How Do Intra-Organizational Networks Foster Contextual Resilience and Prepare MNCs For the New Normal? Insights from a Case Study

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Abstract

This paper explores how intra-organizational networks promote contextual organizational resilience in multinational companies (MNCs). According to Lengnick-Hall et al. (2011), the contextual elements of resilience are psychological safety, social capital, power diffusion, and network resources. Since multinational companies are, by definition, geographically dispersed and heterogeneous, the study investigates the extent to which a network structure promotes contextual resilience and thus prepares MNCs for the new normal.

The results of a case study conducted in an MNC are presented. The study was conducted during the Covid-19 pandemic (2020), and the pandemic was used as an example of shock to analyze how the network influences resilience during a shock. The results demonstrate that a cohesive network can promote contextual resilience by increasing connection and thus psychological safety, social capital, power diffusion, and access to network resources. With its focus on interaction, exchange, and relationship in addressing challenges and opportunities, this research aims to contribute to a relational view of economy (Wieland 2020, Biggiero et al. 2022).

Keywords: Intra-organizational Network, Organizational Resilience, Contextual Resilience, MNC, Relational Economics, Case Study, Covid-19.

1. INTRODUCTION

The Covid-19 pandemic, the war in Ukraine, the energy crisis, and inflation call for more resilient organizations. From an academic perspective, this means a need for more research into concepts and practical mechanisms for rebuilding capabilities and renewing strategies to maintain or regain competitive advantage in turbulent times. This research focuses on the question of what characteristics intra-organizational networks need to have to prepare multinational companies (MNCs) to cope with the challenges of the "new normal" and to take advantage of associated opportunities. Against this background, the research question of this study is: How do intra-organizational networks promote contextual resilience and prepare MNCs for the new normal?

This paper aims to provide a conceptual bridge between theories of organizational resilience and intra-organizational networks. It aims to highlight intra-organizational networks as a mechanism for promoting contextual resilience in MNCs.

As for contextual resilience, this study draws on Lengnick-Hall et al.'s (2011) elements of contextual resilience: psychological safety, social capital, power diffusion, and network resources. With reference to network theory, the concepts of network density, cohesion, and structural holes are applied to elaborate how an intra-organizational network could promote the aforementioned resilience. An intra-organizational network that fosters contextual elements of resilience would be a relational governance construct within the organization (Wieland 2023). Relational governance is defined as governance that ensures cooperation (e.g., Williamson 2005, Wieland 2020, Argyres et al. 2019, Baker et al. 2002, Ferguson et al. 2005). Therefore, networks that foster

collaboration within the organization and between the organization and external stakeholders can be defined as a relational governance construct.

The empirical part of the study is based on a case study aimed to investigate empirically whether the intra-organizational network of an MNC exhibits the contextual elements of resilience and to explore empirically whether such a network promotes organizational resilience, thereby preparing MNCs for the "new normal". Because the case study data was collected during the Covid-19 pandemic (2020), the pandemic was used as an example of a shock to examine how the network actually promotes resilience. The results show that a cohesive network structure can promote organizational resilience.

This research aims to contribute to a current debate in the business and management literature regarding the impacts of Covid-19 on business and the consequences in the current post pandemic era. These current debates include, for instance, the works published in the especial issue of the International Journal of Business Research and Management (IJBRM) on management, entrepreneurship, organizational change and digital technology in the post-Covid-19 new business world from 2021 that includes the works of Madondo (2021), Arora et al. (2021a), Arora et al. (2021b), Makurumidze and Mpofu (2021a), Makurumidze and Mpofu (2021b)and, more recently, the work of Salvatore and Milone(2023) on the effects of Covid-19 on family businesses, to mention but a few examples.

This paper is structured as follows: first, a literature review is presented. This includes an overview of the concept of organizational resilience and its associated contextual elements. This allows for clarification of the meaning of resilience as it is applied in this study. Next, the importance of the contextual elements of resilience (psychological safety, social capital, power diffusion, and network resources) as elaborated by various scholars is outlined. The relationship between contextual resilience and networks concludes the literature review. The second part of the paper is devoted to the empirical case study. First, the methodology is presented, followed by the results. The results are divided into three parts: first, the structure of the studied network is presented. Then, this structure is conceptually linked to the contextual elements of resilience. Finally, findings are presented on how the network helped the organization overcome challenges and seize opportunities in the context of Covid-19. The paper concludes with a discussion reflecting on the findings, addressing the implications as well as the limitations of the study and possible future studies.

2. LITERATURE REVIEW

2.1 Organizational Resilience

Resilience is a concept studied in many research traditions (Annarelli and Nonin 2016, MacManus et al. 2008, Ruiz-Martin et al. 2018, Stötzer et al. 2022) and there is no consensus on which research stream first introduced the term resilience (Ruiz-Martin et al. 2018). The relevance of resilience in the different streams of the scientific literature has increased in the 21st century due to the crises that have characterized this century to date: starting from the financial crisis in 2007/2008, environmental issues, and more recently the Covid-19 pandemic and the war in Ukraine (Buyl et al. 2022). In management and organizational studies, concepts such as "organizational resilience" and "supply chain resilience" and their strategic relevance have been conceptualized and empirically studied (Annareli and Nonino 2016). Although academic interest in resilience has increased in organizational research in recent years (Annarelli and Nonin 2016, Duchek 2020, Ruiz-Martin et al. 2018, Buyl et al. 2022), there is no consensus around the definition of resilience (Duchek 2020, Ruiz-Martin et al. 2018, Trunk and Birkel 2022). Resilience is an ambiguous term (Buyl et al. 2022). There are over 50 definitions for organizational resilience alone (Ruiz-Martin et al. 2018). Resilience has been conceptualized as a feature, outcome and measure (Ruiz-Martin et al. 2018). It has also been studied in terms of organizational characteristics, resources or processes (Duchek 2020). What all definitions have in common is that they emphasize long-term survival despite shocks and crises, the management of risks, and the ability to change. This paper draws on this general definition of resilience as the ability to continue to survive and create value despite crises and shocks.

Lengnick-Hall et al. (2011) classify the different definitions of resilience in organizational studies into two perspectives: the first, rebound-oriented view of resilience, namely resilience as the ability of an organization to return to its original "shape" after a shock. Second, the transformational view of resilience, namely the ability of an organization to resurge stronger from a shock. Duchek (2020) also proposes a similar distinction between three types of resilience. The first as the ability to resist and/or recover from shocks. The second as the ability not only to recover, but also to advance after the shock. Third, resilience as an anticipatory ability. While the first two approaches to resilience are defensive, the latter is proactive (Duchek 2020, Annareli and Nonino 2016). The literature has also called the different approaches post-crisis or pre-crisis responses (MacManus et al. 2008). In the proactive and pre-crisis approach, resilience is part of a strategy for fostering competitive advantage (Duchek 2020, Annareli and Nonino 2016). A proactive approach towards resilience may foster a continuous learning process within the organization. In particular, for fostering resilience proactively it may be particular important to learn from failures and from the successful and unsuccessful management of shocks (Duchek 2020).

Early studies of organizational resilience focused on psychological aspects of resilience in organizations, namely at the employees' level (Buyl et al. 2022). For instance, Mallak (1998) identified eight principles for implementing resilience in organizations: perceive experiences constructively, perform positive adaptative behaviors, ensure adequate external resources, expand decision making boundaries, practice bricolage, develop tolerance for uncertainty, build virtual role systems. Although the researcher derived some implications for management, the principles focused on the individual level and therefore considered the psychological domain mentioned. More recent studies have addressed resilience at the organizational level (Buyl et al. 2022). These studies include Lengnick-Hall et al. (2011), who addressed the collective dimension of resilience and considered the contextual elements of fostering resilience in organizations: psychological safety, social capital, diffused power and accountability, access to a broad resource network (Lengnick-Hall et al. 2011). The contextual elements may be a constituent part of a proactive approach in the sense that they prepare the organization to be ready for shocks. Drawing on Ghoshal and Barlett´s behavioral attributes of organizational context (discipline, stretch, support, and trust), Möller et al. (2022) empirically test how organizational context fosters contextual ambidexterity and thereby organizational resilience. While the first two attributes (discipline and stretch) refer to behavioral components, the last two (support and trust) refer to the social context. The study found that support and trust (positive organizational social context) are more relevant than behavioral components, highlighting the relevance of contextual resilience for the organization. One of the reasons in favor of contextual elements of resilience as critical to an organization's ability to survive and continue to create value in turbulent times may be that context fosters organizational atmosphere which, in turn, affects the ability to develop new capabilities (Chassagnon 2022) and promote a proactive approach towards shocks.

2.2 Clarification on Contextual Elements of Resilience

As discussed above, Lengnick-Hall et al. (2011) identified the contextual resilience elements: psychological safety, social capital, power diffusion, and access to network resources. To elucidate the meaning of these elements, the following is a brief overview of the concepts of the contextual elements of resilience. Indeed, such elements of resilience are concepts that have been explored in various streams in the literature.

As for the first element, namely psychological safety, this is a concept introduced by Schein and Bennis in 1965 (Newman et al. 2017, Frazier et al. 2016). In general, psychological safety refers to inter-personal trust, to the feeling of safety when it comes to seeking and providing feedback, sharing ideas, collaborating with others, taking risks, inter alia (Newman et al. 2017, Frazier et al. 2016, Men et al. 2020, Clark 2020). It is interesting to note that psychological safety conceptually overlaps the previously discussed attributes of social context (trust and support) as elaborated by Ghoshal and Barlett (1994). Indeed, psychological safety promotes trust and inter-personal support. Kirkman et al. (2013) empirically shows how psychological safety increases performance in national heterogeneous teams. Thus, the findings of Kirkman et al. (2013) highlight the

relevance of fostering psychological safety especially in MNCs. To operationalize psychological safety, this study used the interviewees' subjective degree of freedom of expression during meetings and exchanges with other members of the network. A narrative analysis of the interview script was conducted to determine this degree of freedom of expression (see case study session).

The second element is social capital. It is defined as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet and Ghoshal 1998: 243). Nahapiet and Ghoshal also identified three dimensions of social capital: structure, cognitive and relational (ibid.). However, the brief overview of social capital studies presented here do not consider any specific dimension but regard social capital in its general definition. Social capital and its impact on organizations has been studied extensively in management and organizational literature (some examples include the works of Liu 2018, Barao et al. 2017, Lesser and Prusak 1999, Lesser and Strock 2001, Urzelei and Puig 2019 to name but a few). Social capital has also already been studied in its relationship to organizational resilience, in particular as an external factor for organizational resilience (study cited by Stötzer et al. 2022). Following Styr (2021), social capital can be measured by asking with whom interviewees regularly interact.

The third element is intra-organizational power diffusion. Like the previous two elements, intra-organizational power has been studied by numerous scholars (Brass 2017, Astley and Sachdeva 1984). Philosophers such as Foucault influenced the debate in the literature (Alvesson 1996, Clegg 1998). Power has also been defined as a resource for organizational actors (e.g., Anderson and Brion 2014). For a contextual perspective on resilience, the structural sources of power may be of interest. In this context, Astley and Sachdeva (1984) identify three structural sources of power: hierarchical authority, resource control, and network centrality. Since the unit of analysis in the present study is a network, centrality is used as the measure of power diffusion. In network theory, central nodes are those that are well connected in the network, i.e., involved in many ties (Wasserman and Faust 1994). Analyzing responses to the question of with whom interviewees are regularly connected can also provide insight into the centrality measure.

The last element, access to network resources, refers to all resources in a network, such as knowledge, assets, skills and information. However, it is not the presence of resources in the network that is important for contextual resilience, but access to those resources. Actual access to these resources requires interaction with other nodes in the network (Wei et al. 2010). In this way, the resource network is also linked to other contextual elements of resilience, namely social capital. Indeed, such resources also affect social capital (Huggins 2010). In particular, Bozionelos argues that "social capital can be parsimoniously considered as consisting of mentoring and network resources" (2003: 43). In this way, the measure (operationalization) of network resources may be correlated to the level of social capital.

2.3 Contextual Resilience and Intra-Organizational Networks in MNCs

Multinational companies (MNCs) are companies that have subsidiaries in different parts of the world. The geographical dispersion of the subsidiaries and the resulting heterogeneity of challenges and opportunities (e.g., due to different government regulations in different countries) bring additional challenges in times of crisis such as the Covid-19 pandemic. In such companies, geographical distance and heterogeneity require additional efforts for strategic alignment. From an organizational perspective, continuous communication and a constant flow of knowledge can facilitate the management of challenges and the exploitation of opportunities, contributing to improving the organization's ability to continuously adapt to the "new normal". In this view, managing crises and shocks in MNCs should also include the organizational ability to manage relationships within the organization and with external stakeholders to ensure the continuity of cooperation.

With respect to Covid-19, the pandemic created an extreme disruptive context because Covid-19 was a rare event independent of most core organizational activities (Stötzer et al. 2022). The pandemic impacted the relationship within organizations and between organizations and its

stakeholders. As for the internal organizational environment, Covid-19 impacted on the work environment (relations with employees), communication between employees and organization and among employees (for instance, because of working from home, remote communication, etc.). As for relationships with stakeholders, the pandemic affected, for instance, the supply chain, prices and interaction with customers (relations with suppliers and customers). Furthermore, organizations had to adapt to new government regulations (relations with government). In addition, the way the different organizations approached Covid-19 also had an impact on how the organization was perceived by the community (relations with community), to name but a few examples. In terms of relations within the supply chain, Trunk and Birkel (2022) emphasize that the different organizations in the supply chain need to work together and that challenges that affect only one or some of the organizations will affect the entire supply chain. The researchers also found in their empirical study of SMEs during the Covid-19 pandemic that there was no supply chain resilience without partnerships (ibid.) and thereby without abilities to manage these partnerships. In addition to the supply chains (suppliers/customers), the literature also emphasizes the role of resilience for other stakeholders, such as the community and other organizations, as today's organizations are highly interconnected in global value networks (McManus et al. 2008, Buyl et al. 2022). Limited awareness of the organizational environment and of stakeholders has been identified as one of the main barriers to organizational resilience (McManus et al. 2008), highlighting the need for relational management with the organizational ecosystem. The disruptive context caused by Covid-19 thus required relational governance efforts to manage relations and ensure collaboration within organizational boundaries and management of relations with stakeholders.

Cohesive intra-organizational networks can be an example of relational governance structures. The geographic and cultural dispersion that characterizes MNCs may require mechanisms to keep the organization together as a unit despite its local subsidiaries. In particular, a certain level of intra-organizational network cohesion, defined as the degree of connectivity between members of a network (Wasserman and Faust 1994), must be achieved in order to maintain or restore a sense of belonging to the entire organizational unit. In the present study, intra-organizational cohesion refers to the degree of connectivity within the organization and does not refer to network closure (Martí et al. 2017), since members of the network may be involved in other networks whose information and knowledge can be transferred to the intra-organizational network. In this sense, this research considers the business environment as a relational space constituted by a network of networks (Wieland 2023). The latter means that the cohesiveness of the intra-organizational network can facilitate the dissemination of knowledge within the organization that network members can obtain through their participation in other external networks (networks with local government bodies, with a chamber of commerce, with local consumers, etc.).

3. METHODOLOGY

This study is based on qualitative case study research (Yin 2018). Case study methodology is a methodology that allows a real time phenomenon to be explored through a case (an example) (Rashid et al. 2019, Yin 2018). In the present study, the case is an intra-organizational network of a multi-national company operating in a high-tech sector. Due to confidentiality agreement and to protect the identity of the interviewees, the organization's name is not disclosed[1].

The intra-organizational network is composed of 21 subsidiaries operating in 17 countries. The subsidiaries are dispersed throughout Europe, North and South America, the Middle East and Asia and employs more than 43,000 employees. Its focus is research and development and it aims to foster the overall organizational innovation, growing and success. Against this background, it is a network with a strategic dimension for the organization. In particular, it aims to connect different local eco-systems in a global network to drive the company strategy.

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[1]The data set from this study was also used for the author's Ph.D. dissertation, but with a different research question. In that case, the focus was on understanding the organizational learning process (see Schwengber 2023).

A purposeful sampling strategy (Shaheen et al. 2019) was followed in the selection of the intra-organizational network. This is a sampling strategy based on the information richness of the study sample. After initial field research in one of the subsidiaries, the author learned about the extent of the network and the study was extended to the entire network. Due to its global dispersion, the intra-organizational network is rich in information about global interaction and its impact on organizational resilience, which provides a deeper insight into the phenomenon being studied. Although there may be other organizations with similar structures, the case study methodology is one that, as the name implies, is based on one or more cases that can provide insight into a phenomenon through the study of an actual example.

As for the network structure, the nodes of the network are the managing directors of the twenty-one subsidiaries. A sample of managing directors was selected. After some initial meetings with representatives of the holding company in 2019 and early 2020, a sample of six subsidiaries operating in Europe, Asia, North and South America was included in the study.

In case study research, various data sources can be applied to collect data to study the case (in this case the intra-organizational network) (Yin 2018, Kaarbo & Beasley 1999, Rashid et al. 2019). Data for the case study was collected through semi-structured online interviews with the six managing directors in 2020 (hereafter: interviewees 1, 2, 3, 4, 5, and 6). Semi-structure interviews means an interview method based on an open-ended questionnaire (Kvale 1996). It is an interview method that allows for some flexibility, i.e., although there is a questionnaire, interesting concepts that emerged during the interview were explored in greater depth through follow-up questions. It allows for the study of a phenomenon by collecting data on a specific topic (in this case, network resilience) (Cassell 2015).

Table 1 shows the questionnaire used in the present study.

Understanding the network
1.I would like to start by asking you how you would describe the [organization´s name] network?
2.Which goal does the network pursue?
3.What kind of information do you exchange during the meetings?
4.In which way do you think that this exchange could be useful for your [subsidiary]?
5.Have you ever applied some innovation or simply "tips and tricks" that you got from these meetings?
6.In general, in what way do you believe that this network impacts on the innovative capabilities of [the organization]?
7. In what way does this network help you to manage the challenges and opportunities of your specific location?
Heterogeneity in the network
1.Which role do different values play in the achievement of the network´s goal?
2.As for your personal view, how do you evaluate the diversity in terms of perspectives and values that exists within the network?
3.Are you able to identify one or more common points in terms of values among all managing directors? Could you please give me some examples?
4.Talking about competences, what competences do you believe a managing director should have in order to be able to act with diversity in this context?
5.Thinking about the future, how do you think these competences could be developed?
Position in the network
1.Aside from these institutional meetings, are you in contact with other managing directors on a regular basis (via email, calls, face to face - the medium is not important)? With whom? How often?
2. Why are you in contact with these persons in particular?

TABLE 1: Interview questionnaire. Source: own table.

Each interview lasted approximately 57 minutes. Since they were conducted in the context of the Covid-19 pandemic, insights were gained into the impact of the pandemic on the organization and whether, and to what extent, the network strengthened the organization's contextual resilience to survive and create value despite the pandemic.

The interviews were conducted in English. Not all interviewees were native English speakers. Naturalized transcription was used, meaning that errors were not corrected (Oliver et al. 2005). The data was analyzed by the researcher using qualitative narrative analysis. This is an analysis approach which focuses on the stories that emerged in the interview situation and is aimed at creating a coherent story (Brinkmann & Kvale 2018, Czarniawska 2004, Cassell 2015). The aim of the analysis was to explore to what extent the intra-organizational network fosters contextual resilience and prepares the organization for the new normal. Particular emphasis was placed on the structure of the network, the presence of the contextual elements of resilience, and whether and to what extent this network prepared the organization for the new normal. Sensitive information was anonymized (put in []) to protect the identity of the interviewee.

4. FINDINGS

4.1 Network Structure

The network in the case study being analyzed is structured in such a way as to promote exchanges between the managing directors of all the subsidiaries. At the headquarters, there is a central team responsible for connecting the different nodes of the network (subsidiaries) and managing their interaction. The central team has the highest centrality value in reference to the intra-organizational network because it is connected to all subsidiaries and all subsidiaries are connected to it (Wasserman and Faust 1994). This result is logical because this team was created to play an intermediary role.

By fostering connection between subsidiaries, the central team bridges structural holes (Burt 2004). This means that the central team bridges knowledge, information, and expertise that are dispersed throughout the network. By bridging structural holes and strengthening the connection between subsidiaries, the central team contributes to increasing the network density and centrality of each subsidiary (ibid.). Network density is the ratio of the number of actual connections to potential connections (Wasserman and Faust 1994). It is a measure of group cohesion (ibid.). Specifically, the higher the network density, the higher the network connectedness. This density affects the centrality of each affiliate. As summarized in Table 2, while answering the following question: "Aside from the institutional meetings in the context of the [network], are you in contact with other managing directors on a regular basis? Via email, call, face-to-face the medium is not important. With whom and how often?", 100% of respondents confirmed that MDs are in contact with each other beyond institutional meetings. However, all respondents agreed that the frequency of exchange beyond institutional meetings depends on the topic being discussed, as different general managers have different levels of expertise.

This interaction in and beyond institutional meetings provides evidence for the claim that the network is characterized by high density, as each individual office can potentially be connected to any other in the network, although the intensity of the exchange can vary. Bridging structural holes and increasing density are fostered by continuous exchange (in institutional meetings and beyond). General managers meet regularly to share ideas and best practices and find solutions to common problems.

Even though the individual subsidiaries face different challenges and have different capabilities, the unifying factor between the nodes of the network is the common organizational strategy. In particular, the interviewees highlighted how the network helps to translate the global strategy to the local level (interviewee 6), and it brings diversity that fosters innovation (interviewee 2). The network also fosters the continuous exchange and productive collaboration with stakeholders (interviewee 5). Interview 2 underlines how the network helps the different parts of the global organization to be driven in the same direction:

"We are lucky to have this [network], and this helps us to…all the [subsidiaries] together to drive the [subsidiaries] more or less in the same direction." (Interviewee 2)

Interviewee	Quote
1	I have a cadence with all of the managing directors on a rotation basis. So usually, we all meet with every MD or COO formally, probably at least like once a quarter. In addition to those that are formally scheduled meetings, in addition to any email exchanges or, you know, just in time if I have an urgent topic that I really need some sort of feedback on, I will definitely reach out.
2	We try to connect on the needed basis I would say, not really just because a (official) meeting (…) Informal meetings depend on what we need.
3	For me it is more on demand basis that I reach out (other MDs beyond institutional meetings).
4	This is somehow how it works and usually with the MDs. It is more really about "I have a problem", I know which MD can help me directly because this topic is handled in the [subsidiary].
5	We set up, previously of Covid-19 times we had I think bi-monthly, so not that often, additional calls in the group of (a specific geographical region) (…). we had bi-weekly calls during Covid-19 just to exchange more often (…). There are online meetings and once a year we plan an offsite in one of the [subsidiaries] from this area. And why this area? We are closer geographically, so it is easy to travel between our cities and we have also similar sizes and similar issues (…).
6	Yeah, I mean, on a need basis, you know, so I mean, of course we all come together every two weeks (…). Apart from that maybe a few of us come together at different events, etc. Then we meet at least once or twice for our outside meeting. Sometimes in person, sometimes the second time virtually. This year due to Covid it is all going to be virtual. So we have different ways that we interact with each other, of course via emails on a demand base we also interact with each other. So these are some of the touch points that I have with my peers.

TABLE 2: Interactions among MDs in and beyond institutional meetings. Source: Interview transcript.

4.2 Contextual Elements of Resilience
The following is intended to illustrate how central team centrality and network density and cohesion promote the presence of contextual resilience elements in the network being studied.

Regarding the first element, psychological safety, subjective freedom of speech through storytelling was assessed during the interviews by reading and analyzing the interview transcription to find out how respondents subjectively perceived their freedom of speech during the network meetings. From the analysis of the transcription, it was found that network members feel free to express their ideas, ask questions, and give feedback, which indicates psychological safety. Interviewee 1 highlights that, in the context of the network, the managing directors can talk "very openly and freely". Also, interviewee 3 highlighted how the discussion "happens very freely". Interviewee 6 pointed out that, in the context of the networks, managing directors can share challenges. In particular, he/she states:

"We can ask: 'did you have a similar challenge? How did you overcome that?' Or we have a common point that we want to discuss with all. We are having this challenge or opportunity, they can ask: 'how do you see this?' So, we can have a join meeting then of course, you know, this kind of interaction helps us to have a better operation." (Interviewee 6)

Interviewee 4 defines the network as a family. While referring to the network during the interview, he/she used the word "family" ten times. The following sentence synthesizes the feeling of psychological safety in the "family":

"(…) as a family we have this open culture. I will always help any MD because I know if I give them a call, they will share information". (Interviewee 4)

Jessica Geraldo Schwengber

The cohesiveness of the network fosters psychological safety by fostering inter-personal trust, a feeling of safety when it comes to seeking and providing feedback, sharing ideas, collaborating with others, taking risks, inter alia (Newman et al. 2017, Frazier et al. 2016, Men et al. 2020, Clark 2020).

As far as social capital is concerned, the network density already discussed provides evidence of a high level of social capital generated by the network. Indeed, density itself is a measure of social capital, as it indicates an intense connection. More specifically, this connection is fostered by regular meetings with all members of the network every two weeks, even during the Covid-19 pandemic (Interviewee 5). In addition to online meetings, physical meetings were also organized every year before the Covid-19 pandemic. Apart from these institutional meetings (physical and online), the interviews also offer insights into the MDs´ connection beyond such institutional meetings. As already discussed and presented in Table 2, 100% of the respondents confirmed that the managing directors are in contact with each other beyond the institutional meetings. However, all respondents agreed that the frequency of exchange beyond the institutional meetings depended on the topic being discussed, as different MDs have different expertise. This finding suggests that some ties may be stronger than others.

In terms of power diffusion, the discussed centrality in the network is a source of structural power (Astley and Sachdeva 1984). The central team with the highest degree of centrality has the structural power. However, by promoting density (connection among MDs), it also helps strengthen the structural power of the subsidiaries and fosters structural power diffusion. By highlighting that when problems or questions arise on specific topics, there are subsidiaries/MDs that are experts on those particular topics and that should be contacted, the organization helps to increase the centrality of certain subsidiaries with respect to specific topics, which contributes to a decentralization of structural power. In this sense, centrality and structural power within the organization are linked to knowledge and expertise.

Regarding access to network resources, it is related to social capital (Bozionelos 2003). High social capital should facilitate access to network resources. In this study, the central team plays a crucial role in facilitating access to resources. Due to its high centrality, it connects nodes (bridges structural holes). By facilitating connections among subsidiaries, the network management team strives to maintain a high network density which, apart from contributing to power diffusion, also contributes to increasing social capital. In practical terms, the network is structured to provide an overview of all the expertise and competencies of the various nodes. Interviewee 4 highlighted that the central team knows who to contact for different specific issues, which promotes a quick transfer of knowledge. Interviewee 4 highlighted that if he/she has a problem that cannot be solved in the subsidiary and the market unit cannot help him/her, he/she knows that he/she can contact the central team, which is able to refer him/her to the right contact person in the network who has the expertise on that topic. Interviewee 2 highlighted how the network is structured to facilitate access to different resources and expertise in case of need of specific nodes:

"We have [subsidiary-to-subsidiary] connection, dot-to-dot connection. (When) some [subsidiaries] felt they need (support) (….), then they found out that some [subsidiary] has done so they connect together". (Interviewee 2)

In addition to resource management by the central team, sharing at regular meetings also promotes access to resources at the meetings themselves. Interviewee 1 emphasizes that the exchange in the network enables:

"To hear what is coming, understand more deeply what has already been launched and have input into very specific initiatives from a global perspective". (Interviewee 1)

Interviewee 5 emphasized that the network provides an opportunity to hear different approaches to the same issue (how to improve brand, attract talent, etc.) and to learn how different managing

directors address the same challenges. Interviewee 3 also pointed to the sharing of best practices.

The analysis of the contextual elements of resilience in the network provides initial evidence of how a cohesive intra-organizational network can promote contextual resilience. The following section examines the concrete example of Covid-19 to analyze whether and how the network characterized by such a presence can actually promote organizational resilience.

4.3 Contribution of the Network to the Organizational Resilience – The Example of Covid-19

The pandemic represented a disruptive extreme event (Stötzer et al. 2022). Due to its broad spectrum of impacts (effects on health systems, economic organizations, and social and psychological impacts, to name but a few), the Covid-19 pandemic can be considered a multi-layered challenge (Buyl et al. 2022). In the case being studied, the network was already in place when the Covid-19 pandemic struck. It was already characterized by a high level of cohesiveness. In this sense, this network can be seen as an anticipatory and pro-active measure towards resilience. The interviews were conducted in 2020, allowing for an overview of the network's role in coping with the turmoil caused by the pandemic. In answering the questions about challenges and opportunities dealt with in the network, the Covid-19 pandemic was cited as an example by interviewees.

Analysis of the interviewees' responses revealed how and to what extent this intra-organizational network contributed to the organization's resilience during the Covid-19 pandemic. For instance, interviewee 5 pointed out that the exchanges in the network made it possible to understand how Covid-19 was proceeding in different parts of the world, what applications were being used to counter Covid-19 in the world (e.g., the Corona app in Germany), and how the different solutions and best practices used in other contexts could be applied at their own site.

Table 3 provides some examples on how the network helped to overcome the challenges related to Covid-19. The quotes in Table 3 highlight how the network enables the sharing of best practice and knowledge on how to address pandemic challenges and provide access to network resources. Although the best practice relates to individual subsidiaries, it served as an inspiration for all subsidiaries around the world. In this way, the network provides a framework that enables the organization to respond to Covid-19. Even though there was some initial skepticism about the spread of the virus beyond China (quote from interviewee 6 in Table 3), it soon became clear that all subsidiaries would be affected. The quotes in Table 3 show how the network facilitated collaboration even during the pandemic. Thanks to this sharing and learning within the organization's internal network, the organization as a whole was more effective and efficient in dealing with the challenges of the Covid-19 pandemic (quote from interviewee 1 in Table 3). This was also possible thanks to the cohesiveness fostered by the global leadership at the management level that continuously provided an overview of the global situation and strategies to address the emerging challenges (quote from interviewee 4 in Table 3). All subsidiaries were thus able to get a good overview of their own situation compared to all other subsidiaries. By sharing best practice and challenges and working together, the individual subsidiaries and the network as a whole were able to learn from failures (actions that did not work) and successes (best practice).

Apart from supporting one another to deal with the challenges of the pandemic, the interviewees also provided evidence on how the network also helped to seize opportunities that emerged during the pandemic. Interviewee 3, for example, in another passage of the interview, also provides an example of a product that was developed specifically in response to Covid-19's new social and health needs:

"We created a [product] that basically was created in order to support NGOs, the doctors and patients in[location] to cope with this challenge during the Covid times" (Interviewee 3)

The development of a new product that explicitly addresses the social challenges of Covid-19 also underscores that the organization being studied not only aimed to recover from the Covid-19

shock, but also to evolve as a result of the shock (transformative resilience). This can also be confirmed by another passage in the interview, where Interviewee 1 pointed out that hundreds of new interns were hired during Covid-19:

"A great example would be a very short list of companies who during Covid still kept their doors open to interns. We hired a hundred interns." (Interviewee 1)

While the existence of the network prior to Covid-19 can be defined as a proactive pre-crisis response to resilience, innovation and growth during Covid-19 (for instance, by developing a new product and hiring of new interns) also demonstrates a transformative post-crisis response to maintain/gain a competitive advantage.

Interviewee	Quote
1	Even now with Covid-19 global pandemic, the learning and the power of the organization during this global pandemic is one of those, you know, strongest muscles I have seen, because China went first and we learned so much and that learning made us smarter and more efficient and probably much more effective in keeping people safer because of the learning of the [intra-organizational network] and the [subsidiaries] that came before [country of interviewee 1]. The power of exchanging, to say, to [another country as example]: "What are you doing? How is it looking? to say to [country]: "I'm about to open the office again for 20%, What has your experience been? What works?"
2	Last week we discussed the new challenges coming after Covid-19. We have some thoughts in [city] on the way we are working, on the way we are living, on the way we are creating innovations and we need to find solutions.
3	During Covid, there are different activities that the different [subsidiaries] were doing in order to support our eco-system, to go through this difficult time. So, we come together and share those best practices and innovations that we have from our different [subsidiaries].
4	Now in this Covid-19 time for sure Covid-19 is the topic for everybody in every weekly call. On the one hand there is a global guidance and [organization´s name] global pandemic taskforce. These are the guys at the headquarters who monitor the trends and the number of people in the countries worldwide going up, going down and they provide report data and global guidance on whether we open offices or close offices.
5	How each [subsidiary] reacts to Covid-19. So of course, we had the first cases in China and China was definitely the first [subsidiary] which was affected and so how they successfully closed the offices and later on what were the steps to open the office after the number of cases dropped. And that was a very good knowledge exchange because we could then see what can work in our location and basically in which part of the pandemic we are right now compared to the countries that already are, let's say, a few weeks in front of us.
6	So during the Covid pandemic, not during but I would say as we go through it, one concrete example of learning is China. We had the cue when it came on how they dealt with the pandemic. Already in January it was clear China was closing the boards and so on and they went to a full lockdown towards end of, I think, January and very quickly the rest of the [subsidiaries] were of course very (…) to what was happening in [subsidiary] China. Of course, at that point in time everybody thought "that´s not going to happen here". In [country of the headquarter] they also thought that, in [country] we are like "ah ok, that´s not going to happen here either", but very quickly everybody realized that "oh, this is going to impact all of us!". So one concrete example of learning was very early on the [subsidiaries] networking together. We had a lots of discussions with [name], who is the MD of [subsidiary] China, together with [name], who heads up the [intra-organizational network] and we very quickly also shared best practices, we very quickly were able to go and check the set up our crisis management teams, our local pandemic task forces was set up.

TABLE 3: Interviewees´ Quotes on the Role of the Intra-Organizational Network During the Covid-19. Source: Interview transcripts.

5. CONCLUSIONS

Drawing on the existing literature on organizational resilience and social networks, this study examines how intra-organizational networks can foster contextual elements of resilience in MNCs and thereby help MNCs prepare for the new normal. Specifically, the effects of network centrality, density, and cohesion on the contextual elements of resilience (psychological safety, social capital, power diffusion, and access to network resources) are elaborated, thereby contributing to the study's bridging of both literatures. The findings suggest that the answer to the research question is that organizational resilience can be fostered by a high network density which translates into high network cohesion.

As for the implications, these are mainly managerial. In particular, the findings demonstrate the benefits of cultivating highly dense intra-organizational networks and bridging structural holes. This is in line with previous research, like Burt´s findings on the role of boundary spanners (2004). In the case study presented, this was possible thanks to a central team that was connected to all subsidiaries and that fostered connectivity between subsidiaries. This shows that to improve the cohesion of geographically dispersed and heterogeneous nodes within the organization, ad hoc functions/roles are required. The competencies of the central team include good knowledge of the network nodes and their expertise, good communication skills, the ability to connect different nodes, and transcultural competences.

This study then analyzes the role of density and boundary spanners for resilience in an MNC, focusing on the Covid-19 pandemic as example of shock. The findings suggest that the network was also successful in promoting organizational resilience in the Covid-19 case because it existed prior to the pandemic. The contextual elements of resilience were already in place (proactive resilience). This may suggest that cohesive intra-organizational networks are also useful in growth phases alongside crises and shocks. This is because when the crisis/shock occurs, the organization is already prepared to cope.

The findings on the relevance of the intra-organizational network in the context of the pandemic provide some evidence for the need of a relational turn in the economy. They underscore the importance of the willingness and ability to cooperate for promoting resilience in regio-global networks (Wieland 2020, Wieland 2023).

In terms of limitations, this study is based on one case study. While it offers some insights into how network structure may foster contextual resilience, a multiple case study investigation would provide more accurate findings. A comparative case study between intra-organizational networks with different levels of cohesiveness would allow a better understanding on the impact of density for organizational resilience. Although the interviewees reported that the network helped them overcome the challenges associated with Covid-19 and be proactive, and they also provided some concrete examples of how the organization continued to create value (developing new products, hiring new interns), further research could confirm these findings by looking for more quantitative and tangible data, such as financial data during the Covid-19 pandemic and in the post-Covid-19 period.

Generalizing the findings would require further studies on similar intra-organizational networks and how they promote responses in different crises. Further studies could examine how these types of intra-organizational network can promote resilience in other types of crisis, such as in the case of war or economic crisis. Apart from intra-organizational networks, further studies could also examine different relational governance mechanisms, such as inter-organization networks.

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Jessica Geraldo Schwengber

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