Developing organizational resilience with the mediating role of leader – Member exchange

Yanuar Surya Putra^{1*}, Ambar Istiyani²

Departement of Management, AMA Economic College of Salatiga, Indonesia yanuar_suryaputra@stieama.ac.id^{1*}, ambar@stieama.ac.id²



Article History

Received on 22 April 2022 1st Revision on 13 May 2022 2nd Revision on 9 June 2022 3rd Revision on 3 July 2022 Accepted on 22 April 2022

Abstract

Purpose: The purpose of this research is to investigate the effect of social capital and organizational flexibility toward organizational resilience, with the mediating role of leader – member exchange (LMX) in higher education institutions in Salatiga, Central Java, Indonesia.

Research methodology: This research will be conducted in Salatiga by taking a total number of lecturers at three higher education organizations in Salatiga, the samples were taken 245 lecturers and educational personnel. This study used purposive sampling as a sampling technique, and the analysis instrument is path analysis with Partial Least Square (PLS) using SmartPLS.

Results: The direct effect indicates that social capital and organizational flexibility positively influence organizational resilience. and **LMX** mediates the relation between social capital and organizational flexibility towards organizational resilience in higher education institutions in Salatiga. **Limitations:** The limitation of this study, is that this study only took lecturers and educational personnel as research samples, while to determine organizational resilience, it required the involvement of all organizational components, besides that the exogenous variables selected were limited to individual and organizational variables.

Contribution: The results of this study contribute to the field of management, especially human resource management, specifically this research provides input to increase organizational resilience through the development and the activity to manage social capital and organizational flexibility, involving the role of leader-member in the organization.

Keywords: Leader-member exchange, Organizational flexibility, Organizational resilience, Social capital

How to Cite: Putra, Y. S., & Istiyani, A. (2022). Developing organizational resilience with the mediating role of leader – Member exchange. *Annals of Human Resource Management Research*, 2(1), 59-69.

1. Introduction

The accelerating turbulences of the new century become greater, thus causing the urgency to address increasing uncertainty within the organization (Teixeira & Werther, 2013). From those results, many decades of research focusing on resilience, become more interesting and promoted much research exploring the resilience of organizations and the need to recover after facing difficulties and challenges (Alliger et al., 2015; Castellion & Markham, 2013). The growing awareness of an organization's need for resilience is partly due to dynamism and changing paces of life that affect the way an organization needs to perform (Sutherland, 2017). Organizations need their resilience to function through difficult environments that resonate with crises and organizational failures, not just in crisis but in daily lives also (Messabia et al., 2022a). Modern approaches view organizational resilience as a vigorous process (King, Newman, & Luthans, 2016), similar to a state that can be built and improved (Gu, 2018). Although the term organizational resilience is used in many disciplines and is discussed in many ways,

research work on organizational resilience is fragmented. It remains the same, and there's no consensus yet on the term or concept of organizational resilience (Cooper, Flint-Taylor, & Pearn 2013). There are still so many unexplored and ignored areas, and what's missing is a deep understanding of how resilience can be built and strengthened in combination with management and employee empowerment, and how this resilience affects organizational performance and behavior. The higher education sector is one of the sectors that are required to have organizational resilience

The recent studies explained that organizational resilience depends on the team's characteristics, like social capital. Social capital consists of relationships and social networks between people within and outside the organization's community (Putnam, 2001). The quality of social relationships and bonds between organizational members shown through faith in a team or group includes mercy, credibility, ability, honesty, and openness (Gray et al, 2016). Therefore, members of the team discuss organizational issues through social networks and learn how to improve them for mutual benefit (Hubers et al., 2018). Reinforce the network of support and belief within the organization can develop organizational resilience because the team members aren't afraid to exchange information about their failed incidents. If trust and attachment are strong, the relationship is informal and coworkers can reveal their susceptibility (Gu, 2018).

Another characteristic of the working environment that can encourage resilience is organizational flexibility (Cunha et al., 2022). Organizational flexibility is defined as an integration and coordination between people and resources within the organization, making alternatives for all situations, including adaptability, resilience, and agility skills. Previous literature explains the importance of organizational flexibility as a key factor in creating organizational resilience (Flores, 2018). Leader – member exchange (LMX) is a theory that focuses on the quality of the relationship between leader and subordinates to understand the influence of the leader's role on members, teams, or organizations (Erdogan & Bauer, 2010). LMX theory says that a leader will distinguish the pattern of relationships with employees or subordinates. It is possible for a leader to create relationships equally among all members or subordinates but forming good relationships will require the sacrifice of time and energy on the other hand employees have different performance and motivations so leaders will tend to distinguish relationships between employees of the organization. This research was conducted in Salatiga by taking the total population of lecturers at three universities in Salatiga, the research participants taken were 245 participants. While purposive sampling is used as a sampling technique. The statistical tool used in this research is path analysis with Partial Least Square (PLS). Can be deduced that the problem in this study is how to build and improve higher education institutions' organizational resilience model through social capital and organizational flexibility with LMX as mediating variable. This is also the purpose and urgency of this research; to build organizational resilience of higher education institutions. This research will give a contribution to higher institutional education to build organizational resilience, thus the higher education institutions can survive in this turbulence situation.

2. Literature review and hypothesis development

The concept of resilience was introduced in 1973 by Holling who argued that resilience determines the persistence of the system, in the degree to which the device can record and exist alternately. Resilience in various senses has been studied in various fields such as psychology, ecosystem, engineering, and organizational management (Hollnagel, 2011). Each discipline has its own perspective on the definition of resilience (Ponis & Koronis, 2012). The result, concept definition, and dimensions of resilience differed between studies (Linnenluecke, 2017). For instance, Werner & Smith (1977) stated that psychological resilience is a prime factor for child growth, so many studies of early resilience focused on personal resilience. While the organizational concept of resilience has recently become the focus of research attention. That attention emerged when researchers began investigating how the organization grew with challenges and developed new skills (Oeij et al., 2017). This series of studies examines two key aspects of organizational resilience. The first examines an organization's resilience as its ability to survive in the face of threats. The resilience point of view of this organizational rebound which is often associated with resilience, emphasizes the positive coordination and resilience of the organization. The next facet of organizational resilience focus on the idea that an organization can arise in the face of challenges and continue to change in response to changes in the environment (Gilbert et al., 2012).

This aspect focus on identifying new opportunities and developing new features (Coutu, 2002; Cuvelier & Falzon, 2016). According to Lengnick-Hall et al., (2011), resilient companies argued that they could do more than recover in an uncertain or unsafe environment. Instead, organizational resilience has to create a good performance than before, if those organizations want to be resilient. Concerning learning organization and organizational behavior, organizational resilience is also considered as a set of routines, skills, resources, and mental models that connect to organizational resilience. Moreover, Kooli, (2021); Linnenluecke, (2017) pointed out that organizational resilience was related to the capabilities of the organization to adapt, learn, and organize itself. According to Lengnick-Hall et al., (2011) organizational resiliencies are defined as an organization's ability to confidently react resolutely and effectively to dangers, to surprisingly destructive situations, environmental shifting, and the possibility to jeopardize the long-term survival of organizations. The organization's resilience is rated as a major developed by scientists from various disciplines, as it is still a current concept in the organization's vocabulary. In general, resilience measurements can be divided into three groups: system-based measurements, strategy-based measurements, and issue-based measurements. Bricolage, virtual role systems, wisdom, and respectful engagement are four potential sources of resilience that allow for successful reactions in the face of unexpected circumstances.

Bricolage is the ability to improvise and solve problems with inventiveness. It refers to the process of putting order into chaos using whatever resources are available. A virtual role system allows members of an organization to establish a shared picture of emerging challenges and action options at the same time. Wisdom is characterized as the ability to examine what is known, recognize knowledge's boundaries, and seek new information. Finally, respectful engagement entails accepting others' reports and acting on them; reporting honestly to others, respecting one's observations, and attempting to integrate them. When you think of an organization as a system, its resilience is frequently measured with a priority on the characteristics that a resilience model should have. Tierney & Bruneau, (2007) stated indicators to measure organizational resilience within an organization through four dimensions: redundancy, robustness, resourcefulness, and rapidity. Ponomarov & Holcomb (2009) added that organizational resilience should have three dimensions: adaption, readiness, and recovery. Kantur, (2015) offers three factors of organizational resilience, consist of agility, robustness, and integrity, where robustness is concerned with an organization's ability to endure and recover from adverse conditions, agility is concerned with an organization's ability to move quickly, and cohesion is concerned with the integrity of its personnel. These system-based indicators offer a unique viewpoint on organizational resilience.

The relationship between social capital and organizational resilience

This study is related to the resilience of an organization, and the characteristics of a team that can promote social capital. Social capital includes relationships and social networks between individuals within an organization's community and between individuals outside the organization (Putnam, 2001). Social capital consists of two components; The first is a social network; it's a social connection of organizational teams. This is reflected in the amount, density, and strength of the connections (Siciliano et al., 2017), and second is trust; trust is the quality of social relationships and bonds between networks or organizational members (Messabia et al., 2022b).

Trust in the team includes resources, goodwill, honesty, competence, and openness (Gray et al., 2016). organizational members example, team or use social networks organizational issues and opportunities for improvement to realize the benefits of sharing (Hubers et al., 2018). Amplifying the network of support and trust within organizations can contribute to the resilience of the organization (Gu, 2018). With trust, team or organizational members will not afraid to exchange information or discuss issues about their problems and failures. If trust and attachment are strong, and the relationship is less formal, employees can show their weaknesses and vulnerabilities. This pattern of information sharing and openness among individuals within organizations is ambiguous when discussing different solutions to an organization's problems and planning different possible and positive responses that take an action towards the most relevant aspects and reduce uncertainty. This is also how they are likely to behave in a crisis and contributes to the resilience of the organization. Social capital is an attribute of an individual (a good individual) or attributes of society (good collectives), it is made up of the interactions and social networks that exist between members of the organization's community and persons from outside the organization. (Putnam, 2001). As a result, social capital provides a theoretical framework for studying the competitive advantage earned by enterprises through social networks.

Social capital is divided into two categories. The first is based on the network viewpoint, which uses notions like bonding, bridging, and linking to define social capital. The other is based on the social structure approach, which uses structural, relational, and cognitive capital to define social capital. Its two components are (1) social networks; Social capital is not only built by individuals but also exists in the growing trend of socializing groups within organizations as an important part of their unique values. Social capital grows in line with the existing capabilities of community groups to build different organizations and networks. One of the keys to the successful building of social capital is the ability of a group of people in the organization to join a network of social relationships. The social relationships within the organizational team will provides evident in the quantity, density, and intensity of the relationship (Siciliano et al., 2017), and (2) trust; is a form of willingness to take risks in social relationships based on the confidence that others are doing something as expected and always behaving in a mutually supportive pattern of behavior, at least others to themselves and their group do not take harmful actions the quality of the social relations and ties among members of the network. Trust in the team includes goodwill, credibility, ability, honesty, and openness (Gray et al., 2016). This is a way for team members to use social networks to discuss organizational issues and opportunities for improvement to achieve shared benefits (Hubers et al., 2018). Based on the explanation the hypothesis is described as follows:

 H_1 : Social capital has a positive influence towards organizational resilience

The relationship between organizational flexibility and organizational resilience

Organizational flexibility, according to the study paradigm, is an antecedent of organizational resilience. Organizational flexibility entails elasticity, adaptability, and agility; it allows for integration and coordination between individuals and resources inside an organization, allowing for the creation of alternatives in every situation (Sheffi & Rice, 2005). Previous literature highlights the importance of organization flexibility as a prime factor in developing organizational resilience (Sabbaghi et al., 2014). According to Anning-Dorson (2021), organization flexibility needs to be considered in four dimensions: (1). Time; is related to the time that is needed by the organization to react or respond to occurring changes; (2). Scope; related to the amount of adaptation of specific elements in the organization that can change in the environment; (3). Decision; from the perspective of choosing the right ways to respond towards occurring changes, a hasty response isn't always proper. Adopting a defensive attitude is also an effective way to adapt to changes in certain situations; (4). Impact area; is related to the organization's choice of a coordinated range of action-in connection with trying to influence the internal or external environment.

The conceptual model recommends that the characteristics of the working environment (organizational flexibility and interdependence of goals) are precursors to organizational resilience. Organizational flexibility includes adaptability, resilience, and agility skills, which would enable integration, coordination, and alignment between employees and resources within organizations and creates alternatives for all situations (Cuvelier & Falzon, 2016). Previous research from several articles and literature has emphasized the relevance of organizational flexibility in building resilience (Kooli, 2019, 2021; Messabia et al., 2022b). The relevance of organizational flexibility in a crisis or trouble situation is the adjustment and coordination of organizational structure, method, and process that allow an organization to continue performing its role while enhancing performance and resilience in the organization. (Chan et al., 2017). Studies show that flexibility is one of the organizational strategies for effectively managing changes, and members are the right initiative, even if it is not always in line with the organization's permanent rules can be taken (Nahum-Shani & Somech, 2011).

In line with those, <u>Wu, Hoy, & Tarter (2013)</u> stated that organizations that have a flexible structure, will have the capability to manage and overcome changes or crises; they will not collapse, but otherwise

will rather function, recover, and even grow. From those explanations the hypothesis is described as follows:

 H_2 : Organizational flexibility has a positive influence on organizational resilience.

The mediating role of leader – members exchange

The LMX is unusual in that it employs a dyadic level of analysis, which claims that a leader has different, unique relationships with each subordinate and that the quality of these ties determines workplace results. Traditional leadership studies, on the other hand, implicitly presume that various subordinates perceive the leader's style in the same way and that this leads to similar behaviors. The rationale for the LMX (leader-member exchange) theory shows that leaders do not develop the same relationship with their subordinates, but the leader develops a different type of relationship with his subordinates.

According to Martin et al. (2018), LMX is multidimensional with four dimensions, consisting of: (1). Affect, mutually influences each other between superiors and subordinates based on interpersonal attractiveness not only from the professional value of workers, which later formed a mutually beneficial personal relationship; (2). Loyalty, expressions, and expressions to fully support the goals and personal character of other members in the reciprocal relationship of employers and employees. Loyalty is defined as loyalty to an individual that is generally persistent in every situation; (3). Contributions, is a perception of task – oriented activities at a certain level between each member of the organization to achieve a common goal; (4). Contributions, and perception of task-oriented activities at a certain level between each member to achieve a common goal. Because LMX behavior is essential to an organization's success, previous studies have explained several workplace factors that can affect the display of these behaviors. One of them is the relationship between superiors and subordinates (Scott & Bruce, 2018).

Based on LMX theory, past studies have shown that the quality of boss relationships varies from subordinate to subordinate, and those who have experienced quality exchanges feel supported and enjoy loyal and credible work relationships. It is suggested that. Superiors provide emotional support and work-related knowledge to high-quality LMX employees in exchange for dedication, creative performance, and enhanced innovative behavioral improvements. With high-quality LMX employees will receive emotional support and work-related information from their superiors (Scott & Bruce, 2018). In addition, previous studies have shown that quality-related employees spend more time on extraordinary tasks than inferiorly-related employees who spend most of their time on day-to-day activities. Is shown. Extraordinary work inspires creative ideas, and quality relationships with bosses give you the freedom and courage to test and implement new ideas and solutions. Previous studies have suggested that quality business relationships influence the emotional and cognitive responses of employees (De Jong & Den Hartog, 2010), and less evidence about the mediating role of affective reaction in the relationship between LMX and employees' innovative behaviors (Schuh et al., 2018). Therefore, the next section argues that positive LMX relationships can have a positive effect on innovative behavior, as they can generate positive emotions (happiness). Employee satisfaction is an individual result, but it can represent a general quality of life across company boundaries (Krishnan et al. 2012). The hypothesis for the mediation variable are:

 H_3 : Social capital has a positive influence on leader – members exchange

 H_4 : Organizational flexibility has a positive influence on leader – members exchange.

 H_5 : Leader-member exchange has a positive influence on organizational resilience

 H_6 : Leader-members exchange mediates the influence of social capital and organizational flexibility toward organizational resilience.

3. Research methodology

Higher education sector is one of the sectors that are required to have human resources, especially lecturers which is expected to create organizational resilience, moreover within this pandemic situation. Based on data from LLDIKTI VI (Lembaga Layanan Pendidikan Tinggi), until February, 2022, the number of lecturers based on functional positions at a private higher institution in Central Java consisted of 97 professors, 973 associate professors, 2,955 lectors, and 4,207 assistant professors. This research

was conducted in Salatiga, Central Java, Indonesia by taking a population of educational personnel and lecturers at three higher institutions in Salatiga, consisting of AMA Economic College of Salatiga, Satya Wacana Christian University, Islamic Institute of Salatiga. The research sample taken was 245 and self – administered questionnaire survey was used to collect data from lecturers, with a purposive sampling method that is used to determine respondents with the following characteristics: participants are lecturers and educational personnel who belong to various generations. From this, 136 (55.6%) of the participants were men and 109 (44.4%) of the participants were women. The data collecting process was using an online questionnaire, due to the physical distancing of covid – 19 pandemic. The statistic tool used in this research is path analysis with Partial Least Square (PLS). It can be concluded that the problem in this study is how to develop higher education institutions' organizational resilience model through social capital and organizational flexibility with LMX as mediating variable. This is also the aim and urgency of this research; to build organizational resilience of higher education institutions.

4. Results and discussions

Construct validity

The validity of a construct indicates how well the results obtained using the measurements are in line with the theory used to define the construct. Construct validity consists of convergent validity and discriminant validity. Convergent validity can be seen from the results of the loading factor > 0.7 or the Average Variance Extracted (AVE) > 0.5 (Chin & Dibbern, 2010). The results of the convergent validity in this study, are shown in the table below:

Table 1. Convergent Validity

Variables	Cronbach Alpha	Rho_A	Composite Reliability	AVE
SosCap	0.883	0.887	0.915	0.682
Org. Flexibility	0.859	0.868	0.899	0.640
LMX	0.877	0.883	0.910	0.669
Organizational Resilience	0.846	0.850	0.896	0.684

Source: Processed data

Table 1 shows that the Average Variance Extracted (AVE) value of each research variable; i.e social capital, organizational flexibility, leader – member exchange, and organizational resilience is > 0.5 so it can be concluded that all variables have good convergent validity. Besides AVE, furthermore, a discriminant validity test is also needed to assess the correlation between different constructs. Discriminant validity relates to the principle that different constructs should not be highly correlated. Based on he discriminant validity test result, that was assessed based on the cross – loading measurement with the construct, with a rule-of thumb > 0.7, and the discriminant validity test shows that all variables, have the cross – loading factor above 0.7. It also can be concluded that the constructs have high discriminant validity.

Hypotheses testing

In this study, hypotheses were tested using the direct and indirect effects of the independent variable on the dependent variable through the mediating variable. Hypothesis testing for a direct effect can be seen from the T statistic value which is greater than the T table or the p-value < 0.05. The results of the analysis for hypothesis testing can be seen in the following table:

Table 2. The Direct Effect Result

Variables	Original sample	Sample Mean	Standard deviation	T Statistic	P Values	Hypotheses testing
SosCap → Org.Resilience	0.364	0.368	0.077	4.727	0.000	H ₁ : supported
OrgFlex→Org.Resilience	0.183	0.181	0.070	2.598	0.000	H ₂ : supported
$SosCap \longrightarrow LMX$	0.174	0.181	0.100	1.748	0.031	H ₃ : supported

$OrgFlex \rightarrow LMX$	0.100	0.111	0.103	0.977	0.329	H ₄ : not
						supported
$LMX \rightarrow Org.Resilience$	0.255	0.260	0.065	3.938	0.000	H _{5:} supported

Source: Processed data

The table above shows the results of the t-statistic and p - values of the direct influence between variables so that the results of direct hypothesis testing can be concluded as follows:

- 1) Social capital has a positive impact on the resilience of higher education organizations in Salatiga, in other words, if the social capital of organizational members increases, the resilience of higher education institutions in Salatiga will also increase.
- 2) Organizational flexibility has a positive impact on the resilience of higher education organizations in Salatiga, in other words, if the flexibility of the organization increases, the resilience of higher education institutions in Salatiga will also increase.
- 3) Social capital has a positive effect on the exchange of leader member of universities in Salatiga, so if social capital increases, the LMX of higher education institutions in Salatiga will increase significantly.
- 4) Organizational flexibility does not have a positive impact on leaders members exchange (LMX) of universities in the city of Salatiga if organizational flexibility increases, the LMX of higher education institutions in Salatiga will not increase significantly.
- 5) The exchange of leader member exchange has a positive effect on the resilience of higher education organizations in Salatiga, in other words, if the LMX increases, the resilience of higher education institutions in Salatiga will also increase.

Hypothesis testing for indirect effect can be seen from the T statistic value which is greater than the T table or the p-value <0.05. The results of the analysis for hypothesis testing can be seen in the following table:

Tabel 3. The Indirect Effect Result

Variables	Original Sample	Sample mean	Standard deviation	T Statistic	P Values
$SosCap \longrightarrow LMX$ $SosCap \longrightarrow Org. Resilience$	0.044	0.047	0.029	2.508	0.000
OrgFlex \rightarrow LMX OrgFlex \rightarrow Org. Resilience	0.026	0.028	0.027	0.932	0.352

Source: Processed data

According to <u>Hair et al.</u>, (2017) the basic principles of mediation are as follows: If the coefficient of indirect influence is significant, and the coefficient of direct influence is also significant but the coefficient value is the same, then it is said to be not mediation; If the coefficient of indirect effect is not significant, it is said not to be mediation; If the coefficient of indirect and direct influence is significant, but the value of the direct coefficient > indirect coefficient, it is said to be partial mediation; If the coefficient of indirect influence is significant, but the direct effect is not significant, then it is said to be full mediation.

In this study, social capital has a positive direct effect on the resilience of higher education organizations in Salatiga, and the indirect effect showed that leader-member exchange became the mediating variable between social capital and organizational resilience. Based on the analysis result, it can be said that social capital acts as an information channel, providing access to resources to increase the efficiency of communication and minimizing redundancy, thereby social capital is able to contribute to the resilience of the organization of higher education institutions in Salatiga. Moreover, social capital provides access to a wider range of quality sources, timely information, and practical business advice that can improve an organization's ability to deal with unexpected disruptions. Support from individuals within an organization (such as support from colleagues, managers, and supervisors) plays an important role in expressing resilience. Organizational support creates a positive emotional experience for individuals

who build organizational resilience, Previous studies have investigated how different leadership styles affect the resilience of subordinates or employees. LMX theory assumes that the quality of the relationship between managers and subordinates helps determine the behavior of subordinates in the workplace. High LMX leaders are able to encourage resilience within the organization by changing the value of information in a more positive manner that emphasise positive achievement. Thus, can encourage resilience within the organization. That is why leader-member exchange became a mediating variable between social capital and organizational resilience.

The direct effect of organizational flexibility on organizational resilience showed a significant influence, while the effect of organizational flexibility on organizational resilience through LMX as a mediating variable showed an insignificant effect. Flexibility is a general ability to adapt and respond to internal or external influences or problems. The organization's ability to rethink its strategies or activities would affect how strong the organization's resilience will be formed. In this case, the leader-member exchange as part of the organization does not mediate the effect of organizational flexibility on organizational resilience. The direct influence between those two variables is greater because both of those variables are at the strategic level of the organization. Thus, can be concluded that the leader-member exchange variable is a variable that can't fully mediate the effect of social capital and organizational flexibility on the organizational resilience of higher education institutions so that the sixth hypothesis (H₆) stated: The exchange of leaders - members mediates the effect of social capital and organizational flexibility on organizational resilience, in Salatiga is not accepted.

5. Conclusion

From the results of data analysis and hypothesis testing, it is found that social capital has a positive influence on the resilience of higher education organizations in Salatiga. The result of the next analysis is that the second exogenous variable which is organizational flexibility also has a positive influence on organizational resilience. In conclusion, this study makes two major contributions. First, we emphasize the relevance of social capital derived from external networks and collaborations as a factor aiding the organizational resilience of higher education institutions. The second contribution is a deeper understanding of the linkages between flexibility and resilience, which enable an organization to survive in turbulent situations. Required talents, when combined, provide an organization with the highest chance of successfully dealing with turbulence.

The results of this study indicate that organizational factors such as social capital and organizational flexibility will affect the organizational resilience of higher education institutions, this is in accordance with research from (Xiao & Cao, 2017). Furthermore, it takes individual resilience factors (confidence, optimism, trust, and sense of belonging) and group (capacity to face failure as a source of learning) as exogenous variables, to be able to see a more complete organizational resilience. Regarding the leadermember exchange variable, the results of the analysis show that LMX is not a full mediation variable because LMX only mediates the effect of social capital variables on organizational resilience, and does not mediate the effect of organizational flexibility on organizational resilience, so it can be concluded that organizational support is partial mediation variable. In a conclusion from this research, it is necessary to support organizational members and the scope of groups or teams within the organization in an effort to build organizational resilience. In addition, innovation plays an important role in organizational resilience, as a source of resilience (Gunasekaran et al., 2011). The nature of the relationship between the leader and the subordinate, rather than the overarching style, appears to play a critical role in building resilience, according to this study. High-ranking LMX executives give critical support, advice, and communication clarity. This allows them to present things in a more positive light, which increases people's motivation to advance and makes them more resilient. As a result, rather than focusing primarily on style, leaders should focus on maintaining high levels of trust, clarity, and reciprocity in relationships.

According to Reinmoeller & Van Baardwijk (2005), innovative companies show higher resilience than less innovative companies. Those innovative organizations can build and maintain their competitive advantage and if they can maintain their competitive advantage, they will also become resilient (Carvalho et al., 2016). Networks are also of great importance for sharing information and for

developing collective responses to unexpected events (Lengnick-Hall et al., 2011). Practically, higher education institutions could develop specific facets of social capital and organizational flexibility to stimulate organizational resilience. Additionally, organizations need to develop high and equitable leader-member exchange which stimulates organizational resilience.

Limitations and study forward

The limitation of this research lies in the narrow scope of the selected sample, which is only lecturers and educational personnel. Meanwhile, to increase organizational resilience, support from all members of the organization is needed. Input for future research is to involve members of other organizations as a whole, and include other exogenous variables that can represent individual, organizational, and leadership elements. Future research could benefit from looking at how these variables interact with LMX and how their combined impact on employee resilience. The process of framing by high LMX leaders is an interesting issue for future scholars to study. While the study suggests that high and low LMX leaders utilize different framing approaches, a more concentrated qualitative approach is needed to understand the dynamics of framing in the workplace.

References

- Alliger, G. M., Cerasoli, C. P., Tannenbaum, S. I., & Vessey, W. B. (2015). Team resilience: How teams flourish under pressure. Organizational Dynamics, 39(3), 1–9. https://doi.org/10.1016/j.orgdyn.2015.05.003
- Anning-Dorson, T. (2021). Organizational culture and leadership as antecedents to organizational flexibility: implications for SME competitiveness. Journal of Entrepreneurship in Emerging Economies. https://doi.org/10.1108/JEEE-08-2020-0288
- Carvalho, A. O. de, Ribeiro, I., Cirani, C. B. S., & Cintra, R. F. (2016). Organizational resilience: a comparative study between innovative and non-innovative companies based on the financial performance analysis. International Journal of Innovation. https://doi.org/10.5585/iji.v4i1.73
- Castellion, G., & Markham, S. K. (2013). Perspective: New product failure rates: Influence of Argumentum ad populum and self-interest. In Journal of Product Innovation Management. https://doi.org/10.1111/j.1540-5885.2012.01009.x
- Chan, A. T. L., Ngai, E. W. T., & Moon, K. K. L. (2017). The effects of strategic and manufacturing flexibilities and supply chain agility on firm performance in the fashion industry. European Journal of Operational Research. https://doi.org/10.1016/j.ejor.2016.11.006
- Chin, W. W., & Dibbern, J. (2010). An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services Between Germany and the USA. In Handbook of Partial Least Squares. https://doi.org/10.1007/978-3-540-32827-8_8
- Cooper, C. L., Flint-Taylor, J., & Pearn, M. (2013). Resilience-Building. In Building Resilience for Success. https://doi.org/10.1057/9781137367839.0014
- Coutu, D. L. (2002). How resilience works. In Harvard Business Review.
- Cunha, A. M., Marques, C. S., & Santos, G. (2022). Organizational and Personal Factors That Boost Innovation: The Case of Nurses during COVID-19 Pandemic Based on Job Demands-Resources Model. Sustainability (Switzerland), 14(1), 1–24. https://doi.org/10.3390/su14010458
- Cuvelier, L., & Falzon, P. (2016). Resilience As Resource-based Design Of Anticipated Situations. In Proceedings of the fourth Resilience Engineering Symposium. https://doi.org/10.4000/books.pressesmines.982
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. Creativity and Innovation Management, 19(1), 23–36. https://doi.org/10.1111/j.1467-8691.2010.00547.x
- Erdogan, B., & Bauer, T. N. (2010). Differentiated Leader-Member Exchanges: The Buffering Role of Justice Climate. Journal of Applied Psychology. https://doi.org/10.1037/a0020578
- Flores, M. A. (2018). Teacher resilience in adverse contexts: Issues of professionalism and professional identity. In Resilience in Education: Concepts, Contexts and Connections. https://doi.org/10.1007/978-3-319-76690-4_10
- Gilbert, C., Eyring, M., & Foster, R. N. (2012). Two Routes to Resilience: Rebuild your core while you reinvent your business model. Harvard Business Review.

- Gray, J., Kruse, S., & Tarter, C. J. (2016). Enabling school structures, collegial trust and academic emphasis: Antecedents of professional learning communities. Educational Management Administration and Leadership. https://doi.org/10.1177/1741143215574505
- Gu, Q. (2018). (Re)conceptualising teacher resilience: A social-ecological approach to understanding teachers' professional worlds. In Resilience in Education: Concepts, Contexts and Connections. https://doi.org/10.1007/978-3-319-76690-4_2
- Gunasekaran, A., Rai, B. K., & Griffin, M. (2011). Resilience and competitiveness of small and medium size enterprises: An empirical research. International Journal of Production Research. https://doi.org/10.1080/00207543.2011.563831
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2017). Multivariate Data Analysis: Seventh Edition. In Prentice Hall.
- Hollnagel, E. (2011). Prologue: The scope of resilience engineering. In Resilience Engineering in Practice: A Guidebook.
- Hubers, M. D., Moolenaar, N. M., Schildkamp, K., Daly, A. J., Handelzalts, A., & Pieters, J. M. (2018). Share and succeed: the development of knowledge sharing and brokerage in data teams' network structures. Research Papers in Education. https://doi.org/10.1080/02671522.2017.1286682
- K Krishnan, S., Bopaiah, S., Bajaj, D., & Prasad, R. (2012). Organization, Generations and Communication Infosys Experience. NHRD Network Journal. https://doi.org/10.1177/0974173920120414
- Kantur, D. (2015). Measuring Organizational Resilience: A Scale Development. Pressacademia. https://doi.org/10.17261/pressacademia.2015313066
- King, D. D., Newman, A., & Luthans, F. (2016). Not if, but when we need resilience in the workplace. Journal of Organizational Behavior. https://doi.org/10.1002/job.2063
- Kooli, C. (2019). Governing and managing higher education institutions: The quality audit contributions. Evaluation and Program Planning. https://doi.org/10.1016/j.evalprogplan.2019.101713
- Kooli, C. (2021). COVID-19: Challenges and opportunities. Aviccena, 2021(1), 4–6.
- Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. Human Resource Management Review. https://doi.org/10.1016/j.hrmr.2010.07.001
- Linnenluecke, M. K. (2017). Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda. International Journal of Management Reviews. https://doi.org/10.1111/ijmr.12076
- Martin, R., Thomas, G., Legood, A., & Dello Russo, S. (2018). Leader–member exchange (LMX) differentiation and work outcomes: Conceptual clarification and critical review. In Journal of Organizational Behavior. https://doi.org/10.1002/job.2202
- Messabia, N., Beauvoir, E., & Kooli, C. (2022a). Governance and Management of a Savings and Credit Cooperative: The Successful Example of a Haitian SACCO. Vision. https://doi.org/10.1177/09722629221074130
- Messabia, N., Beauvoir, E., & Kooli, C. (2022b). Haitian Cooperative of Savings and Credits: Social and Community Dimensions of Success. Lecture Notes in Networks and Systems. https://doi.org/10.1007/978-3-030-93464-4_4
- Nahum-Shani, I., & Somech, A. (2011). Leadership, OCB and individual differences: Idiocentrism and allocentrism as moderators of the relationship between transformational and transactional leadership and OCB. Leadership Quarterly. https://doi.org/10.1016/j.leaqua.2011.02.010
- Oeij, P., Dhondt, S., Gaspersz, J., & Vuuren, T. van. (2017). Innovation Resilience Behavior and Critical Incidents. Project Management Journal.
- Ponis, S. T., & Koronis, E. (2012). Supply chain resilience: Definition of concept and its formative elements. Journal of Applied Business Research. https://doi.org/10.19030/jabr.v28i5.7234
- Ponomarov, S. Y., & Holcomb, M. C. (2009). Understanding the concept of supply chain resilience. The International Journal of Logistics Management. https://doi.org/10.1108/09574090910954873
- Putnam, R. D. (2001). Reviewed Work: Bowling Alone: The Collapse and Revival of American Community. In Contemporary Sociology. https://doi.org/10.1145/358916.361990
- Reinmoeller, P., & Van Baardwijk, N. (2005). The link between diversity and resilience. In MIT Sloan Management Review.

- Sabbaghi, N., Sheffi, Y., & Tsitsiklis, J. N. (2014). Allocational flexibility in constrained supply chains. International Journal of Production Economics. https://doi.org/10.1016/j.ijpe.2014.01.014
- Schuh, S. C., Zhang, X. A., Morgeson, F. P., Tian, P., & van Dick, R. (2018). Are you really doing good things in your boss's eyes? Interactive effects of employee innovative work behavior and leader–member exchange on supervisory performance ratings. Human Resource Management. https://doi.org/10.1002/hrm.21851
- Scott, S. G., & Bruce, R. A. (2018). Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. Academy of Management Journal. https://doi.org/10.5465/256701
- Sheffi, Y., & Rice, J. B. (2005). A supply chain view of the resilient enterprise. In MIT Sloan Management Review.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Ehrhart, K. H., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. In Journal of Management. https://doi.org/10.1177/0149206310385943
- Siciliano, M. D., Moolenaar, N. M., Daly, A. J., & Liou, Y. H. (2017). A Cognitive Perspective on Policy Implementation: Reform Beliefs, Sensemaking, and Social Networks. Public Administration Review. https://doi.org/10.1111/puar.12797
- Sutherland, I. E. (2017). Learning and growing: trust, leadership, and response to crisis. Journal of Educational Administration. https://doi.org/10.1108/JEA-10-2015-0097
- Teixeira, E. de O., & Werther, W. B. (2013). Resilience: Continuous renewal of competitive advantages. Business Horizons. https://doi.org/10.1016/j.bushor.2013.01.009
- Tierney, K., & Bruneau, M. (2007). Conceptualizing and measuring resilience: A key to disaster loss reduction. In TR News.
- Wu, J. H., Hoy, W. K., & Tarter, C. J. (2013). Enabling school structure, collective responsibility, and a culture of academic optimism: Toward a robust model of school performance in Taiwan. Journal of Educational Administration. https://doi.org/10.1108/09578231311304698
- Xiao, L., & Cao, H. (2017). Organizational Resilience: The Theoretical Model and Research Implication. ITM Web of Conferences. https://doi.org/10.1051/itmconf/20171204021