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The importance of leadership in agile projects: systematic literature review

A importância da liderança em projetos ágeis: revisão sistemática da literatura

La importancia del liderazgo en proyectos ágiles: revisión sistemática de la literatura

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Abstract
In an environment marked by the presence of agile practices for project management, the leadership role needs to present competencies that involve changes concerning market conditions and business uncertainties. They are responses to rapid changes and agility as an organizational competence to deal with these environmental factors surrounding the life cycle of projects. The objective of this article was to identify how studies on agile project management practices approach leadership. As a methodological strategy, a Systematic Literature Review was adopted to assist in the mapping and evaluation of a specific intellectual structure to develop a body of knowledge. For data collection, the Web of Science and Scopus databases were used. Initially, 120 articles were found. The results showed that there are still obstacles to implementing the agile approach in the organizations, but that practices based on agile leadership and servant leadership can help agile development in the projects. The contribution to adopting agile leadership and servant leadership is to facilitate transforming traditional organizations into agile organizations.
Keywords: Agile; Agility; Agile leadership; Servant leadership; Software development.

Resumo
Em um ambiente marcado pela presença das práticas ágeis para a gestão de projetos, o papel de liderança precisa apresentar competências que envolvam as mudanças em relação às condições de mercado e às incertezas de negócio. São respostas às rápidas mudanças e a agilidade como competência organizacional para lidar com esses fatores ambientais entorno do ciclo de vida dos projetos. O objetivo deste artigo foi identificar como os estudos sobre as práticas ágeis de gestão de projetos abordam a liderança. Como estratégia metodológica foi adotado uma Revisão Sistemática de Literatura para auxiliar no mapeamento e avaliação de uma estrutura intelectual específica para desenvolver um corpo de conhecimento. Para a coleta de dados foram utilizadas as bases Web of Science e Scopus. Inicialmente, foram encontrados 120 artigos. Os resultados apontaram que ainda existem entraves para o processo, mas que práticas pautadas na liderança ágil e a liderança servidora em projetos de desenvolvimento ágil ainda apresentam desafios importantes nas organizações estabelecidas como organizações ágeis e como organizações tradicionais.
Palavras-chave: Ágil; Agilidade; Liderança ágil; Liderança servidora; Desenvolvimento de software.

Resumen
Em um ambiente marcado pela presença das práticas ágeis para a gestão de projetos, o papel de liderança precisa apresentar competências que envolvam as mudanças em relação às condições de mercado e às incertezas de negócio. São respostas às rápidas mudanças e a agilidade como competência organizacional para lidar com esses fatores ambientais entorno do ciclo de vida dos projetos. O objetivo deste artigo foi identificar como os estudos sobre as práticas ágeis de gestão de projetos abordam a liderança. Como estratégia metodológica foi adotado uma Revisão Sistemática de Literatura para auxiliar no mapeamento e avaliação de uma estrutura intelectual específica para desenvolver um corpo de conhecimento. Para a coleta de dados foram utilizadas as bases Web of Science e Scopus.

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1. Introduction

Project agility is the ability of a project team to quickly adapt to changes, review the project's direction and deliver value to the customer in short cycles of planning, development, and continuous delivery (Sutherland, 2019; Conforto & Amaral, 2016). In the context of agile practices, organizations and customers benefited from delivering value as early as possible through the realization of projects (Lichtenthaler, 2020; Walter-Güpner, 2018).

To adopt agile practices, organizations need to be prepared concerning possible culture changes, management processes, as well as in the relationship of leaders with the team, customers, and stakeholders (Alqudah & Razali, 2017). Among the frameworks most adopted by organizations, Scrum is a framework for dealing with complex and adaptive problems, characterized by values, roles, artifacts, and events (Colomo-Palacios et al., 2012). Regarding roles and responsibilities, Scrum is formed by the Product Owner (PO), the Developers and the Scrum Master (SM). The PO is responsible for the leadership and management of products, stakeholders and customers. Developers lead the development and delivery of the functional quality software increment at the end of each Sprint (Sutherland, 2019). The SM plays the role of a servant leader and ensures the correct application of Scrum, as well as being a facilitator for the PO and Developers (Anwer et al., 2017; Hron & Obwegeser, 2018).

The KanBan method has as main objective to present a panoramic view of the activities to be carried out for the entire team, with principles and values that can be adopted in any production line (Hoda & Murugesan, 2016). The Kanban method is widely used in software development projects. Although the method does not prescribe roles and you can start work with it the way the organization operates (Majchrzak & Stilger, 2017), Kanban suggests that the organization has product, flow, and technical leadership (Dos Santos et al., 2018).

When the leadership comes to roles and responsibilities of people in project management positions in both frameworks, Gjøystdal and Karunaratne (2020) highlight that there is no centrality of command about leadership. In this context, Pacheco et al. (2018) state that the leader needs to present new skills for the relationship with the team, customers, and stakeholders. Mergel (2016), and Shamim et al. (2016) highlight that in an environment of agile project management practices, the person in a leadership role, regardless of the framework, must ensure a collaborative environment, good relationship with the team, in addition to encouraging the ability of each one to act during the life cycle of the projects, thus giving rise to the term servant leadership.

Based on what was presented about the need for the leader to participate in the relationship with the team, customers, and stakeholders in an environment under agile practices, this research aims to answer the following question: "how studies on agile project management practices approach leadership?" The objective of this article was to identify how studies on agile project management practices approach leadership. To answer this question, a Systematic Literature Review - SLR was adopted as a methodological strategy. The justification for this choice is given by the role of SLR in helping to map and evaluate a specific intellectual structure to develop a body of knowledge (Tranfield et al., 2003). In addition, SLR is a methodological procedure that uses literature as the main source of data (Sampaio & Mancini, 2007).

In the following section, the methodological procedures are presented. Subsequently, the results are presented and, finally, the final remarks are presented, which describe the findings and limitations of this research, as well indicate for future studies.

2. Methodology

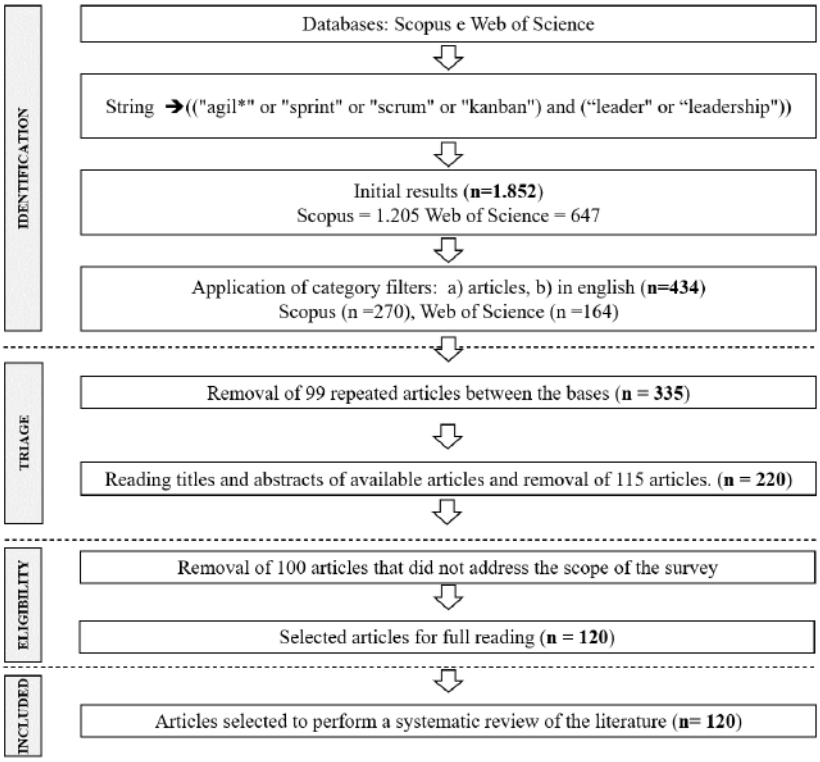
The research presented here adopted an SLR as a method to understand the convergence of two relevant themes, which are agile practices and leadership. SLR differs from traditional narrative reviews by adopting a systematic scientific process that is replicable and transparent. In this sense, its use is also justified because it minimizes the bias in the construction of a theoretical analysis corpus, as well as the possibility of building an audit trail of the decisions and procedures applied in this research (Cook et al., 1997).

The procedures for carrying out this SLR followed six phases according to the prescriptions of Pollock and Berge (2018): (i) clarifying research goals and objectives; (ii) seeking relevant research; (iii) collecting data to incorporate in the analysis corpus; (iv) assess the quality of studies selected; (v) synthesizing the evidence from articles; (vi) interpret the findings after analysis process. The objective of the phases and activities presented is to guarantee the rigor and robustness that are aimed at in this type of research. Following this phase, the first step was motivated by the question that guides this research, which was: “how do studies on agile project management practices approach leadership?”. For this purpose, the academic databases Web of Science and Scopus were used as research sources, as they are one of the main databases for accessing research published in the area of social sciences.

The string used to perform the searches was ((("agil*" or "sprint" or "scrum" or "kanban") AND ("leader" or "leadership")). The survey was carried out on May 1, 2021. The use of the Boolean operators “and” and “or”, in addition to the use of the symbol “*” allows for greater scope, and control in the construction of the research base. The operators are applied to take into account the intersection of the two research areas studied. The use of the asterisk incorporates all variations of the word in the position after it is found. It is noteworthy that no temporal filter was applied so that it was possible to map all the production on the themes studied.

Therefore, after the first phase, which comprises the establishment of objectives, the researchers moved into the application of the search string. The results found in the first round underwent analysis and screening, as is shown in Figure 1, respecting the proposal by Pollock and Berge (2018), who present four steps for the elaboration of the analysis corpus.

Figure 1. Search results in data sources.



Source: adapted from Pollock and Berge (2018).

Figure 1 presents the four stages for the elaboration of the analysis corpus. The first step highlights the string used to search the databases selected. The second step is the screening of results in order to identify the articles corresponding to the research proposal. In the third stage, the eligibility criteria were applied, where the articles were evaluated according to the inclusion and exclusion criteria. And finally, the fourth stage constituted the corpus of analysis, resulting in the sample database of articles for the research.

For the composition of the database, some filters were applied during the initial research, such as the criterion of only articles in journals, excluding articles in congresses, books, among others. This exclusion was defined because these studies do not undergo a peer review in some cases, or even due to the maturity presented in working papers, in addition to mitigating the redundancy of works presented at congresses and published in journals. The areas delimited for this research were: "Management" and "Business" for Web of Science, "Business" for the Scopus database.

After the consolidation of the databases, repeated articles were removed to eliminate redundancy. Subsequently, the database was treated with the aid of Excel spreadsheets. This software allowed performing data analysis and presenting the results from the combination of quantitative information by frequency analysis, as well as qualitative information by categorizing the contents of the articles. This research phase also allowed us to present a relevant descriptive analysis of the study carried out.

From the reading of titles and abstracts in the screening phase to verify the eligibility of articles, some inclusion and exclusion criteria were established, highlighted in Figure 2. After verifying and reading the abstracts and introductions of the 345 previously selected articles, the final base was composed of 120 accepted articles that formed the research corpus.

Figure 2. Inclusion and Exclusion Criteria.

Inclusion Criteria	Reason for Inclusion
Articles that conceptualize the studied constructs	Allow addressing research purposes: understanding the constructs studied according to the articles selected.
Articles that address the relationships between the constructs studied	Allow contemplating the alignment of articles: understanding the interdependencies and relationships between the constructs.
Published articles	Offer greater rigor in the arguments and theoretical contributions studied.
Exclusion Criteria	**Reason for Exclusion**
Articles focusing on Quality, Marketing, Health, Finance, or other purposes outside the given constructs.	Exclude articles that are not focused on the questions that will offer insights to meet the research objectives.
Articles without a relevant theoretical foundation, or with a low relationship with the constructs.	One of the purposes of the study is to obtain future research perspectives, through theoretical knowledge existing in a structure, for which theoretical assumptions are prerequisites.

Source: Prepared by the authors (2021).

The next step was to read the 120 articles contained in the corpus of analysis, categorizing the contents in Excel spreadsheets to present a grouping of findings and comparison of categories. The activities applied in this phase are in line with the prescriptions of Pollock and Berge (2018) in phases (v) synthesizing the evidence and (vi) interpreting the findings. Although some quantitative treatments were applied, in this research, the qualitative analysis of the articles was prioritized to constitute a matrix that could represent the findings of this study.

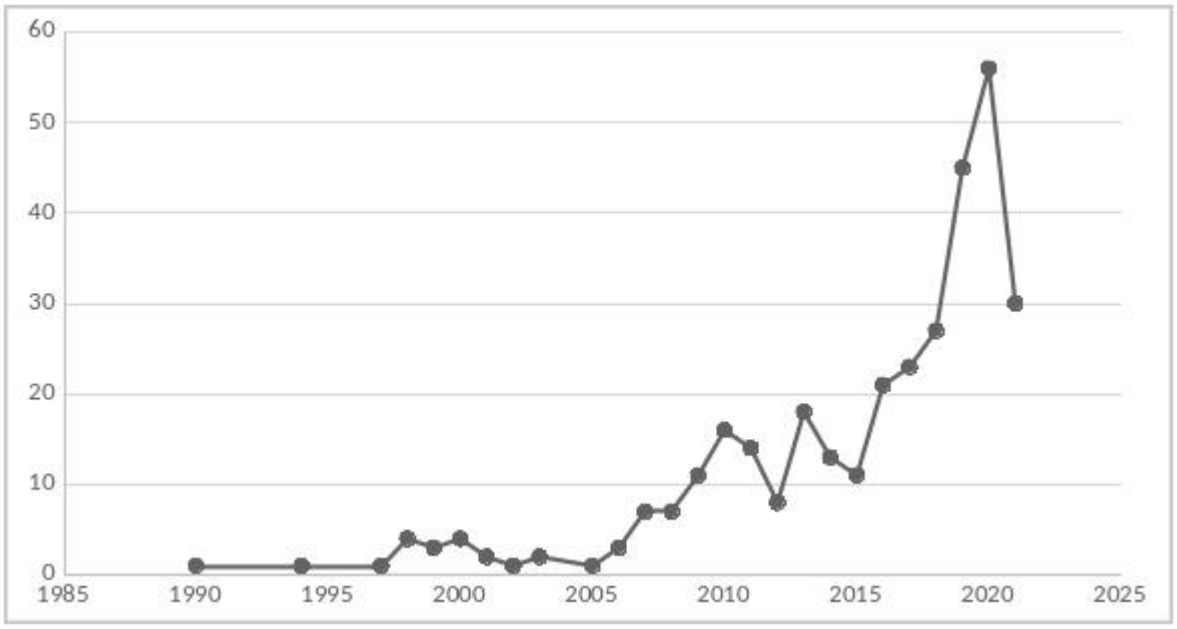
3. Results and Discussion

In this section, the results of this SLR are presented after carrying out the analysis processes. Initially, the mapping of the articles that constituted the corpus of analysis is presented. Following, the categories highlighted after an in-depth analysis of the contents of the articles are presented.

3.1 Evolution of article published

The articles selected from the Web of Science and Scopus databases were screened and the analysis corpus consisted of 120 articles. The articles underwent a more in-depth analysis, which allowed us to understand the studies on the relationship between agile practices and leadership. The 120 articles analyzed are temporally situated between the years 1990 to May 2021, shown in Figure 3.

Figure 3. Temporal analysis of articles.



Source: Research data (2021).

As can be seen from the analysis of Figure 1, the publication of articles dealing with the relationship between agile practices and leadership remained low until 2005, with an average of 2 articles per year. Despite the drops in 2012 and 2015 to 8 and 11 articles respectively, the following years show a growth in research in which there is an intersection of these two themes. A relevant aspect is that the year 2021 is still being finalized at the time of finalizing this article, but this year it already has 30 articles published until May, a number very close to the average of 34.4% of the last five years.

After analyzing the temporal distribution of articles, we also sought to understand the frequency of articles per journal. Figure 4 shows the journals with more than two publications and the respective number of articles published on the topic, ordered by the largest number of publications and by the alphabetical order of the name of the journals.

Figure 4. Journals and number of publications on the subject.

#	Journals	Quantity
1	Harvard Business Review	**8**
2	Mis Quarterly Executive	**7**
3	California Management Review	**5**
4	Journal of Business Research	**3**
5	Journal of Leadership Studies	**3**
6	Management Decision	**3**
7	Benchmarking-An International Journal	**2**
8	Business Horizons	**2**
9	Industrial and Commercial Training	**2**
10	International Journal of Operations & Production Management	**2**
11	International Journal of Organizational Leadership	**2**
12	International Journal of Project Management	**2**
13	Journal of Asian Finance Economics and Business	**2**
14	Project Management Journal	**2**
15	Revista de Gestao e Projetos	**2**

Source: Research data (2021).

Regarding the number of articles published per journal, the journals considered most useful, according to research data, are: 'Harvard Business Review' with 8 articles; ‘MIS Quarterly Executive’ with 7 articles and “California Management Review” with 5 articles.

3.2 Analysis and discussion of the categories found

After mapping the articles that constituted the corpus of analysis, an in-depth analysis of the published contents was carried out. Reading and categorizing the contents led to the classification of articles into 4 categories concerning the object of this research. The categories are described in Figure 5.

Figure 5. Classification of articles into 4 categories.

Categories	Authors
Agile leadership	Wanasida *et al*., 2021; Dabić *Et Al*., 2021; Malik; Sarwar & Orr, 2021; Agarwal *et al*. 2021; Busse & Weidner, 2020; Kim, You & Hong, 2020; Holtzhausen & De Klerk, 2018; Srivastava & Jain, 2017; Hall & Rowland, 2016.
Agile Leadership Competency	Holweg & Maylor, 2018; Garcia & Russo, 2020; Perides, Barrote & Sbragia, 2021; Kaufmann, Kock & Gemünden, 2020; Gonçalves *et al*., 2020; Anke & Ringeisen, 2021; Dries & Pepermans, 2012.
Leadership for Empowerment	Grass, Backmann & Hoegl, 2020; Kappelman *et al*., 2019; Bäcklander, 2019; Parker, Holesgrove & Pathak, 2015.
Leadership in an Agile Organization	Tariq & Abonamah, 2021; Koch & Schermuly, 2020; Annosi *et al*., 2020; Tronvoll *et al*., 2020; Akkaya & Tabak, 2020; Vanharanta *et al*., 2018; Lichtenthaler, 2020; Holbeche, 2019; Antonacopoulou *Et Al*., 2019; Reitz *et al*., 2020.

Source: Research data (2021).

The four categories found comprise an abstraction observed in the readings of the articles. It is worth mentioning that the initial analysis process of the articles was individual and, later, for the selection of the categories, the analysis of the researchers of this research was carried out. The categorization process was carried out by discussing and establishing a consensus on what was the greatest adherence of all articles in each of the constituted categories.

In the next section, the categories will be discussed to explain the findings of this research. The categories presented here do not only represent a way of explaining and organizing the contents studied, but also opportunities for creating research agendas.

3.2.1 Agile Leadership

Wanasida et al. (2021), Busse and Weidner (2020), and Hall and Rowland (2016) discuss the relationship of transformational leadership in the organization as important factors for performance, learning, and organizational agility. In this case, the leaders inspired and motivated their teams to create innovations and changes that will help the company to grow and develop towards organizational agility, especially in an environment of volatility, uncertainty, complexity, and ambiguity (VUCA). Dabić et al. (2021) demonstrate the role of entrepreneurial leaders with the intellectual agility that positively influences the organization's innovative capacity, and the innovation capacity involves both the project and the project teams. Malik, Sarwar, and Orr (2021) argue that agile practices of team autonomy and agile communication contributed to empowerment, improving innovative behavior and project performance.

In sharing knowledge and project management practices such as Waterfall and agile, Agarwal et al. (2021) and Antonacopoulou et al. (2019) stated that culture for organizational learning and the flexible and collaborative organization supports knowledge sharing and the adoption of agile practices. This culture facilitates a vertical or distributed leadership style in a VUCA environment. To support collaborative leadership, Kim et al. (2020) suggested that, for the establishment of an

agile culture in an organization, the exercise of servant leadership is very important. For the authors, it is leadership that maximizes the potential of the organization's members based on respect, support, and rewards provided by the organization. Furthermore, for servant leadership in Scrum teams, Holtzhausen and De Klerk (2018) confirmed the importance of servant leadership skills when identifying and developing SM and Team Leaders, indicating the formal role of team leader in Scrum teams and implementing agile practices effectively.

According to Parker, Holesgrove, and Pathak (2015), and Srivastava and Jain (2017), the role of servant leadership in self-organized and distributed teams can be challenging. In addition, they added that the multicultural influence of geographically distributed teams as a growing factor in organizations can influence the success of the self-organized team. These teams include task types and complexities, dynamics, and performance, which is an explicit definition of the self-organizing team and appropriate leadership models. In this sense, the authors proposed a framework for leadership to deal with self-organized, multicultural, and geographically distributed teams.

The articles in this category presented important discussions about the role of leadership in agile project management practices. There is an important involvement of agile leadership in the motivation for innovation and improvements aimed at leadership in an agile organization. An involvement of servant leadership, collaboration, and facilitation, supporting teams to self-organize and use flexible management techniques and agile frameworks.

3.2.2 Agile leadership competency

Holweg and Maylor (2018) highlighted that agile leadership can make important contributions to project management and that the use of tools, such as Lean and Theory of Constraints, can help organizations achieve greater value in projects. Since streamlining processes and reducing waste can reflect positively on the added value. Garcia and Russo (2020) identified the influence of the type of leadership on the performance of the project team, according to the methods applied in the management of software development projects. The authors identified three leadership styles, being transactional, transformational, and empowering leadership. Such leaders relate positively to the performance of the team. However, in this study, it was found that agile or predictive project management methods did not influence the relationship between leadership and team performance.

Perides et al. (2021) brought an analysis of five competencies in agile or predictive management projects considered the most important, namely: integrity and personal reliability; Communication; teamwork; strategy and relationships; and team engagement. Very close to these competencies, Dries and Pepermans (2012) published a list of leadership competencies that include: emotional agility; humor; efficient delegation; and quality of feedback. These competencies reflect in the team as they communicate openly because they have fun at work and have compassion for each other.

Regarding managerial practices, Gonçalves et al. (2020) showed concern in identifying the necessary competencies for managing projects that used the traditional and agile approach that require distinct team characteristics, especially in a technology-intensive context that requires high performance. The authors carried out a case study in an EdTech, which is an educational startup, with company employees who composed two different teams. The work concluded that the team is on the way to being a high-performance team, however, it is still necessary for members to incorporate more agile practices and agile leadership, understanding the real value they generated for customers, through the development of your products. In this sense, Anke and Ringeisen (2021) analyzed the competence requirements and leadership success criteria of project managers, who oversee agile software development teams.

In 2017, Kappelman et al. (2019) identified that agile software development ranks sixth in the top ten of the most important and hardest-to-find technical skills. Anke and Ringeisen (2021) presented several competencies focused on leadership, and how to motivate and promote people. The authors also brought the skills to interact and present adequate

communication and conflict management to analyze and interpret the specialized knowledge in agile software development project management. The authors also identified that support and cooperation favor teamwork skills and that both conceptualizing and creating these relationships result in favoring openness. In addition, it was highlighted that organization and execution support resource management, and that adaptation and coping to deal with errors outlines an entrepreneurial and performance profile favoring software development.

The articles presented important discussions about leadership competencies in agile project management practices. The selected articles presented leadership styles such as transactional and transformational that positively influence the performance of those they lead. Competencies such as integrity, reliability, communication, teamwork, strategy, relationship, and engagement were identified in the surveys regardless of whether the projects are conducted in the agile or predictive model. Thus, these competencies are aligned with the competencies expected by the roles present in agile project models.

3.2.3 Leadership for Empowerment

Research by Grass, Backmann, and Hoegl (2020) developed a model of the continuous process of agile team innovation that revealed the importance of states of leadership empowerment and team adaptability. The authors found that empowerment is not a static state but emerges through interactions between various stakeholders. Thus, the involvement of leadership and staff in activities that have influences from the customer and the organizational environment caused the increase and decrease of empowerment. Hence, agile transformation and top management supportive behaviors played an important role that affected the empowerment dynamics and resulted in the adaptability of the team. The authors also revealed the dynamic role of empowerment and adaptability constructs for agile innovation processes, both to create conditions for empowerment and to foster adaptability.

For Bäcklander (2019), the conditions for empowerment can be the key balancing force in leadership in complex environments, such as in software development project environments. In this way, the authors showed that the work of agile coaches is important in enabling leaders to understand the context of others, supporting other leaders in establishing principles of group dynamics and teamwork. In addition, the work of agile coaches supports leadership in the transparency of conflicts, facilitating and encouraging constructive dialogue to balance leadership autonomy and the strategic alignment of organizations.

The leadership for empowerment presented in the articles in this category showed that the theme empowerment plays a key point in agile project management, which can influence teams to innovate and adapt throughout the project. Thus, leaders or agile coaches who foster empowerment in teams showed greater results from agile project management practices in organizations.

3.2.4 Leadership in an agile organization

Tariq and Abonamah (2021) discussed in their article that agility in organizations is especially derived from scope changes for customers, market changes, and technological changes, in addition to social, cultural, and competition development. This referred to an important ranking of business agility, where innovation, agility, adaptability and flexibility, and facilitation skills are critical for agile organizations.

Annosi et al. (2020), Akkaya and Tabak (2020), Vanharanta et al. (2018), and Holbeche (2019) sought to understand how agile methods can influence the way an agile organization learns, adapts, and changes. Therefore, the authors point out that the role of leadership in an agile organization develops with a collaborative, inspiring, trusting, resilient, and cooperative environment among employees and for the development of executive leaders. As suggested by Reitz et al. (2020), based on practical implications of the mindfulness method, which represents mindfulness of every movement, situation, and emotion.

Tronvoll et al. (2020) assessed the level of organizational agility and identified gaps between organizational needs and

the needs of agile teams in this organizational learning process. In this sense, Tronvoll et al. (2020) suggested that the agile mindset is critical for transforming the organization's processes to move from planning to discovery, from data scarcity to shared data abundance, and from the hierarchy of jobs to the partnership.

Lichtenthaler (2020) highlighted those isolated applications of Design Thinking and Lean Startup in projects will not promote the benefits of agile innovation organizations. Thus, the authors found that executives are seeking the benefits of agility by jointly executing Design Thinking in front-end software development teams and Lean Startup in back-end software development teams.

From the perspective of an agile project management portfolio in organizations, Kaufmann et al. (2020) measured the agility capability of organizations. The research presented the recognition of the emerging strategy in organizations, that is, according to the empirical mentality of process control to make strategic decisions based on what is known. Thus, the emerging strategy is positively linked to the success of the agile project management portfolio.

From the point of view of the adoption of practices by leadership in agile organizations, Koch and Schermuly (2020) studied the probability of attracting candidates and retaining employees because the organization performs project management using agility. The research showed a greater ability of organizations to retain and attract candidates in companies that adopt agile practices in project management.

The articles in this category showed that the topic of leadership in an agile organization plays a key role in leadership in agile project management and in the way, teams innovate and adapt throughout the project, and how leadership in the agile organization retains its talents. In this sense, the articles brought up topics such as business agility, innovation, agility, adaptability and flexibility, and facilitation skills. The role of leadership in an agile organization develops with a collaborative, inspiring, trusting, resilient and cooperative environment, in addition to the empirical mindset of process control of making strategic decisions. Thus, leaders, or agile coaches, who foster empowerment at various levels of leadership in teams showed greater results from agile project management practices and the strategic alignment of organizations.

The authors' articles showed that the organization's influence is fundamental to promote flexibility, adaptability, business agility, innovation for the agility of organizations that seek to deliver greater value to customers. In addition, organizations that promote a collaborative, inspiring, trusting, resilient, and cooperative environment among employees, attract and retain employees, and develop executive leaders. That is, they are agile organizations that learn, adapt, and change, especially those that understand agile methods and practices, such as Design Thinking and Lean Startup in conducting project management.

4. Conclusion

From the research carried out in the Web of Science and Scopus databases, SLR found articles that addressed aspects related to agile leadership, agile leadership competence, leadership for empowerment, and leadership in an agile organization, and addressed the relationships between the studied constructs.

The results showed that there are still obstacles to the process of applying agile practices, but activities that consider agile leadership and servant leadership in agile can improve this reach. In the same way, projects development in general still present challenges in organizations established as agile organizations and as traditional organizations as well. Feedback, communication, humor in pressure environments, delegation, autonomy, and flexibility of both executive leadership and leadership in self-organized and cross-functional teams are cited in some articles as fundamental for agile leadership.

The term servant leadership was introduced in the book by Greenleaf (1977), and he defines the term as a professional profile that seeks, first, to serve people and then to lead them. The servant-leader must create and maintain business process restructuring initiatives in the direction of agility to support agile projects (Holtzhausen & de Klerk, 2018; Anwer et al., 2017;

Hron & Obwegeser, 2018). Thus, from the point of view of "The Evidence-Based Management Guide" (EBM, 2020), servant leadership is not just about SM, the organization and top leadership must assume the role of servant leadership to support SM in the transformation of the organizational environment around agility (Spiegler et al., 2019; Walter-Güpner, 2018; Xu & Shen, 2018).

Regarding organizational competencies in agility, it is understood that the servant leader needs to consider competencies that involve changes in market conditions, business uncertainties, and adaptability in response to rapid changes and agility. These are organizational competencies to deal with these environmental factors surrounding the life cycle of information systems (Walter-Güpner, 2018). In this sense, the great challenge for traditional organizations is how to change the traditional mindset of control and monitoring in software development projects (Sutherland, 2019). This traditional management mindset applied to agile projects causes dysfunctions in decision making, generating financial impacts on projects, costs, and value delivered to customers (Lichtenthaler, 2020; Walter-Güpner, 2018). Servant leadership is a factual competency for the development of SM and Team Leaders, however, we did not identify the same competency as necessary for executive leadership in agile software development projects. Thus, research opportunities are evident to address the role of leadership in agile project management practices. There is an important involvement of agile leadership in the motivation for innovation and improvements aimed at the agile organization, in the involvement of servant leadership, supporting teams for self-organization, and use of management techniques and agile practices.

As found in the articles, the culture for organizational learning and the flexible and collaborative organization supports knowledge sharing and the adoption of agile methods. Thus, servant leadership supports the dissemination of agile thinking in organizations. In this sense, three leadership styles were identified, being transactional, transformational, and empowerment that did not influence the existing relationship between leadership and team performance in agile software development projects, or in the predictive model of project management.

Some articles investigated the importance of organizational learning to deal with constant changes in the business environment. The articles analyzed shown that the work of agile coaches is to disseminate the necessary skills and empower agile thinking to deal with unstable, and challenging organizational environments with the VUCA environment. In leadership empowerment, the authors showed that the theme empowerment plays a key role in agile project management, furthermore in the way teams innovate and adapt throughout the project. Thus, leaders or agile coaches who foster empowerment at various levels of leadership in teams showed greater results from agile project management practices and the strategic alignment of organizations.

Agile organizations are classified as organizations that learn and respond quickly to changes, always bent on delivering value to customers and businesses. In this sense, the use of tools such as Scrum, Design Thinking, Lean Startup, and Theory of Constraints can help organizations achieve greater value delivery in projects. This thinking also promotes entrepreneurship with the intellectual agility that positively influences the innovative capacity of the organization. The organization's influence is fundamental to promote flexibility, adaptability, business agility, innovation for the agility of organizations that seek to deliver greater value to customers. In addition, promoting a collaborative, inspiring, trusting, resilient and cooperative environment among employees, attracting and retaining employees, and developing executive leaders, make them agile organizations that learn, adapt, and change, and that understand the agile methods and practices.

This work presented limitations of the role of leadership in the theme of agile project management in organizations. Thus, articles were found that discussed the role of leadership in managing people and teams, in the influence of leadership in organizations that consider themselves agile, in competencies found in agile leaders, and in how leadership can favor empowerment.

Future work could explore whether agile leadership contributes positively to the organization to remove

organizational limitations and help in the delivery of project results in software development teams that use the Scrum Framework and the Method Kanban. Despite the limitations presented, it is expected that this study can contribute to the deepening of the discussion on the themes of Agile Practices and Agile Leadership, in addition to providing a base that informs the work carried out, journals, authors, and categories as a facilitating tool for the researchers.

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