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TOWARDS A CONCEPTUAL FRAMEWORK LINKING CREATIVE LEADERSHIP, EMPLOYEES' INTRAPRENEURSHIP BEHAVIOR AND MANAGERIAL INNOVATION

The present paper attempts to explore the relationship between creative leadership, employee intrapreneurship behavior, and managerial innovation. The endlessly changing environment faced by organizations led to the necessity of an in-time response and to the recognition of the place of creative leadership in fostering intrapreneurship and managerial innovation as a set of processes, practices, and tools leaders would adopt in order to create the conditions for an effective intrapreneurship. Based on a theoretical approach in which several papers were included, a conceptual model was developed in this research for a future empirical study, three relationships would be examined: the relationship between the dimensions of creative leadership and intrapreneurship, the effect of creative leadership on managerial innovation, and the moderating role of managerial innovation in the relationship between creative leadership and intrapreneurship. Lastly, this study seeks to highlight creative leadership as one of managerial innovation's drivers and to draw the attention of academics and actors in the organization to managerial innovation since it remains a developing topic in the literature.

Keywords: proactive behavior, stimulative creative leadership, integrative creative leadership, managerial practices, managerial innovation.

1. INTRODUCTION

Nowadays, economists, theorists, and researchers are no longer required to emphasize the volatile, uncertain, complex, and ambiguous environment that organizations are facing and to put stress on flexibility or responsiveness improvement by companies. Moreover, technological innovation and its impact on competitiveness and corporate performance have been widely discussed and demonstrated in the literature. Additionally, the manifestation of the Z-generation in the work environment continuously challenges and

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offers opportunities to organizations to seek adequate managerial practices, structures, and processes that would fit this generation's needs and expectations.

The COVID-19 pandemic has emphasized and confirmed Schumpeter's theories and contributions regarding entrepreneurship and innovation. Therefore, companies are expected to focus on how to do, and what actions to take for organizational competitiveness and sustainability, on leaders' roles, and on employee behavior since the rules of the environment have changed, or more specifically, the environment has changed (Mack et al., 2016). Additionally, economic actors are invited to consider managerial innovation; which addresses the social system of the organization, and is acknowledged as a non-technological innovation, supporting the argument that innovation is rather than a matter of technology; as more than a culture but a mindset since it contributes to an organization's competitiveness and leverages its performance and productivity (Volberda et al., 2013).

Consequently, creative leadership as a leadership style, is receiving increasing attention from scholars. It is nowadays considered essential and no longer an option for organizations to adopt but a necessity. Creative leaders contribute to the creation of an innovative and experimental culture through which collaboration, knowledge sharing, followers' creative behavior, and organizational learning are expected to be optimized and fostered. Hence, studies pointed out the importance of leadership for managerial innovation (e.g. Vaccaro et al., 2012), and for employee creativity, proactivity, innovativeness, and risk-taking behaviors (Nguyen et al., 2023; Hashem, Aluminate, 2023), in other words, intrapreneurship.

Finally, this paper aims to respond to the question of how the relationship between creative leadership, managerial innovation, and intrapreneurship can be conceptualized, then it suggests a conceptual model through which the relationship between creative leadership, managerial innovation, and employees' intrapreneurship behavior will be highlighted. We focus on three main theories: self-determination theory, leader-member exchange, and the knowledge-based view.

2. STUDY CONTEXTUALIZATION

This paper is grounded on self-determination theory (SDT), leader-member exchange theory (LMX), and the knowledge-based view (KBV), which will be accentuated on organizational learning (OL).

SDT characterizes employees' motivation toward intrapreneurship, this later provides employees with autonomy and is built on innovative, proactive, and risk-taking behaviors (Alghamdi, Badawi, 2023). SDT advances that individuals are motivated by personal growth, change, and development encompassed in the need for autonomy, relatedness, and competence (Nguyen et al., 2023). Furthermore, satisfying these needs leads employees to transform their intentions into implemented actions (Nguyen et al., 2022; Nguyen et al., 2023).

Leadership is expected to respond to these needs by providing support, mutual trust, empowerment, and material resources (Joo et al., 2014). LMX is, accordingly, a theory that refers to the quality of social exchange relationships between leaders and their followers. In this theory, numerous variables have been argued to be influenced by the quality of exchange between a leader and their followers, some of those variables can be enumerated: employee commitment, role conflict, innovativeness, and employee creativity (Jong, 2007; Joo et al., 2014). In this vein, creative leadership is outlined by Harris (2009) as ego-less

leadership aiming to foster autonomy and empowerment among their employees in the creativity process (in Randel, Jaussi, 2019).

Creativity as a major element in the creative leadership style, is described as the generation of novel and original ideas or solutions that are expected to be valuable regarding the development of products/services, procedures, processes, or ideas that can contribute to the organization's transformation (Amabile, 1996; Zhou, 1998). Consequently, idea generation is not the only element that represents creativity. Yet, it also concerns organizational problem-solving (Sohmen, 2015).

In this regard, employee creativity encompasses solution-finding by employees to existing problems (Sourchi, Jianqiao, 2015). following Joo et al. (2014), employee creativity refers to the ability of employees to come up with original, innovative, valuable, and appropriate solutions/ideas for the development or improvement of "products, services, practices, processes, and procedures" for the organization. Employee creativity leads to innovation capability, employee, and firm performance (Hassan et al., 2013; Ximenes et al., 2019).

Authors like woodman et al. (1993) have advanced several characteristics that would enhance employee creativity, one of these characteristics was the climate of a learning organization (in Joo et al., 2014) which consists of organizational capability of adaptation and renewal aligned with changes in its environment (Liao et al., 2008). OL is a concept that is defined by Leroy (1998) as the "interaction between individuals within an organization" that leads to, according to Senge et al. (1994), the generation of tangible activities and innovations in management methods and organizational structure to change the way of working. Furthermore, Morgan and Ramirez (1984) argue that OL happens through problem-solving, in which exploitative or explorative learning take place.

In the KBV, knowledge is perceived as a valuable and central resource for innovation. It mainly contributes to the process of problem-solving and value creation, as stated by Al-Husseini et al. (2021): "Innovation depends on employees' knowledge, skills and experiences in the value creation process". Simultaneously, creative leadership refers to the ability of leaders to stimulate and enhance employees' creativity (Tierney, 2008). Following the definition of Mumford et al. (2002), creative leadership contributes to the generation of new ideas by the followers through "the exercise of influence".

Moreover, creative leadership describes a leader as an individual who possesses the capacity to produce a wellspring of creativity through the transformation of various gathered knowledge and ideas from different origins by employing effective management of their relationship with the team members (Hashem, Alhumeisat, 2023). In this vein, the role of leaders is then to foster knowledge-sharing and learning through collective interactions within the organization.

Finally, this study is conceptual research, dealing with concepts and theories contrary to empirical research, which relies on data validation. Jaakkola (2020) argues that conceptual studies "are not without empirical insights but rather built on theories and concepts that are developed and tested through empirical research" showing that these two types of research are interdependent. The conceptual framework is built by the selection and examination of theories and concepts from the literature, which are then analyzed and synthesized. This study included articles from different fields and sectors. Research engines, encompass Scopus, Emerald, and Google Scholar, were adopted to serve as the main source for this research using keywords such as "management innovation", "managerial innovation", "creative leadership", "innovative leadership", "intrapre-

neurship” and the combination of key words to find appropriate books or articles that respond to the research objective.

3. CREATIVE LEADERSHIP AND MANAGERIAL INNOVATION

Managerial innovation is identified by Hamel (2006) as changes in the way managers ensure their work, in terms of activities coordination, orientation determination, decision-making process, and employee motivation (Vaccaro et al., 2012). Managerial innovation is therefore highlighted in “new management practices, processes, or structures” (Vaccaro et al., 2012).

In this current paper, we consider managerial innovation as a construct of three main dimensions that are used in different management innovation studies: structural, managerial practices, and managerial processes dimensions (Guzman, Espejo, 2019; Hassi, 2019; Li et al., 2022; Vaccaro et al., 2012; Yang et al., 2020). The structural dimension refers to how communication occurs between the organization’s members, and how flexibility is promoted regarding the operating level (Kraśnicka et al., 2016; Vaccaro et al., 2012). Managerial processes focus on routines that characterize the work of managers. Whereas, the third dimension reflects the practices that managers or leaders do regularly, such as talent development or employee tasks and objectives allocation (Vaccaro et al., 2012).

When it comes to the relationship between leadership and managerial innovation, the study conducted by Vaccaro et al. (2012) in private Dutch companies has shown that leadership positively influenced managerial innovation, regarding the organizational size, in this same study, in smaller and less complex companies, transactional leadership contributed more to managerial innovation; whereas, followers are more encouraged to adopt creative thinking and are more intellectually stimulated in larger and more complex companies via transformational leadership which has been found to contribute the most to managerial innovation.

In the same vein, García-Morales et al. (2012) concluded in their study, in the sector of automotive and chemicals in Spain, that leadership positively impacts organizational performance through innovation. Additionally, OL is defined as the process by which members of an organization share knowledge that will be incorporated into the organization's body of knowledge. OL is, accordingly, recognized as a mediator in the relationship between leadership and managerial innovation (García-Morales et al., 2012).

Mainemelis et al. (2015) suggested a multi-context creative leadership framework. Therefore, three conceptualizations are distinguished: directive creative leadership, integrative creative leadership, and facilitative creative leadership (Mainemelis et al., 2015). Directive creative leadership highlights the leaders’ innovative behavior, expressed differently, it focuses on the role of a leader in generating a creative vision or idea that will be followed and materialized by their team members (Sternberg, 2003; Mainemelis et al., 2015).

Regarding the context of our paper, we will focus on integrative and stimulative creative leadership since they are consistent with SDT, LMX, and KBV theories. These two conceptualizations highlight the relationship and collaboration between creative leadership and their team members, wherein stimulative and integrative leaders adopt tools and practices to provide an innovative environment and climate characterized in employees’ autonomy and relatedness for an effective intrapreneurship, and wherein OL is stimulated through knowledge sharing and members exchanging their creative ideas.

Additionally, we seek to draw attention on how creative leadership affects employees' intrapreneurship behavior as a part of our aspiration in this paper. Yet, directive leadership emphasizes a leader who adopts such behaviors (innovativeness, proactiveness, and risk-taking behaviors) and being the one generating creative thinking without necessarily investing in their followers' creative thinking.

Integrative creative leadership is aligned with collective creativity, where new insights and ideas result from a collective in which individuals share their past experiences to provide solutions to distinguished problems (Abecassis-Moedas, Gilson, 2018). Besides, as mentioned by Mainemelis et al. (2015), this conceptualization highlights the role of a leader in putting together professionals and followers and their creative ideas for problem-solving and developing new insights. Stimulative creative leadership describes the role played by a leader as a facilitator by stimulating and fostering creativity within their employees (Abecassis-Moedas & Gilson, 2018). Facilitative creative leaders are concerned with introducing new tools, methods, and an appropriate climate to facilitate employees' creative thinking (Alharbi, 2021). Considering the positive influence that leaders have on employees' creativity which was suggested by scholars (Amabile, 1988; Woodman et al., 1993; Ford, 1996), facilitative creative leadership was determined and found to be the style that impacts employee creativity the most (Mainemelis et al., 2015).

Managers tend to adopt leadership styles to fit and fulfill the organization's vision and employees' needs. In this vein, Liao et al. (2017) found that innovation is influenced by leadership through the full mediation of organizational learning in financial and information technology companies located in Taiwan, however, leadership did not directly influence managerial innovation. In another study, containing a sample of teachers from postsecondary schools in Taiwan, leadership influenced managerial innovation, and organizational learning partly mediated this relationship (Hsiao, Chang, 2011).

Leaders contribute to the implementation of innovative processes and practices as managerial innovations that aim to stimulate organizational learning, the proposition of creative solutions by employees, and their innovative capacity (Brest, 2011; Chantelot, Errami, 2015; Santos-Vijande, Álvarez-González, 2007). Hence, creative leaders tend to create a climate and a culture of creativity and innovation. Moreover, according to SDT, employees who manifest innovative behaviors require an environment and creative managers or leaders who encourage their autonomy and innovative mindset.

Boyer (2020), in the managerial innovation context, defines a 'co-responsible' culture and presents this latter as what reflects the current management. Accordingly, he argues that co-responsibility is about considering employees as responsible, accountable, and autonomous individuals. Hence, creative leaders in a co-responsible culture will need to promote managerial innovation pillars, as described by the LMX, the quality of exchange and collaboration between leaders and their followers is crucial for various outcomes, e.g. innovativeness, proactivity, and risk-taking behaviors. Managerial innovation pillars consist of two main categories: being together and doing together (Boyer, 2020). Integrative and stimulative creative leaders tend to foster collective intelligence and be inclusive regarding creative thinking and problem-solving.

Both the two categories of managerial innovation encompass three pillars (Boyer, 2020). Being together includes strengthening confidence in the relationship leader-collaborator, developing employees' accountability, and enhancing well-being at work through adequate climate and culture. Doing together involves optimizing collaboration to stimulate knowledge sharing and organizational learning, cultivating agility through a flexible structure as one example, and boosting creativity.

Consequently, managerial innovation consists of “the implementation” by creative leaders “of new management practices, promoting, in particular, creativity, cross-functionality, flexibility, collective intelligence, and initiative-taking, and seeking to foster an entrepreneurial culture that values risk-taking, initiative, and responsibility” (in Ahras, 2020).

4. CREATIVE LEADERSHIP AND INTRAPRENEURSHIP

Intrapreneurship is defined by Carrier (1996) as “the introduction and implementation of a significant innovation for the firm by one or more employees working within an established organization” (Rigtering, Weitzel, 2013). Most studies on intrapreneurship accentuate three dimensions that will be adopted for this paper, namely: innovative, risk-taking, and proactive behaviors (Moriano et al., 2014; Farrukh et al., 2021; Nguyen et al., 2023; Alghamdi, Badawi, 2023; Ye et al., 2023).

Through findings consistent with the LMX theory, Moriano et al. (2014) have concluded in their empirical study of the public and private sectors in Spain that when managers or leaders support their employees through coaching, stimulate their creative thinking, and place trust as a pillar in their relationship, they influence their members’ intrapreneurial behavior regarding their proactive, innovative, and risk-taking behaviors. Furthermore, organizational identification—which emphasizes how employees embrace the organization’s goals and aims – plays a role in partially mediating this relationship (Moriano et al., 2014).

Proactive behavior consists of employees that challenge their organizational status quo by seeking solutions, providing creative ideas, and exceeding their job expectations, it is, in fact, a “self-initiated behavior that aims to cause positive change for current situations” (Zhou et al., 2024). Integrative and stimulative creative leaders, in contrast to some other styles of leadership, aim to foster novel idea generation among employees, they are constantly seeking new ways of working, problem-solving, employee motivation, and organizing (Reiter-Palmon, Illies, 2004).

Besides, when they are creative, open to new ideas, and challenge their employee's creativity and the organization's status quo (Nguyen et al., 2023); they, according to social learning theory as a mechanism in organizational learning, inspire their followers to imitate their behavior and be in turn proactive (Zhou et al., 2024). Hence, in their study, Zhou et al. (2024) concluded that proactive behavior is influenced by creative leadership through the moderation of conformity value. In the same study, proactive behavior moderates the link between creative leadership and innovative behavior.

Employees' innovative behavior concerns the introduction and promotion by individuals in their work of creative and worthwhile ideas regarding their organizational process/procedures or products/services (Janssen, Van Yperen, 2004). Thus, intrapreneurship seeks to spot opportunities and the generation of novel ideas by intrapreneurs. Meanwhile, the role of leadership in contributing to the organization's climate and culture has been recognized (Reiter-Palmon, Illies, 2004), and as stated earlier, leadership contributes to managerial innovation through the implementation of new practices, processes, or structures.

As empowerment is a part of managerial innovation, it consists of offering autonomy to collaborators and pushing them to participate in providing creative solutions and risk-taking when it comes to problem-solving (Hassi, 2019), empowerment reflects a quality of LMX highlighted in a climate of trust, confidence, autonomy, and employee development

through learning by doing. Therefore, the SDT argues that when such conditions are available, employee motivation and engagement are fulfilled, hence they transform their intentions into actions, accordingly, empowering creative leadership seems to influence employees' innovative behavior, thus, through employee job engagement (Li et al., 2023).

The literature provided numerous leadership styles, many of which have been acknowledged to influence intrapreneurship. In their critical review, Verma and Mehta (2020) provided a list of leadership styles influencing intrapreneurship: transformational leadership, temporal leadership, open leadership, charismatic leadership, and positive leadership. Moreover, in a wider perception, LMX has been recognized to be positively linked to employees' intrapreneurship behavior, and this relationship was mediated by organizational climate (Farrukh et al., 2021). In addition, creative leadership can directly influence employee intrapreneurship behavior (Hashem, Alhumeisat, 2023).

Intrapreneurs as creative and innovative individuals are devoted to experimentation through risk-taking and mistakes-making (Stoll & Temperley, 2009). Hence, risk-taking behavior is outlined by Moriano et al. (2014) as “venturing into unknown areas for the organization” which reflects a process of learning by doing through trial and error and challenging what is already known as paradigms by intrapreneurs (Keamy, 2016). Therefore, when the quality of integrative stimulative leadership and employee relationship is good, employees become courageous regarding the idea of risk-taking because, as opposed to transactional leadership, if they fail in their creative actions, they will not be sanctioned by their leader but will be, in an organizational learning perspective, encouraged to learn from their failure and develop their competencies (Farrukh et al., 2021).

Accordingly, Vargas-Halabi et al. (2017) and Alam et al. (2020) suggested considering intrapreneurship from three and four perspectives respectively. The first element is to view this concept as “efforts, orientations or activities performed within the organization” (Vargas-Halabi et al., 2017) such as the creation of an in-organization new venture for an ongoing product/service. Another perspective is to consider intrapreneurship as individual or collective entrepreneurial actions taken within the organization to respond to an environment built by executives to foster risk-taking as one example. The third is to focus on the aim of these actions, which encompasses the generation of innovation on behalf of the organization, to illustrate: new products/services, new technology, and new processes. Last but not least, is to view this phenomenon as a “strategic revolution” related to a “culture of self-renewal” (Alam et al., 2020).

Finally, intrapreneurship corresponds to the process of adopting a leadership style that promotes individual or collective/collaborative efforts in identifying worthwhile opportunities or in the problem-solving process, through the generation of original or creative ideas that can be materialized into impactful innovative solutions to support organizational sustainability (Vargas-Halabi et al., 2017).

5. MANAGERIAL INNOVATION AS A MODERATOR

In the systematic review published by Khosravi et al. (2019), managerial innovation was found to provide dynamic and learning capabilities as outcomes. Learning capability is one of the mechanisms that stimulates organizational learning. When the organizational climate is built on innovation spirit and managerial innovation pillars, employee creativity will receive “more pressure” (Nguyen et al., 2023). Besides, employees will tend to share knowledge and contribute to the organizational learning process (Nguyen, Malik, 2020).

Moreover, when creative leaders implement or adopt new management practices, processes, or structures, they will act as “internal change agents” (Birkinshaw et al., 2008) by anticipating change resistance, and will tend to seek adequate methods and tools to improve their LMX quality level to manage change, and work on their follower's acceptance of new practices. Managerial innovation also provides the organization with an outcome of innovation performance (Khosravi et al., 2019).

While considering the role of integrative supportive creative leadership as an internal agent of change regarding managerial innovation implementation and in fostering employee intrapreneurship behavior dimensions (Nguyen et al., 2023; Zhou et al., 2024; Li et al., 2023; Hashem, Alhumeisat, 2023); a climate of innovation stimulated by managerial innovation will drive leaders to promote and benefit from this climate and use motivation tools by leveraging implemented managerial innovation practices as resources, this is because they will be more expected to foster intrapreneurial behavior as their organization goal and as a way of reaching corporate performance (Augusto Felicio et al., 2012).

Managerial innovation is represented through four characteristics, it “must be implemented” in the organization, “new” to the organization, “bring change to the way managers do their work”, and “aims to further organizational goals” (Rahimli, 2021). Along these lines, e-marketing leads to changes in marketing traditional approaches through the use of digital technologies for product/service promotion; managers will need to adapt to this new strategy when it is implemented within the organization and it will be considered an innovative practice, and due to the new environment exigences, this practice is what is nowadays expected to improve organizational performance.

Hence, e-marketing is a managerial innovation that moderates the relationship between creative leadership and employee intrapreneurship behavior (Hashem, Alhumeisat, 2023). Finally, regarding the relationship between creative leadership, online knowledge sharing, and employee creativity, managerial innovation moderates the link creative leadership-knowledge sharing. In addition, knowledge sharing impacts employee creativity (Zhou et al., 2024).

6. DISCUSSION

In light of the different evidence identified in the literature on the possible existing relationships between the three variables highlighted in this paper, we suggest the model shown in Figure 1. Moreover, based on the review presented in the last sections, three propositions are developed, (1) creative leadership positively affects managerial innovation, (2) creative leadership positively affects intrapreneurship, and (3) managerial innovation moderates the relationship between creative leadership and intrapreneurship.

Creative leadership was identified as an important variable affecting intrapreneurship and managerial innovation. The literature review revealed that leaders are expected to foster their followers' creativity, risk-taking, and proactive behaviors by managing factors already underlined by the literature as impacting employees' creativity. Furthermore, based on the previous mentioned studies, we suggest that when it comes to leadership styles, integrative leadership fosters collective creativity and problem-solving by encouraging the collaboration of several employees belonging to different divisions, departments, or structures. Regarding facilitative creative leadership, employee creativity and innovative behavior will be highlighted more. Hence, creative leaders adopt new managerial practices, processes, or structures to create an adequate and supportive organizational culture.

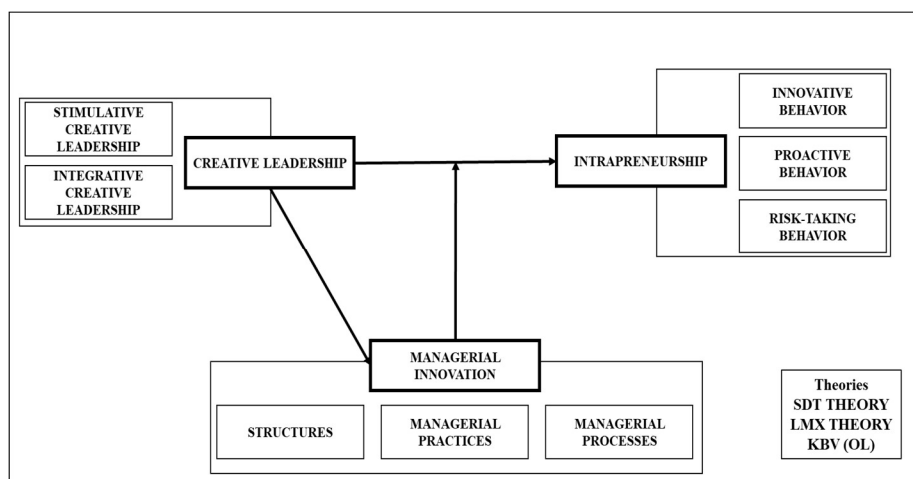


Figure 1. Model conceptualization

Source: Authors' conceptualization.

Therefore, in the context of stimulative leadership, intrapreneurship will mostly be recognized as an employee behavior which is highly expected to be a bottom-up process. whereas, integrative leadership can encompass both bottom-up and top-down processes, given that intrapreneurship is also about generating novel ideas and turning them into products/services, practices, structures, or new processes. Hence, innovative ideas can be suggested by employees, top management, or leaders.

The literature provided numerous examples regarding managerial innovations generated and/or adopted by organizations, for instance: total quality management, lean production, just-in-time production, Taylorism, Fordism, new structure forms (U-form, M-form, vertical integration...), employee-driven problem-solving, and self-managed teams, whereby teams are given autonomy and responsibility to enable them to make choices and establish priorities. However, this list is hardly all-inclusive, though managerial innovation remains a relatively recent concept. Therefore, measuring it in an established organization appears challenging.

Nevertheless, several authors suggested measurement models which may be adopted to validate the conceptual model developed in this study (eg, Krasnicka et al., 2016; Vaccaro et al., 2012; Terziovski, 2010). Since the environment is continuously evolving, some items can be included, such as green practices, adoption of artificial intelligence at work, and use of virtual collaboration tools. This can also be considered an opportunity for researchers to suggest new managerial innovation measurement models.

The present conceptual framework is expected to be applicable in different sectors, for different organizational sizes, and especially, to various cultures. Existing measurement models that have been verified in the literature can be used to measure the variables, and they can be adjusted to fit the study's context. In this vein, an example of creative leadership measurement is the one suggested by Wen et al. (2017) and validated by Ye et al. (2022). Regarding intrapreneurship measurement, Farrukh et al. (2019) scale, which was confirmed by Farrukh et al. (2021) can be adopted. Finally, the research population can include managers, directors, and employees from different organizational levels.

7. CONCLUSION

To the best of our knowledge, the relationships between the three variables as presented in this paper are lacking in the literature. Hence, a conceptual framework linking creative leadership, managerial innovation, and employee intrapreneurship behavior within the framework of SDT, LMX, and OL theories is required. To establish a culture that will allow creative leaders to encourage intrapreneurship behavior, this study may assist several companies in examining the connections between these key variables and inviting them to implement new management practices, frameworks, or processes.

The VUCA (volatile, uncertain, complex, and ambiguous) and changing environment pushes organizations to become more agile and innovative to adapt to change and remain competitive. Therefore, this paper emphasizes why creative leadership is crucial for organizations in such conditions, and how it could be more effective through managerial innovation. Managers are, henceforth, invited to adopt this model by identifying the best innovative managerial practices that would help them promote a creative, risk-taking, and proactive organizational culture that leads employees to view themselves as entrepreneurs. Moreover, managers can think of new training programs that would focus on leaders' and followers' creative behavior and stimulate novel idea generation.

Furthermore, through this model, organizations can think of maintaining agility by adopting organizational structures and processes that would help them to quickly adapt, respond to change, and enhance intrapreneurial spirit, like a flat structure, which can also facilitate decision making, communication, and exchange between leaders and their followers.

The model lacks contextual and environmental variables and needs a larger theoretical perspective such as the adoption of contingency theory. In addition, creative leadership and intrapreneurship behavior also depend on personal characteristics and intrinsic motivation that cannot necessarily be integrated in SDT and LMX theories. However, by emphasizing LMX, SDT, and OL perspectives, this study provides insights on how, through the combination of these theories and the relationship between the three variables, organizations could identify key elements and factors (psychological, behavioral, and organizational) that would promote intrapreneurship behavior, collective intelligence, collaborative decision making, and what is more relevant, how to maintain creative leaders commitment to create such culture and help their organization recognize the importance of managerial innovations as technological ones.

Moreover, comparative empirical studies across other contexts or sectors can be conducted, and new scales tailored to the sector or country requirements can be developed to improve the reliability and applicability of future studies. Finally, other elements can be explored: 'how can this model help organizations enhance their performance', 'what would be its impact on organizational agility', 'on innovation capability', 'on organizational commitment', or 'on employees' motivation'.

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REFERENCES

- Abecassis-Moedas, C., Gilson, L. L. (2018). Drivers and levels of creative leadership: An examination of choreographers as directive and integrative leaders. *Innovation*, 20(2), 122–138. <https://doi.org/10.1080/14479338.2017.1394793>
- Ahras, A. (2020). *L'innovation managériale en contexte algérien : Difficultés et perspectives. Approche par études de cas. Recherche sur les ressorts de l'innovation managériale face à un environnement entrepreneurial hostile*. [PhD Thesis]. Pau. Retrieved from: <https://theses.hal.science/tel-04321559/document>
- Alam, M. Z., Nasir, N., Rehman, Ch. A. (2020). Intrapreneurship concepts for engineers: A systematic review of the literature on its theoretical foundations and agenda for future research. *Journal of Innovation and Entrepreneurship*, 9(1), 8. <https://doi.org/10.1186/s13731-020-00119-3>
- Alghamdi, A. A., Badawi, N. S. (2023). Intrapreneurship at the Individual-Level: Does Psychological Empowerment Matter? *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(5), 53. <https://doi.org/10.26668/businessreview/2023.v8i5.1672>
- Alharbi, I. B. A. (2021). Innovative Leadership: A Literature Review Paper. *Open Journal of Leadership*, 10(3), Article 3. <https://doi.org/10.4236/ojl.2021.103014>
- Al-Husseini, S., El Beltagi, I., Moizer, J. (2021). Transformational leadership and innovation: The mediating role of knowledge sharing amongst higher education faculty. *International Journal of Leadership in Education*, 24(5), 670–693. <https://doi.org/10.1080/13603124.2019.1588381>
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123–167.
- Amabile, T. M. (1996). Creativity in context. Boulder, CO. 1998). La creatividad como um valor dentro del proceso educativo. *Psicología Escolar e Educativa*, 2, 43–51.
- Augusto Felício, J., Rodrigues, R., Caldeirinha, V. R. (2012). The effect of intrapreneurship on corporate performance. *Management Decision*, 50(10), 1717–1738. <https://doi.org/10.1108/00251741211279567>
- Birkinshaw, J., Hamel, G., Mol, M. J. (2008). Management Innovation. *Academy of Management Review*, 33(4), 825–845. <https://doi.org/10.5465/amr.2008.34421969>
- Boyer, F. (2020). *L'innovation managériale en action : 50 pratiques managériales innovantes. S'inspirer et apprendre des entreprises qui ont su concilier épanouissement individuel et performance collective*. Eyrolles.
- Brest, P. (2011). Le leadership dans les organisations publiques: Le cas des chefs d'établissement de l'enseignement secondaire. *Politiques et management public*, 28(3). Retrieved from: <https://journals.openedition.org/pmp/4406>
- Carrier, C. (1996). Intrapreneurship in Small Businesses: An Exploratory Study. *Entrepreneurship Theory and Practice*, 21(1), 5–20. <https://doi.org/10.1177/104225879602100101>
- Chantelot, S., Errami, Y. (2015). Stimuler le potentiel créatif des environnements urbains-La nécessaire transformation du leadership public. *Revue française de gestion*, 41(250), 139-158. <https://doi.org/10.3166/RFG.250.139-158>

- Farrukh, M., Lee, J. W. C., Shahzad, I. A. (2019). Intrapreneurial behavior in higher education institutes of Pakistan: The role of leadership styles and psychological empowerment. *Journal of Applied Research in Higher Education*, 11(2), 273–294. <https://doi.org/10.1108/JARHE-05-2018-0084>
- Farrukh, M., Meng, F., Raza, A. (2021). Believe they can succeed, and they will: Intrapreneurial behavior and leadership. *European Journal of Innovation Management*, 25(3), 661–679. <https://doi.org/10.1108/EJIM-10-2020-0393>
- Ford, C. M. (1996). A Theory of Individual Creative Action in Multiple Social Domains. *The Academy of Management Review*, 21(4), 1112. <https://doi.org/10.2307/259166>
- García-Morales, V. J., Jiménez-Barrionuevo, M. M., Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of business research*, 65(7), 1040–1050. <https://doi.org/10.1016/j.jbusres.2011.03.005>
- Guzman, F. A., Espejo, A. (2019). Introducing changes at work: How voice behavior relates to management innovation. *Journal of Organizational Behavior*, 40(1), 73–90. <https://doi.org/10.1002/job.2319>
- Hamel, G. (2006). The why, what, and how of management innovation. *Harvard business review*, 84(2), 72.
- Harris, A. (2009). Creative leadership: Developing future leaders. *Management in Education*, 23(1), 9–11. <https://doi.org/10.1177/0892020608099076>
- Hashem, T. N., Alhumeisat, E. K. I. (2023). Examining the Moderating Role of e-marketing: Creative Leadership as a Source of Intrapreneurship within Marketing Department. *Journal of System and Management Sciences*, 13(2), 83–100. <https://doi.org/10.33168/JSMS.2023.0206>
- Hassan, M. U., Malik, A. A., Hasnain, A., Faiz, M. F., Abbas, J. (2013). Measuring employee creativity and its impact on organization innovation capability and performance in the banking sector of Pakistan. *World Applied Sciences Journal*, 24(7), 949–959. [10.5829/idosi.wasj.2013.24.07.13253](https://doi.org/10.5829/idosi.wasj.2013.24.07.13253)
- Hassi, A. (2019). Empowering leadership and management innovation in the hospitality industry context: The mediating role of climate for creativity. *International Journal of Contemporary Hospitality Management*, 31(4), 1785–1800. <https://doi.org/10.1108/IJCHM-01-2018-0003>
- Hsiao, H.-C., Chang, J.-C. (2011). The role of organizational learning in transformational leadership and organizational innovation. *Asia Pacific Education Review*, 12(4), 621–631. <https://doi.org/10.1007/s12564-011-9165-x>
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10(1–2), 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- Janssen, O., Van Yperen, N. W. (2004). Employees' Goal Orientations, the Quality of Leader-Member Exchange, and the Outcomes of Job Performance and Job Satisfaction. *Academy of Management Journal*, 47(3), 368–384. <https://doi.org/10.5465/20159587>
- Jong, J. P. J. (2007). Individual Innovation: The connection between leadership and employees' innovative work behavior. *EIM Amsterdam, The Netherlands*. Retrieved from: https://pure.uva.nl/ws/files/4343764/52860_Jong_jeroen_de_Ind_innovation_JJO_cropped.pdf, 29.03.2024.
- Joo, B.-K. (Brian), Yang, B., McLean, G. N. (2014). Employee creativity: The effects of perceived learning culture, leader-member exchange quality, job autonomy, and proactivity. *Human Resource Development International*, 17(3), 297–317. <https://doi.org/10.1080/13678868.2014.896126>

- Keamy, R. (2016). Creative leadership? 'It's just the norm'. *School Leadership & Management*. Retrieved from: <https://www.tandfonline.com/doi/full/10.1080/13632434.2016.1196173>.
- Khosravi, P., Newton, C., Rezvani, A. (2019). Management innovation: A systematic review and meta-analysis of past decades of research. *European Management Journal*, 37(6), 694–707. <https://doi.org/10.1016/j.emj.2019.03.003>
- Kraśnicka, T., Głód, W., Wronka-Pośpiech, M. (2016). Management innovation and its measurement. *Journal of Entrepreneurship, Management and Innovation*, 12(2), 95–122.
- Leroy, F. (1998). *L'apprentissage organisationnel: Une revue critique de la littérature*. Acte de la VIIème conférence internationale de l'AIMS. Retrieved from: <http://www.sietmanagement.fr/wp-content/uploads/2017/12/Leroy.pdf>, 14.12.2023.
- Li, Y., Chen, H., Wei, L., Wei, L. (2022). COVID-19 Pandemic and SMEs Performance Decline: The Mediating Role of Management Innovation and Organizational Resilience. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.944742>
- Li, Z., Qiu, C., Zeng, K., Wang, F. (2023). Gain or loss: The double-edged effect of empowering leadership on employees' innovative behaviours. *Chinese Management Studies*, 17(2), 233–250. <https://doi.org/10.3389/fpubh.2022.944742>
- Liao, S., Fei, W.-C., Liu, C.-T. (2008). Relationships between knowledge inertia, organizational learning and organization innovation. *Technovation*, 28(4), 183–195. <https://doi.org/10.1016/j.technovation.2007.11.005>
- Liao, S.-H., Chen, C.-C., Hu, D.-C., Chung, Y.-C., Liu, C.-L. (2017). Assessing the influence of leadership style, organizational learning and organizational innovation. *Leadership & Organization Development Journal*, 38(5), 590–609. <https://doi.org/10.1108/LODJ-11-2015-0261>
- Mack, O., Khare, A., Krämer, A., Burgartz, T., eds. (2016). *Managing in a VUCA World*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-16889-0>
- Mainemelis, C., Kark, R., Epitropaki, O. (2015). Creative Leadership: A Multi-Context Conceptualization. *Academy of Management Annals*, 9(1), 393–482. <https://doi.org/10.5465/19416520.2015.1024502>
- Morgan, G., Ramirez, R. (1984). Action Learning: A Holographic Metaphor for Guiding Social Change. *Human Relations*, 37(1), 1–27. <https://doi.org/10.1177/001872678403700101>
- Moriano, J. A., Molero, F., Topa, G., Lévy Mangin, J.-P. (2014). The influence of transformational leadership and organizational identification on intrapreneurship. *International Entrepreneurship and Management Journal*, 10(1), 103–119. <https://doi.org/10.1007/s11365-011-0196-x>
- Mumford, M. D., Scott, G. M., Gaddis, B., Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The leadership quarterly*, 13(6), 705–750. [https://doi.org/10.1016/S1048-9843\(02\)00158-3](https://doi.org/10.1016/S1048-9843(02)00158-3)
- Nguyen, M., Sharma, P., Malik, A. (2023). Leadership styles and employee creativity: The interactive impact of online knowledge sharing and organizational innovation. *Journal of Knowledge Management*. <https://doi.org/10.1108/JKM-01-2023-0014>
- Nguyen, T.-M., Malik, A. (2020). Cognitive processes, rewards and online knowledge sharing behaviour: The moderating effect of organisational innovation. *Journal of Knowledge Management*, 24(6), 1241–1261. <https://doi.org/10.1108/JKM-12-2019-0742>
- Nguyen, T.-M., Ngo, L. V., Paramita, W. (2022). Turning lurkers into innovation agents: An interactionist perspective of self-determinant theory. *Journal of Business Research*, 141, 822–835. <https://doi.org/10.1016/j.jbusres.2021.11.087>

- Rahimli, N. (2021). *The adoption of open innovation as a form of management innovation and its impact on individuals*. The Hong Kong Polytechnic University. Retrieved from: <https://theses.lib.polyu.edu.hk/handle/200/11568>, 4.03.2024.
- Randel, A. E., Jaussi, K. S. (2019). Giving Rise to Creative Leadership: Contextual Enablers and Redundancies. *Group & Organization Management*, 44(2), 288–319. <https://doi.org/10.1177/1059601119834089>
- Reiter-Palmon, R., Illies, J. J. (2004). Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *The leadership quarterly*, 15(1), 55–77. <https://doi.org/10.1016/j.leaqua.2003.12.005>
- Rigtering, J. P. C., Weitzel, U. (2013). Work context and employee behaviour as antecedents for intrapreneurship. *International Entrepreneurship and Management Journal*, 9(3), 337–360. <https://doi.org/10.1007/s11365-013-0258-3>
- Santos-Vijande, M. L., Álvarez-González, L. I. (2007). Innovativeness and organizational innovation in total quality oriented firms: The moderating role of market turbulence. *Technovation*, 27(9), 514–532. <https://doi.org/10.1016/j.technovation.2007.05.014>
- Senge, P. M., Kleiner, A., Roberts, C. (1994). *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. Nicholas Brealey.
- Sohmen, V. S. (2015). Reflections on creative leadership. *International Journal of Global Business*, 8(1), 1–14. <https://doi.org/10.13140/RG.2.1.1620.3366>
- Sourchi, S., Jianqiao, L. (2015). Understanding High-Performance Work System (HPWS) as related to creativity and job engagement in Kurdistan and Canada. *European Journal of Business and Management*, 7(20), 92–106.
- Sternberg, R. J. (2003). WICS: A Model of Leadership in Organizations. *Academy of Management Learning & Education*, 2(4), 386–401. <https://doi.org/10.5465/amle.2003.11902088>
- Stoll, L., Temperley, J. (2009). Creative leadership: A challenge of our times. *School Leadership and Management*, 29, 65–78. <https://doi.org/10.1080/13632430802646404>
- Terziovski, M. (2010). Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: A resource-based view. *Strategic Management Journal*, 31(8), 892–902. <https://doi.org/10.1002/smj.841>
- Tierney, P. (2008). Leadership and employee creativity. *Handbook of organizational creativity*, 95123.
- Vaccaro, I. G., Jansen, J. J., Van Den Bosch, F. A., Volberda, H. W. (2012). Management innovation and leadership: The moderating role of organizational size. *Journal of management studies*, 49(1), 28–51. <https://doi.org/10.1111/j.1467-6486.2010.00976.x>
- Vargas-Halabí, T., Mora-Esquivel, R., Siles, B. (2017). Intrapreneurial competencies: Development and validation of a measurement scale. *European Journal of Management and Business Economics*, 26(1), 86–111. <https://doi.org/10.1108/EJMBE-07-2017-006>
- Verma, S., Mehta, M. (2020). Effect of Leadership Styles on Corporate Entrepreneurship: A Critical Literature Review. *Organization Development Journal*, 38(2), 65–74.
- Volberda, H. W., Van Den Bosch, F. A. J., Heij, C. V. (2013). Management Innovation: Management as Fertile Ground for Innovation. *European Management Review*, 10(1), 1–15. <https://doi.org/10.1111/emre.12007>
- Wen, L., Zhou, M., Lu, Q. (2017). The influence of creative leadership on employee creativity: Scale development and validation. *Management Review*, 29(2), 129.
- Woodman, R. W., Sawyer, J. E., Griffin, R. W. (1993). Toward a Theory of Organizational Creativity. *The Academy of Management Review*, 18(2), 293. <https://doi.org/10.2307/258761>

- Ximenes, M., Supartha, W. G., Manuati Dewi, I. G. A., Sintaasih, D. K. (2019). Entrepreneurial leadership moderating high performance work system and employee creativity on employee performance. *Cogent Business & Management*, 6(1), 1697512. <https://doi.org/10.1080/23311975.2019.1697512>
- Yang, D., Li, L., Jiang, X., Zhao, J. (2020). The fit between market learning and organizational capabilities for management innovation. *Industrial Marketing Management*, 86, 223–232. <https://doi.org/10.1016/j.indmarman.2019.12.007>
- Ye, D., Xie, W., Zheng, L. (2023). Unleashing Intrapreneurial Behavior: Exploring Configurations of Influencing Factors among Grassroots Employees. *Behavioral Sciences*, 13(9), Article 9. <https://doi.org/10.3390/bs13090724>
- Ye, P., Liu, L., Tan, J. (2022). Creative leadership, innovation climate and innovation behaviour: The moderating role of knowledge sharing in management. *European Journal of Innovation Management*, 25(4), 1092–1114. <https://doi.org/10.1108/EJIM-05-2020-0199>
- Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance. *Journal of applied psychology*, 83(2), 261.
- Zhou, X., Zhong, J., Zhang, L. (2024). Action Speaks Louder: The Role of Proactive Behavior between Creative Leadership and Employees' Creativity. *Behavioral Sciences*, 14(3), Article 3. <https://doi.org/10.3390/bs14030257>

