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THE RELATIONSHIP BETWEEN LEARNING ORGANIZATIONS AND ORGANIZATIONAL PERFORMANCE IN PORTUGUESE HIGHER EDUCATION INSTITUTIONS (HEI)

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Abstract

This research aims to study the role that learning organizations may have on organizational performance in Portuguese higher education institutions (HEIs), through a literature review that supports the presentation of a conceptual model proposed by the authors. The survival of HEIs depends on how these institutions accept change, improve their practices and react to competitiveness. Nowadays, the most relevant aspects of education in higher education are translated by learning, dynamic structures, flexibility and quality. Consequently, the higher education system will have to adapt to the continuous changes and new requirements, to achieve the success and the proposed objectives. Thus, to differentiate themselves from their competitors, organizations must develop their resources, promoting the creation of knowledge and the dissemination of information. Learning organizations can be defined as organizations that facilitate the learning of all their elements, assuming themselves as learning entities that have certain characteristics to meet the changing needs of the environment. Currently, HEIs suffer great pressure to create significant learning environments, this is, learning spaces that can fully train their students, based on educational projects that take on and respond to the growing cultural, linguistic, ethnic, and socioeconomic diversity of students, their families and their teachers [1-2]. An educational organization that intends to establish itself as a learning organization will have to consider multiple dimensions, such as the individual behaviour of different educational agents, teamwork and organizational culture, structured and fostered by factors such as trust, time, technology and joint reflection [3]. Learning organizations will be able to follow developments and improvements in the business environment to perform their actions successfully. Thus, one of the key goals of HEIs is to achieve academic excellence among students, and as such, need to transform into learning organizations and subsequently improve the overall performance of the organization. Organizational performance, on the other hand, has proved to be a difficult concept to define and even measure [4]. Among the existing studies about the performance, is possible to state that there isn't a single criterion for defining the performance, which makes difficult to measure or compare the results. To overcome this ambiguity concerning the performance criterion, in this research will be considered three perspectives of performance, namely, financial, operational, and market performance. Regarding the methodology, the data will be obtained through a questionnaire to evaluate the different dimensions of the proposed conceptual model. The sample will consist of about 200 emails from members of the management boards of Portuguese HEIs. In the treatment of quantitative data, a model of structural equations (SEM) will be used, to investigate the possible relations between the different dimensions incorporated in the model. In terms of discussion of results, it is intended to characterize the relationship between the concept of learning organizations and performance in Portuguese HEI.

Keywords: Higher Education, Learning Organizations, Organizational Performance.

1 INTRODUCTION

Nowadays, HEIs face increasing challenges posed by competitive and dynamic markets. This leads to disruptive changes that force organizations to change their strategy to survive. Expansion of the global economy, as well as, a global competition, new developments and innovations, rapid changes and new technologies, customer expectations, quality management, demographic changes, and demand for specific skills, pose a huge challenge to the flexibility of an organization that operates in this scenario. Organizations need to change and adopt new ways to remain competitive. To survive in a competitive and rapidly changing environment, continuous learning becomes essential.

In this way, to develop and sustain a superior competitive advantage, organizations must resort to the management of their knowledge resources, because value must be created from knowledge assets in order to improve performance. It has become increasingly important for organizations to adopt a learning culture, to the extent that such guidance may contribute to organizational success. However, since the ability to learn may not occur with the readiness or spontaneity that would be desired, it is imperative that organizations ensure that all their resources and efforts are directed towards the development of a learning philosophy. Likewise, it is fundamental that HEIs also become learning organizations in order to ensure that their institutional goals are achieved. The concept of learning organizations has been related to the performance of organizations in several investigations already carried out [5-7]. Some studies even show a strong relationship between these two concepts [8-11].

The capacity to deal with change and the search for continuous improvement to overcome the challenges that arise in organizations' day to day has been related to the capacity of these organizations to learn [12-13]. This means that organizations that demonstrate learning ability will be able to more easily follow developments and changes in the environment in which they operate to be successful in their area of business. In this way, like other organizations, HEIs will also have to become learning organizations in order to achieve their strategic objectives, as learning organizations seek transformation and excellence through an organizational renewal [14-15].

Nowadays, the most relevant aspects of education in higher education are translated by dynamic structures, flexibility, and quality. Consequently, the higher education system will have to adapt to the continuous changes and new requirements, to achieve the success and the proposed objectives. This means that the entire education system will, necessarily, to coat itself on high levels of quality. On the other hand, the emphasis placed on costumers and quality leads to consider as priorities, organizational learning and innovation so that institutions provide the best services to students and teachers as well as to society itself, promoting, ultimately, growth and economic development [16].

2 THEORETICAL FRAMEWORK

2.1 Relevance of the Research

Organizational learning is a crucial factor to be managed proactively by organizations in order to survive and be successful in the activity in which they operate. Learning encourages people to develop their ability to solve problems by promoting the improvement of the quality of their actions. Develop qualified collaborators is one of the valences of continuous learning which can create long-term competitive advantage for organizations and that promotes success in organizational performance. Organizational learning prioritizes the creation and acquisition of new knowledge and emphasizes the role of people in the creation and use of that knowledge [17]. In this way, the concept of organizational learning provides the fundamental foundations for achieving competitive advantage, translating into an excellent performance and success of organizations [18].

It is true that there are many references found in the literature on the study of learning organizations in the most varied business areas, however, the focus on HEIs has been somewhat neglected in this analysis, and studies on this type of institution are scarce. But, to be successful, HEIs must apply business concepts that are inherent in profit-oriented businesses, including evaluating their performance, and as such they will have to engage with organizations oriented towards continuous learning. HEIs play an important role in the knowledge-based economy. As learning organizations, HEIs will be able to expand knowledge skills, produce high-quality professionals and researchers, increase innovation and creativity, and effectively contribute to the production of knowledge and the development of intellectual property [19-20].

The increase of knowledge assets is the central issue of higher education and clearly contributes to the future of the economic and social development of any society. Thus, the relevance of this research is based on the enormous importance that HEIs have been assuming in the knowledge economy, presenting new challenges in the study of these dimensions [20-22].

2.2 Learning Organizations

An institution that wishes to establish itself as a learning organization will have to consider multiple dimensions, such as the individual behavior of different educational agents, teamwork and organizational culture, structured and empowered by factors such as trust, time, technology and joint reflection [3]. In this same line of thinking, Senge [12] clarified that learning organizations usually develop

five capacities - or as the author designates them, nuclear disciplines - such as learning systems, personal domain, mental models, shared vision and team learning. By learning systems, we can understand a whole body of knowledge and tools that help in the identification and perception of how they can be transformed, always bearing in mind the existence - and the will to circumvent it - of certain dynamics that are real obstacles to change. If a system does not record changes, it will continue to generate the same results, even assuming the individuality of each employee. The causes and effects of problems are not always centered in space and time, and it is important that learning organizations seek multiple levels of understanding in the domain of these complex realities where education is embedded [23].

Bowen et al. [24] believe that when HEIs are assumed to be learning organizations, this may lead to the unlocking of creative processes and dynamics that allow significant changes, responding to the new and growing challenges that are posed to higher education, in search of an educational achievement, but also a personal one. Celep et al. [25] also point out the importance of the motivation of all the actors in the context of HEIs, the role of work and collaborative learning, supported by a clear monitoring of the technological advances that are available in the educational context, for an efficient transformation of institutions into learning organizations. Bowen et al. [24] clarify that learning organizations are able to value, acquire, and use information that emerges from the organization and its employees, to redefine and evaluate strategies to achieve certain objectives. According to the authors, an institution that manifests several properties or characteristics can be regarded as a learner, grouped according to certain actions and feelings.

According to Webber et al. [26], referring to the learning organizations paradigm, although having its origin in the economic and business world, it is becoming increasingly urgent to assume its application in educational organizations. Other authors [27-28] corroborate that the educational institutions that assume this paradigm can be more effective in the processes of change, being possible to verify a benefit in the professional development of teachers which is reflected in better learning by the students. Some criticisms are pointed to this process in the educational context, as reported by Bolivar [29], particularly in the difficulties of implementation of this concept in public institutions, pointing to examples of high bureaucracy, excessive centralization and little openness to change.

2.3 Learning organizations and organizational performance

The concept of learning organizations is an important and valuable way to facilitate learning and knowledge management and has been considered an important plan to improve organizational performance so that the organization remains competitive [30]. Learning organizations promote innovation and the creativity of employees, which in turn will improve organizational performance [31-32]. Likewise, it also promotes the transfer and sharing of knowledge within the organization, which is extremely important in the process of organizational performance [33].

According to DeSimone et al. [34], a learning organization can be characterized by five different organizational dimensions, namely, structure, information systems, human resources and human resource development practices, organizational culture, and leadership. In terms of structure, learning organizations are known by eliminating hierarchical barriers and promote collaborative structures, such as multifunctional teams. Besides that, learning organizations define structures and practices that stimulate information sharing and, at the same time, implement reward systems which reinforce long-term performance and the development of new skills and knowledge. The culture of learning organizations is characterized by an emphasis, promotion and reinforcement of risk-taking.

According to Harbor [35], organizational performance can be measured through the implementation of a series of measures that represent the result of the organization's activity. Other authors, namely Peterson et al. [36] defined organizational performance as the ability of organizations to use their resources efficiently in order to produce results consistent with their strategic objectives. Other studies have considered organizational performance as something that allows to evaluate the success of organizations and to achieve their success [37].

2.4 Definition of Research Hypotheses

Several studies have suggested that learning organizations have a significant impact on the performance of their activities [38-42]. Goh et al. [43] found a positive relationship between organizational learning ability and organizational performance, where non-financial performance, translated by innovation, efficiency and job satisfaction, among others, revealed more strongly associated with the organizational learning capacity, than the performance itself from a financial

perspective. Ramírez et al. [39] showed that organizational learning is positively related to organizational performance in Spanish public universities, concluding that a greater emphasis on the size of learning organizations is equivalent to better performance in the organization.

Several studies have explored the impact of organizational learning on business performance. Their conclusions allow us to verify that there are two different perspectives on the concept of performance, that is, they consider financial performance and non-financial performance [44-47]. Bontis study [44] allowed to conclude that performance can be measured by two aspects, which include, on the one hand, economic-financial results and, on the other hand, non-financial performance. Hult et al. [45] and Wu and Fang [47] focused on non-financial results, such as innovation and employee efficiency. Goh et al. [43] analyzed the financial performance considering factors such as competitiveness, profitability, profit growth, sales growth, return on investment (ROI) and return on equity (ROE), and non-financial performance, such as innovation, efficiency and job satisfaction. Ngo and Loi [46] considered in their study aspects related to the market, along with the personal characteristics inherent in business performance, such as employee satisfaction, employee retention, customer satisfaction and customer retention.

In fact, the existing literature on this theme considers organizational learning as the basis for obtaining a sustainable competitive advantage and increasing organizational performance [48]. Following this premise, organizations that adopt strategies consistent with the concept of learning organizations are considered to perform better [32,49]. Ellinger et al. [49] analyzed the relationship between learning organizations and financial performance, and their study sought to determine the effects of continuous learning, research and dialogue, collaboration and team learning, employees' capacity for collective vision, the organization's connection to its environment, and the focus of leadership in financial measures such as ROE, ROA, and market value added (MVA). This research suggested a positive relationship between learning organization practices and objective measures of financial performance of companies.

The learning orientation of an organization influences its performance indirectly, as it improves the quality of market-oriented behaviors, and directly, since it facilitates generating learning which leads to innovations. Another evidence found in the literature is the study of Calantone et al. [32], which states that organizational learning affects organizational performance through the company's innovative performance.

Also, Martinez-Costa and Jimenez-Jimenez [48] evidenced the positive influence of organizational learning on organizational performance, referring that organizations that learn best are more likely to identify events and trends in the market that, in turn, will lead to increased sales and increased market share. Apart from this aspect, organizational learning provides a more flexible structure for organizations so that they can respond more quickly and assertively to new challenges than their competitors. On the other hand, continuous learning will also provide the organization with a better efficiency and celerity in the processing of information from the markets [48].

Based on the various researches carried out on these subjects, the three hypotheses of investigation that intend to respond to the possible relationship between the learning organizations and the organizational performance of the HEIs are now presented, being considered in this study three different perspectives on the concept of organizational performance, namely, the financial, operational and market approach.

- *H1: The dynamics of learning organizations have a positive influence on the financial performance of HEIs.*
- *H2: The dynamics of learning organizations have a positive influence on the operational performance of HEIs.*
- *H3: The dynamics of learning organizations have a positive influence on the market performance of HEIs.*

Completed the description of the fundamentals that led to the construction of the initial issues based on literature review, it is now presented the proposed research model as illustrated in the figure 1:



Figure 1 - Conceptual Model and Research Hypotheses

3 METHODOLOGY

Regarding to methodology, the research is qualitative in nature, using quantitative techniques. The data were obtained through the application of a questionnaire elaborated by the authors in order to evaluate the different dimensions of the proposed conceptual model. In this study, the independent variable is the concept of learning organizations while the dependent variable is organizational performance, measured in three different perspectives, namely, financial, operational, and market.

The sample will consist of about 200 email addresses of members of the direction of Portuguese universities and polytechnics. For the statistical treatment of the data, a structural equations model (SEM) will be used to investigate the possible relationships between the different dimensions incorporated in the model. The questionnaire will be elaborated with closed questions, using a five-point Likert scale to evaluate the respondents' conceptions about the dimensions considered, where 1 represents "strongly disagree" and 5 represents "strongly agree". For the characterization of respondents and organizations, nominal and ordinal scales will be used.

4 FINAL CONSIDERATIONS

Nowadays, for an organization to develop, improve and innovate it must maximize the use of the human potential at its disposal and seek to develop by establishing a culture of learning and continuous progress. Organizational learning is a crucial factor to be managed proactively by organizations, in order to survive and be successful in the activity in which they operate.

This research aims to study the role that learning organizations may have on organizational performance in HEIs, through a literature review that supports the presentation of a conceptual model proposed by the authors, since the survival of HEIs depends on how these institutions accept change, improve their practices and react to competitiveness.

This research is still under development, expecting to get the first results very soon. However, with the literature review in this paper and the theoretical framework of the proposed conceptual model, it seems to us of great importance to emphasize the dimensions to be studied and the impact of the expected conclusions of this investigation for a better knowledge of the Portuguese HEIs and, in a larger scope, of its impact on the social and economic development of Portugal.

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REFERENCES

- [1] J. Husu and K. Tirri, "Developing whole school pedagogical values - A case of going through the ethos of "good schooling"", *Teaching and Teacher Education*, no. 23, pp. 390–401, 2007.

- [2] P. R. Mucharreira, *O papel da formação contínua, centrada na escola, na (re)construção do projeto educativo e no desenvolvimento profissional docente – um estudo de caso*. Lisboa: Instituto de Educação da Universidade de Lisboa, 2017.
- [3] OECD, *What makes a school a learning organisation? - A guide for policy makers, school leaders and teachers*. Paris: OECD Publishing, 2016.
- [4] P. Erbisch, *Management Style, Organizational Climate, and Organizational Performance in a Public Mental Health Agency: an Integral Model*. Michigan: Western Michigan University, Kalamazoo, 2004.
- [5] K. E. Watkins and V. J. Marsick, *Sculpting the Learning organization: Lessons in the art and science of systematic change*. San Francisco: Jossey-Bass, 1993.
- [6] K. E. Watkins and V. J. Marsick, *Facilitating learning organizations: Making learning count*. Aldershot: Gower Publishing Limited, 1999.
- [7] J. Power and D. Waddell, "The link between self-managed work teams and learning organizations using performance indicators", *The Learning Organization*, vol. 11, no. 3, pp. 244-259, 2004.
- [8] T. Robinson, B. Clemson, and C. Keating, "Development of high organizational learning units", *The Learning Organization*, no. 4, pp. 228-234, 1997.
- [9] A. Khandekar and A. Sharma, "Organizational learning and performance: Understanding Indian Scenario in Present Global Context", *Education + Training*, vol. 48, no. 8/9, pp. 682-692, 2006.
- [10] L. A. Ho, "Meditation, learning, organizational innovation and performance", *Industrial Management and Data Systems*, no. 111, pp. 113-131, 2011.
- [11] S. Akhtar, A. Arif, E. Rubi, and S. Naveed, "Impact of Organizational Learning on Organizational Performance: Study of Higher Education Institutes", *International Journal of Academic Research*, vol. 3, no. 5, pp. 327-331, 2011.
- [12] P. M. Senge, *The fifth discipline: The art and practice of learning organization*. New York: Doubleday, 1990.
- [13] A. Armstrong and P. Foley, "Foundations of a learning organization: Organization learning mechanism", *Learning Organization*, no. 10, pp. 74-82, 2003.
- [14] S. Kalsom and C. H. Ching, "Knowledge Management & Organisational Learning", *Proceedings from ICIKM 2011: The 8th International Conference on Intellectual Capital*, Bangkok, Thailand: Academic Conferences Limited, 2011.
- [15] O. V. Griego, G. D. Geroy, and P. C. Wright, "Predictors of learning organizations: A human resource development practitioner's perspective", *The Learning Organization*, vol. 7, no. 1, pp. 5-12, 2000.
- [16] P. R. Mucharreira and M. G. Antunes, "Os efeitos das variáveis macroeconómicas no desempenho das organizações: Evidência das pequenas e médias empresas em Portugal", *Portuguese Journal of Accounting and Management*, no. 17, pp. 113-143, 2015.
- [17] J. Denton, *Organisational learning and effectiveness*. London: Psychology Press, 1998.
- [18] D. Dunphy and A. Griffiths, *The Sustainable Corporations*, Allen and Unwin, St Leonards, 1998.
- [19] A. Kok, "Intellectual Capital Management as Part of knowledge Management Initiatives as Institutions of Higher Learning", *The Electronic Journal of Knowledge Management*, vol. 5, no. 2, pp. 181-192, 2005.
- [20] R. Abdullah and M. Selamat, "A Framework for Knowledge Management Systems Implementation in Collaborative Environment for Higher Learning Institution", *Journal of Knowledge Management Practice*, Retrieved from <http://www.tlinc.com/articl83.htm>, 2005.
- [21] M. Bhusry and J. Ranjan, "Knowledge Collaboration in Higher Educational Institutions in India: Charting a Knowledge management Solution", *International Journal of Computer Science*, vol. 8, September 2011.
- [22] N. Sedziuvienne and J. Vveinhardt, "The Paradigm of Knowledge in Higher Educational Institutions", *Engineering Economics Journal*, no. 5, 2009.

- [23] P. Senge, N. Cambron-McCabe, T. Lucas, B. Smith, and J. Dutton, *Schools that learn: A fifth discipline fieldbook for education, parents, and everyone who cares about education*. New York: Doubleday, 2000.
- [24] G. Bowen, W. Ware, R. Rose, and J. Powers, "Assessing the Functioning of Schools as Learning Organizations", *Children & Schools*, vol. 29, no. 4, pp. 199-208, 2007.
- [25] C. Celep, T. Konakli, and E. Recepoglu, "Organizational Learning: Perceptions of Teachers in Turkey", *International Online Journal of Educational Sciences*, vol. 3, no. 2, pp. 474-493, 2011.
- [26] K. Webber, G. Bowen, N. Melão, and M. Dinis, "As escolas portuguesas são organizações aprendentes? Um estudo empírico", *Revista Portuguesa de Investigação Educacional*, no. 13, pp. 7-26, 2013.
- [27] M. Fullan and A. Hargreaves, *A Escola como organização aprendente*. Porto Alegre: Artmed Editora, 2000.
- [28] I. Alarcão, *Professores Reflexivos em uma escola reflexiva*. São Paulo: Cortez Editora, 2005.
- [29] A. Bolivar, *Los centros educativos como organizaciones que aprenden*. Madrid: Editorial La Muralla, 2000.
- [30] D. Davis and B. J. Daley, "The learning organization and its dimensions as key factors in firms' performance", *Human Resource Development International*, vol. 11, no. 1, pp. 51-66, 2008.
- [31] C. Ramus and U. Steger, "The roles of supervisory support behaviors and environmental policy in employee" ecoinitiatives" at leading-edge European companies", *The Academy of Management Journal*, vol. 43, no. 4, pp. 605-626, 2000.
- [32] R. Calantone, S. Cavusgil, and Y. Zhao, "Learning orientation, firm innovation capability, and firm performance", *Industrial Marketing Management*, vol. 31, no. 6, pp. 515-524, 2002.
- [33] X. Jiang and Y. Li, "The relationship between organizational learning and firms' financial performance in strategic alliances: A contingency approach", *Journal of World Business*, vol. 43, no. 3, pp. 365-379, 2008.
- [34] R. L. DeSimone, J. M. Werner, and D. M. Harris, *Human Resource Development*. Orlando: Harcourt College Publishers, 2002.
- [35] J. L. Harbour, *The performance paradox: Understanding the real drivers that critically affect outcomes*. Boca Raton: CRC Press, 2008.
- [36] W. Peterson, G. Gijsbers, and M. Wilks, *An organizational performance assessment system for agricultural research organizations: Concepts, methods, and procedures*. The Hague: International Service for National Agricultural Research, 2003.
- [37] J. P. Antony and S. Bhattacharyya, "Measuring organizational performance and organizational excellence of SMEs – Part 2: An empirical study on SMEs in India", *Measuring Business Excellence*, vol. 14, no. 3, pp. 42-52, 2010.
- [38] T. Hernaus, M. Skerlavaj, and V. Dimovski, "Relationship between organisational learning and organisational performance: the case of Croatia", *Transformations in Business & Economics*, vol. 7, no. 2, pp. 32-48, 2008.
- [39] A. Ramírez, V. Morales, and R. Rojas, "Knowledge creation, organizational learning and their effects on organizational performance", *Engineering Economics*, vol. 22, no. 3, pp. 309-318, 2011.
- [40] S. B. Farsani, M. E. Farsani, F. A. Farsani, S. Aroufzad, and S. Ban, "Relationship between organizational learning and organizational performance among employees in physical education organizations", *European Journal of Experimental Biology*, vol. 3, no. 1, pp. 540-544, 2013.
- [41] M. P. Pokharel and S. O. Choi, "Exploring the relationships between the learning organization and organizational performance", *Management Research Review*, vol. 38, no. 2, pp. 126-148, 2015.
- [42] S. P. Singh and P. Singh, "Organizational learning and business performance: A study of selected healthcare organizations", *The International Journal Research Publications*, vol. 6, no. 8, pp. 93-97, 2016.

- [43] S. C. Goh, C. Elliott, and T. K. Quon, "The relationship between learning capability and organizational performance: a meta-analytic examination", *The learning organization*, vol. 19, no. 2, pp. 92-108, 2012.
- [44] N. Bontis, "Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field", *International Journal of Technology Management*, vol. 18, no. 5, pp. 433-462, 1999.
- [45] G. Hult, D. Ketchen, and E. Nichols, "Organizational learning as a strategic resource in supply management", *Journal of Operations Management*, no. 21, pp. 541-560, 2003.
- [46] H. Y. Ngo and R. Loi, "Human resource flexibility, organizational culture and firm performance: an investigation of multinational firms in Hong Kong", *The International Journal of Human Resource Management*, vol. 19, no. 9, pp. 1654-1666, 2008.
- [47] C. Wu and K. Fang, "Improving project performance through organizational learning: an empirical study", *Technology Analysis & Strategic Management*, vol. 22, no. 2, pp. 261-76, 2010.
- [48] M. Martinez-Costa and D. Jimenez-Jimenez, "The Effectiveness of TQM: The Key Role of Organizational Learning in Small Businesses", *International Small Business Journal*, no. 27, pp. 98-125, 2009.
- [49] A. D. Ellinger, A. E. Ellinger, B. Yang, S. W. Howton, T. T. Baldwin, and C. C. Danielson, "The Relationship Between the Learning Organization Concept and Firms' Financial Performance: An Empirical Assessment (and Invited Reaction)", *Human Resource Development Quarterly*, vol. 13, no. 1, pp. 5-29, 2002.