ORGANIZATIONAL CULTURE: DENISON'S FOCUS ON ECUADORIAN HIGHER EDUCATION INSTITUTIONS

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Summary: Studies of organizational culture in universities and institutes of higher education have acquired relevance due to the valuable information they generate about the identity of an organization. The organizational culture described as a set of values, beliefs and artifacts not only define the behavior of people and social entities, but are aspects that are transmitted from generation to generation, through the teaching-learning processes and that are transmitted through the knowledge, attitudes and behavior that the members of the educational faculty have. Hence, the importance of developing this research work that seeks to characterize the organizational culture, analyze the dominant dimensions and design the cultural model in a higher education institute in Ecuador. For this purpose, the Denison instrument is applied to the teaching population of the institute. In the treatment of the information, the statistical package SPSS and Microsoft Excel are used, as well as statistical tools such as Cronbach's Alpha and Principal Component Analysis. The results reveal the dominance of a mission-oriented culture.

Keywords: Characterization, main components, cultural dimensions, higher education, misión.

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1. Introduction

In the last decade, several studies have been developed on organizational culture in higher education institutions, since organizations have begun to recognize the impact that culture has on the success of management. Universities with a strong and positive culture have higher student retention rates, higher levels of job satisfaction, and overall a better reputation internationally (Denison, 2015).

Likewise, the dominant organizational culture in a social group generates a sense of identity, orients behaviors towards organizational goals, facilitates the adaptation of the organization with the environment, tends to learning, prepares its members to assume change and allows transmitting

values, habits and beliefs (Alcocer and Vera, 2004; Carrillo et al., 2021). This is how, when organizational culture generates value, it becomes a competitive advantage (Franco et al., 2022).

In this regard, the dominant organizational culture in higher education institutions has been characterized by being hierarchical, research-oriented and focused on knowledge and discipline. However, in recent years this vision has evolved to reflect a greater focus on management, innovation, diversity and inclusion, development of soft skills, emotional competencies, as well as teaching based on transparency of information and accountability (Van der Wende, 2014; Krumboltz et al., 2020).

Currently, university culture is open, collaborative and interdisciplinary, with a high focus on training and applied research and the search for internationalization through accreditation processes and placement in important places in world rankings (Kehm, 2015). According to Kim Lee and Park (2019), culture has a significant influence on the job satisfaction and commitment of university faculty, and this, in turn, generates an impact on the quality of teaching and learning.

Similarly, several studies have found a positive relationship between strong organizational culture and organizational success in terms of resources, academic performance, innovation, organizational commitment, and international reputation (Jsiswal et al., 2019; Akande et al., 2020). Precisely, the theory indicates that organizational culture plays a preponderant role, since it is considered as a determinant of success or failure (Cameron and Quinn 2011).

Along the same lines, Schein (2010) argues that culture is a critical element to understand organizational dynamics and constitutes the entity through which employees act and behave in the world of work. Therefore, in the context of higher education, the diagnosis of organizational culture is fundamental to perceive and improve the effectiveness of educational institutions based on the diagnosis and characterization of values, norms and beliefs shared by the actors of the university education system.

Likewise, Yuliawati and Suhartanto (2019) affirm that organizational culture is essential for the longterm success of higher education and, and represents a strategic element that allows to face changes and survive in increasingly competitive environments. These changes have been motivated by a number of factors such as increasing competition in higher education institutions, the globalization of education, new generations of students and the changing demands of the labor market.

According to Singh and Singh (2020) in the university context it is necessary to strengthen the culture of innovation and disciplinary that encourages and supports the continuous learning of students, teachers and employees, emphasizing the integral formation, research and commitment of the members of the university community. In addition, it highlights that learning cultures are the key axis of any organization and, especially for higher education institutions.

In the case of higher education institutions in Ecuador, accreditation is a key tool to ensure that higher education has standards and requirements demanded by national and international standards. For this purpose, the Council for Quality Assurance of Higher Education (CACES) is responsible for the accreditation of universities and technical and technological institutes in order to guarantee the training of professionals with high levels of education that meet the social, economic, technological and cultural needs of the national and global environment (CACES, 2021).

According to the World Bank (2019), international accreditation ensures that degrees granted by Ecuadorian higher education institutions are recognized abroad to ensure the mobility of their students. Indeed, the strong organizational culture, based on academic excellence, innovation, research, technology transfer and social responsibility facilitate the implementation of international standards and criteria. It is therefore critical that higher education institutions analyse, define and understand their organizational culture.

Thus, Table 1 shows some international studies developed in recent years on organizational culture in universities and higher education institutions (HEIs).



Studies of organizational culture in HEIs at an international level

l am a student	Authors							
Understanding university culture: A qualitative study of australian	(Brown, M; Lewis, P y							
universities.	Sheedy, V 2011)							
Exploring the relationship between university culture and	(Reio, T, G y Shuck 2015)							
employee engagement.								
A study on the impact of organizational culture on employee	(Chakraborty y Basu,							
engagement in higher education institutions in West Bengal	2017)							
University quality and organizational culture in Higher Education	(Esquinca and Gaggiotti,							
Institutions in Mexico: conceptual approaches.	2019)							
Organizational culture of the Public Universities of the	(Rivas, 2020)							
Municipality of Cabimas.								
University research, climate and organizational culture at the (Farfán et al., 2020								
César Vallejo University - Lima East - SJL.								
Culture and effectiveness in Spanish universities.	(Duarte, I; Aparicio-							
	Chueca, P and Ramos, A							
	2021)							
Organizational culture in higher education institutions:	(Siqueiros-Quintana and							
conceptualization, measures and associated variables.	Vera-Noriega, 2022)							

Likewise, Ecuadorian higher education institutions are in a permanent search for high performance, growth, satisfaction and market participation in the international arena, facing the effects of the pandemic, economic recession and government budget restrictions, acquiring a new vision to face the new changes, emphasizing labor market orientations, digital era, student profile and new teacher skills (Vega Falcon et al., 2021). Thus, through exploratory documentary research, some current studies have been identified on the subject of organizational culture in higher education institutions (HEIs) in Ecuador, as shown in Table 2. In these works it stands out that most HEIs have dominant organizational cultures of market type and hierarchical, while all would like a clan typology. These investigations also use the cultural models of Denison and, Cameron and Quinn.

Table 2
Studies of organizational culture in the IES of Ecuador

I am a student	Authors						
Teamwork and orientation to organizational change of students in	(Galarza et al., 2020)						
an Ecuadorian public university							
Deciphering the dominant and preferred culture in the university	(Rosas et al, 2020)						
environment from the model of values by competence							
Study of FLACSO's commitment management and organizational	(Cuenca and López,						
culture	2020)						
Incidence of the socioeconomic level of university students in the	(Carrillo et al, 2020)						
organizational culture							
Organizational Culture: Characteristic Approaches at the	(Coca et al., 2021)						
University of Guayaquil							
Organizational culture, classroom situation and development of	(Bravo et al., 2021)						
the Universidad Tecnológica Empresarial de Guayaquil - Ecuador							
Organizational Culture from the Focus of Values in Competition:	(Carrillo et al., 2021)						
Current and Desired Situation in the University of the Armed							
Forces ESPE							
Characterization of Organizational Culture at the University of	(Carrillo et al., 2021)						
the Armed Forces ESPE							

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Autopoiesis and organized anarchy in universities (Franco et al.,2022)
Predominant cultural dimensions in the University of the Armed (Carrillo et al., 2022)

Forces ESPE

Organizational Culture: success criteria in Higher Education (Carrillo et al., 2023)

institutions in Ecuador

Therefore, this research aims to carry out a theoretical and empirical review on the organizational culture in the field of higher education, characterize the organizational culture in the Instituto Superior Tecnológico Pelileo (ISTP) of Ecuador considering that it is a center of higher education recently accredited and has been in the sector since 1978. For this purpose, the cultural model of Denison (1997) is used. Also, the study seeks to establish the dominant cultural dimensions in this HEI and design a cultural model of the institute through the analysis of main components.

Finally, this article, in the first place, deals with theoretical and empirical studies of organizational culture, in the following section the applied methodology is described. Thirdly, the results obtained are presented and discussed. Finally, the conclusions and future lines of research are described.

2. Literary review

Organizational culture is a concept widely analyzed in the literature of business management and refers to the set of values, beliefs, norms and behaviors that characterize an organization (Kehm, 2015), therefore, culture is an effective force that influences productivity, innovation and the success of the organization. In this line, Chiavento (2010) affirms that the positive, solid and coherent culture attracts and retains employees and motivates them towards the fulfillment of organizational objectives, allows to create a sense of belonging and community among the members, while, a negative organizational culture can have adverse effects such as high rates of staff turnover, Low morale and low performance.

According to Shein (2010), organizational culture is the pattern of basic assumptions that a group of individuals developed while learning to face their problems of external adaptation and internal integration. Therefore, the organizational culture is the reflection of the identity of the company that is visible in the way tasks are carried out, in communication, in decision-making, in the commitment and motivation of employees, in innovation and in the ability to adapt to change (O'Reily et al., 2010; Helfat and Peteraf, 2015).

Along the same lines, Rodríguez (2019) points out that organizational culture is a set of values, norms, beliefs and behaviors shared by the members of an organization that influence their performance and their ability to adapt in the environment. In this regard, Atbach and Knight (2007) argue that organizational culture interprets the identity of an organization. For their part, Cameron and Quinn (2011) state that organizational culture is responsible for the performance of entities and argue that a strong and healthy culture is the success factor of any organization.

Precisely, Denison et al. (2003) describe four cultural dimensions that allow defining the culture and dominant characteristics in any organization. First, there is Engagement, which refers to the empowerment of people, loyalty, commitment and motivation of employees. It is subdivided into empowerment, team orientation and capacity building. Secondly, Adaptability is presented, which is the ability to respond to changes and adapt to new challenges. This relates to innovation, creativity and responsiveness. It is subdivided into organizational learning, customer focus and change creation.

The third cultural dimension that Denison manifests is the Mission, which refers to the sense of clarity and commitment of the organization to its purpose and objectives. This trait is visualized in strategic direction, vision, goals and objectives. Finally, the fourth dimension is called Consistency and studies the behavior of individuals is based on a set of core values, staff has the ability to achieve agreements. A culture of consistency helps the organization maintain quality and consistency in its products and/or services and improve customer satisfaction. It is subdivided into coordination and integration, agreements and core values (Denison et al, 1997).

3. Methodology

The design of the research is quantitative, since the results and discussion are based on the information collected and treated from the application of the survey of the cultural model of Denison (1997). The Denison survey together with the competing values model of Cameron and Quinn (1996) are the most used in studies worldwide to diagnose and characterize the organizational culture in all types of entities. In this sense, Denison's model contains twelve cultural variables structured within four generic dimensions: 1) Involvement (decision making, teamwork, capacity building), 2) Consistency (values, agreements, coordination and integration). 3) Adaptability (change orientation, customer orientation, organizational learning), 4) Mission (direction and strategic purposes, goals and objectives, vision).

The object of study includes the Instituto Superior Tecnológico Pelileo which is located in the province of Tungurahua of Ecuador and trains professionals in software development, accounting, textile manufacturing, gastronomy, electromechanics, animal production and flori-fruticulture. In this case, the research is directed to the teaching community made up of 80 professors and coordinators in order to examine the perception they have about the predominant organizational culture in the ISTP. Whereas, the senior management of the institute provides the facilities for the survey to carry out a census is applied through Google forms.

The research is non-experimental and cross-sectional, since the object of study is not altered and the information is collected at a certain time as defined by Hernández et al. (2012). The information collected is processed in Microsoft Excel for the establishment of the dominant cultural dimensions, while, for the design of the cultural model, the statistical package SPSS version 23 is used. Additionally, statistics such as Cronbach's Alpha and ACP Principal Component Analysis are used.

4. Results

4.1. Instrument reliability analysis

The use of Cronbach's Alpha coefficient allows to evaluate the quality of the measures obtained through the set of 60 *items* of the Denison survey to guarantee the validity and reliability of this. Thus, Table 3 shows that this coefficient has a value of 0.96, therefore, the use of the Denison instrument in the ISTP is highly consistent due to its proximity to the unit (100%).

Table 3

Reliability statistics					
Alfa de Cronbach	N of elements				
,960	60				

4.2. General respondent data

The ISTP teaching staff that participated in the study is made up of 50% men and 50% women, of whom 85% work as teachers and 15% are coordinators. Likewise, 80.10% of the respondents are between 30 and 40 years old and 67.50% work in the higher education institution for more than 5 years. Therefore, teachers can evaluate the situations perceived in the field of organizational culture based on their experiences and experiences acquired during their stay at work.

4.3. Dominant cultural dimensions

According to the cultural dimensions of Denison and the results obtained from the treatment of the surveys, it is necessary that the cultural predominance in the ISTP, from the perception of the teaching community, in order of assessment, is given by the Mission (89.10 points), followed by Adaptability (87.18 points), Involvement (87 points) and Consistency (86.98 points). as shown in Fig. 1. Therefore, the members of the ISTP prioritize their activities towards the sense of clarity and commitment of the organization to its purpose and objectives, that is, they dedicate their efforts towards the achievement of the mission.

Secondly, the organization's capacity to respond to changes and adaptation to new challenges stands out, based on innovation, creativity and responsiveness. The third predominant dimension reveals that the ISTP works for the empowerment of people, loyalty, commitment and motivation of employees and, finally, teachers perceive that the behavior of individuals in the ISTP is based on a set of core values, staff have the ability to achieve agreements to maintain quality and consistency in education, improving the satisfaction of its students, teachers and administrators.

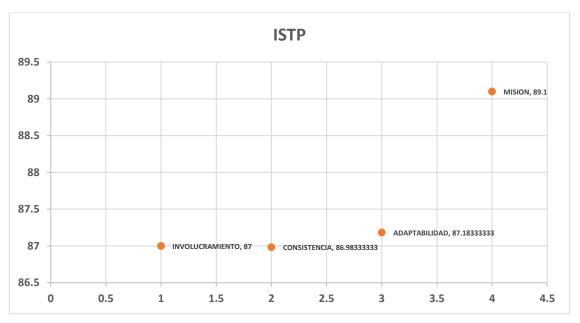


Fig. 1 Cultural dimensions in the ISTP

4.4. Dominant cultural characteristics

Fig. 2 and Table 4 show the twelve characteristics or cultural variables that make up the dimensions of Denison's model based on the results obtained in the treatment of the surveys. Therefore, there is a predominance of the cultural characteristics of teamwork (4.57 points), goals and objectives (4.54 points) and mink (4.50 points). That is, in the ISTP the teaching community considers that the organization is a team of people who act as a unit, interact and relate to each other to achieve common objectives, goals and vision of the institution (Robbins and Judge, 2009).

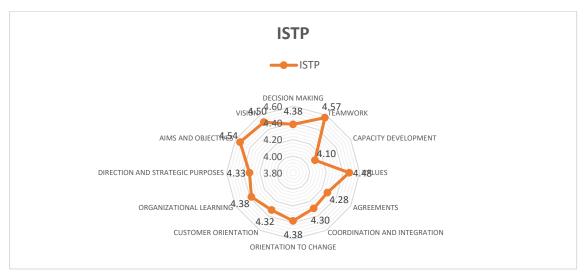


Fig. 2 Cultural characteristics in the ISTP



Table 4

Denison survey results applied to ISTP teachers

	Dimension	Value
		4.20
	DECISION MAKING	4,38
1	Most of the members of this group are very committed to their work Decisions are often made at the level with the best information	4,38
		4,36 4,24
	Information is widely shared and the information you need can be obtained Each member believes they can have a positive impact on the group	4,24 4,44
4	The planning of our work is continuous and involves everyone to some	4,44
5	degree.	4,50
COD.	TEAMWORK	4,57
	Cooperation between the different groups of this organization is actively	
6	encouraged.	4,54
7	Working in this group is like being part of a team	4,74
	We usually perform tasks as a team, instead of unloading the weight in the	
_	direction	4,51
9	Groups and "NO" individuals are the main pillars of this organization	4,44
10	Work is organized so that each person understands the relationship	4,60
10	between their work and the goals of the organization.	4,00
COD.	CAPACITY BUILDING	4,10
	Authority is delegated so that people can act on their own	4,55
	Training is provided to future group leaders	4,05
	This company continuously invests in the development of the capabilities	·
13	of its members	3,83
14	People's ability is seen as an important source of competitive advantage	4,59
15	Problems often arise because we don't have the skills to do the job.	3,50
COD.	VALUES	4,48
16	Leaders and directors practice what they proclaim	4,43
	There is a characteristic management style with a set of distinctive	
17	practices	4,40
40	There is a clear and consistent set of values that governs the way we	4 5 4
	conduct ourselves.	4,54
19	Ignoring the core values of this group will cause you problems There is a code of ethics that guides our behavior and helps us	4,26
20	distinguish what is right.	4,75
COD.	AGREEMENTS	4,28
21	When there are disagreements, we work hard to find win-win solutions.	4,40
22	This group has a "strong" culture	4,51
23	It is easy for us to achieve consensus, even on difficult issues	4,30
24	We often struggle to reach agreements on key issues.	3,76
25	There is clear agreement about the right and wrong way of doing things	4,41
COD.	COORDINATION AND INTEGRATION	4,30
26	The way we work is consistent and predictable	4,54
2-	People from different groups in this organization have a common	4.44
	perspective	4,44

**	``````````````````````````````````````	*****
	It is easy to coordinate projects between the different groups of this	
28	organization	4,30
	Working with someone from another group in this organization is like	
29	working with someone from another organization.	3,73
20	There is a good alignment of objectives between the different hierarchical	4.40
30	levels	4,48
COD	CHANGE ORIENTATION	4,38
31	The way we do things is flexible and easy to change	4,43
_	We respond well to changes in the environment	4,51
	We continually embrace new and better ways of doing things	4,59
	Attempts to make changes often generate resistance from the team	4,04
٠.	The different groups of this organization often cooperate to introduce	.,
35	changes	4,34
COD.	CUSTOMER ORIENTATION	4,32
36	Feedback and recommendations from our customers often lead to changes	4,46
37	Information about our customers influences our decisions	4,46
	We all have a deep understanding of the wants and needs of our	
38	environment.	4,54
39	Our decisions often ignore the interests of customers	3,53
40	We encourage the direct contact of our people with customers	4,60
COD.	ORGANIZATIONAL LEARNING	4,38
41	We see failure as an opportunity to learn and improve	4,65
42	Innovation is something that the company fosters	4,69
43	Many ideas "get lost along the way"	3,73
44	Learning is an important goal in our daily work	4,70
45	We make sure that "the right hand knows what the left hand is doing"	4,14
COD.	DIRECTION AND STRATEGIC PURPOSES	4,33
46	This organization has a long-term project and orientation	4,63
	Our strategy serves as an example to other organizations	4,50
	This organization has a clear mission that gives meaning and direction	•
48	to our work	4,65
49	This organization has a clear strategy for the future	4,60
50	The strategic orientation of this organization is not clear to me	3,25
COD.	GOALS AND OBJECTIVES	4,54
	There is broad agreement on the goals to be achieved	4,58
	Leaders and directors set ambitious but realistic goals	4,51
	Management leads us towards the goals we are trying to achieve	4,63
	We continuously compare our progress with the goals set	4,53
	The people in this organization understand what needs to be done to	,
55	succeed in the long run.	4,45
COD.	VISION	4,50
- •	We have a shared vision of what this organization will look like in the	,
56	future.	4,63
57	Leaders and directors have a long-term perspective	4,53
58	Meeting short-term goals often compromises our long-term vision	4,36
59	Our vision generates enthusiasm and motivation among us	4,58



We can meet short-term demands without compromising our long-term 60 vision. 4,43

Note: Items taken from the Denison survey (1997) applied to the ISTP

4.5. Characterization of organizational culture in the ISTP from Denison's approach

Starting from Table 4 and selecting each of the variables or items that have the highest score in each of the cultural characteristics, the following paragraph presents the characterization or definition of the dominant organizational culture in the ISTP, under the Denison cultural model approach.

In the ISTP the planning of the work is continuous and involves all its members to some degree. Working at ISTP is like being part of a team. The ability of people is seen as an important source of competitive advantage and there is an ethical code that guides the behavior of its members that helps them distinguish what is right. The ISTP has a "strong" culture with a consistent and predictable way of working. New and better ways of doing things are continually being adopted. Direct contact between members of the institute and students is encouraged. Learning is an important goal in everyday work. The organization has a clear mission that gives meaning and direction to work. Management leads to achieving goals and the vision is shared about what this organization will look like in the future.

4.6. ISTP cultural model low in principal component analysis

Principal component analysis (PCA) is a statistical technique used to reduce the dimensionality of a dataset, preserving as much variability as possible, therefore, it allows to reduce the complexity of a dataset by identifying the most important variables that explain the greatest amount of variation in the data and contributes to eliminate the multicollinearity of two or more variables highly correlated with each other.

Table 5 shows that the data set of this study is suitable for the analysis of the main component ACP, given that the Kaiser-Meyer-Olkin Measure is close to 0.7, the Chi-square coefficient is high and positive and the level of significance is less than 0.05.

Table 5

KMO and Bartlett Test

Kaiser-Meyer-Olkin sampling adequacy measure		,686
Bartlett's sphericity test Approx. Chi-square		4723,748
	Gl	1770
	Itself.	,000

to. It is based on correlations

In the development of this cultural model, the total variance explained is determined, which indicates how much of the information contained in the original data can be explained by the main components. If this variance is high it means that the selected principal components are capable of capturing a large amount of information from the original data, however, it is also important to consider the interpretation of the principal components and the usefulness of these in the specific case study.

Thus, Table 6 has a total variance explained from 76.11% to the fourteenth component of the model, that is, the fourteen principal components, as shown in Fig. 3, capture 76.11% of the total variance present in the original data. Meanwhile, for this case study, up to 5 main components are selected that capture 55.41% of the total variance explained.



Total variance explained

	iotal variance explained							
	Initial eigenvalues ^a			Sums of extraction of squared loads				
			%			%		
	Total	% variance	Cumulative	Total	% variance	Cumulative		
1	12,456	31,189	31,189	22,190	36,983	36,983		
2	6,093	15,256	46,445	5,414	9,023	46,006		
3	2,087	5,225	51,670	1,934	3,223	49,229		
4	1,728	4,328	55,997	1,818	3,030	52,258		
5	1,626	4,072	60,070	1,892	3,154	55,412		
6	1,455	3,644	63,714	1,968	3,280	58,692		
7	1,297	3,249	66,962	2,033	3,389	62,081		
8	1,022	2,559	69,521	1,189	1,982	64,063		
9	,952	2,384	71,905	1,543	2,571	66,634		
10	,892	2,235	74,139	1,224	2,040	68,674		
11	,863	2,160	76,300	1,457	2,429	71,103		
12	,794	1,988	78,287	,872	1,454	72,556		
13	,751	1,880	80,167	1,024	1,706	74,263		
14	,679	1,701	81,868	1,107	1,845	76,108		
15	,613	1,534	83,402					
16	,576	1,442	84,844					
17	,524	1,311	86,155					
18	,460	1,151	87,306					
19	,417	1,045	88,351					
20	,385	,965	89,316					
21	,358	,896	90,212					
22	,335	,838	91,050					
23	,313	,784	91,834					
24	,271	,678	92,512					
25	,250	,626	93,138					
26	,239	,599	93,738					
27	,209	,524	94,262					
28	,193	,484	94,746					
29	,180	,451	95,197					
30	,165	,413	95,610					
31	,155	,389	95,999					
32	,150	,376	96,375					
33	,143	,359	96,734					
34	,134	,334	97,069					
35	,122	,304	97,373					
36	,116	,290	97,663					
37	,110	,275	97,938					
38	,096	,241	98,178					
39	,094	,235	98,413					
40	,084	,209	98,622					
41	,071	,177	98,799					
42	,063	,158	98,957					
43	,056	,141	99,098					
44	,055	,137	99,235					
45	,048	,119	99,355					
46	,044	,111	99,466					
47	,040	,100	99,566					
	,0-10	,100	77,300					

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48	,037	,094	99,660	
49	,026	,065	99,725	
50	,022	,056	99,781	
51	,020	,050	99,831	
52	,017	,043	99,874	
53	,015	,037	99,911	
54	,009	,023	99,934	
55	,008	,021	99,955	
56	,005	,014	99,968	
57	,005	,012	99,981	
58	,003	,008	99,989	
59	,003	,008	99,996	
60	,001	,004	100,000	

to. When analyzing a covariance matrix, the initial eigenvalues are the same between the rescaled and pure solution.

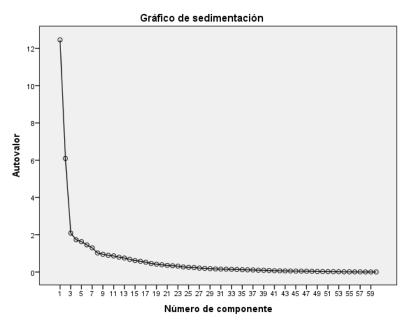


Fig. 3 Sedimentation Graph

Finally, Table 7 defines the elements of each of the five main components, considering those that have covariances equal to or greater than 0.7. Therefore, the cultural model for the ISTP is structured as follows:

Component 1: The members are accustomed to performing tasks as a team, instead of offloading the weight on the direction and, the organization has a clear mission that gives meaning and direction to the work.

Component 2: Leaders and directors set ambitious but realistic goals, and leaders and directors have a long-term perspective.

Component 3: Student feedback and recommendations often lead to change, and information about students influences decision-making.

Component 4: Most members of this organization are very committed to their work, and decisions are often made at the level that has the best information.

Component 5: The ISTP continuously invests in the development of the capacities of its members.



Table 7

Component Matrix

	1	2	3	4	5
Most of the members of this group are very committed to their work	,233	,159	,204	,817	,074
Decisions are often made at the level with the best information	,089	,154	,199	,808	,048
We usually perform tasks as a team, instead of unloading the weight in the direction	,715	- ,007	,018	,310	,143
This company continuously invests in the development of the capabilities of its members	,100	,238	,103	,246	,806
Feedback and recommendations from our customers often lead to changes	,312	,158	,704	,171	,068
Information about our customers influences our decisions	,199	,030	,724	,203	,185
This organization has a clear mission that gives meaning and direction to our work	,716	,355	,190	,033	025,
Leaders and directors set ambitious but realistic goals	,193	,838	,057	,206	,116
Leaders and directors have a long-term perspective	,269	,741	,351	,148	,137

Similarly, starting from the components defined in the cultural model of the ISTP under the analysis of principal components and the cultural model of Denison, the following paragraph describes the characterization of the dominant cultural model in the institute of higher education:

The members are accustomed to performing tasks as a team, instead of offloading the weight on the direction and, the organization has a clear mission that gives meaning and direction to the work. Leaders and directors set ambitious but realistic goals, and leaders and directors have a long-term perspective. Student feedback and recommendations often lead to changes and information about students influences decision-making. Most members of this organization are very committed to their work, and decisions are often made at the level that has the best information. The ISTP continuously invests in the development of the capacities of its members.

Therefore, the characterization described in point 4.5 and in this numeral are complementary and expose more specifically the dominant organizational culture in the Instituto Superior Tecnológico Pelileo from the perception of the teaching community that works in it.

5. Discussion

According to the study developed by Carrillo et al. (2023) it is determined that the dominant organizational culture in the ITSP under the Cameron and Quinn model is market and is characterized because the organization is results-oriented, has a tutor, counselor and paternalistic leadership. Management is oriented to tough and demanding competitiveness. Competitive actions and achievements focus on capturing leadership in the sector based success on human talent (p.125).

In this study, through the model of Denison (1997) it is determined that in the organization the cultural dimension of the Mission predominates, that is, the ISTP prioritizes its activities towards the sense of clarity and commitment of the organization with its purpose and objectives, that is, they dedicate their efforts towards the achievement of results. Therefore, both models drive the characterization of the organizational culture of the institute towards the achievement of the mission and results.

Likewise, this work deduces that the organizational culture is based on participatory planning, vision-oriented teamwork, the ability of people focused on continuous learning, task innovation, internal and external customer service, long-term leadership, commitment of organizational members and empowered decision making. Consequently, the organizational culture and cultural dimensions of this higher education institution is not far from the reality of other national and world universities that



focus on a market and hierarchical typology with an orientation to innovation and constant adaptation to changes in the environment.

6. Conclusions

The organizational culture is an important aspect in the management of higher education institutions, whether these universities or institutes, since its diagnosis allows to determine the dominant cultural factors and dimensions that form the values, habits and customs that induce the behavior of teachers and students in the face of the changing teaching-learning process. Therefore, in the last decade these studies have increased, so that they become a competitive advantage for education through the generation of value within the organization and outside it.

The cultural models of Cameron and Quinn and Denison are the most used in research, since both allow diagnosing the situation of the dominant cultural dimensions, characterizing the current and desired organizational culture and designing their own cultural models through the support of statistical tools such as factor analysis, highlighting that this analysis allows to achieve a cultural characterization of the organization.

In the case of studies on organizational culture in higher education centers in Ecuador, it has been revealed that the dominant cultural typologies are market and hierarchical, mainly due to the prevailing discipline in these, a factor that becomes a strength within professional training. Likewise, in the study of the organizational culture of the Instituto Superior Tecnológico Pelileo the cultural domain of the market and hierarchical is established with a high orientation towards results and fulfillment of the mission.

Considering the cultural characterization established in this study for the ISTP and the characterization of the cultural model, the current and dominant organizational culture in the institution is defined as follows: "In the ISTP work planning is continuous and participatory. Work is ethical, team-based, consistent and predictable. The capacity of people is a competitive advantage and the organization continuously invests in the development of this. Learning is an important goal in everyday work, so new and better ways of doing things are continually adopted. Direct contact between members of the institute and students is encouraged. The organization has a clear mission that gives meaning and direction to the work and, the direction leads towards the achievement of objectives and vision. Most members of this organization are very committed, and decisions are often made at the level that has the best information."

Finally, research topics are proposed to develop comparative studies on the cultural models of different institutions and higher education centers to establish cultural gaps and design strategies that allow organizational culture to become a critical factor of success. In addition, it is suggested to expand the diagnostic studies of organizational culture with the incorporation of qualitative tools such as the realization of focus groups.

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