Work Culture at Public University in Central Mexico

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ABSTRACT

The work culture is a nodal process in the success story of companies in the face of contingencies or potential risks. The objective of this work was to explore the dimensions of the work culture in micro, small and medium-sized companies in a town in Medellín, Colombia. An exploratory, psychometric and cross-sectional study was carried out with a sample of 100 employees of local companies considering alliances with educational institutions. The results corroborate the theoretical model consisting of five factors related to tasks-people, innovations-change, hierarchy-authority. individualism-collectivism and security-stability. In relation to the state of the question where labor culture stands out as a factor of competitiveness and productivity policies, the scope and limits of the study are discussed and lines of confirmation of the theoretical model are recommended.

Keywords:
Work culture; hierarchy; authority; innovation;
change; individualism; collectivism

1. Introduction

The historiography of Colombian companies is a fascinating field of study that allows us to understand the economic, social and political evolution of Colombia over time [17]. Through the investigation and analysis of the companies, we can obtain a clearer vision of how business development has been in the country, the dynamics that have influenced its growth and the challenges they have faced.

The history of Colombian companies dates to colonial times, when the first commercial activities were established in the territory [14]. During this stage, trade was focused on the export of agricultural products such as gold, silver and cocoa. The colonial companies were controlled by the European powers and were established mostly in the main cities and ports of the time, such as Cartagena and Santa Marta.

With the independence of Colombia in the 19th century, a process of industrialization and economic development began that had a significant impact on the historiography of companies [2]. New industries such as textiles, manufacturing and agriculture arose, which contributed to the

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economic growth of the country. However, during this period, Colombian companies faced challenges such as a lack of infrastructure, a shortage of capital, and competition from imported products.

At the end of the 19th century and the beginning of the 20th, some of the most emblematic companies in Colombia were consolidated [4]. Companies such as Bavaria, which became one of the main beer producers in the country, and Coltejer, one of the largest textile companies in Latin America, stand out. These companies played an important role in the economy and industrial development of Colombia, and laid the foundations for the consolidation of other business sectors in the future.

During the 20th century, Colombia experienced important changes in its economic and business structure [18]. Import substitution policies were promoted, which led to the strengthening of the national industry and the emergence of new companies in sectors such as the steel industry, petrochemicals and electronics. However, there were also moments of economic and political crises that affected the business development of the country, such as bipartisan violence and the internal armed conflict.

In recent decades, Colombia has undergone a process of modernization and economic opening that has generated new opportunities for companies [3]. Policies to attract foreign investment have been promoted, entrepreneurship has been promoted and the services, technology and renewable energy sectors have been strengthened. In addition, globalization has allowed Colombian companies to expand and compete in international markets.

The historiography of Colombian companies is a constantly evolving field of study that allows us to understand the economic and business trajectory of the country [7]. Through historical research, we can analyze the factors that have influenced the development of companies, the challenges they have faced and the strategies they have implemented to adapt to changes. Studying the history of Colombian companies is essential to understand the present and project the future of business development in the country.

Work culture is a broad concept that encompasses the norms, values, beliefs and behaviors shared by members of an organization in relation to work [8]. This culture can influence the way tasks are carried out, interactions with others, decisions are made and the work environment is perceived. The dimensions of work culture vary according to different theoretical approaches and analysis models, but the following are some common dimensions that are often identified:

Task orientation vs. people orientation: This dimension refers to whether the work culture is more focused on achieving goals and objectives (task orientation) or on well-being and interpersonal relationships (people orientation) [11]. In some work environments, efficiency and the achievement of results are valued more, while in others the care and support of employees is prioritized.

Hierarchy and authority: This dimension refers to the way in which power is distributed and exercised in the organization [13]. Some work cultures may have a rigid hierarchical structure in which employees are expected to follow the orders and decisions of their superiors, while others may promote greater employee participation and autonomy in decision making.

Orientation towards innovation and change vs. Stability and Tradition Orientation: This dimension is related to the organization's willingness to adapt and promote change and improvement (innovation and change orientation) or to maintain established practices and structures over time (stability orientation). and tradition) [12]. Some work cultures encourage creativity, experimentation, and adaptability, while others may be more conservative and resistant to change.

Orientation towards individualism vs. collectivism orientation: This dimension refers to the degree to which individual interest and competition among employees is valued and promoted (individualism orientation) or teamwork, collaboration and cooperation (collectivism orientation).

[6]. Some work cultures emphasize individual success and autonomy, while others place a greater value on teamwork and solidarity.

Orientation towards security and stability vs. risk and uncertainty orientation: This dimension is related to the tolerance and willingness of the organization to assume risks and face situations of uncertainty (risk and uncertainty orientation) or to prioritize stability, security and predictability (risk and uncertainty orientation). towards security and stability) [16]. Some work cultures may encourage risk-taking and innovation, while others favor long-term planning and security.

Work culture scales are instruments used to measure and assess cultural characteristics in a work environment [20]. These scales are based on a series of questions or statements that employees answer, and from these answers information is obtained about the dimensions of the work culture present in the organization. Some of the most used scales are the following:

Competing Organizational Culture Scale Values Framework (CVF): This scale, developed by Quinn and Rohrbaugh, is based on a model of four cultural dimensions: Clan (orientation towards people and collaboration), Adhocracy (orientation towards innovation and creativity), Market (orientation towards towards results and competitiveness) and Hierarchy (orientation towards stability and control) [1]. The scale consists of a series of statements related to each dimension, and employees indicate to what extent they agree with each one.

Denison Organizational Culture Scale: This scale, developed by Daniel Denison, focuses on four dimensions of organizational culture: Engagement, Consistency, Adaptability, and Mission [5]. The scale assesses the perception of employees on these dimensions and provides a measure of the organizational culture in terms of strengths and weaknesses.

Hofstede Organizational Culture Scale: Geert Hofstede is known for his study of cultural dimensions in the national context, but he has also developed a scale to measure organizational culture [15]. Its scale is based on five dimensions: Power distance, Individualism vs. Collectivism, Masculinity vs. Femininity, Uncertainty Avoidance, and Long-term Orientation vs. Short-term orientation [9]. These dimensions are used to measure organizational culture in terms of these cultural characteristics.

Therefore, the objective of this work was to establish an exploratory factorial model of the theoretical dimensions of work culture from the contrast with empirical observations of the construct in a town in Medellín, Colombia.

2. Method

A cross-sectional, exploratory and psychometric study was carried out with a sample of 100 employees (M = 27.3 years of age and SD = 2.3 years, as well as M = 3'892.00 USD and SD = 245.34 USD of monthly income) from microenterprises in Medellin, Colombia, considering its participation in strategic alliances with public universities in the region, as well as the social service system and professional practices in the academic, professional and labor training of talents in the area of economic-administrative sciences.

The Carreón Labor Culture Scale (2020) was used, which includes the dimensions of tasks-people, hierarchy-authority, innovation-change, individualism-collectivism, security-stability. Each item is answered with one of five options ranging from 0 = "not at all agree" to 5 = "quite agree". The reliability reported in the literature was between .89 and .95, although in the present work it reached a value of .86 for the general scale and between .74 and .84 for the subscales. In the case of validity, the factorial weights reported in the literature reveal a threshold of .345 to .657 and in the present study they reached values that oscillate between .324 and .546.

Respondents were contacted through their personal email. They were informed about the

objectives, managers and costs of the project. They were told that their responses would not be paid for, but confidentiality and anonymity were guaranteed in writing. 10 employees were invited to a focus group to standardize the concepts.

The data were processed in Excel and analyzed in JASP version 16 in order to be able to contrast the hypotheses of significant differences between the theoretical structure and the structure observed in the empirical study. Values close to unity were assumed as evidence of reliability, validity, adequacy, sphericity, and fit. Values close to zero as evidence of residuality.

3. Results

The eigenvalues indicate the maximum allowable factors to include in the exploratory factor model. In addition, they suggest the possible relationships indicated by the degrees of freedom. There are 20 indicators that would be distributed in two factors, although the theoretical structure speaks of five factors. Suitability: .737 and .941; Sphericity: $X2 = 2105.370$ (300 gl) $p > .001$

The factorial model indicates the distribution of theoretical factors in empirical observations. Five theoretical factors are appreciated that would explain the 25 indicators that measure them and on which they are inferred. Positive (green lines) and significant (thick lines) relationships are observed between the five factors and indicators related to work culture (see Table 1). The adjustment and residual parameters indicate the non-rejection of the null hypothesis regarding the significant differences between the theoretical structure of the work culture reported in the literature from 2020 to 2023, as well as the empirical observations made in this work.

Table 1
Factor Loadings

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Uniqueness
r1		1.020				0.132
r2	0.736				0.633	0.079
r3	-0.516				0.465	0.028
r4		1.075				0.069
r5	0.884					0.091
r6	0.945					0.046
r7				0.765		0.267
r8	0.894					0.053
r9		-0.626				0.069
r10	0.789					0.095
r11			-0.875			0.051
r12	0.876					0.201
r13					-0.597	0.458
r14	0.906					0.069
r15						0.864
r16		0.437	0.623			0.255
r17			-0.735	0.682		0.149
r18	0.666	-0.465				0.069
r19		0.721				0.102
r20			0.885			0.192

Note. Applied rotation method is promax.
RMSEA = .060; TLI = .885

4. Discussion

The contribution of this work to the state of the art lies in the establishment of an exploratory factorial model of work culture. The results show that the reliability and validity of the instrument allowed the contrast of the null hypothesis regarding the significant differences between the theoretical structure with respect to the observed structure. In addition, five dimensions were found that were related to 25 indicators which measured the work culture, although the first factor related to the task-people factor and hierarchy-authority explain the highest percentage of the variance, although the three remaining factors coincide with the other factors. reported in the literature to explain the dimensions of innovation-change, individualism-collectivism and security-stability [19]. The extension of the study to a regional sample is recommended to establish the reliability and validity of the instrument in a confirmatory model of the five predominant dimensions [10]. In addition, the results allow the construction of organizational policies related to work culture to promote competitiveness.

5. Conclusion

The objective of this work was to establish the dimensions of the work culture in an exploratory factorial model contrasted with the theoretical dimensions reported in the literature, as well as the factors included in the review of the instruments. The results corroborate the five predominant dimensions: tasks-people, hierarchy-authority, innovation-change, individualism-collectivism, security-stability. In addition, the total explained variance is explained by the first two factors, coinciding with the reviewed literature. The recommendation to extend the study towards the factorial validity of the dimensions in a confirmatory model will allow the design of labor productivity and competitiveness strategies in micro, small and medium-sized companies in the study area.

References

[1] Al-Khrabsheh, Abdullah Abbas, Sakhr AI Al-Bazaiah, Abdelruhman Abbas Al-Khrabsheh, and Ahmed Fathi Alheet. "The strategic role of human resources management in performing crisis management: The mediating role of organizational culture and human capital during Covid-19 (An Applied Study on the Jordanian Ministry of Health)." *Journal of Management Information and Decision Sciences* 25 (2022): 1-18.

[2] Alonazi, Wadi B. "Building learning organizational culture during COVID-19 outbreak: a national study." *BMC health services research* 21 (2021): 1-8.

[3] Al-Shamali, Sarah, Ahmed Al-Shamali, Ahmad Alsaber, Anwaar Al-Kandari, Shihanah AlMutairi, and Amer Alaya. "Impact of organizational culture on academics' readiness and behavioral intention to implement eLearning changes in Kuwaiti universities during COVID-19." *Sustainability* 14, no. 23 (2022): 15824.

[4] Athar, Handry Sudiartha. "The influence of organizational culture on organizational commitment post pandemic Covid-19." *International Journal of Multicultural and Multireligious Understanding* 7, no. 5 (2020): 148-157.

[5] Brown, N. Derek, Yixi Chen, Hope Harrington, Paul Vicinanza, Jennifer A. Chatman, Amir Goldberg, and Sameer Srivastava. "How have organizational cultures shifted during the COVID-19 pandemic." *California Management Review. Retrieved February* 15 (2022).

[6] Fassarella, Cintia Silva. "Organizational culture of safety during the COVID-19 pandemic." *Revista de Enfermagem Referência* 5 (2021).

[7] Haffar, Mohamed, Wafi Al-Karaghouli, Ramdane Djebarni, Khalil Al-Hyari, Gbolahan Gbadamosi, Fiona Oster, Amer Alaya, and Abir Ahmed. "Organizational culture and affective commitment to e-learning'changes during COVID-19 pandemic: The underlying effects of readiness for change." *Journal of Business Research* 155 (2023): 113396.

[8] Haris, Nurhayati, Jamaluddin Jamaluddin, and Ernawaty Usman. "The effect of organizational culture, competence and motivation on the SMEs performance in the Covid-19 post pandemic and digital era." *Journal of Industrial Engineering & Management Research* 4, no. 1 (2023): 29-40.

[9]   Komorowski, Piotr, Jack Warchalowski, and Piotr Zawada. "The organizational culture of enterprises and changes in supply chain management in the COVID-19 pandemic era." *Journal of Modern Science* 47, no. 2 (2021): 211-226.

[10]   Mileva , I., Bojadjiev , M., & Petkovska , MS (2022). Entrepreneurial Organizational Culture During a Pandemic in a Labor -Intensive Industry: The Mediating Role of Fear of COVID-19, Psychological Distress, and Job Satisfaction in Turnover Intention. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, *27* (3), 71-80. https://www.ceeol.com/search/article-detail?id=1116223

[11]   Müller, Lea S., Sebastian Reiners, Jörg Becker, and Guido Hertel. "Long-term effects of COVID-19 on work routines and organizational culture–A case study within higher education's administration." *Journal of business research* 163 (2023): 113927.

[12]   Pinzaru, Florina, Alexandra Zbuchea, and Lucian Anghel. "The Impact of the COVID-19 Pandemic on Business. A preliminary overview." *Strategica. Preparing for Tomorrow, Today* 8 (2020): 721-730.

[13]   Putra, I. Made Yoga Darma, Ni Ketut Rasmini, Gayatri Gayatri, and Ni Made Dwi Ratnadi. "Organizational culture as moderating the influence of internal control and community participation on fraud prevention in village fund management during the COVID-19 pandemic." *Linguistics and Culture Review* 6, no. S1 (2022): 351-362.

[14]   SAPTA, IKSMNM, Muafi Muafi, and Ni Made SETINI. "The role of technology, organizational culture, and job satisfaction in improving employee performance during the Covid-19 pandemic." *The Journal of Asian Finance, Economics and Business* 8, no. 1 (2021): 495-505.

[15]   Sieber, Marcel R., Christian Russ, and Katja Kurz. "Organizational Culture and Business-IT Alignment in COVID-19: A Swiss Higher Education Case Study." *International Journal of Innovation and Technology Management* 20, no. 03 (2023): 2242004.

[16]   Song, Xudong, Kan Shi, and Wei Zhou. "Mechanisms of Organizational Cultural Tightness on Work Engagement during the COVID-19 Pandemic: The Moderating Role of Transformational Leadership." *Behavioral Sciences* 13, no. 1 (2022): 27.

[17]   Spicer, André. "Organizational culture and COVID-19." *Journal of management studies* 57, no. 8 (2020): 1737-1740.

[18]   Suprapti, Suprapti, Masduki Asbari, Yoyok Cahyono, Abdul Mufid, and Noor Eva Khasanah. "Leadership style, organizational culture and innovative behavior on public health center performance during Pandemic Covid-19." *Journal of Industrial Engineering & Management Research* 1, no. 2 (2020): 76-88.

[19]   Suryoto, Suryoto. "What is the Role of Organizational Culture, Competence and Motivation on the SMEs Performance in the Digital Era and the Covid-19 Pandemic?." *International Journal of Social and Management Studies* 3, no. 4 (2022): 117-125.

[20]   Zhang, Yingmin, Philip Saagyum Dare, Atif Saleem, and Caleb Chidozie Chinedu. "A sensation of COVID-19: How organizational culture is coordinated by human resource management to achieve organizational innovative performance in healthcare institutions." *Frontiers in Psychology* 13 (2022): 943250.