

# CHANGING PERCEPTIONS OF ORGANIZATIONAL CLIMATE AMONG MEXICAN BUSINESS SCHOOL TEACHERS

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## ABSTRACT

*This article investigates the relationship between organizational climate and faculty's perception of organization climate. Faculty members of a school of business in Mexico participated in a transversal study conducted in 2013 and 2018. A questionnaire was used to collect primary data on thirteen factors related to organization, work conditions, individual characteristics, and organization surroundings. Statistical tests including factor analysis, correlation analysis and level of reliability were used in the analysis. The results showed no significant difference in faculty perception even though the school had three different directors.*

**JEL:** M140, L220

**KEYWORDS:** Organizational Climate, Professors, Conduct

## INTRODUCTION

Organizations desire a pleasant coexistence among individuals so that firm objectives may be obtained under the best suitable conditions. This investigation analyzed changes perceived by the faculty regarding organizational climate in the Academic Unit of Accounting and Administration of the Autonomous University of Zacatecas (UACA UAZ) located in the center of Mexico. The University is a public entity with approximately 40,000 students. The Academic Unit is made up of more than 2,300 students and 103 staff. The one bachelor's degree has two categories: required schooling and semi required schooling. There are five postgraduate programs, one specialization, three masters, and one doctorate. The staff lectures in accordance to their level in the aforementioned programs. We utilize a questionnaire in this study. The same questionnaire was distributed in both, 2013 and 2018, to compare the perception of conditions expressed by the staff in 2013 and 2018. There have been three directors, at the school, during those periods with each applying their own style of administration. Because of varied style characteristics there were imperceptible changes that revealed themselves when said measures were taken. The existence of these changes will be expressed to the succeeding administrative team to facilitate appropriate decisions.

Organizational climate studies identify the existing conditions of the institution, permitting the necessary changes to be made so schools function adequately and satisfies the objectives for which it was created. The organization climate theme has been studied in diverse manners by investigators including Litwing and Stinger (1968), Schein (1973) Gonzalez and Parra (2011). The result of this type of investigation improves the studying of the organizations. Reed (1996) expresses the importance of analyzing the organization from its exterior context to find the condition it is in. This may be interpreted as the philosophical content of the moment, to its members and ties. Several studies measure the organizational climate of various institutions

including some of the most diverse university faculties in Mexico, Argentina and Spain. Results show they meet common conditions, yet differ in characteristics (Carmona, 2019).

Using different time periods, the authors examine a single organization to see how it has changed with respect to these situations. Various studies exist which permit identifying how the organizational climate has changed in the last decades. Vega et al (2006) give an account and present the form as to how this study has developed in Latin America. This theme study starts with few elements that define it bit by bit and winds up with many elements which better explain the organization (Alva & Dominguez, 2015).

Individuals that head an institution decide on the appropriate path to take to reach the objectives set forth from the start or objectives decided by the administration. The following issues should be taken in account in this type of study: personalities of each head, experience as head of other organizations and the ability or acquired studies in each professional preparation. Considering this idea, two administrators heading the same organization may lead to slightly different situations. They may have similar curriculum but have different personalities. This situation makes us raise the following investigative question. What factors changed in the perception of the professors in the Organizational Climate in the Accounting and Administration Academic Unit of the Autonomous University of Zacatecas in Mexico in the years 2013 and 2018? With this question it is possible to express the following objective: Identify factors that changed in the perception of the professors in the organizational climate in the Accounting and Administration Unit of the Autonomous University of Zacatecas in Mexico in the year 2013 and 2018.

To respond adequately to the question, we consider the following Hypothesis: No difference exists in the perception of the professors in the organizational climate in the Accounting and Administration Academic Unit of the Autonomous University of Zacatecas in Mexico between the year 2013 and 2018 in any of the factors. This work resolves the affirmation recently expressed from the introduction of the theme in question. Work the 1960 and 1970 are fundamental in understanding how we arrived at today's themes. These works include Latin American authors who speak of the organization being studied in more recent times. We pose a method utilized that involves the application of various statistical processes that permit us to compare the results obtained in the same organization at two different periods 2013 and 2018. The results are analyzed in light of the statistical analysis that permit to reject or not the expressed hypothesis.

## LITERATURE REVIEW

Many theorists have studied organizational climate. Each theorist incorporates an aspect that distinguishes their perception from the others. Garcia Solarte (2009) argues that organizational climate is difficult to explain as in each organization there exists persons with different ideas, personalities and attitudes that make it an exclusive condition to the organization. This condition cannot be generalized throughout time, not even to its own organization. Given this condition, Carmona (2019) wrote of organizational climate conditions which can be conceptualized. He expresses conditions that should be considered. An important condition is the physical well-being of the person and team in which the work is carried out. Another consideration is conditions such as companionship, satisfaction and the aptitudes of those sharing day-to-day physical or virtual space. If we consider Shein's (1973) vision with regard to the organizational culture, we note that what occurs in the organization is a pattern of shared suppositions with which the group learns to live. These results are transmitted group by group, in conformance to the individuals being integrated to fill vacancies or posts for the development and good of the organization. Near the end of the 60's some investigators expressed that organizational climate could function in various dimensions: structure, individual responsibility, and remuneration, risks, support and conflict tolerance. We observe that different visions exist to describe the organization and each one intends to describe it as he/she believes this administrative situation should be studied (Litwin & Stringer, 1968).

Other authors argue organizational behavior should be an amalgam where such situations could be identified as the interpersonal relations that exist between the different individuals. This promotes achievement of the organization by having common visions that would be a greater collective than the sums of those of an individual (Rodriguez, 1999). Other authors propose the organizational climate should be an amalgam where situations can be identified as interpersonal relations existing with different individuals. These relations promote achieving the organization's objectives by having common visions which would be greater than the collective sum of the individuals (Rodriguez, 1999). Salazar and his collaborators (2009) include in their vision how the organizational climate should conform across characteristic integration of the following: the physical environment, the structure of the organization, the existing social environment, the personal characteristics. These characteristics coincide with those expressed by Rodriguez, who argued that organizational climate generates conditions which make it possible to promote, or not, the administration of its employees.

Reciprocity exists in the same dynamic. The organizational climate is not only defined by persons that influence it, but also as the sum of the attitudes of individuals. The organizational climate will also influence people as a cost of excellence, as expressed by Aubert and Gaulejac (1991).

Just as it is very important to speak about the impact that the organization has on individuals and then these on the organization, Gonçalves (2000) expresses that it is fundamental to include results of psychological factors as part of the basic components of the organizational climate. This situation permits adding personal characteristics, communication, and retribution of useful and potentially collaborative ideas. This idea permits the direct manner in how awards and merits are expressed across multiple conditions to feel recognized as part of the organization. Therefore, the organizational climate that exists results from individualized visions and what is perceived. It also results from perception ranging from what employees have done to the conduct or actions which persons say they feel, how the organization benefits some, and its prejudice of others (Anzola, 2003). Méndez Álvarez (2006) expresses his opinion about how organizational climate is perceived, noting that what is produced by the environment of the organization itself and perceived by the members themselves occurs thanks to social interaction which gives the feeling of credibility and participation. Perception is also affected by attitudes which directly impact the satisfaction and efficiency to carry out their daily work. An organization is not an isolated entity and does not exist for itself. Rather, it is an institution that interacts with other organizations or with other individuals. Individuals represent an immediate influence as to how the organizational climate is modified and exists, externally to its physical walls, and how this condition interacts with its outside members and re-arranges itself in different frameworks in accordance with the actions of its members and external stakeholders (Morgan, 1998).

The organization should be interconnected in such a way that members are cognizant of what is happening within its walls. We recommend the organization see itself as a series of interconnected systems in which there exists a flow. This flow is not only of information, but also of support and backup for the coalescence of the essential activities and to the related activities (Hall, 1996). If we take into account the vision regarding the organizational climate present in Latin American institutions, due to the strong cultural roots of its members, it may seem there exists changing conditions when there are not (Vizcaino & Martinez, 2014). We find special conditions where leadership is an important factor that permits reverting to those expressed by Vizcaino & Mendez (2014). With adequate conditions, it is possible throughout time, that the organization modify its actions and style to interact with the different members (González, 2014; Garcia Velázquez, et al 2017).

## **DATA AND METHODOLOGY**

To contrast the expressed hypothesis, it was necessary to analyze various aspects that would permit us to gather trustworthy data to bring about the adequate comparisons. We present the detail in Table 1 of the

analysis group characteristics. We see an increase of staff from 2013 to 2018 and the applied surveys also increased.

Table 1: Faculty Professor Population 2013 and 2018

Year	Assigned Professors	Surveyed Professors	Response Percentage
2013	92	31	33%
2018	103	45	43%

*Table 1. The table shows the staff population that existed at the Faculty in the applied periods of 2013 and 2018. It is possible to observe a slight increase in staff to meet the needs of the students. In the same manner we were able to increase the surveyed staff elevating the percentage to 10% in the second case.*

The questionnaire was designed and applied to the first survey. The survey instrument was composed of 135 questions grouped into 13 factors. The questions were posed to obtain a response using a Likert 5 scale. For comparison, in group results, diverse techniques were utilized to locate main differences. The questionnaire starts with a comparison of means by using chi square for each variable. A concentrated variable is generated for each factor that consists of an average of all responses in this group. With this information, a radar type graph is presented that expresses the satisfaction for each factor. The graph presents a scale that is not from 1 to 5. Rather it is amplified from 3.5 to 4.2 to observe changes in the different faculty groups. As the line measurement in this polynomial nears 5 it indicates that perception of the organizational climate is better. In the same manner, when the line is closer to the center of the graph the organizational climate perceived is less pleasant. Statistical tests were conducted including factorial analysis, correlation analysis and a level of reliability. The statistical analysis was completed using SPSS version 22 software. By way of background, factorial analysis provides a way of looking for information in a questionnaire that permits identification of the existence of a group of responses that are identified in groups with similar characteristics to find existent correlations among the data (Sanchez Villegas et al, 2014).

Subsequently, multiple correlation is conducted to identify how, through a strategy of variable relations, we can identify the validity of the model starting from the lineal relations among the variables. The necessary conditions were satisfied to carry out this analysis. These conditions include presenting a minimum of 20 observations (Schervish, 1987). A reliability analysis is contemplated that permits identifying, how the sample can represent with confidence the data compiled by its counterpart. We also hope the completed questionnaires result in the desired variability and not in a mechanical way, maintaining the consistency and stability of the values found (Cohen & Manion, 2002). The two questionnaires were given to faculty in attendance when we decided to complete the survey. Questionnaires were given to the faculty in attendance. The selection was random without reason to exclude anyone. The first application corresponds to 2013 where all the questionnaires were in paper form. For the 2018 event, part of the faculty received a paper questionnaire and others received it electronically through a link to a page designed for this purpose. All the data was collected in a general file, therefore there is no paper/electronic response percentage available. The questionnaires were anonymous, but a control was instituted to avoid any duplication of responses. The surveys were carried out in the month of May for both years. May is identified as nearing the end of the school cycle. The questionnaires were directly given to the faculty by the investigators and in a few cases by students aiding in the process. After return of the faculty' responses, the questionnaires were reviewed to insure all the questions were answered. Table 2 shows the components of organizational behavior.

Table 2: Components of Organizational Behavior

Nr.	Name	Conditions
1	Organizational Structure	How is the structure integrated in the organization
2	Objectives	Organization’s goals
3	Decision making	How the decision making affects the individuals
4	Leadership	Guidance to achieve goals
5	Motivation	Actions of leaders to improve work
6	Communication	Dual messaging to the community
7	Values	Ethical values
8	Psychological	Psychological factors influencing the organization
9	Social environment	Interaction amongst people
10	Personal	Personal conditions that may affect companionship
11	Physical environment	Physical conditions allowing the performance of work
12	Linkage	Links between the organization and the exterior
13	Technology	Technology used to do the daily activities

Table 2: The organizational climate components. From the analysis of various authors, a system was designed contemplating 13 components (also called factors) that permit identification of how characteristics of the organizational climate can be studied.

**RESULTS**

We initiate the analysis through the comparison of methods obtained for the data. This is done by means of a table that expresses the simple way the values obtained and the data differences for the two sample periods. The first statistical result is presented in Table 3 which gives a comparison of the percentages obtained for each factor in the two sample periods. The results reported in this data are a simple frequency analysis. Some 10 negative differences stand out and only 3 positive.

Table 3: Comparative Averages of Perception of Organizational Behavior

Factor	2013	2018	Difference
Organizational Structure	3.52	3.45	-0.07
Objectives	3.96	3.90	-0.06
Decision making	3.82	3.75	-0.07
Leadership	3.59	3.53	-0.06
Motivation	4.10	3.92	-0.18
Communication	3.52	3.52	0.00
Values	3.94	3.78	-0.16
Psychological	4.08	3.96	-0.12
Social environment	3.66	3.64	-0.01
Personals	3.53	3.59	0.06
Physical environment	3.97	3.86	-0.10
Linkage	3.33	3.38	0.05
Technology	3.93	3.80	-0.13

Table 2: Results in the Accounting and Administration of the Academic Unit of organizational climate perception of the faculty in 2013 and 2018. At a quick glance, it is evident that there exists a decrease of climate perception after the two questionnaires were applied.

As can be observed in Table 3, differences exist, but they are negative, suggesting that the climate perception has been deteriorating. Faculty simply do not consider the working conditions at the school to be adequate. These same differences can also be observed in Figure 1. Figure 1 shows the means used in

2018 are closer to the center of the graph giving us the same lower perception. We can interpret this figure in such a way that if the measure were closer to the value of 5 the organization perception of the organizational climate is better. To the contrary, a data closer to the center would indicate a less favorable perception of the organizational climate. Observe that some data differentiates because the lines distance themselves from the faculty' perception of the organizational climate. In Figure 1, we observe data that presents the most difference is relative to the Motivation and Psychological factors. Notice how the second survey has values closer to the center of the graph, which makes for a less favorable perception of the organizational climate.

Figure 1: Faculty Perception of Organizational Climate

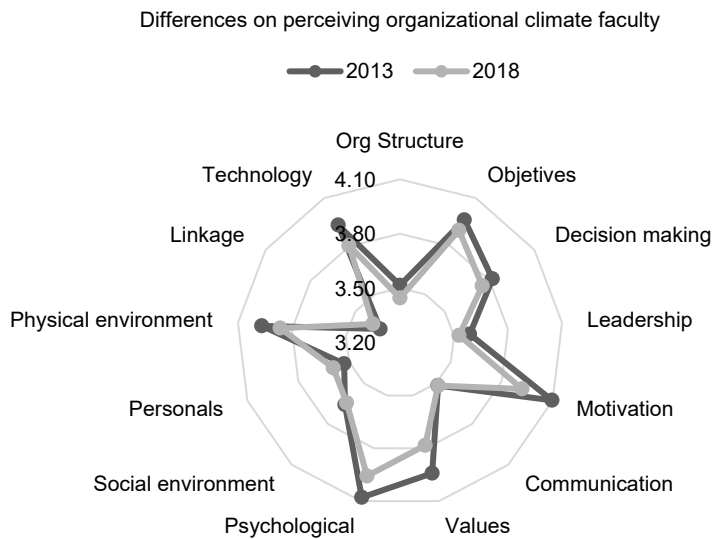


Figure 1. The Organizational climate differences of the Faculty. The corresponding line of faculty perception is closer to the center of the graph in 2018 which indicates a less pleasant environment during this period.

Factorial analysis, with the intention of reducing the variables, indicates a perception that in both years there is only one component that can describe the combination. The result is the grouping of all the given variables. These characteristics are found in both surveys. The other components represent low values of the variables that are not worth studying. The main difference of the data of 2013 and 2018 is that in the first sample the component describes up to 77% of the variance, and the second is reduced to 74%. This data is shown in Table 4, which shows how the combined variables are presented in the groups with similar characteristics.

Table 4: Explanation of the Total Variance 2013

Component	Initial Auto Values			Sum of the Load to the Square of Extraction		
	Total	Variant %	Accumulated %	Total	Variant %	Accumulated %
1	10.029	77.148	77.148	10.029	77.148	77.148
2	0.672	5.171	82.318			
3	0.599	4.609	86.927			

**Method of Extraction: Analysis of Principal Components**

a. Median = 1.00

**Explanation of the Total Variance 2018**

Component	Initial Auto Values			Sum of the Load to the Square of Extraction		
	Total	Variant %	Accumulated %	Total	Variant %	Accumulated %
1	9.719	74.758	74.758	9.719	74.758	74.758
2	0.684	5.264	80.023			
3	0.452	3.480	83.502			

*This table shows a comparative of factorial analysis differences perceived by faculty in the organizational climate of 2013 and 2018. This examination utilizes principal components. Median = 2.00. There exists a great component that involves all the variables that describe the variants of the data in 77% and 74% of the values found.*

Table 5 shows the components resulting from the factorial analysis applied to the two groups of data. Repeated situations are present in both years. For 2013 and 2018 the data presents a single component which can be expressed as small variations that should be analyzed in more detail with another type of statistics test. Table 5 shows the loads that exist between results of the samples obtained from factorial analysis. In this situation there is an increase in the psychological and physical environment, ethic value factors among others. In the rest of the results, as shown in the median difference the results remain less favorable.

Table 5: Load Comparisons of the Matrix Components 2013 y 2018

Component Matrix <sup>a,b</sup>	2013	2018
	Component	Component
	1	1
Psychological Fact.	0.759	0.798
Personal Characteristics	0.851	0.805
Social Environment	0.933	0.913
Physical Environment	0.749	0.797
Organizational Structure	0.860	0.826
Communication	0.928	0.899
Leadership	0.875	0.834
Technology	0.877	0.832
Motivation	0.871	0.894
Linkage	0.924	0.863
Ethic Values	0.882	0.901
Objectives	0.941	0.916
Decision Making	0.940	0.944

*Table 5 gives the loads of the variables that constitute the organizational climate expressed in the years 2013 and 2018. There are small changes, but they demonstrate slight variation which defines a decrease in the organizational climate perception. Method of extraction: analysis of principal components a. Mediation = 1.00, 2.00 b. 1 component extracted.*

Spearman’s correlations produced significant correlations in both samples with the following exceptions: the first sample only has two variables that do not have meaningful correlations, lower to 0.01. In the second sample there exists only one correlation with a significance value lower than 0.01. When the differences of means are applied comparing 2013 with 2018, we find no significant differences. Of all the variables we realize 8 results where there exists a statistical difference from the 135 total. Significant variables are appear in Table 6. The difference in the variables has to do with freedom of expression of ideas and the sentiments toward authorities. A difference exists in the treatment of the installations, and there is a difference in companionship. Recognition of the best members appears as a variable with a statistical difference, as well as with personal fulfillment, the assistance among them and a respectful coexistence.

Table 6: Statistically Different Variables

2013	2018
Freedom of expressions of ideas exist and sentiments toward the authorities	Your fulfillment as a member of the University
Are the installations and equipment given adequate treatment	The level of assistance between companions
The companionship factor influences the daily activities	The use and behaviors affect the daily coexistence of the University
The University recognizes the best members	The members of the University coexist respectfully

*Table 6 shows the loads of variables that constitute the organizational climate. Results are presented expressed in the two moments 2013 and 2018. There exist small changes, but they have slight variation which defines a diminishing in the perception of the organizational climate.*

This same analysis was applied to the factor differences as suggested in Table 4 and in Figure 1 which perceives this difference. The chi square test results do not have a significant value at the 0.05 level and even less at the 0.01 level which indicates that there is a different perception condition.

**CONCLUDING COMMENTARIES**

The objective of this work is to analyze changes in the organizational climate perception by the faculty in a business school. The analysis involved distributing two questionnaires to the incumbent staff. After applying an analysis of frequencies, factorial analysis, Spearman’s correlations and chi square tests the results are not statistically significant. We conclude the expected difference does not exist. Various analyses were carried out to demonstrate a difference in the organizational climate perception of the faculty. Even though the differential of means suggests there is a difference, the chi square test rejects that this situation exists. Other analysis, such as exploratory factorial and correlations give similar results showing a lack of significance. Even though there are differences in the means, the factors analyzed, are not significant. The results from the applied analysis with the chi square test demonstrates the contrary. This analysis is limited to the the applied questionnaires and to the geographical and political context both university and the country where it is located. The implications are necessary to pinpoint how, after having found procedural changes made by the directors, no significant statistical difference was found. Actions by the directors and the faculty, are very different where the sample was applied. An increase of students by group, aids the faculty to participate in conferences or investigative projects. Even though the faculty can perceive this difference it does not impact the global vision of the organizational climate. From the results obtained we conclude there is no statistical evidence to reject the hypothesis that there is a difference in the perceptions of the faculty in the organizational climate in 2013 and 2018.

**REFERENCES**

Alva Fructuoso, J A; Domínguez Díaz LA. (2015). Clima Organizacional y Satisfacción Laboral en los Trabajadores de la Universidad San Pedro de Chimbote, 2013. In Crescendo Institucional, 90 - 102.



Aubert, N y Gaulejac, V de. (1993) El coste de la excelencia. ¿Del caos a la lógica o de la lógica al caos?. Madrid: Ediciones Paidós, 1993.

Carmona, E A (2019) Percepciones del Clima Organizacional. Visiones de diferentes instituciones. Policromía Servicios Editoriales. Zacatecas, México

Cohen, L. & Manion, L. (2002). Métodos de investigación cuantitativa. Madrid: La Muralla.

García Solarte, M, Clima Organizacional y su Diagnóstico: Una aproximación Conceptual. Cuadernos de Administración Num 42 (Julio-Diciembre) 2009. Universidad del Valle. Cali, Colombia.

García Velázquez, M R et al (2017). Asociación del Clima Organizacional y la Satisfacción Laboral en Empresas de Servicios. Revista Internacional Administración & Finanzas, 37 - 48.

Gonçalves Alexis P. (1997) Dimensiones del clima organizacional. Extraído de <http://www.geocities.ws/janethqr/liderazgo/130.html>

González Herrera, M B. et al (2014). Influencia del Liderazgo sobre el Clima Organizacional en PyMES: Caso Catering Gourme de Durango, México. Revista Internacional Administración & Fianzas, 45 - 62.

González Millán, J. J., & Parra Penagos, C. O. (2011). Clima organizacional, motivación, liderazgo y satisfacción de las pequeñas empresas del Valle de Sahamuxi y su incidencia en el espíritu empresarial. Pensamientos y Gestión, 47.

Hall, Richard H. (1996). Organizaciones: Estructuras, procesos y resultados. 6a. ed. México: Prentice Hall

Chin Nam Choi (2007) Change-oriented organizational citizenship behavior: effects of work environment characteristics and intervening psychological processes Journal of organizational Behavior Volume28, Issue4 May 2007 Pages 467-484

Litwin, G.H. y Stringer, R.A. (1968). Motivation and organizational climate. Boston: Harvard Business School Press.

Morgan G (1996) Images of organization SAGE Publications. California–USA, 1997 (H. Hall, 1996)

Reed, M, (1996), Organizational theorizing a historically contested terrain, en Clegg, Stewart R, Cynthia Hardy y Walter R. Nord (eds.), Handbook of Organization Studies, SAGE, Great Britain, pp. 31 - 56.

Rodríguez, J. (1999). Diagnóstico Organizacional. México, DF.: Alfa Omega.

Salazar E J, Guerrero PJC, Machado RYB, Cañedo AR (2009) Clima y cultura organizacional: dos componentes esenciales en la productividad laboral. Revista Cubana de Información en Ciencias de la Salud (ACIMED) 2009; 20 (4)

Sánchez Villegas, A [et al.] (2014). Análisis factorial. En: Bioestadística amigable (dir. Miguel Ángel Martínez González). Págs. 487-512.

Schein, E. H (1973). Consultoría de procesos, su papel en el desarrollo organizacional. Fondo Educativo Interamericano S.A.

Schervish, M. J. (1987). «A Review of Multivariate Analysis». Statistical Science 2 (4): 396-413

Vega, D; et al (2006). Panorama sobre los estudios del clima organizacional en Bogotá, Colombia 1994 - 2002. Revista Diversitas, 329 - 349.

Vizcaíno Figueroa, J J; Martínez Pedregal A. (2014). Experiencia Ecuatoriana para el cambio organizacional de las instituciones de educación superior como pilar fundamental para el mejoramiento de su calidad académica. Ciencia Administrativa, 168 - 172.

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