisms and adaptation (the bidirectional relationship; the iterative influence effect—learning entices adapting and adaptation enacts new learning avenues). However, central to this iterative process is partners' ability to account for their institutional and cultural differences, as well as discrepancy in working logics. In effect, cross-sector collaboration brings together organizations from two sectors or more that are inherently different due to their diverse ideologies, institutional logic, business models, motives, culture, and value systems (Selsky and Parker, 2005). These discrepancies can complicate the collaboration process as partners' would perceive their working systems as incompatible (Saadatyar et al., 2020). Thus, failure to tackle these differences can seriously undermine the interaction and communication, that underpin collective learning-adaptation endeavor, as partners would lose their relational capital— that is much needed to maintain trust and commitment within the relationship (Luo, 2020).

As a consequence of iterative AL processes, partners are likely to create social value, defined as the creation of benefits or reductions of costs for society by addressing societal needs and problems (Phills et al., 2008). Within the context of global emergency conditions, this value can be better understood as an innovative crisis response to foster society's resilience. In other words, the collaboration response can enhance social resilience; strengthen society's socioeconomic systems to overcome crucial challenges—like the pandemic—to return to normalcy and encourage future development (Katz et al., 2020). Indeed, increasing inequality, environmental volatility, sustainability challenges (Perez-Aleman and Sandilands, 2008), and the unprecedented threat of large-scale emergencies like the COVID-19 pandemic highlight the need for social value. Society needs social value beyond that of economic value to endure challenges and hardships and maintain well-being in the face of the growing scale and scope

of problems (Weber et al., 2017, Caldwell et al., 2017). This need becomes particularly relevant in times of emergencies, disasters, and external shocks.

Table 1: Reciprocal learning mechanisms in cross-sector collaboration for global crisis intervention

| Underpinning mechanisms | Supporting evidence from the illustrative cases |
|---|---|
| 1) Developing absorptive capacity: by building the ability to identify new external information/knowledge, recognize its relevance, and utilize it to create social value/change | Case 1:<br><br>In order to improve the response strategy in Pakistan, several parties (i.e., Ministry of Health, Local government departments, Municipal services, Ministry of Science and Technology, Academia, Research Institutes, and UN Agencies) have co-developed information sharing platforms to adapt their typical practices, and thus devise effect response strategy.<br><br>Case 2<br><br>In Turkey, part of the national COVID-19 response strategy was co-designed and co-enacted by the Turkish government initiative #EvdeKal, Science Dissemination Foundation (nonprofit organization) and private firms aiming to foster solidity in society at the time of crisis. The partners were able to develop collective absorptive capacity to identify and harness the unique knowledge resides (e.g., technical expertise of state institutions as well as knowledge of local networks in Turkish) in each of them. Via their regular meetings, they were able to sense and exploit technical expertise and local community knowledge. In these online meetings, collaborators shared their experiences and brain-stormed over potential solutions and strategies to mitigate the negative effect of the lockdown. |
| 2) Escaping the trap of learning myopia: by learning how to learn from failure and balancing between long- vs. short-run learning objectives | Case 1<br><br>The local government of one of the provinces in Pakistan has collaborated with local NGOs and firms operating in that province to support COVID-19 affected community by offering basic food supply. This collective effort was informed by prior failures by the provincial government to establish similar initiatives. Therefore, by involving all these partners, they were able to learn from previous mistakes and built an IT-enabled application to facilitate the registration of affected and needy communities for the effective delivery of humanitarian aids (financial and in-kind) and other health and social services. |
| 3) Activating experiential learning: by engaging in iterative trial-and-error knowledge development attempts –learning by doing- to explore and understand new domains | Case 3<br><br>Addressing the effect of COVID-19 social stigma on the effectiveness of the national response strategy was a new real challenge in Nigeria, which was complicating the application of COVID-19 controlling measures. Consequently, a national level partnership of multiple actors (OCHA, community teams in the WASH Sector, and community healthcare workers) was established to co-design a public education campaign. This collaboration helped to better understand and learn how to adapt the health-related communication strategies with the public to account for culturally sensitive issues (i.e., understand and refute the misconceptions and stigma around COVID-19). Accordingly, the campaign involved several destigmatizing activities. At the same time, the partners in the collaboration were collecting and monitoring perceptions, rumours and feedback to understand better the negative behaviour and social stigmas associated with the outbreak, and introduce corrective measures to the outreach policy. By continuously evaluating these strategies, adaptation and structural changes can occur via "learning by doing" (Luo, 2020). |

| | Case 1: |
|---|---|
| 4) Adopting learning mindfulness: by developing the ability to view things from multiple perspectives and be sensitive to unexpected events and thus mitigate the risk of being routine-driven | The federal state in Pakistan and local nonprofit organizations collaborated to develop a system for food delivery and healthcare provision. Given the complexity of developing this system (because of complex stakeholder networks, large number of beneficiaries, need for data accuracy), partners needed to perceive the full picture of the crisis and appreciate its extended ramifications. Therefore, a digital forum was developed to enable the partners to continuously to ensure that views and insights from all parties are incorporated in the design and implementation processes. For example, the forum facilitated the communication between the government and financial institutions to rethink typical banking procedures (routines) to develop new measures to consider the current COVID-19 related conditions. This, in turn, was essential to adopt several fiscal policy measures to facilitate women entrepreneurs and thus protect this venerable sector from collapsing due to the lockdown and freezing of economic activity. |

## 5    Conclusions

Existing studies have provided useful insights into the functioning of cross-sector partnerships and collaboration (Bryson *et al.*, 2015; Quayle *et al.*, 2019), but events like the recent COVID-19 pandemic make the related opportunities and challenges visible. Under exceptional circumstances, parties representing different sectors have been forced to act quickly, think outside the box, and make compromises. It seems that turning into survival mode with short timeframes for decision-making (compared to a more normal situation where there is plenty of time to make comparisons and negotiate) can speed up learning and adaptation needed to find solutions to complex, global challenges. However, such fast learning does not seem to be equally spread, but cross-sector collaboration exhibits variation across different societies. Therefore, next, we discuss several critical issues when seeking to leverage the advantages of cross-sector collaboration in responding to global crises like the COVID-19.

First, cross-sector partnerships require fast learning abilities and provide essential learning opportunities to diverse stakeholders to create value (Al-Tabbaa et al., 2019, Bryson et al., 2006). As illustrated by our cases, it is clear that adaptive learning approaches and knowledge exchange through cross-sector partnerships are vital for co-designing solutions that deal with extreme challenges and deliver social value in different contexts. The current crisis clearly shows that no single organization or government can overcome global emergencies. It also seems that cross-sector partners operating across different realms are better positioned to co-create value and mitigate the impact of emergencies on communities. However, adaptive learning demands clear openness toward collaboration (Austin, 2000), which especially applies when disaster/emergencies (Nolte and Boenigk, 2013). In cross-sector collaborations developed in response to the crisis, partners need to be clear and specific about the scope of their involvement, interaction, and share of knowledge. That said, they should also be willing to share and discuss evolving issues that may complicate their endeavor to co-learn and co-work (Avoyan and Meijerink, 2020, Curnin and O'Hara, 2019). Indeed, cross-sector collaboration set in the context of COVID-19 needs such openness in mobilizing the effort as many of these partnerships are established between developing and developed economies (as in our third illustrative case), where partners are inherently different (Vopni, 2020).

Second, we argue that adaptive learning and social value creation are two critical pillars of cross-sector collaborations. Coordination and sharing of different resources, expertise, and organizational logics enable cross-sector partners to learn from each other to create relevant social value and do these both locally and globally. Adaptive learning and social value creation

through cross-sector collaborations become particularly relevant in times of severe shocks and crises, such as the COVID-19 pandemic, as they enable them to achieve and maintain community resilience. Thus, we argue, and our anecdotal evidence shows that cross-sector collaboration in emergency management could be a bedrock for attaining and preserving community resilience when a sudden and large-scale crisis hits large swaths of society. That said, fast, adaptive learning from others' activities and considering the nature of the problem and its potential solutions are essential to realize the potential of cross-sector collaboration. In this respect, Cox and Perry (2011) emphasize the critical importance of collaboration both as an orienting framework in recovery and as the ground upon which social capital and community disaster resilience are built. That said, community and regional resilience are inextricably intertwined in that community resilience can better be understood through place-based model resilience to natural disasters (Cutter et al., 2008). As such, regional resilience is not just the ability of a region to accommodate shocks but is the long-term ability of regions to develop new growth paths (Carnevale and Hatak, 2020, Barbour et al., 2020). According to Boschma (2015), for regions to develop new growth paths in the aftermath of emergencies, industrial, network, and institutional aspects of resilience need to converge. Psychological aspects of individuals' resilience are of great importance to achieve community resilience in times of shocks and crises (Norris *et al.*, 2008; Cox and Perry, 2011).

Third, cross-sector partnerships can further play an essential role in human logistics management at a time of pandemic like COVID-19. Many emerging economies in Asia, Africa, and Latin America have large populations who live away from their hometown and villages to work in large cosmopolitan centers (Nair and Verma, 2020). After the lockdown was announced, many were left without any income, driving them to walk towards their villages, which resulted in human tragedies (e.g., Sengupta and Jha, 2020). Better coordination and collaboration between the government authorities and public and private sector transportation firms can potentially help in the future to avoid such situations. Adaptive learning in this context can be useful, especially for public transport managers and decision-makers in emerging economies regarding logistics optimization and delivery protocols to the sites even in emergencies of global retailers operating in their countries. Extant research also indicates that firms can deliver unique social value by working closely with non-profit organizations, especially in disaster situations prevalent in developing economies (cf. Ballesteros and Gatignon, 2019).

The post-pandemic world and organizations will be different from what we have observed before the current crisis. Thus, cross-sector partnerships can provide firms and local government effective means to develop and tap into a range of capabilities to co-create social and economic value for diverse of stakeholders. Multinational enterprises (MNEs) have used corporate social responsibility and non-market strategies to establish legitimacy and manage non-market risks across developed, emerging, and developing economies (cf. Khan *et al*., 2015; Oetzel and Oh, 2015). MNEs can develop new capabilities and create value for their stakeholders in global crises and effectively manage non-market risks by forming partnerships with social sector organizations. They can then utilize diverse capabilities to address the grand challenges such as those caused by the COVID-19 pandemic. MNEs and social sector organizations can acquire valuable knowledge for social and economic value creations in emerging and developing economies. By acquiring and combining knowledge from their social sector partner organizations, MNEs can even address supply chain related challenges since social sector organizations are in a better position to reach underserved and hard to reach communities, which are traditionally out of the reach of MNEs. MNEs can also enhance their absorptive capacity by assimilating valuable knowledge and then transforming that knowledge for products/services offering to address grand challenges by working closely with social sector organizations. Addressing grand societal challenges in emerging economies' context is also important and useful for the MNEs in the long run. It has been a fact that future market growth is expected to take place in emerging and developing economies rather than developed economies. Hence, if those economies (which include current and potential future markets for MNEs) are stable with societies increasingly becoming both economically and socially developed, MNEs stand to benefit in economic terms and reputational and social responsibility advantages.

## 6    Limitations and future research directions

While our discussion shows the potentials of cross-sector collaborations in developing response strategies during the crisis (Huang, 2020), we identified several avenues for future research. Importantly, it is critical to realize that building such collaborative structures is not easy (Nolte and Boenigk, 2013, Lu and Li, 2020). Despite the development in the literature, our understanding of how, where, and when such collective initiatives can create public value under the stress of COVID-19, as other global crises, is still limited. Typically, organizations engaged in cross-sector collaboration suffer from several challenges (e.g., communications difficulties, conflicting institutional logics, and competing agendas) that can seriously limit

their ability to address their common goal. However, developing effective cross-sector collaboration in response to crisis at the scale of COVID-19 can be even more complicated. More specifically, when coupling the myriad difficulties associated with typically cross-sector collaboration with the characteristics of crisis (mainly uncertainty in scope, the rapid increase in demand and resources, and fast track due diligence), it can be realized that designing an agile response can be a challenge. More specifically, we identified three levels for future research directions. These include:

1) Institutional (macro) level. For example, when establishing cross-sector collaboration in developing economies for crisis mitigation and management, how can we offset the effect of institutional voids and weak infrastructure? What is the level of state intervention in starting cross-sector collaboration during the pandemic? Should this intervention be limited to stimulate (rather than) enact the partnership? Also, future research can specifically try to link the institutional and cultural differences and sense making divergences among partners in cross-sector collaborations with the performance of such collaborations as well as issues like trust and commitment in this context.

2) Network (meso) level. How can the characteristics of crisis (e.g., uncertainty and sudden and rapid service) affect the established enablers of typical collaboration (inter-organizational trust, collective governance, reciprocity, power disparity, etc.)? How can these characteristics influence the process of establishing the cross-sector collaboration and the perception of its partners? How can partners be gathered and governed rapidly in response to a sudden crisis? Do we need a meta-governance mechanism (Sørensen, 2006), an external body that acts as a structuring force and steering agency, to speed up the formation process and lubricate the collaboration structure? Moreover, in which format, for example, vertical meta-governance (a higher authority that is not a part of the collaboration) vs. horizontal meta-governance (a higher authority that is a participating member in the collaboration)? Also, how and in what ways intermediary organizations facilitate the formation of cross-sector collaborations for social value creations?

3) Organization (micro) level. Participation in cross-sector collaboration during a crisis can destabilize the internal systems of the participating organizations and drain their resource base. Therefore, what are the implications for these organizations? how can they adapt? In this regard, some empirical evidence suggests that participating in a cross-sector collaboration can have a 'negative spillover' effect, which in turn can deviate an organization from its original

mission (Arslan and Tarakci, 2020). What is the specific role of individual action and perception during the design and implementation of cross-sector collaboration in crisis? How these actions and perceptions can change during the various phases of crisis? How can they be channeled toward the benefit of the overall aim of the collaboration? Recent research (e.g., Bode et al., 2019) has shed some light on the importance of this level of analysis (i.e., the micro- foundation level) to complete our understanding of these complex relationships.

Finally, as it attempts to connect to an ongoing pandemic academically, it was not possible to collect primary data on cross-sector collaboration and partnerships. However, such an analysis can be undertaken by future studies, when hopefully the current pandemic has cooled down. This paper brings up initial insights into the phenomenon as it is observed now. In the future, it would be essential to examine how different organizations working in partnerships internalize knowledge and scale up innovation, especially concerning emergencies like pandemics and how the learnings are disseminated. Such studies could integrate the stakeholders' perspectives and adaptive learning in examining the co-creation of value and social innovation to overcome global emergencies and grand challenges.

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