

EVALUATION OF THE ORGANIZATIONAL ENVIRONMENT IN AN EDUCATIVE TECHNOLOGICAL INSTITUTION

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ABSTRACT

The organizational environment has been defined as the properties that affect the working environment in the coexistence between the worker and the structures or organizational processes. The objective of this research is to diagnose and analyze the organizational environment of the Administrative Staff in a Technological High School in Oaxaca, Mexico. The research was carried out based on the dimensions used by Bustamante Ubilla, Hernandez Cid and Yanez Aburto (2009). The results reported a general perception of the organization fairly favorable, identifying the dimensions identity, responsibility, supervision styles, support, warmth, work motivation, risk and structure were more favorable in relation to opportunity development, rewards, communication, job security as well as equipment, personnel and equipment distribution, influencing negatively on the organizational environment.

Introduction

The organizational environment has been defined as the properties that affect the working environment with bases for the perceptions that the worker has about the structures and organizational processes (Cárdenas Niño, Arciniegas Rodríguez, Barrera Cárdenas, 2009). The object was to diagnose and analyze the organizational environment of the administrative staff in a high school level institution, through the application of a survey used

by Bustamante Ubilla, Hernández Cid and Yáñez Aburto (2009) and by Domínguez Téllez, Tenopala ernández and Torres López (2013).

There are 71 items in the data collection instrument, which are distributed in fourteen dimensions: structure, responsibility, reward, risk, quality, support, conflict management, identity. Supervision style, motivation, work motivation, work stability, development opportunities, communication, just like equipment, the distribution of people and materials. These elements were taken from Bustamante Ubilla, Hernández Cid and Yáñez Aburto (2009) and it were applied to the administrative staff of the High School Institution "Centro de Bachillerato Tecnológico Industrial y de Servicios" N° 259 in Oaxaca, Mexico.

This paper is presented beginning with the literature review section, the research background on organizational environment in Mexico is presented, with analyzes of the concept and the indicators employed to evaluate the organizational environment. On the methodology section, the operational definition of the variables and the design of the collecting data instrument are included. Then, the analysis of the data is presented. At least on the results section, a table and a graph are presented for a better appreciation of the results.

Literature review

According to (Cárdenas Niño, Arciniegas Rodríguez, Barrera Cárdenas, 2009), the organizational environment has been defined as the properties that affect the working environment with bases for the perceptions that the worker has about the structures and organizational processes. The idea of organizational climate goes to the issues to determine the organizational effectiveness (Schneider, 1980) so that, there are theoretical perspectives referring organizational climate and organizational environment. As the theoretical research was made initially in Mexican Spanish, it is necessary to declare that authors refer to organizational environment in their studies instead of organizational climate.

For example, Martínez Méndez and Ramírez Domínguez (2010) developed one research applying a survey with five variables through the scale developed by Likert to a sample of 69 scholastics, finding as result that the motivational factors were different for the scholastics according to their workload, classifying the factors in economical (wages and salaries), social (groups and organizational environment) and psychological (accomplishments, power and self-esteem).

As well as Alcántara Enríquez et al. (2012) who tested and validated an instrument with 46 items grouped into six variables and he concluded that, with the validation of the model proposed, only by five of the six variables were allowed. González Herrera et al. (2014), analyzed the influence of leadership in the organizational environment and detected that the leadership exerts a greater influence over motivation and in a minor proportion in reciprocity.

Hernández Sampieri et al. (2014) constructed an instrument to measure the organizational environment in function of a model by values in competitiveness proven in a heterogenic sample of twelve organizations in 1,424 cases through a survey validated through the Mexican working environment using a likert scale type of two positive answers and two negative answers. The instrument was shown valid and trust worthy even though with a certain limit in the cultural hierarchy. By her part, Cruz Aquino (2014) realized an analysis of the organizational environment through three interviews with detailed questions and a survey proposal with 22 items, grouped in five dimensions and using Likert scale applied to 96 administrative workers of the Honorable Congress of Oaxaca State, resulting "work in a team" as the only one dimension to define the organizational environment. In this type of dependencies

leadership, the orientation of the results, feedback, and the motivation do not determine the organizational environment.

Bustamante Ubilla, Hernández Cid, Yáñez Aburto (2009) diagnosed the organizational environment of the regional hospital in Talca, identifying the variables and designing an instrument with fourteen dimensions and 71 items that allowed a gathering of information from the workers perspective, just like how to define the most important dimensions for the organization and to detect the dimension with a major difficulty in the organizational environment, working with an error of 5%, a level of trustworthy of 95% and with a variability of 0.25.

Later, in Huamantla Tlaxcala, Domínguez Téllez, Tenopala Hernández and Torres López (2013) used the same instrument designed by Bustamante Ubilla, Hernández Cid and Yáñez Aburto (2009) in a Textile Manufacturing Company dedicated to make swimsuits and sports equipment, in order to diagnose the organizational environment and to know the main factors that negatively affect the work environment, they found as result that the principal causes of inconformity in workers are risk, development opportunity and worker satisfaction.

Besides the many studies that have been developed in facts of organizational environment even in Oaxaca State, there is no research that lets us meet the organizational environment on a high school education institution with the purpose of quality and certification. Therefore, considering the dimensions proposed by the authors preceding us, it is important to diagnose the organizational environment for the administrative staff of the High School "Centro de Bachillerato Tecnológico Industrial y de Servicios" (CBTIS) No. 259. As result, the following question arises:

With a base on the dimensions proposed by Bustamante Ubilla, Hernández Cid and Yáñez Aburto (2009) and applied in the regional hospital of Talca and by Domínguez Téllez, Tenopala Hernández and Torres López (2013) in a textile manufacture company of Huamantla, Tlaxcala to focus in the administrative staff of the High School center "Centro de Bachillerato Tecnológico Industrial y de Servicios" (CBTIS) N° 259. What are factors that describe the organizational environment in a high school educative center in Oaxaca, Mexico?

Methodology

This investigation was based on a qualitative method with phenomenology analysis, in order to review the dimensions of the organizational environment and to obtain information close to the perception of study subjects with the example of the detailed interview to key informants in order to identify the main categories.

With the categories of the organizational environment and results from the qualitative analysis, a quantitative analysis was made, with one of the descriptive phases where the populations' indicators and statistics data were found. Under this, a factorial analysis was performed to analyze the scales' development and to establish the definition of the scales proposed and appropriate them in the qualitative phase. A correlation analysis was performed between the dimensions used in order to identify and define the organizational environment for the administrative staff in the educational center.

Three detailed interviews were realized with people known as key informers, parts of the organization, communication and administration in the institution. With the resulting categories from the qualitative analysis, a survey was designed based on the instrument used by Bustamante et al. (2009). A pilot test was applied and the reliability of the instrument was analyzed, a Cronbach's alpha coefficient of 0.713 was obtained.

Table 1. Statistical reliability

Cronbach alpha	Cronbach alpha base on the typified elements	Number of elements
0.713	0.710	71

Source: own elaboration.

The reliability coefficient of the instrument resulted close to 75% as the coefficient demonstrated by Bustamante et al. (2009), it proceeded to the implementation of the instrument in the whole administrative staff within 43 collaborators of the High School.

Data Analysis

According to the procedure followed by Bustamante et al. (2009), in order to obtain comparable data, the values were standardized in order that the average of each item was performed, not taking in mind the average of all items and the result divided by the standard deviation of the analyzed category, so this analysis allowed to determine how standardization near and far agrees with the final values of standard deviation (Bustamante Ubilla, Hernandez Cid, Yanez Aburto, 2009).

By observing the average dimensions, it can be seen that they are similar, reaching 3.05 points to all dimensions and standard deviation of 0.21.

Table 2. Absolute averages and Standardized Dimensions

No.	Dimensions	Average	Standardization
1.	Structure	3.08	0.12
2.	Responsibility	3.33	1.28
3.	Reward	2.87	-0.82
4.	Risk	3.12	0.32
5.	Quality	3.22	0.79
6.	Support	3.18	0.60
7.	Conflict management	2.84	-0.97
8.	Identity	3.48	1.99
9.	Supervision styles	3.21	0.73
10.	Motivation	3.13	0.37
11.	Work stability	2.83	-1.03
12.	Development opportunities	2.83	-1.03
13.	Communication	2.85	-0.94
14.	Equipment, human and material distribution	2.75	-1.41
All of the dimensions average		3.05	
Standard deviation		0.21	

Source: self-elaboration using SPSS.

According to the second table it is observed that the dimension "equipment, distribution of the people and materials" is the one that was found further below the medium with 2.75 points, equivalent to a standard of -1.41,

in which the statement "the number of people that work in the institution is appropriated for the quantity of work realized" emphasizes, with a -1.41 standard. On the positive side, the dimension "identify" shows 3.48 Likert points and a standardization of 1.99 , highlighting the statement "I am interested in making this institution the best" with 1.15 standard points.

The rewarding dimensions such as Conflict Management, working stability, development opportunity and communication were found in the negative range of the standardization. The rewarding dimension represents an average of 2.87 with a standardization of -0.82 , up next the dimension of Conflict Management represents an average of 2.48 points and -0.97 standard points, afterwards the dimension of working stability and the development opportunities show an average of 2.83 points and a standardization corresponding to -1.03 standard points.

On the other hand, the dimension of communication holds an average of 2.85 with a standardization of -0.94 . The most representative statement in these dimensions is "in this institution we are informed about subjects that we should know" with -1.58 . According to the statement with a positive standard in these dimensions we find the statement "In this institution many critics exist" with a stander of 1.66 .

The structure, responsibility, risk, quality, support, supervision styles and motivation dimensions were found in a standard positive range; the structure dimension shows an average of 3.08 Likert points and a standardization of 0.12 , after words, the responsibility dimension holds an average of 3.33 and a standardization of 1.28 ; the risk dimension presents an average of 3.12 points and 0.32 in standard. Thus the quality dimension showed an average of 3.22 and a standardization of 0.79 : the support dimension shows an average of 3.18 and a standardization of 0.60 : then the supervision styles dimension presents an average of 3.21 with 0.73 standard points. At least, the motivation dimension that holds a 3.13 medium and 0.37 for standardization.

The most representative statement within these dimensions was "Those who lead this institution prefer that, if one is doing his job right, they should go forward with confidence rather than consult everything with them" with 1.77 standard points followed by the statement "In this institution people do not trust others" with a standardization of 1.57 . As for the statements with a negative standardization was found that "The direction of this institution cares about people, how they feel and their problems" with a -1.71 standard points and "The best way to have a good relationship with the boss is to not contradict him." With -1.32 .

With all the previous results, it was possible to determine, according to the main standard measurements that some dimensions show a major development in the organizational environment of the administrative staff in the High School, among the one that highlights the dimension "identity" with a 1.99 standard value and within it the expression "I am interested in making this institution the best" with 1.15 points, which shows the interest from the staff to aid the institution in which managers need to make proposals for improvements that allow them to grow as individuals and as an organization.

However, the respondents believe that people working in this institution is not appropriate for the amount of work done, which matches the information provided by the detailed interviews applied within the institution, in which according to their perception there are areas uncovered, therefore, it is important to make the necessary managements in order to attract a major number of administrative staff in order to cover the missing areas.

Hypothesis proof

The procedure for hypothesis testing began with a factorial analysis applied to the data resulting from the application of the survey. In order to analyze each of the variables using techniques that allowed the tabulation,

presentation and statistical analysis of data in the program SPSS (Statistical Package for the Social Sciences), where the extraction method of components was used with a level of perceptual descriptive research.

Table 3. Matrix components

Matrix of rotated components a				
no.	statement	components		
		communication	conflict management	structure
65.	Everything we have to do is clear because it is well explained and on time	0.883		-0.232
68.	There is a good communication between the different departments and units that work generally together	0.867		-0.133
51.	The bosses handout information to their workers depending on their job performance	0.844	0.120	0.183
61.	The institution is characterized by a constant concern about the development and training of staff.	0.808	0.234	0.188
6.	The basic criteria for assigning tasks in this institution is the ability of each person	0.766	0.187	
17.	In this institution there is greater concern for emphasizing a job well done than a bad one	0.714		-0.289
39.	Here we are encouraged to say what we think, even if we disagree with our leaders		0.916	0.160
64.	In this institution we are kept informed about the matters we should know		0.837	0.201
35.	The direction of this institution cares about people, how they feel and their problems	0.265	0.810	-0.181
4.	In some activities in which I have been asked to participate, I did not know exactly who my boss was	-0.338		0.820
60.	I believe that at any time I can lose my job in this institution	0.291	0.473	0.725
Extraction Method: Principal component analysis				
Rotation Method: Varimax with Kaiser Normalization				
The rotation converged in 4 iterations				

Source: own formulation.

As observed, the items were grouped only in three components and among them there are those that predominated such as Communication, conflict management and the 14 proposed by Bustamante Ubilla, Hernandez Cid and Yanez Aburto (2009) and by Dominguez Tellez, Tenopala Hernandez and Torres Lopez (2013) to measure the Organizational Environment. As a final test of reliability, Cronbach's alpha with the 3 components from 11 items resulting in a coefficient of 0.816, demonstrating its reliability.

Table 4. Statistical reliability

Cronbach alpha	Number of elements
0.816	11

Source: own formulation.

The results obtained were different among the dimensions considered in the Hospital of Talca, the textile manufacturing company in Tlaxcala and the Administrative Staff of the Educational Center, as the organizational environment was only defined by communication, conflict management and structure variables, that may be due to a smaller sample than those used in bigger organizations.

Conclusions formulation

Table 5. Summary by Dimension & Percentage

Position	Dimension	Highest points	Points	Percentage of the highest points (%)
1.	Identity	1,015	706	70
2.	Responsibility	1,160	771	66
3.	Supervision styles	870	558	64
	Support	725	461	64
	Quality	870	560	64
4.	Work motivation	435	272	63
5.	Risk	580	362	62
	Structure	1,015	625	62
6.	Development opportunities	435	258	59
7.	Reward	870	500	57
	Communication	725	413	57
	Conflict management	725	412	57
8.	Working stability	435	246	57
9.	Equipment, human capital and material distribution	435	239	55

Source: own formulation.

As we can observe with the previous analysis, all of the dimensions were found located in an average level of the organizational environment; even though we should highlight that the identity dimension is the most representative considering the highest points according to the number of questions (70%), followed by the responsibility dimension with a percentage of 66%, in third place the supervision styles, support, and quality dimensions are located with a score higher than 64%, as next work motivation represented with a 63%. The risk and structure dimensions were found in fifth place with 62%, development opportunity with 59%. In sixth place followed by reward, communication, Conflict Management and work stability dimensions were found with a 57% of the total score by dimension and in last place equipment and distribution of human capital and materials with a 55%.

While it is true that the dimensions show an average level of organizational environment, we recommend the managers of the institution, especially in the dimensions such as reward, communication, conflict management, work stability, equipment, and distribution of the human capital and materials, to implement meetings in order to inform the staff about the developments, guidelines and procedures to leave no doubt about them.

In the job stability dimension, the process of National Education Reform, approved in 2014 by Federal Government, has left uncertainty in the staff that could be causing insecurity to keep their jobs, so it is important

for managers to investigate, inform and train staff, so they might have a more stable working environment and a certainty about their work.

Regarding the dimension of equipment and distribution of human capital and material, it is necessary to identify the need of resources so that, if necessary, a staff redeployment can be made to take advantage of their capabilities and potentialities and in the meantime, let them get enough equipment and materials that promote their job performance on time.

Despite the previous result from the statistical analysis, which showed in the test conducted at the High School, the organizational environment is defined by three variables distributed under their degree of significance as Communication, Conflict Management and Structure, it is suggested to follow the questionnaire (Table 6) to measure the organizational environment, consisting of 11 items.

- strongly disagree,
- disagree,
- neither agree nor disagree,
- agree,
- strongly agree.

Table 6. Survey with validated items

No	Affirmations	1	2	3	4	5
1.	Everything we have to do is clear because it is well explained and on time					
2.	There is a good communication between the different departments and units that work generally together					
3.	The bosses handout information to their workers depending on their job performance					
4.	The institution is characterized by a constant concern about the development and training of staff					
5.	The basic criteria for assigning tasks in this institution is the ability of each person					
6.	In this institution there is greater concern for emphasizing a job well done than a bad one					
7.	Here we are encouraged to say what we think, even if we disagree with our leaders					
8.	In this institution we are kept informed about the matters we should know					
9.	The direction of this institution cares about people, how they feel and their problems					
10.	In some activities in which I have been asked to participate, I did not know exactly who my boss was					
11.	I believe that at any time I can lose my job in this institution					

Source: own Formulation.

Conclusions

According to the objectives in this investigation it was possible to diagnose and analyze the organizational environment in a High School Educative Center in Mexican South East, based on the dimensions raised by Bustamante Ubilla, Hernandez Cid and Yanez Aburto (2009), concluding that identity dimension is one of the most outstanding and it is above average in the diagnosis and analysis of organizational environment in the High School evaluated, along with the structure, responsibility, risk, quality, support, supervision styles and motivation dimensions are in the positive range of standardization.

On the other hand, among the dimensions on the negative plain below the average, the dimensions emphasized are equipment and distribution of human capital and material, which are found farthest from the average followed

by reward, conflict management, job stability & development opportunity and communication dimensions. It was also determined that identity, responsibility, supervision styles, support, quality, work motivation, risk and structure dimensions were more favorable in relation to development opportunities, reward, communication, job security and finally, equipment, and distribution of human capital and material dimensions.

When analyzing and comparing the dimensions used by Bustamante Ubilla, Hernandez Cid and Yanez Aburto (2009) and Dominguez Tellez, Tenopala Hernandez and Torres Lopez (2013) in which the purification of components was applied, it allowed to identify that only three of 14 dimensions proposed were able to define organizational environment, such as communication, conflict management and structure, within a Cronbach's alpha of 0.816, so it is proposed as a suitable instrument to measure organizational environment in educative institutions among others.

Regarding to the factors that influence negatively, it was identified that development opportunity, reward, communication, conflict management, work stability, in addition to equipment, and human capital & Material distribution dimensions interfere in a negatively way on the organizational environment of administrative staff in high school analyzed (Centro de Bachillerato Tecnológico industrial y de servicios No. 259). It is possible to define the organizational environment of the administrative staff in the high school establishing that it is on an average level from the scores obtained.

Regarding to the General Hypothesis, it was found that the organizational environment of the administrative staff in the High School is not defined by the following dimensions: structure, responsibility, reward, risk, quality, support, conflict management, identity, supervision styles, work motivation, work stability, development opportunity and communication. It is defined just by equipment and distribution of human capital & materials proposed by Bustamante et al. (2009) in the regional hospital of Talca and by Domínguez et al. (2013) in a textile manufacturer company in Huamantla, Tlaxcala, since the result of the exclusion method components it is only measured by Communication, Conflict Management and Structure dimensions.

Finally, as this study was applied to the administrative staff of the high school (Centro de Bachillerato Tecnológico industrial y de servicios No. 259) it is left open to the possibility of an after study on the organizational environment for scholastics in the same institution or other related institutions or organizations, where this can serve as a reference tool that may allow to know and implement development alternatives for these organizations.

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