

From a hierarchical organizational culture to a clan culture: the case of the Colegio de Postgraduados, Veracruz Campus

S. Zárate-Canseco, G.¹; Cuéllar-Lugo, M.B.^{1*}; Gallardo-López, F.¹; López-Romero, G.¹

¹ Colegio de Postgraduados Campus Veracruz. Tepetates, mpio. Manlio Fabio Altamirano, Ver. C.P. 91690.

* Correspondence: cuellar.martha@colpos.mx

ABSTRACT

Objective: To identify the dominant and desired organizational cultures within the academic community.

Design/methodology/approach: The Organizational Culture Assessment Instrument (OCAI) questionnaire was administered to 28 academics using a pragmatic methodology based on systems theory.

Results: The findings reveal a predominantly hierarchical culture, although there is a strong aspiration toward a clan-type culture.

Limitations and implications of the study: The results suggest that fostering a clan-type organizational culture within hierarchical institutions can enhance commitment, cohesion, and organizational effectiveness, though it requires flexible leadership and well-structured change strategies.

Conclusions: It is concluded that a transition toward more collaborative organizational structures could strengthen institutional identity, cohesion, and effectiveness. Further research on organizational resilience and dynamic capabilities is recommended.

Keywords: behavior, organization, administrative structure

Citation: Zárate-Canseco, G., Cuéllar-Lugo, M.B., Gallardo-López, F., & López-Romero, G. (2025). From a hierarchical organizational culture to a clan culture: the case of the Colegio de Postgraduados, Veracruz Campus. *Agro Productividad*. <https://doi.org/10.32854/k01d5r33>

Academic Editor: Jorge Cadena Iñiguez

Associate Editor: Dra. Lucero del Mar Ruiz Posadas

Guest Editor: Daniel Alejandro Cadena Zamudio

Received: May 2, 2025.

Accepted: July 19, 2025.

Published on-line: September XX, 2025.

Agro Productividad, 18(8). August. 2025. pp: 99-108.

This work is licensed under a Creative Commons Attribution-Non-Commercial 4.0 International license.



INTRODUCTION

An organization whether for-profit or non-profit, formal or informal, centralized or decentralized is composed of individuals who interact within a dynamic system shaped and guided by leaders, structures, routines, rules, and norms of its environment (Schein, 1988). Together, these elements form a society structured by diverse functional systems. These functional systems emerge through an organizational culture, which, according to Pedraza *et al.* (2015), comprises significant internal and external experiences that individuals in an organization have encountered and the strategies they have implemented to adapt to it.

Recent studies indicate that public educational institutions face tensions between traditional hierarchical models and more horizontal, participatory management schemes, such as those promoted by a clan-type culture. These tensions affect coordination, the effectiveness of collegial bodies, and the perceived legitimacy of decision-making processes. Examples of this are found in studies by Cancho & Huamán (2020), Lysytsia & Druker (2021), Parveen (2021), Bernatová & Kuklišová (2024), and Oliveira & Alves (2024).

In this context, it becomes particularly relevant to assess what type of organizational culture predominates at the Colegio de Postgraduados, Campus Veracruz (CPVer), and what model its members aspire to especially in an environment that prioritizes collaborative academic work, the generation of relevant knowledge, and the training of high-level human resources. This research is grounded in General Systems Theory, viewing CPVer as a complex and dynamically coupled organization, whose components interact non-linearly.

It also adopts a pragmatic and instrumentalist epistemological approach, recognizing that the knowledge generated should serve to transform institutional reality. For the analysis, the study employs the Competing Values Framework (CVF), developed by Cameron and Quinn (1999), using the Organizational Culture Assessment Instrument (OCAI), which identifies four types of organizational culture: clan, adhocracy, market, and hierarchy. This model has proven effective in diagnosing cultural alignment in educational institutions and in proposing change strategies. Thus, the aim of this study is to analyze the organizational culture of the Colegio de Postgraduados, Campus Veracruz, in order to identify the predominant cultural type, the one desired by its academic community, and to assess whether current institutional actions support the achievement of the expected outcomes.

MATERIALS AND METHODS

This exploratory study was conducted to gather information that would help understand the organizational environment of the Colegio de Postgraduados, Veracruz Campus (CPVer). As a case study, it allowed for field research, using surveys as the primary research strategy, administered to the actors directly involved in the phenomenon under investigation, who served as the main source of information. The research was carried out in four phases. The first involved a case study at CPVer through the application of the Organizational Culture Assessment Instrument (OCAI) to academic staff. The purpose of this instrument is to diagnose the dominant organizational culture by identifying four organizational subcultures: clan, hierarchy, adhocracy, and market. The OCAI comprises six questions, each with four answer options. Participants assign scores to each option by distributing 100 points among the four responses, giving the highest score to the option that best reflects the current practice at CPVer.

According to Hernández, Fernández, and Baptista (2014), the minimum sample size recommended for case studies ranges from six to ten participants. In this study, the instrument was administered to all 28 academic staff members at CPVer, qualifying as a convenience sample.

The OCAI instrument is divided into two parts: the first assesses the current organizational culture, and the second evaluates the desired organizational culture. Each item in the questionnaire corresponds to a specific cultural type: item A represents the clan culture, item B the adhocracy culture, item C the market culture, and item D the hierarchical culture.

The dimensions assessed by the OCAI are as follows:

1. **Dominant characteristics:** describe what the organization is like.
2. **Organizational leadership:** evaluates how leadership is exercised and transmitted within the organization.
3. **Personnel management:** analyzes how employees are treated and the overall work environment.
4. **Organizational unity:** examines internal cohesion and the mechanisms that foster interpersonal bonds.
5. **Strategic emphasis:** identifies how institutional goals are achieved.

6. **Criteria of success:** defines the standards by which success in employee development is judged, estimated, or recognized.

Given the nature of the convenience sample, a pilot study was conducted to refine aspects related to the instrument's administration. This pilot was applied to administrative and unionized personnel at CPVer and concluded with a feedback session regarding the content of the instrument, including suggestions for improving instructions or clarifying any ambiguous questions.

Subsequently, the OCAI was formally administered to the key actors in this research.

The second phase involved entering the data into the OCAI database and calculating Cronbach's Alpha for validation purposes. The third phase focused on producing summaries and radial graphs that illustrated the preferred means for achieving organizational goals. The fourth and final phase consisted of analyzing the results

RESULTS AND DISCUSSION

Every organizational structure is designed by establishing hierarchies, procedures, responsibilities, among other elements, and emphasizing decision-making processes where communication and routines are central axes making organizational culture a key component.

Organizational culture functions as a tool within any administrative structure, enabling the understanding of organizational functioning through factors such as values, beliefs, climate, norms, symbols, and philosophy. The Cronbach's Alpha coefficient was calculated at 0.897. The results show that the greatest gaps are found between the Clan and Hierarchical organizational cultures, indicating a pronounced need for a Clan culture rather than the currently prevailing Hierarchical one (Table 1). Notably, the Clan culture is currently the least practiced. Regarding the desired culture, the Adhocracy type ranks second in preference.

Additionally, radial graphs depicting the results of the organizational culture assessment are presented. These illustrate both the current perception and the projected perception five years into the future (Figure 1), highlighting the type of organizational culture deemed necessary by the academic community at CPVer.

Organizational culture has a significant impact on the effectiveness of CPVer. It must be considered as the guiding framework for addressing and resolving challenges inherent to the institution's academic population, as it conveys identity, strengthens loyalty, and

Table 1. Results of the current and required organizational culture.

Current culture		Required culture		Cultural gap	
Clan	14.33	Clan	31.83	Clan	17.50
Adhocracy	20.21	Adhocracy	31.32	Adhocracy	11.11
Market	29.08	Market	19.06	Market	-10.03
Hierarchy	40.42	Hierarchy	19.70	Hierarchy	-20.72

Source: Own elaboration.

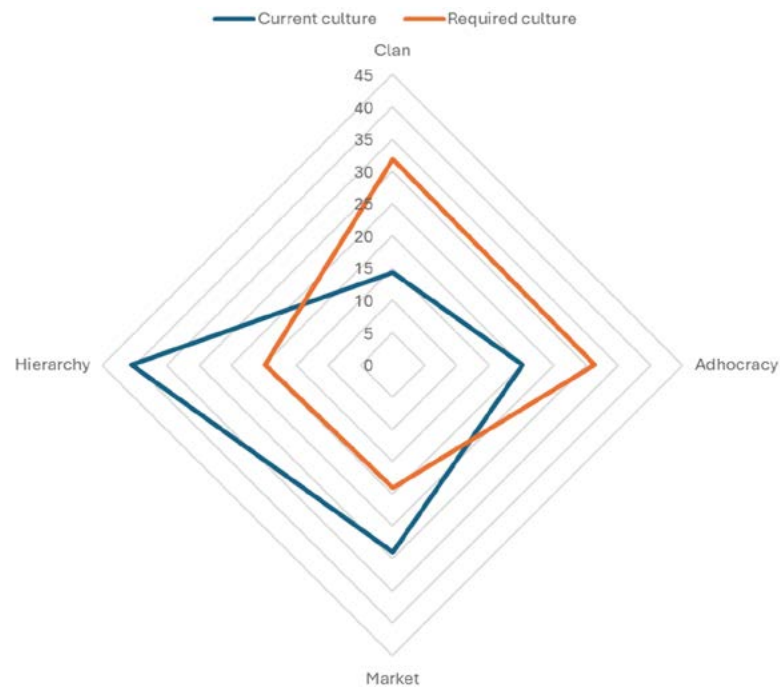


Figure 1. Results of current organizational culture.

influences decision-making. Culture acts as the cohesive force, serving as a bridge between organizational behavior and the strategies implemented within the institution (Robbins, 1999; Smircich, 1983). Moreover, a strong organizational culture enhances effectiveness and increases the commitment of academic collaborators and leaders (Parveen & Tripathi, 2021).

According to Schein, organizational culture can be analyzed through three levels: artifacts, espoused and enacted values, and underlying assumptions. The first two represent manifestations, though not the culture itself. Relating Schein's (1988) framework to Smircich's (1983) perspective, studying organizational culture as a variable is limited to these manifestations. However, through the use of questionnaires and observation, it becomes possible to reveal the basic assumptions that constitute organizational culture.

The use of models to evaluate organizational culture was proposed by Cameron & Quinn (1999) through the Competing Values Framework (CVF), which enabled a diagnostic of the cultural type using the Organizational Culture Assessment Instrument (OCAI). This model is based on the principle that organizational culture is defined by two dimensions: degree of freedom and orientation.

It is important to note that all four cultural types are present within CPVer's academic community, aligning with the assertions of Schein (1988) and Sánchez *et al.* (2006), who argue that organizations develop a dominant culture over time, adapting it in response to environmental challenges and changes.

Studying organizational culture, in line with Robbins (1999) and Smircich (1983), allows one to describe how problems are addressed and also serves as a mechanism to reduce issues inherent to CPVer's academic population. Culture conveys identity,

reinforces loyalty, influences decision-making, and acts as a cohesive element a bridge between structure and strategy.

The application of the OCAI instrument enabled a diagnosis and analysis of the dynamics and impact of academic relationships, providing a valid approach to the complexity of organizational culture within CPVer. The results show the coexistence of all four cultural types, with Hierarchical culture as the dominant one unsurprisingly, given CPVer's status as a public research institution characterized by bureaucratic structures. It exhibits strong internal orientation due to its need for control and stability. This reflects how the external environment significantly influences CPVer, as it depends on governmental policies and the National Center for Humanities, Sciences, and Technologies. Internally, its function through Collegiate Bodies relies on effective administrative leadership and alignment with the current Institutional Plan.

Additionally, as a higher education institution, hierarchical culture is common due to:

- **Historical heritage:** Educational organizations traditionally operate under hierarchical structures dating back centuries in some cases.
- **Traditional academic model:** Faculty members occupy positions of authority.
- **Departmentalization:** The College and by extension CPVer operates through its own collegiate bodies, establishing a clear hierarchy in decision-making and administration.
- **Emphasis on research and teaching:** Authority and recognition within the institution are linked to research and teaching, reinforcing hierarchical status.
- **Institutional conservatism:** CPVer is inherently traditional and conservative, which contributes to slower adoption of structural changes.

In descending order, the second most prevalent cultural type is Adhocracy, characterized by dynamism, entrepreneurial spirit, and a creative environment. These traits are inherent to the academic population engaged in specialized research in agricultural, forestry, livestock, and aquaculture sciences. The presence of innovative, curious, persistent, and competent researchers plays a crucial role in the advancement of knowledge on tropical agroecosystems and in the training of human resources. Support from leadership for research development is essential.

The third cultural type, Market, is marked by result-oriented leadership and a focus on performance. The Colegio de Postgraduados is evaluated by the Ministry of Agriculture and Rural Development (AGRICULTURA) and, at the campus level, by the External Evaluation Committee. Their evaluation criteria align with the Strategic Plan, and these assessments serve as indicators for the institution's sustainability.

The evaluation of academic productivity is conducted by the Campus Academic Committee, as detailed in institutional regulations. It is essential to meet the minimum productivity requirements established for each researcher's category, in addition to the specific goals set by each Subdirectorate. Therefore, success is defined in terms of achieving those indicators, reaffirming an outward orientation while requiring internal control and stability.

Finally, the highest-rated cultural type is the Clan culture, in which the organization is perceived as a friendly place to work and where individuals share a strong sense of community. This perception aligns with the researcher's observations of the academic population, as various subgroups exist, and team cohesion is often fractured. However, it is emphasized that despite internal divisions at Campus Veracruz, when collective interests or evaluations are at stake, all academic staff actively participate, demonstrating consensus, engagement, and loyalty.

At this point, it is important to highlight a case study by Bernatová & Kuklišová (2024) involving Slovak universities, which demonstrated that leadership positively influences organizational culture most notably, mediated by organizational trust. The Campus Academic Committee, as the collegiate body that supports Campus leadership in decisions regarding core academic functions, should not limit its role to monitoring and enforcing regulations. Instead, it should channel its efforts toward achieving the Campus's performance indicators, which involves promoting organizational trust.

In this context, trust stems from CPVer's adherence to formal processes and procedures. It has been identified that formal rules and institutional policies are what hold the academic population together. The Academic Committee is perceived as the organizer concerned with effective operations through high levels of control. Consequently, the academic community expresses a desire for a more familiar environment, one that fosters teamwork and commitment.

The need for a Clan culture is not exclusive to CPVer. Other case studies have also revealed a predominance of Hierarchical culture in universities, alongside a desire for a Clan-type culture (Mebariki & Barka, 2021; Paredes & Paredes, 2021; Rahman, Partiwi & Theopilus, 2021; Tikson *et al.*, 2023). This cultural gap may hinder the implementation of organizational changes.

Promoting a Clan culture would bring greater flexibility and innovation through an internal orientation. However, such a transformation is unlikely to occur within five years, as suggested in the instrument, due to the academic population's resistance to change. Nevertheless, the integration of new faculty members may support this transition, aiming for improved coordination and a cohesive campus guided by clear norms to maintain stability, control, and effective functioning of core areas. In this scenario, the Academic Committee would need to implement strategies to improve fluidity in endorsing, accepting, and recommending processes under its purview. In other words, leadership capacities must align with fostering a collaborative environment (Rahman, Partiwi & Theopilus, 2021), a transition that is essential for implementing effective management strategies.

The academic population also identifies Adhocracy and Market cultures as preferred alternatives to Hierarchical culture. This may stem from a desire for greater recognition of creativity or a need for institutional support to implement change. These cultures are more externally oriented and differentiated, where external factors influence adaptation, and such cultural shifts may be temporary.

The largest negative gap appears in the Hierarchical culture, indicating that the environment is perceived as excessively strict, and the current enforcement of regulations is seen as overly rigid. This may be attributed to the fact that most faculty members have

an average tenure of about 30 years, during which regulations have become increasingly strict in tandem with changes in government and policy implementation. As a result, the Academic Committee is sometimes perceived as a “punisher.” However, thanks to the Committee’s actions, Campus Veracruz has benefited and holds one of the highest average ratings across the three core areas when compared to all other campuses of the Colegio de Postgraduados.

At this point, it is worth noting alignment with the arguments of Hartnell, Ou, Kinicki, Choi & Karam (2019), specifically regarding:

- a. Hierarchical culture will have a stronger positive relationship with an organization’s exploitation strategy than Clan, Adhocracy, or Market cultures.
- b. Clan, Adhocracy, and Market cultures will have a stronger positive relationship with an organization’s organic structure than Hierarchical culture.

Moreover, both the evidence from the aforementioned study and the results of this research indicate that leadership, strategy, and structure function as integration mechanisms that create and reinforce an organization’s culture. Sánchez-Quintanar and García-Cue (2013) analyzed the organizational climate at the Colegio de Postgraduados, Montecillo Campus (CPMon), highlighting that the institution’s organizational capacities and limitations are closely tied to those of the academic staff. They found that organizational behaviors at CP are governed by formal principles, concepts, and official definitions signaling a hierarchical organizational culture. However, a significant limitation among CPMon’s academic staff lies in two behaviors: on one hand, the assimilation of responsibility-avoidant behaviors and a tendency to express aggression diffusely, leading to frustration; on the other, the presence of a complex authority structure that has contributed to a form of Emotional Depression Syndrome within the academic community.

In this context, and considering the experience observed in CPMon’s organizational climate, it becomes essential that CPVer avoids such depressive dynamics within its academic community and fosters harmony to ensure the effective development of its core activities. Thus, it is necessary to implement a Clan culture as the organizational model to enable the academic body to achieve the expected success for CPVer.

The CPVer academic staff’s call for a Clan culture stems from a desire to dismantle deeply institutionalized routines and access new learning systems. This model focuses on the development and coordination of organizational members through teamwork, empowerment, and communication to increase flexibility and adaptability contrasting with a hierarchical culture that emphasizes process efficiency.

This suggests that attempts to change an organization’s culture by merely providing resources and expecting individuals to change their values and accepted routines are likely to be ineffective. Leaders must instead be encouraged to adopt a systems perspective and initiate cultural transformation by addressing the factors that support organizational culture.

While there is a need for values that support flexibility, the current culture hierarchical is primarily focused on process efficiency. It is geared toward stability, order, and control,

behaviors closely linked to resource and technology optimization through formalized routines that reduce ambiguity and enhance performance. However, these very traits are what CPVer's academic staff criticize, as internal controls and rigid structures support an exploitation strategy (Hartnell, Ou, Kinicki, Choi & Karam, 2019).

Leadership must also be considered. Although the institutional structure promotes decentralization through Collegiate Bodies enabling open communication channels and improving adaptability in response to environmental changes there is a gap in fostering flexibility. This is due to the institutional need to implement existing policies and achieve organizational goals, prompting the Academic Committee at CPVer to adopt a directive and dominant leadership style. This style is marked by a focus on clear performance indicators, strict adherence to rules, and the achievement of consistent, efficient results. Furthermore, the organizational structure explicitly defines the responsibilities of both the academic staff and the Academic Committee, with documented roles and processes for regulatory compliance, yielding consistently effective outcomes.

Nonetheless, Clan culture aligns with motivational leadership, where goals are achieved collaboratively, and relationships are built on mutual trust something CPVer academics have expressed they need. They indicate a desire for greater involvement in decision-making, citing a decline in collaboration and open communication that has been exacerbated by the hierarchical culture.

These findings suggest that CPVer's effectiveness and efficiency are not solely tied to organizational culture but are also influenced by other elements. The coexistence of the four cultural types explains the variations observed in the performance of a loosely coupled system. This study underscores the importance of identifying both the current and needed cultural configurations within such a system, while raising awareness about its inherent tensions. At the same time, the Collegiate Body known as the Academic Committee must promote both stability and change, efficiency and effectiveness, innovation and collaboration, as well as competition, to achieve institutional objectives and goals.

The results provide a framework for proposing organizational change at the Colegio de Postgraduados, recognizing that leadership, strategy, and structure are mechanisms that shape and reinforce organizational culture. Given the organization's nature as a loosely coupled system, meaningful cultural change must address these elements. So far, attempts at cultural change have largely failed, often ignored or becoming sources of internal conflict (Schein, 1998). Therefore, attention must be given to academics, incentives, control mechanisms, and the organizational structure itself, as these factors influence behavior and, in turn, drive changes in organizational culture (Hrebiniak, 2013). Accordingly, the Academic Committee at CPVer must adopt a systemic perspective and drive cultural transformation through the foundational elements of organizational culture, in alignment with upper management and institutional leadership.

CONCLUSIONS

Although it was identified that all four types of organizational culture (Clan, Adhocracy, Market, and Hierarchy) coexist at CPVer with the Hierarchical culture being dominant due to historical legacy, traditional academic models, departmentalization, emphasis on

research and teaching, and institutional conservatism some educational institutions are actively working to promote more collaborative, inclusive, and participatory cultures. These institutions recognize the benefits of fostering creativity, innovation, and diversity of thought in the academic environment, a desire also acknowledged by CPVer's academic staff. Their aspiration is to transition toward a Clan-type organizational culture one that is friendly, fosters interpersonal relationships, and addresses the current lack of cohesion caused by the existence of many subgroups within the institution. Ultimately, a Clan culture would enable CPVer's Collegiate Bodies to be seen as facilitators of the institution's mission. However, such a transition is unlikely to occur immediately. It must be acknowledged that the refinement of organizational culture is a continuous process. While gradual, this change is key to the institution's success. New adaptations must align with the goals of each core area and the indicators of the Colegio de Postgraduados, ensuring that strategies are implemented to achieve organizational effectiveness. It is also essential that, at the central level, organizational culture is considered in the design or modification of the institutional structure. Although the need for change is recognized, the nature of the institution requires further research to uncover the practical consequences of such change. These efforts must consider the effects of multiple cultural dimensions and the structural elements of the Colegio de Postgraduados. It is recommended that studies be conducted on the development of dynamic capabilities, resistance to change, and organizational resilience studies that should encompass not only the achievements, learning, and adaptations of academic staff but also those of students and administrative personnel. These efforts will provide greater clarity on the integrated functioning of the elements that make up this loosely coupled system.

REFERENCES

- Schein, E. (1988). *La cultura empresarial y el liderazgo*. Ciudad de México: Plaza & Janes Editores.
- Pedraza A., L., Obispo S., K., Vásquez G., L., & Gómez G., L. (2015). Cultura organizacional desde la teoría de Edgar Schein: Estudio fenomenológico. *Clío América*, 9(17), 17-25.
- Cancho Capcha, J. M., & Huamán Inga, L. (2020). Cultura organizacional y competitividad en la Facultad de Química e Ingeniería Química de la UNMSM, Perú, 2020. *Journal of Global Management Sciences*, 3(2), 98-113.
- Lysytsia, N., Wozniak, G., & Druker, A. (2021). Finding links between organisation's culture and innovation. The impact of organisational culture on university innovativeness. *PLOS ONE*, 16(10), e0258451
- Parveen, S., & Tripathi, K. (2021). Aligning organizational culture to enhance managerial effectiveness of academic leaders. *International Journal of Educational Management*, 35(3), 601-616
- Bernatová, M., & Kuklišová, M. (2024). Organizational culture at Slovak universities: A mediation analysis of the associated factors. *Entrepreneurship Education*
- Oliveira, P., & Alves, H. (2024). The role of organisational culture in university-firm cooperation: Multiple case studies. *International Journal of Organizational Analysis*.
- Cameron, K., & Quinn, R. (1999). *Diagnosing and Changing Organizational Culture: based on the competing values framework*. San Francisco, California, Estados Unidos de América: Jossey-Bass.
- Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, M. (2014). *Metodología de la Investigación* (6ta ed.). Distrito Federal, México: Mc Graw Hill Education.
- Robbins, S. (1999). *Comportamiento Organizacional* (8va ed.). Ciudad de México: Prentice-Hall Pearson.
- Smircich, L. (1983). Concepts of Culture and Organizational Analysis. *Administrative Science*, 28(3), 339-358.
- Sánchez, J., Tejeno, B., Yurrebaso, A., & Lanero, A. (2006). Cultura organizacional: Desentrañando vericuetos. *Revista de Antropología Iberoamericana*, 1(3), 380-403.
- Mebarki, S., & Barka, M. (2021). Organizational Culture at the University Level: A Study Using the OCAI Instrument. *Journal of Industrial Economics*, 13(2), 45-60.

- Paredes, J., & Paredes, M. (2021). Organizational Culture from the Focus of Values in Competition: Current and Desired Situation in the University of the Armed Forces ESPE. En *Artificial Intelligence, Computer and Software Engineering Advances* (pp. 42-56). Springer.
- Rahman, A., Partiwi, S. G., & Theopilus, D. S. (2021). University organizational culture mapping using Organizational Culture Assessment Instrument. *IOP Conference Series: Materials Science and Engineering*, 1072(1), 012069.
- Tikson, S. D. S., Hamzah, D., Mardiana, R., & Hamid, N. (2023). Analysis of University Culture Using the OCAI Instrument. En *Proceedings of the 7th International Conference on Accounting, Management and Economics (ICAME-7 2022)* (pp. 246–252). Atlantis Press.
- Hartnell, C., Ou, A., Kinicki, A., Choi, D., & Karam, E. (2019). A meta-analytic test of organizational culture's association with elements of an organization's system and its relative predictive validity on organizational outcomes. *Journal of Applied Psychology*, 104(6), 832-850. doi:10.1037/apl0000380
- Sánchez Quintanar, C. y García Cue, J. L. (2013). Clima organizacional y valores: indicadores de necesidades y limitaciones para el cambio Caso: Colegio de Posgraduados. *Revista Educación*, 37(2), 17-38.
- Hrebiniak, L.G. (2013) *Hacer que la estrategia funcione: liderar la ejecución y el cambio efectivo*. Upper Saddle River, New Jersey, Pearson Education, Inc.

