



# **HOW THE INFORMAL RELATIONSHIPS SHAPE THE VALUES AND CULTURE WITHIN THE ORGANIZATION: AN EMPIRICAL STUDY**

**Author: Héctor Cantos Galindo**

**Tutor: Juan Carlos Bou Llusar**

**GRADO EN ADMINISTRACIÓN Y DIRECCIÓN DE EMPRESAS  
AE1049 – TRABAJO FINAL DE GRADO  
CURSO 2015 - 2016**

## INDEX

---

1. Introduction .....	p. 04
2. Theoretical review .....	p. 06
2.1. Culture and organization values .....	p. 06
2.1.1. What is culture?.....	p. 06
2.1.2. Organizational culture.....	p. 07
2.1.3. Organizational culture – climate – organizational values .....	p. 08
2.2. Importance of organizational culture and the emergence of subcultures .....	p. 10
2.3. Organizational structure and its impact on regulating the transmission of information .....	p. 12
2.3.1. The formal and informal relations as coordination mechanisms.....	p. 14
3. Empirical study.....	p. 15
3.1. Methodology .....	p. 15
3.2. Research objectives.....	p. 19
3.3. Results and discussion .....	p. 20
3.3.1. Phase 1 .....	p. 20
3.3.2. Phase 2.....	p. 23
3.3.3. Phase 3.....	p. 26
4. Conclusion .....	p. 27
5. References .....	p. 29
6. Bibliography .....	p. 32
7. Appendix I. Questionnaire .....	p. 33
8. Appendix II. Sheet data collection for employees.....	p. 35

## INDEX OF FIGURES

---

Figure 1: The three levels of culture.....	p. 08
Figure 2: Values within culture definitions .....	p. 09
Figure 3: Similarities and differences culture, climate and organizational values .....	p. 10
Figure 4: Factors and items of the revised OCP.....	p. 17
Figure 5: Cultural profile by department .....	p. 20
Figure 6: Cultural profile by ages .....	p. 21
Figure 7: Cultural profile by time in company .....	p. 22
Figure 8: Cultural profile by educational level.....	p. 23
Figure 9: Map of formal network .....	p. 24
Figure 10: Map of informal network.....	p. 25

## 1. INTRODUCTION

---

We are currently immersed in a process of globalization, where the physical distances between people have become an insignificant problem. The overcoming of this important barrier has led an unprecedented growth of most major corporations becoming companies with presence in many countries. These transnational organizations operate with very different cultures. Currently, the increase in the geographic mobility of persons obliges organizations (even those that are not multinational) to manage a wider range of people with different cultures. Due to these events, in organizations, the study of organizational culture and the values associated with these becomes increasingly important.

The importance of organizational culture for organizations has also resulted in a greater interest by the study. From the 1970s have been many definitions of organizational culture and models to define it; all of them derived from anthropology mainly. A common definition of culture is to understand it as a set of values, beliefs and basic assumptions that are shared by all members of the organization that influence their behavior and differentiates them from the outside.

The culture is proving to be a very efficient tool to generate competitive advantages compared to other organizations (Barney, 1986), but so many resources and efforts carried out by companies in the search for the maintenance and implementation of that culture. The supposed advantage to improve the influence and power of the 80's organizations, called internationalization, is becoming the new problem that multinational companies should face it. As they grow and expand their areas of influence, greater are the problems of communication and transmission of the vision, mission, values and organizational culture. To these difficulties, organizations try to formalize the culture and find mechanisms that allow to effectively transmitting the values of the company. However there is evidence that these solutions are, in many cases, inefficient and that as organizations become more complex, decentralized and the possibilities to arise subcultures growth (Howard-Grenville, 2006). These subcultures, in the case of misalignment with the desired culture, will be able to influence over the corporative brand face stakeholders and productivity and implementation strategy problems (Detert, Schroeder, Mauriel; 2000).

The organizational behavior literature can shed light about the cultural problems in organizations. Due to this research's, they have been achieved to find

diverse analyze culture models like the Organizational Culture Profile (OCP) or the Organizational Culture Inventory (OCI), as well as measure tools that can help and advice top managers to make strategic decisions like culture graphs, relationships maps and others. Nevertheless, it has taken less attention to informal relationships like disarrange culture trigger.

As the organizations are becomes larger is more complicated perform a direct control over employees, these having to choose by more participative and flexible models. This propitiates the groups and work teams arising where the relationships are empowered highly compared with classical organizational models. The globalization and internationalization sum, the people incorporation of different locations in the same work teams and greater interaction between them due to the Information Technologies (IT) can generate subcultures. In some occasions subcultures can negatively affect to organization, being that the subcultures can follow behavior patterns, beliefs and values other than those desired by top management.

For all this, is very interesting analyzing, in an empirical way, organization's deviations about what it is and what should be. This research will try to study the difficulty of sustaining strong cultures and cohesive when they have a very extensive geographical scope (for example, the multinationals organizations) and there is accused hierarchical structure. In these cases, appearing organizational subcultures that will can resemble, in the best case, to the desired culture. Likewise, it will seek demonstrate that the appearing of this subcultures is not merely caused by structure and the context, but by the informal relationships of organization employees. We understand, in this study, informal relationship like those sporadic relationships that surge between employees wherein organization and those that they will sustain outside of labored context.

The structure of the study is a follow. First, it starts with a theoretical review of culture term, like so his importance and influence. It will comment the existents kinds of culture and also we will indicate the methodology to culture measure in organizations. Once the culture concept is defined, we will revise all literature about culture transmission and the importance of personal informal relationships and its transmission.

In the second part of the study, it will show an empirical study about a multinational organization, with the final purpose to bring evidences about of the

mentioned relationships above. In this study, we will identify the desired culture by the top managers and the perceived it by employees, also the formal structure in organization (chain of command) and the existing informal relationships. With this we will try seek the existing cultures and if it exist, its surging possibly, can be related with the affinity grade of those that share the same ideas and values.

Finally, we will show the results discovered in the organization and we will discuss its implications in the organizational culture field, trying demonstrating that the informal relationships have a direct incidence over the organizational subcultures creation. In addition, some recommendations were made about futures researches which could be done starting with the present investigation.

## **2. THEORETICAL REVIEW**

---

### **2.1 CULTURAL AND ORGANIZATIONAL VALUES**

#### **2.1.1 ¿What is culture?**

Along the history have had a special interest in the explication search to the human behavior. Many researches has starting of the anthropological field and this has defined the culture like a experiences set, habits, beliefs, myths, rites and values than it going to developing along the time and characterizes a human group (Shalins, 1976). Authors like Shalins claim that the culture is an element that surge of the denominated “social phenomena”, and the history and other past acts we will carried to a determinate behavior or actuation way.

This definition, it is the evidence that being of "social phenomena", the study field where the research must to start are the social sciences and psychology (Gouldner, 1954). With this vision of culture, the correct focus to the studies was different to the last used. The interest is focused in the greater knowledge in the interaction of the individual with the context and like this could alter his behavior faces to different situations (Repetti, 1987). With this finding was demonstrated that in front of dynamic environments, that depend of a great number of variables, the human faces to the problem in a different way and reasons of why this occur ,they have a vital importance to the researchers.

The psychology was taking root in organizations with the aim of understand organizational members behavior. It was tried develop methods that lend understand

like is the behavior of individuals wherein organization and if the employee will fit in the enterprise. (Vandenberghe, 1999). For this, the culture won a fundamental protagonist and finally, it arrived to the term that we will developing in the present organizational culture research.

### 2.1.2 Organizational culture

Firstly, it is so important understand that the fundamentally organizational culture concept is based in the behavior. We interpret behavior like the result of a sense making process wherein stimulate are processed by humans (Bergeron, Schneider, Younger, Wadeson, Guirguis; 2000), or perhaps even construct (Weick, 1995), the situations to which they respond. The organizational culture tries to frame these behaviors of decision making process and filtering ideas method. With a correct interpretation and having clear how the things work, the organizations will be able to know like employees will fit to his work assignment, what are their expectatives, what they are wait about organization and in this way achieving a better efficiency (Denison,1984).

Due to the importance and implications in the business ambit of culture, many academics have starting to study this concept deeply. Studies of Pettigrew (1979), Hofstede (1980) and Schein (1985) have marked, during more than three decades, researches about organizational culture. Because of that, we defining culture and its components due to Schein's definition (1996): "A pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration. "A product of joint learning".

Once we arrived here we could have wondered, Can we analyze something that we did not see? Schein explains that culture is composed by three levels or phases: artifacts, espoused beliefs and values, and basic underlying assumptions. Artefacts refers to organizational culture visible elements, the next level are evidences that it is possible gather up with the realization of an empirical study like this that we will realize in the second part of this text. The last one, are beliefs and unconscious behaviors, is here where the organizations have the main implementation difficulties. We can observe this better in the next scheme (Figure 1):

**FIGURE 1: The Three Levels of Culture**

- 
1. **Artifacts**
    - Visible and feelable structures and processes
    - Observed behavior
      - *Difficult to decipher*
  2. **Espoused Beliefs and Values**
    - Ideals, goals, values, aspirations
    - Ideologies
    - Rationalizations
      - *May or may not be congruent with behavior and other artifacts*
  3. **Basic Underlying Assumptions**
    - Unconscious, taken-for-granted beliefs and values
      - Determine behavior, perceptions, thought and feeling
- 

SOURCE: Schein, Edgar H. *Jossey-Bass Business and Management: Organizational Culture and Leadership (4<sup>th</sup> Edition)*, 2010, p41

This scheme evidences that the organizational culture is not a concrete and tangible concept that can be introduced easily in a company. Precisely, his complexity is the majoritarian failure reason in organizations in their implementation phase. The most are focusing in the first level, and not know that beliefs and employees values are not changing.

All this can have repercussions in a long term, due to there is a possibility that can exist duality in the way of understanding work and context and face of uncertainty situations the enterprise will never can know exactly the unconscious and sporadic answer of employees. This occur because, although in a write and norm-referenced way (level 1) and even employee and organization having same objectives and ideals (level 2) is not achieves that employee feels, perceives and thinks in a similar way than strategic makers in organization. This can generate subcultures (Schein, 1985), that we will see in more details in a later paragraph.

### 2.1.3 Organizational culture – climate – organizational values

Before continuing, it is necessary to clarify some terms "a priori" similar in this research field. Commonly, we understood organizational values and organizational culture as synonymous when the first really come embedded in the organizational culture. Some authors in fact, incorporate them into their own definition. Figure 2 shows some definitions of culture that explicitly include the concept of values:



## FIGURE 2: Values within Culture Definition

---

- **OUCHI (1981)**
    - *Set Of symbols, ceremonies and myths that communicate the underlying values and beliefs of the organizations to its employees*
  - **VAN MAANEN & SCHEIN (1979)**
    - *Values, beliefs and expectations that members come to share*
  - **KROEBER & KLUCKHOHM (1952)**
    - *Transmitted patterns of values, ideas, and other symbolic systems that shape behavior.*
- 

ADAPTATION: A.Cooke, Robert; Rousseau, Denise (1988); *Behavioral Norms and Expectations: A Quantitative Approach of Organizational Culture*. *Group & Organization Studies*, Vol 13 No 3, September 1988 245-273.

It is evident that these definitions among theorists of organizational culture, understands organizational values as "a belief that a specific mode of conduct is preferable to an opposite or contrary mode of conduct" (Rokeach, 1973). Relating this definition to the different levels of Schein, we can see clearly that organizational values are also structured as organizational culture itself. Because of this parallelism and the difficulty for a study that can correctly identify the culture of a company, we will take to this case of study like synonyms these terms because of similarity analysis and perception; being Phases 1 and 2 to which pay more attention because Phase 3 would require a more comprehensive and individualized analysis.

Once defined organizational values, we must define another term that sometimes is used as a synonym for culture and that we need identify it and defining it properly to avoid future confusion, organizational climate. The climate can be defined as the individual perceptions of their organizations affected by characteristics of the organization and the individual (Schneider and Hall, 1972). So, climate refers to the perception of the environment, how the individual feels when performing their work. This has to be controlled by any organization and can be part of the organizational culture in strict sense, but we must make clear that these two terms are different and for this study will not be necessary to measure this variable. Figure 3 shows the similarities and differences between the terms culture, climate and organizational values:

**FIGURE 3:** Similarities and Differences Culture, Climate and Organizational Values

---

- **SIMILARITIES**
    - ✓ *Are incorporate in the same concept: culture*
    - ✓ *All variables can be interpreted different way by individuals.*
    - ✓ *All organizations try to homogenize these elements on all employees.*
    - ✓ *We can study them with qualitative and quantitative methods.*
  - **DIFFERENCES**
    - ✓ *Climate and values can be more subjective than culture.*
    - ✓ *The values just refer to behavior of employees, culture goes beyond.*
    - ✓ *Culture and values can be a specify part that appear on organizational papers, but the climate is impossible to evaluate.*
- 

SOURCE: OWN PRODUCTION

The figure shows the subjective nature of the organizational climate and the attempt to objectify and standardize the understanding of organizational values and culture concepts. As we mentioned above, the fundamental difference between culture and values are based on, climate are incorporated into culture, this being a set of descriptive elements of the organization. Because of that our research will try to influence organizational values and how employees perceive them, we can take like equals the terms, due to the cultural analysis will not focus on other elements such as rites, climate and traditions among others.

## 2.2. IMPORTANCE OF ORGANIZATIONAL CULTURE AND THE EMERGENCE OF SUBCULTURES

When organizational structures are highly centralized and formalized, other elements like organizational culture receives a low importance. The control exercised by employees is greater and their ability of decision-making is limited (Chandler, 1962). When organizations grow, due to globalization among other factors, the structures become increasingly vertical and complex. Because of this, a decentralization of decision-making as a result of this greater geographical spread of organizations is turning necessary (Govindarajan, 1986).

In more decentralized organizations, organizational culture has emerged as a new source of competitive advantage (Fiol, 1991). Have been many studies that have seek how large companies have been able to get better results than its competitors,

they relatively having the same resources (Barney, 1986). The result that has been found is that employees shared a parallel features and understanding the organization in a similar way, that is, it have a strong culture. This allows workers to perform their tasks more pleasant way and therefore efficient (Vandenberghe, 1999).

Due to the evidence that the organizational culture can be an sustainable advantage source along the time (Fiol, 1991), every time are more the organizations that start to have interest by measuring of cultural profile and see the deviations between desire culture and real culture. All of this cultural elements, that there are propagated by top managers and there are assimilated (although be level 2) by the majority of workers is denominated "dominant culture" (Cooke and Rousseau, 1988). But this dominant culture not always is possible to transmit it to all functional units of the organization and employees. Those people or items that are unable to instill, internalize or merely transmit such culture or has been partially completed, is called subculture (Schein, 1985).

The question we must ask is, Do they arise sporadically these subcultures?, or there are triggers for your appearance? As organizations have been increasing their size have become increasingly decentralized and increasing their hierarchy. These circumstances have promoted the "insularity" and "differentiation" between organizational units (Cooke and Rousseau, 1988). The term refers to insularity organizational units that due to processes such as relocation or finding new competitive markets have been distanced themselves from the matrix, and therefore the dominant organizational culture goes into the background. The term differentiation refers to the different patterns of behavior and thinking of members within a certain hierarchical level or in a functional area (Pavett & Lau, 1983). In addition it is important to clarify that when we refer to internal differences, we will call horizontal differentiation when are the same department or functional area; and when we talk about differentiation from other hierarchical levels will be vertical (Blau, 1970).

These two aspects are triggers of organizational subcultures, often occur in large multinationals and top management would should fully involve in these issues as they may arise clashes between cultures or clans, this is known like counter cultures (Schein, 1985; Ouchi and Wilkins, 1983). This term refers to the confrontations that may arise between different units of the organization, divisional budget wars to get more than others, for example. This can cause failure of the alignment of objectives, other possibility is that competition can grow to levels that create discomfort in the

workplace and generates stress. It is therefore important to get an organization as homogeneous as possible, culturally speaking, or if necessary create mixed cultures that allow understanding between divisions, units or departments that are separated from the rest (insularity) or simply having functions or positions different in the organization (differentiation) (Schein, 1985).

According to studies by Barney (1986) to achieve that culture is considered a source of competitive advantage, it must meet three requirements: 1) that is unique or rare, 2) that can be valuable in economic terms and 3) it is imperfectly imitable. That is why worth analyzing whether the relationships of people, the human factor, may be able to influence this strategic tool. Schein (1988) and Robins (2005) incise in the influence of interpersonal informal relationships like a cofactor decisive in transmitting values.

Now, we will discuss in more detail the relations in the organization and its impact on culture, due to these relationships can provide to culture of these differentiators attributes: unique or rarely and imperfectly imitable culture.

### **2.3. ORGANIZATIONAL STRUCTURE AND ITS IMPACT ON REGULATING THE TRANSMISSION OF INFORMATION**

The organizations are a group of people who are intentionally organized to accomplish a common goal or set of these (McNamara, 2013). It is thus obvious, that is possible there can be interaction between such individuals, and these relationships have to be managed. In fact, different researchers understand that relationships between employees can be the triggers of structural changes and can be give life to the organization (Weick, 1979). The results of this communication are cultural assumptions (Zucker, 1988).

As a result of this interaction, could be arise subcultures and is of special interest go deeper and find the causes of their appearance. First we must understand the mechanisms that can regulate these relationships. These mechanisms may be found in the denominated: "organizational structure". Every organization has a specific organizational structure. This can be defined as a set of elements such as jobs, employment contracts, departments and divisions, routines, work units, the books of procedures, legal bases, and in an infinity of others elements that generate the organizations are different one of another (McPhee, 1985). These formal lines of

communication, can reduce redundancy in communication, eliminate overlapping spheres of authority and ensure efficient coordination (Stevenson, 1990).

One of the implicit elements that are part of the organizational structure is the hierarchy. This element responds to the need to organize and coordinate the efforts of all members to achieve the agreed goals, monitoring tasks and routines of each employee and who should oversee the work and who make appropriate reports (Mintzberg, 1979). Here we can find various coordination mechanisms but, is of vital interest to our research the formal structure as a mechanism for transmission of information and knowledge. Many authors make no distinction between formal structure and hierarchy and used interchangeably, defined as the structure that emerges in organizations because of the needs of managing information (Galbraith, 1977). Galbraith explains that it is very complex that one person can gather up a lot of information and he is able to effectively process this and that is why we must decentralize decision making by allowing each member has his responsibility.

This need to manage relationships in the company is the result of competitive pressures and changing technology; to deal with these stressors, companies must correctly manage their structures and planning processes in each of the hierarchical levels (Adler, 2001). The hierarchy is therefore the best way to control workflows and communication between employees.

As we mentioned in the previous section, large corporations because of their extraordinary growth they have had to decentralize activities like result of internationalization (Govindarajan, 1986). Therefore, it is common to find more and more middle managers in organizations that are responsible for managing part of the activities of the organization; the organizations creating departments to improve this information management. This departmentalization and creating divisions are created to avoid breakdowns in the transmission of information and limits imposed by the hierarchy itself (Adler, 2001), can be a blockade of knowledge (Kaplan 1984). It follows the importance analyze whether the perception of organizational culture desired by top managers, differs in response to the hierarchical position in the organization, since we take culture as an element of organizational structure.

### 2.3.1 The formal and informal relations as coordination mechanisms

The control can be conceptualized as a process of assessment which is based on monitoring and evaluation of the behavior or outputs (Ouchi, 1977). As we mentioned above, the increase in size creates problems of control and integration between different subunits (March & Simon, 1958).

As a result of this increase in size, it also increases the need for human capital in order to meet the production needs, and as human beings who are these employees have the need to socialize (see, the Hawthorne effect). This socialization may occur in two different ways, by formal communication and informal communication (March & Simon, 1958).

Formal communication: Formal communication is given by the denominated "formal structure", is to say, communication lines to be followed by employees. This formal structure identifies individuals who are the official sources of information and the information that is their special concern (Johnson, Donohue, Atkm, 1993). These relationships are given by the hierarchy itself, generated by the differentiation of activities in the organization (Dow, 1988). These elements are created as formal elements of coordination, and communication is required to achieve the goals of the organization and do not promote the transfer of knowledge that can lead to innovation (Smelser, 1963).

Informal communication: Informal communication lacks formalization and satisfies to individuals to need socialization (Mintzberg, 1979). These informal structures enhance communication, maintain group cohesion and give a sense of autonomy and facilitate the transmission of knowledge (Smelser, 1963). This communication is direct, the range can be from talking about what went on holiday with a coffee until ask for help some people from another department without following any formalism. In the study by Johnson, Donohue, Atkin (1994) empirical evidence that informal channels for transmission better serve the mission and vision. However, these channels due to high formalization and role-based structure can prevent being carried out.

### 3. EMPIRICAL STUDY

---

#### 3.1 METHODOLOGY

In this study we have proposed different goals and ideas that should be analyzed with a particular methodology. On the one hand, we have talked about the importance of measuring the organizational culture and see the possible subcultures that may appear due to the size of the organization. Then, it has stressed the importance of formal relations and informal, mainly to convey information and therefore also the desired organizational culture. Therefore, it is interesting to see that these relations can have impact on the cultural perception and see how far these relationships can be significant.

As we have mentioned in the theoretical framework, this study is based on large companies, where the distance of the business units and relationships complexity can lead to problems of alignment between the desired and actual culture. Due to the lack of resources and time to conduct a comprehensive and thorough study to any organization with these characteristics, it has chosen refinery petroleum belonging to BP Oil. In order to study the data more clearly and effectively, it has been divided into 3 phase's empirical analysis:

***Phase 1: Cultural Analysis***

***Phase 2: Analysis of relationships***

***Phase 3: Search relations between Phase 1 and Phase 2.***

Then, we proceed to explain what they are each of the phases and methodology has been used to draw conclusions to help us clarify the objectives outlined above.

#### Phase 1

As just discussed, the cultural analysis has been performed in a refinery of petroleum that is part of a multinational company with activities in several countries. In this first phase we interested to know the cultural profile of the organization and deviations that may have with employees. The plant in question had more than 400 workers, so that the number of data with which to work would be too high. Therefore, we have chosen two departments as a sample of the plant, with a total of 26

employees over we will initially doing the study, including four directors who will serve as reference for the desired cultural profile would be made.

In this first part, we seek to know the manager's organizational cultural profile and compare it with employee's results. For this we have chosen conducting individual interviews in which they were administered a questionnaire. The questionnaire had to be able to identify the key values of the organization and see in what degree have been transmitted to the rest of the organization.

There are many surveys that attempt to measure such variables, but all of them are of high complexity and with a large number of items that make it difficult an empirical work. So, it was necessary to gather information from any of them and adapt to the needs of the present work. The main ideas therefore were extracted from the Organizational Culture Profile (OCP). This instrument contains a set of values that characterize an organization and try to measure how workers adapt to them (Caldwell & O'Reilly, 1990).

The OCP had 54 values that were used to measure the person-organization fit degree. As we have mentioned above, we consider values and culture as equivalent terms, since the values allow us to better measure later the degree of relationship between employees and the results will have a better approximation to reality. The 54 values, however, included some elements that are far away the values associated with the culture. In the empirical work we used the adaptation of the OCP by Sarros, Gray and Densten (2005), that reduces the questionnaire to 28 values and 7 major categories. These categories allow us to define the organizational culture a more precise and concise manner. The Figure 4 shows 7 categories and 28 values of the questionnaire:



**FIGURE 4:** Factors and Items of the Revised OCP

Factors	Items
1 Competitiveness	Achievement orientation An emphasis on quality Being distinctive—being different from others Being competitive
2 Social Responsibility	Being reflective Having a good reputation Being socially responsible Having a clear guiding philosophy
3 Supportiveness	Being team oriented Sharing information freely Being people oriented Collaboration
4 Innovation	Being innovative Quick to take advantage of opportunities Risk taking Taking individual responsibility
5 Emphasis on Rewards	Fairness Opportunities for professional growth High pay for good performance Praise for good performance
6 Performance Orientation	Having high expectations for performance Enthusiasm for the job Being results oriented Being highly organized
7 Stability	Stability Being calm Security of employment Low conflict

**Source:** Sarros, J.C, Gray, J., Densten, I.L., & Cooper, B. (2005) *The Organizational Culture Profile revisited and revised: An Australian perspective*, *Australian Journal of Management*, 30 (1), 159-182

In the questionnaire administered to employees (see Appendix 1), each one of these great attributes have been explained for each one of the 28 values. For them, it has made 28 statements that must be answered following a Likert scale of 5 points, from strongly disagree and strongly agree. In addition, after the questionnaire and before Phase 2 respondents were asked to answer three more questions that could be significant in identifying the reasons for a possible deviation between the actual cultural profile and desired (see Appendix 2):

- Education level
- Age
- Time in the company

According to the responses of individuals, we will be carried out a graph of radians in order to see the different perceptions of workers according to their department, age, time in company and educational level.

## Phase 2

After we have analyzed the perception of individuals, the relationships between them are discussed. Based on the work of Molina (1995), the best method for interpreting relationships is the network map. In order to do this, it was necessary after completion of the questionnaire, to indicate each of the respondents the degree of interaction both formally and informally.

This requires a list of all names, each with a unique code that they did not know was prepared, and asked everyone go one by one indicating 3, 2 or 1 depending on the degree of formal and informal relationship maintained (3 being the highest level and 1 the lowest level).

Due to the technicality of the terms, these were explained them in line with the theory developed above; it was the differentiation between formal and informal communication. While they evaluated this degree / weight relationships they had with their peers, the interviewer filled the data collection sheets.

In order to translate these relations, it was necessary to use a program of social networks design, Gephi. In this tool, each node corresponded to an individual, and relations were marked with edges. With this program, we will be able to visualize an image with formal and informal structure of respondents to later try to show that these structures are significant in a similar way to answer the questionnaires completed in Phase 1.

## Phase 3

Finally, in the last phase will proceed to make correlations between the data obtained in phase one and phase two, as well as explain the relevance of informal relationships respect answers in the questionnaire. To measure the similarity and discrepancy between the responses should perform a distance table with the elements we want to analyze.

Because in phase two the results are not unidirectional, that is, a person can asses higher or lower the relationship than the other, it will proceed to the sum of the weights of each of the relations and will be the distance between people who score higher and lower return. In addition, the table results where we know if the variables

are significant at the time of answering the questionnaire in a similarly way. Due to there are people that do not responded the questionnaire, we take the answer of their workmates like him, because we understand that the differences are not significant.

### **3.2 RESEARCH OBJECTIVES**

In Phase 1 of the research we must show and analyze the cultural profile of the desired and actual organization culture and see the deviations between them. These deviations, if any, will be analyzed regarding attributes: department they belong to individuals, age, time in business and educational level. If there are significant deviations we will be able to prove the existence of subcultures within the organization and that can come given by the departmental horizontal differentiation, by vertical or both. According to studies by Van de Ven (1994) and Stevenson (1990) we will find significant differences in the interaction of individuals with regard to their department and their hierarchical position. On the other hand we can see if the time in the company or age makes individuals thinks in a more aligned with what you want the organization. Finally, it will examine whether the education level can have influence in understanding and engage more employees with the organization.

In Phase 2, a map of formal and informal relations will be discussed. The formal map should be adapted to individual's needs of exchange information (we show the most heavily weighted for more clear outcome) and should respond to the real needs of the organization, the resulting map will be similar to official hierarchical chart.

Moreover, we will show an additional map where the informal relationship is displayed. This map will respond to the needs of socialization of individuals or merely of work. It will be interesting to analyze that: the informal map differs from the formal map and informal relationships exist with members belonging to different departments.

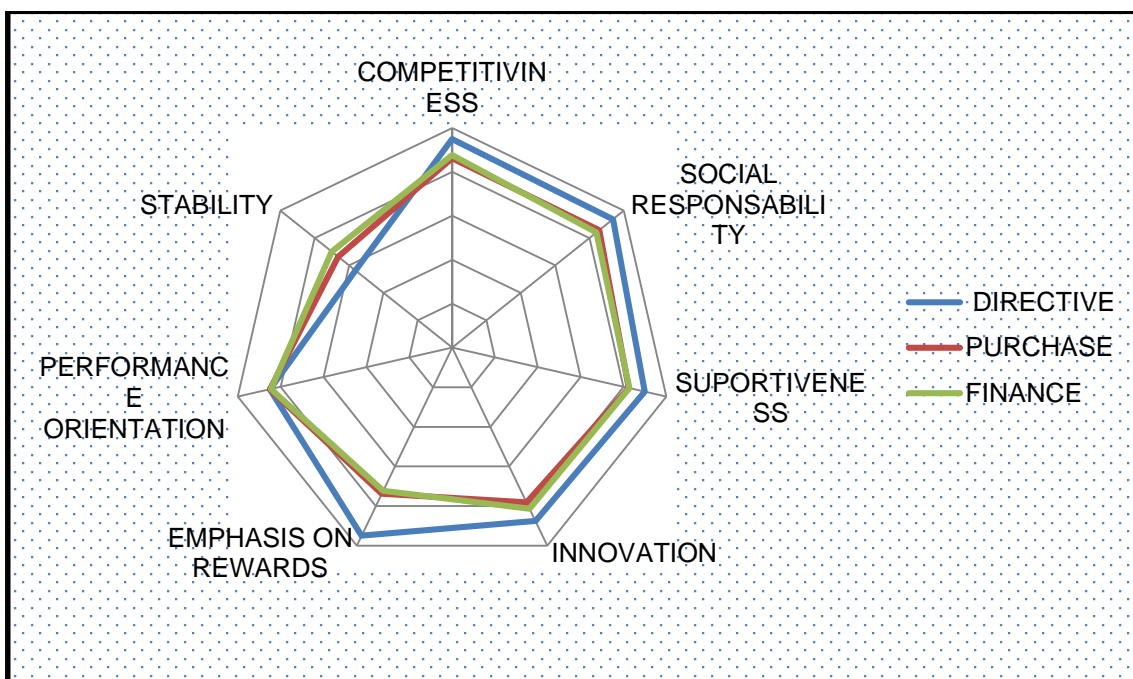
Finally in Phase 3, we will proceed to analyze the correlation between the variables shown in Phase 1 and Phase 2 with the deviations from the results of the questionnaire. It will try to show that those with greater weight in informal relations will have a shorter distance in the answers given in the questionnaires; showing that higher is the informal relationship, the transmitting organizational values will be better.

### 3.3 RESULTS AND DISCUSSION

#### 3.3.1 Phase 1

As described in the methodology section, first we proceed to show the cultural profile of the organization based on the criteria of department, age, educational level and time in the organization, to see the similarities or differences between them. First, in Figure 5 we designed the radians chart that corresponding to the merely functional or departmental division of the organization, and the comparison of the responses of the purchasing department and finance department with the desired by the directive:

**FIGURE 5:** Cultural Profile by Employee's Departments and directives



It can be seen that, the alignment between the purchasing department (red line) and finance (green line) is almost total in the 7 major categories of cultural profile, so we cannot say that, on average, both departments think differently between them. In a second step, we analyze where there are discrepancies with the profile desired by the directive, created from the 4 questionnaires made to executives of the organization and shown in blue. In this case we see that there is alignment in performance orientation, and directive is assessed himself with the highest score in the rest of categories, except in stability.

In this category recall that we attempted to measure "the preference of the organization to maintain its status quo at all levels". The data show evidence that the

organization is perhaps more proactive and generates more changes than the average of employees perceive. Despite all this, is not relevant enough difference to say that there are discrepancies between what the organization wants and what is perceived in a departmental level. Based on this evidence, we can conclude that in this case there are no subcultures in the purchasing and finance departments.

In Figure 6, the graphical representation of the cultural age profile is shown, based on questionnaire responses given by employees of purchasing department and finance (Age 1 = 20 - 30 years; Age 2 = 31 - 40 years; Age 3 = 41 - 50 years; Age 4 = 51 or more) and the results of 3 managers:

**FIGURE 6:** Cultural Profile by Ages

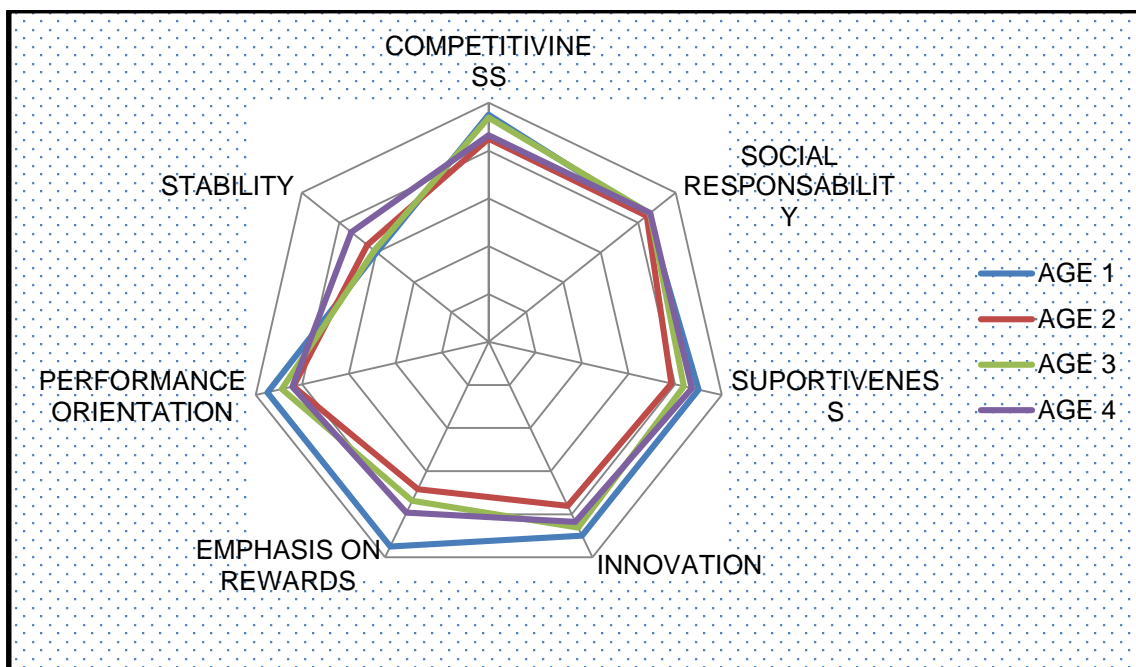
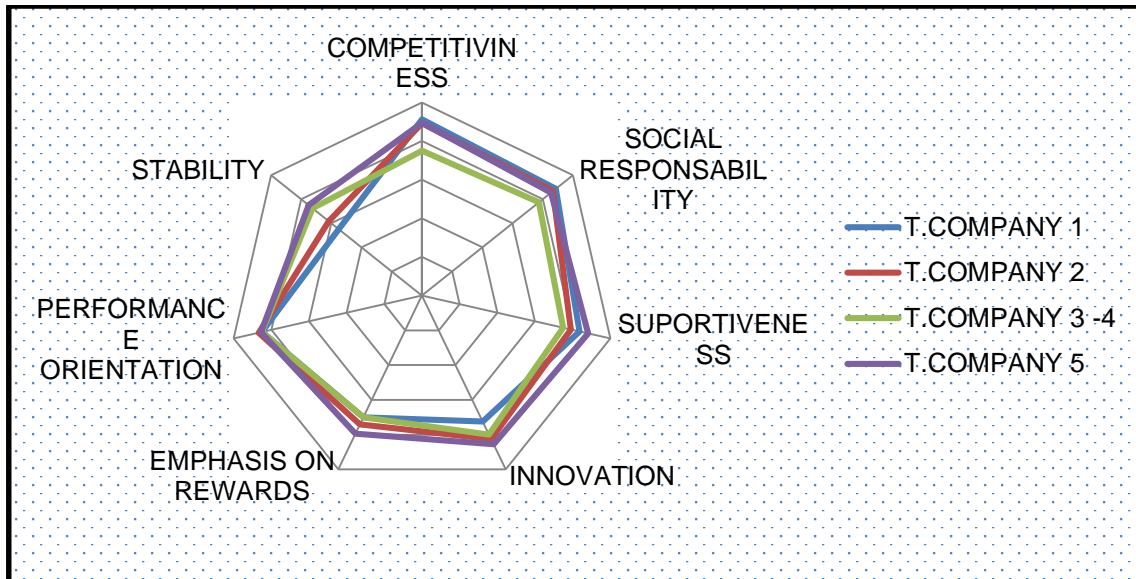


Figure 6 shows that there is also a great similarity of data between the groups, except in the age range 1 (employees aged between 20 and 30 years) than in "emphasis on rewards" a point is displayed above the rest of respondents. However we cannot say that younger people think differently from the rest because the discrepancy is found only in this cultural dimension. Therefore, the graph shows us again that there are no clear subcultures analyzing individuals for their age, and that the company is able to transmit the values and organizational culture correctly without the age be a problem when doing so.

Another attribute that may be the trigger of subcultures rising is the time remained in the company. In Figure 7, we shows the results of the questionnaires

classified by the time they have been in the organization (T.1 = 0 - 4 years; T.2 = 5 – 9 years T.3 = 10 - 14 years; T. 4 = 15 - 19 years; T.5 = 20 or more). It is worth to note that because in the range 3, corresponding to employees with an age between 10 and 14 years; there was no observation, we have joined the ranks 3 and 4 as shown below:

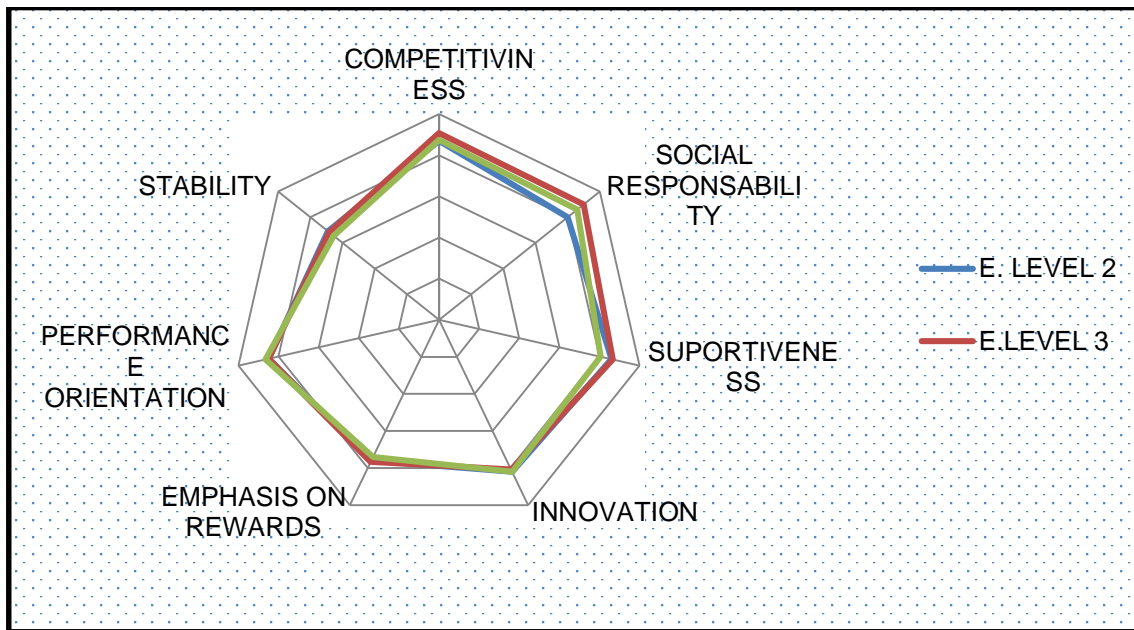
**FIGURE 7: Cultural Profile by Time in Company**



Again, what we show is an almost perfect alignment between the 4 groups that have been determined. We can perhaps mention, that members of the organization that have remained less time are able to see less stability in the operations of the organization than the rest; likewise we must stress that veterans employees are who have given higher scores in all categories. Based on these results we conclude that there are no subcultures among employee groups classified by the time they have been working in the organization, and there are no barriers to the new work force incorporation in the organization.

Finally and to complete phase 1 of our analysis, Figure 8 shows the cultural profile when employees are segmented by level of education. With this, we attempt to analyze whether the level of education can affect the perception of the desired culture of the organization. The Figure 8 joins levels 4 and 5 and has removed the group 1 (1 = Uneducated, 2 = Modules, Training; 3 = Degree/ Diplomature/ Engineering; 4 = Master Degree; 5 = More studies) because there was no observation:

**FIGURE 8:** Cultural Profile by Educational Level



Analysing Figure 8, we can notice clearly that the alignment between the 3 groups is almost perfect, the largest among the four tests shown graphically. With this, we can say that there are no subcultures by level of education. The fact that there are people with lower-level studies does not prevent these equally, they are well aware of the cultural values of the organization.

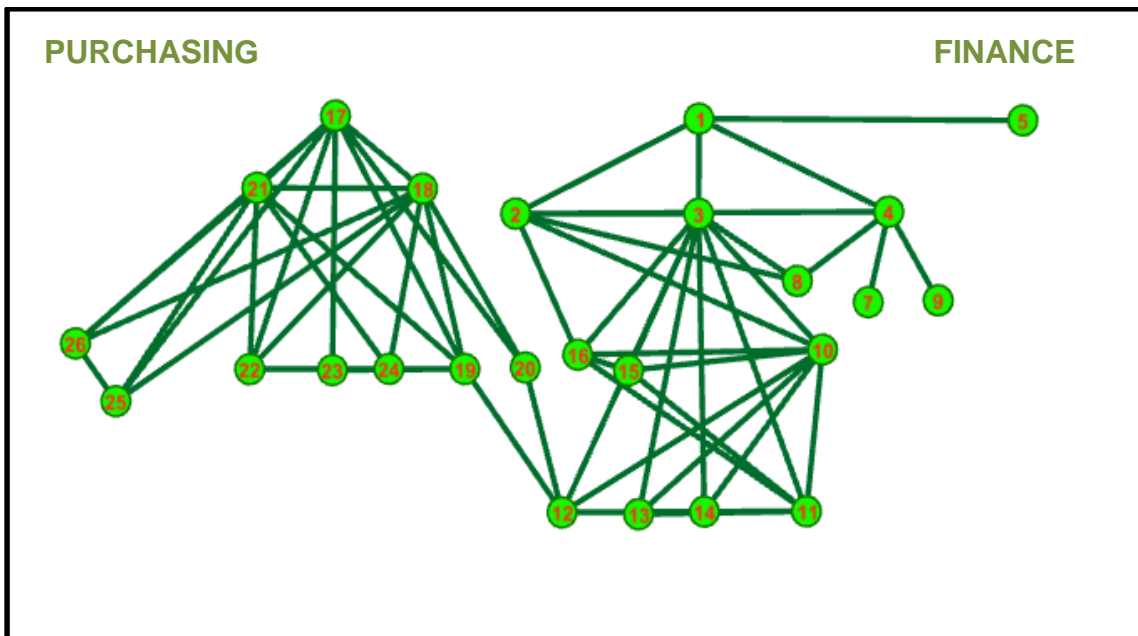
In conclusion to this first phase of research, which has made different groups of employees in accordance with criteria that may be generating subcultures, we no observed that there are different subcultures in any criteria, can say that the company has managed to convey the most important values efficiently.

### 3.3.2 Phase 2

Once the questionnaire responses were analyzed, we focused on the formal and informal relationships. To do this, as described in the methodology section, we will use the social network analysis (using free software, Gephi) that allows us to analyze in a more visual way these relationships. In a social network analysis node of the networks map corresponds to an employee, and the edges that leaving these nodes are equivalent to their relationship with other individuals. Due to the high interaction registered among all members of the organization; we have filtered the results, showing on the formal relations map just level 3 (1 = low relation; 2 = medium relation; 3 = high relation), that this level reflecting a more formal relationship. On the other hand, and due to the bidirectional nature of informal relations, to evaluate the intensity,

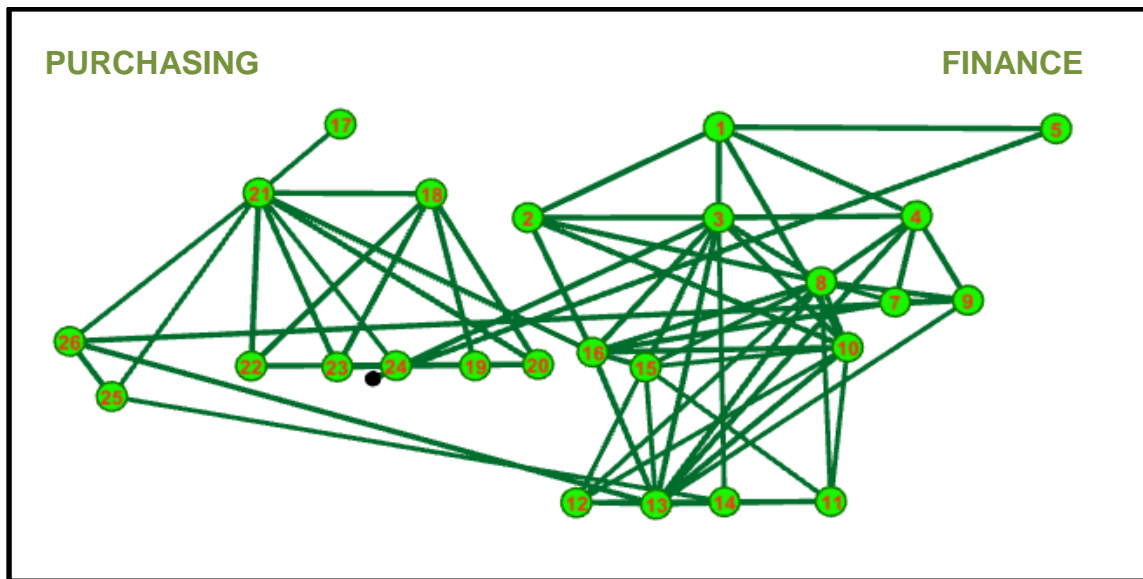
it has joined to evaluate the intensity, it has joined the weight relationship in both directions, as respondents differed when assigning a weight to the relationship they had with the other person. So, while some could rate as an intense informal relationship (score 3), others the same relationship was perceived by the other person as average or even low (i.e., scores 2 or 1). Given this, we will show both maps together, formal relations filtering by weight 3 and informal relationships filtering levels 5 and 6. The levels 5 and 6 are the result of the sum of informal relations, so that two individuals who interact value their relationship with a 3 they will receive a total weight of 6 and with just one of the individuals think that their relationship is high intensity (3) and the other one a medium level (2) will also be shown in Figure 9:

**FIGURE 9:** Map of Formal Network





**FIGURE 10:** Map of Informal Network



The Figure 9 shows the map corresponding to formal network relationships. This map shows the relations formal of weight 3 with each individual. The position of the nodes corresponds to a hierarchical structure that corresponds to the organization chart. It should be noted, that some modifications have been made to facilitate the interpretation of the map. We can say that the proposed organization structure corresponds to the needs of transmission and the needs of employees' work (for confidentiality reasons no will attach the organization chart).

Figure 10 shows the map of the informal relationships, following the same design and the same organization nodes to facilitate the analysis. As we can see informal relationships are more abundant than the formal (strictly speaking of those that have more weight, i.e. 5 and 6), and may even through departments. We must say that the structure of informal relations is similar to formal, and there are few individuals who do not maintain high degree relationship with those with whom they interact often in a work terms. So, it is evident that there is a strong informal network in this organization, and there is great communication between individuals; although there remains a marked departmentalization. Now in the next part of our analysis we will see if these detected relationships are significant, to answering in a similar way the questionnaire, or otherwise the internalization of culture has been achieved by the correct implementation of culture at all levels.

### 3.3.3 Phase 3

One time analyzed the cultural profiles, and identified the informal relationships existence in the organization with their respective weights, in Phase 3 of the research is to analyze whether the cultural profile is determined by formal and informal relationships within the organization. To do this, we analyze the degree of linear correlation these two variables. For comparison we build two arrays of the same dimension. The first matrix containing the similarity of cultural values between each pair of employees, the scores were obtained from questionnaires of cultural values. Meanwhile, the informal relationships matrix contained the sum of the informal relationships of each pair of employees.

To assess the similarity matrix of cultural values among individuals, it was calculated the discrepancy in absolute value between the profiles of cultural values of each pair of employees. For each pair of employees thus, it was obtained the existing deviation. To the informal relationship matrix, due to the bidirectional nature of the relationship between individuals, the sum of the weights of relations between each pair of individuals was calculated.

To analyze the relationship between cultural profiles of employees and the existing informal relationships, the correlation coefficient between the matrices described above was calculated. The results indicate a correlation of -0.008140, bringing evidences that the differences between the employee's cultural values are not correlated with the intensity of the relationships that these individuals possess. Given the few observations was decided to make the whole process again, but it doing a segmenting by department. In this new scenario, the correlation obtained with the finance department employees was negative (correlation coefficient = -0.20514562), but nevertheless, yes we observe a positive correlation between deviations from the questionnaires with the weight of informal relationship in the purchasing department, with a coefficient of 0.2254285. This result confirms the existence of a relationship between the similarity of employee's cultural values of and the intensity of informal relations.

This data can lead us to think that in the purchasing department, the informal relationships are more decisive than in the finance department; in this department exists a good alignment and homogenization of cultural values. It not is impossible to prove that informal relationships are causing one outcome or another in the questionnaires.

Finally, we must mention that due to the few observations and that we could not follow the network of relationships of each individual, i.e., interview all individuals with those who maintain a high level of informal relationship degree; we cannot show clearly the correlation, and it is enough with one or two numbers are contradictory, the correlation ceases to be positive. It would have been appropriate analyze the deviations between those people that maintaining relations daily, even outside the workplace.

## 4. CONCLUSION

---

Throughout the text we have described the organizational culture and its importance for the competitiveness of organizations. It is clear that those organizations with a strong culture that are understood their employees, will achieve a more productive workers and better levels of turnover. To get a better understanding of organizational culture, we have described and compared to other important terms in this field of study, including the direct involvement of relations and hierarchy in a successful implementation of culture.

We have also focused on the formal and informal relationships in the organization. These relationships should be maintained, as they are essential elements to the transmission of knowledge and information. The capacity to manage them enables the organization be more versatile and flexible to changes in the environment. In the empirical part of our research, we have empirically analyzed that informal relationships can be cause of a successful or failure culture implementation. In this case, we have had a small number of observations compared to the population of workers who were in the organization; hence the data alone can give us an idea about where to go for further research in this field. This is due among other factors, to the complexity of the analysis that we have used, measuring the weights of relations to then, entering the data in the software network design for a better visual of the organization informal structure and compare it with the formal structure. Furthermore, these data have subsequently served to calculate the correlation of these results with the questionnaires, trying us to demonstrate the importance of informal relationships to transmit the cultural values.

Nevertheless to above ideas, the data obtained have contributed us clear evidences that relationships can affect cultural perceptions. This has been able to observe in the purchasing department where those individuals with more informal

relationship have managed to have some minor deviations in the outcome of the questionnaire. This allows us to state that relations can have a positive impact on the internalization of organizational cultural values and organizations should take this into account for an efficient implementation of the organizational culture.

Finally comment that would have been of great interest, we had followed the map of employee relations, without having to limit ourselves to analyze the intradepartmental relations, understanding that an employee can have relationships outside their department or area. For future researches, should take into account this point just discussed and try to get results in other organizations with different activity. This research we can say that has shown a good tool to organizations to analyze more effectively the existing misalignments between what they want and these workers perceive.

## 5. REFERENCES

---

- Adler, S.P. (2001). Market, hierarchy and trust: The knowledge economy and the future of capitalism. *Organization Science*, 12 (2), 215 - 234.
- Barney, J.B. (1986). Organizational Culture: Can It Be a Source of Sustained Competitive Advantage? *Academy of Management Review*, 11 (3), 656 - 665.
- Bergeron, N.; Guirguis, M.; Schneider B.H.; Younger, A.J.; Wadeson, R. (2000). A Behaviour-Based Peer-Nomination Measure of Social Withdrawal in Children. *Social Development*, 9 (4), 544 - 564.
- Blau, P. M. (1970). A Formal Theory of Differentiation in Organizations. *American Sociological Review*, 35 (2), 201 - 218.
- Chandler, A. D. (1962). Strategy and structure: Chapters in the history of the American enterprise. Cambridge: Massachusetts Institute of Technology.
- Cooke, R. A.; Rousseau, D. M. (1988). Behavioral norms and expectations a quantitative approach to the assessment of organizational culture. *Group & organization management*, 13 (3), 245 - 273.
- Denison, D.R. (1984). Bringing Corporate Culture to the Bottom Line. *Organizational Dynamics*, 13 (2), 5- 22.
- Denison,D.R.; Mishra,A.K. (1995). Toward a Theory of Organizational Culture and Effectiveness. *Organization Science*, 6 (2), 204 - 223.
- Detert, J.R.; Schroeder, R.G., Mauriel, J.J. (2000).A Framework for Linking Culture and Improvement Initiatives in Organizations. *Academy of Management Review*, 25 (4), 850 - 863.
- Dweck, Carol S.; Leggett, Ellen L. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95 (2), 256 – 273.
- Fiol, C.M. (1991). Managing Culture as a Competitive Resource: An Identity-Based View of Sustainable Competitive Advantage. *Journal of Management*, 17 (1), 191 - 211.
- Galbraith, J. R. (1977). Organization Design: An Information Processing View. *Organizational Effectiveness Center and School*, 21, 21 – 26.
- Gouldner, A.W. (1954). Patterns of Industrial Bureaucracy. New York: Free Press

- Govindarajan, V. (1986). Decentralization, strategy, and effectiveness of strategic business units in multibusiness organizations. *Academy of Management Review*, 11 (4), 844 - 856.
- Hall, D. T., & Schneider, B. (1972). Correlates of Organizational Identification as a Function of Career Pattern and Organizational Type. *Academy of Management Proceedings*, 1 (1), 159 – 161.
- Hofstede, G. (1980). Culture and Organizations. *International Studies of Management & Organization*, 10 (4), 15 - 41.
- Howard-Grenville, J.A (2006). Inside the “BLACK BOX”: How Organizational Culture and Subcultures Inform Interpretations and Actions on Environmental Issues. *Organizations & Environment*, 19 (1), 46 - 73.
- Johnson,J.D; Donohue,W.A; Atkin,K.C; Johnson,S. (1994). Differences Between Formal and Informal Communication Channels. *The Journal of Business Communication*, 31 (2), 111-122
- Kaplan, R. (1993). The Role of Nature in the Context of the Workplace. *Landscape and Urban Planning*, 26 (1), 193 - 201.
- Kroeber, A.L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions*. Papers. Peabody Museum of Archaeology & Ethnology, Harvard University.
- March, J. G., & Simon, H. A. (1958). *Organizations*. Chicago: Blackwell Publishers
- McNamara, C. (2013). *Basic definition of organization*. Recuperado el 10 de abril de 2016 de <http://managementhelp.org/organizations/definition.htm>
- McPhee, D.; Zaug, P (2001).Organizational Theory, Organizational Communication, Organizational Knowledge, and Problematic Integration. *Journal of Communication*, 51 (3), 574 - 591.
- Mintzberg, H. (1979). *The Structuring of Organizations: A Synthesis of the Research*. University of Illinois: Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Molina, J.L. (1995). Analisis de Redes y Cultura Organizativa: Una propuesta Metodologica. *REIS*, 71 - 72 , 249 – 263.
- Ouchi, W. (1977). The relationship between Organizational Structure and Organizational Control. *Administrative Science Quarterly*, 22(1), 95 - 113.

- O'Reilly III, C.A.; Chatman, J.; Caldwell, D.F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal*, 34(3), 487- 516.
- Pavett, C.M.; Lau, A.W. (1983). Managerial work: The influence of hierarchical level and functional specialty. *Academy of Management Journal*, 26 (1), 170 - 177.
- Pettigrew, A.M. (1979). On Studying Organizational Cultures. *Administrative Science Quarterly*, 24 (4), 570 - 581.
- Repetti, R.L. (1987). Individual and Common Components of the Social Environment at Work and Psychological Well-Being. *Journal of Personality and Social Psychology*, 52 (4), 710 - 720.
- Robbins, S.P. (2004). *Comportamiento organizacional*. San Diego: Pearson educación.
- Rokeach, M. (1973). *The nature of human values*. New York: Free press.
- Sahlins, M.D. (1976). *Culture and Practical Reason*. Chicago: University of Chicago Press.
- Sarros, J.C, Gray, J., Densten, I.L., & Cooper, B. (2005). The Organizational Culture Profile revisited and revised: An Australian perspective, *Australian Journal of Management*, 30 (1), 159 - 182
- Schein, E.H. (1985). *Organisational culture and leadership: A dynamic view*. San Francisco: Jossey-Bass
- Schein, E.H. (1996). Culture: The missing concept in organization studies. *Administrative Science Quarterly*, 41 (2), 229 - 240.
- Sheridan,E.J. (1992). Organizational Culture and Employee Retention. *The Academy of Management Journal*, 35 (5), 1036 - 1056
- Stevenson, W. B. (1990). Formal Structure and Networks of Interaction within Organizations. *Social Science Research*, 19 (2), 113 - 131.
- Vandenberghe, C. (1999). Organizational culture, person-culture fit, and turnover: A replication in the health care industry. *Journal of Organizational Behavior*, 20 (2), 175 - 184.
- Weick, K.E. (1995). What Theory is Not, Theorizing Is. *Administrative Science Quarterly*, 40 (3), 385 - 390.
- Weick, K.E. (1979). Cognitive Processes in Organizations. *Research in Organizational Behavior*, 1 (1), 41 - 74.

Wilkins, A.L.; Ouchi, W.G. (1983). Efficient Cultures: Exploring the Relationship Between Culture and Organizational Performance. *Administrative Science Quarterly*, 28 (1) 468 - 481.

Zucker, L. G. (1989). Institutional Patterns and Organizations: Culture and environment. *Administrative Science Quarterly*, 34 (3). 501 – 503.

## 6. BIBLIOGRAPHY

---

Carrol, A. B. (1991). The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. *Business Horizons*. 7, 39 - 48.

Chaharbaghi, K.; Feurer, R. (1994). Defining Competitiveness: A Holistic Approach. *Management Decision*, 32 (2), 49 - 58.

Crawford, J.; Lok, P. (1999). The Relationship between commitment and organizational culture, subculture, leadership style and job satisfaction in organizational change and development. *Leadership & Organization Development Journal*, 20(7), 365 – 373.

Martins, E.C.; Terblanche, F. (2003). Building Organisational Culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64 - 74.

Smircich, L. (1983). Concepts of Culture and Organizational Analysis. *Administrative Science Quarterly*, 28 (3), 339 - 358.



## 7. APPENDIX I

Next is presented the questionnaire used to perform the empirical study.

**COMPETITIVENESS:** Refers to the constant search for improved organizational capacity to face competitors. This requires having the ability to act quickly to changes in the environment and invest capital in improving quality.

P.1		
1	At all times the company make clear the goals pursued with the work done.	
2	The organization looks at every detail and seeks the highest quality in its products and services.	
3	The organization has elements that distinguishes it from the others: logotype, exclusive products	
4	The organization tries to make consistently better products or services that competition and improves processes.	

**SOCIAL RESPONSIBILITY:** Refers to the commitment, obligation of members of the organization and the same with society as a whole, making practices ensure the common good.

P.2		
1	The organization develops and thinks a lot of decisions before carrying them out.	
2	The organization has a good reputation in the sector.	
3	The practices undertaken by the company are carried, thinking about the social and environmental impacts involved.	

4	At all times, the organization makes clear the values of the organization (for example: the lowest possible contamination, increased safety for workers, etc.)	
---	--	--

**SUPPORTIVENESS:** Refers to the pillars that support the activities of the organization, ways to raise the work to be done.

P.3		
1	The organization promotes form teams to cope with problems and daily activity.	
2	In organizing information is shared freely, can communicate with any member of the organization if necessary.	
3	The Company cares to train and get employees feel satisfied.	
4	The company encourages collaboration among employees to achieve better results.	

**INNOVATION:** Refers to the incorporation of developments in the field of organization, these can be both at the process level and at the economic level, new products, services, etc.

**PERFORMANCE ORIENTED:** Refers to the interest in achieving a good performance across the value chain of the organization.

P.4	
1	The company continuously introduces changes in the organization to improve its performance.
2	The company tries to take advantage of the opportunities that occur in its environment: possibility of incorporating new equipment, new products ...
3	In a situation of uncertainty the organization is not afraid to take risky decisions (regulatory changes, decreases in sales, economic crisis)
4	The company delegates its workers the ability to propose improvements.

P.6	
1	The organization is ambitious and seeks to improve its results in order to constantly year.
2	The organization is enthusiastic about improving performance and try to transmit it to other employees.
3	The organization seeks above all to get good results.
4	There are standardized coordination and planning to achieve the goals set plans.

**EMPHASIS ON REWARDS:** Refers to the reward that the organization gives to the efforts of workers in the performance of their work.

**STABILITY:** The preference of the organization to maintain its status quo at all levels.

P.5	
1	Wages and extras are fair and equitable to the work performed.
2	The organization allows workers to ascend based on the results.
3	The effort and its reflection in the results amount to a retributive improvement.
4	The organization recognizes the efforts of the workers.

P.7	
1	The company prefers routine to those tasks require risky decisions.
2	The work climate of the organization is quiet, without great pressure.
3	Workers are confident that they will remain working in the organization in a long-term (except for the commission of offenses)
4	In the organization there are no conflicts between departments or between individuals, and if any are quickly solved.

THANK YOU FOR YOUR COLLABORATION

