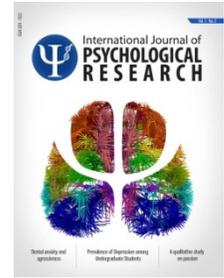




# Relation Between Organizational Climate and its Dimensions and Knowledge-sharing Behavior among Knowledge Workers

Relación entre el Clima Organizacional y sus Dimensiones y Comportamiento del Conocimiento Compartido entre Trabajadores del Conocimiento



Research

Milena Margarita Villamizar Reyes<sup>a</sup> \* ✉, Delio Ignacio Castañeda Zapata<sup>b</sup> ✉

<sup>a</sup> Faculty of Psychology, Universidad de San Buenaventura, Medellín, Colombia.

<sup>b</sup> Faculty of Psychology, Universidad Católica, Bogotá, Colombia.

## ARTICLE INFO

### Article history:

Received: 20-03-2014

Revised: 15-05-2014

Accepted: 30-07-2014

### ABSTRACT

This study aimed at identifying the relation of organizational climate and its dimensions from the PMCO measuring test for organizational climate (Cardenas & Villamizar, 2008, as cited in Cardenas, Arciniegas y Barrera, 2009) - in knowledge-sharing behavior, which was measured from the psychosocial variables and organizational conditions of knowledge-sharing behavior test (Castañeda y Fernandez, 2007). 100 participants from two types of organizations participated on this study: one of private nature and one public. A correlation of 0.578 between organizational climate and knowledge-sharing behavior was found. When carrying out an analysis of each organization, it was evident that the level of correlation between climate and knowledge-sharing behavior was highly significant in the public organization: There was a reliability level higher to 99%. There was no correlation found between the two variables studied in the private organization -with an r of 0.093 to 95%. As for the dimensions of climate and knowledge-sharing behavior, the results showed that in all public universities (including level of work, which got the lowest relation) these are statistically significant to 99.9%. In the private university only a relation to the personal growth dimension of 95% was found.

### Key words:

Organizational climate, organizational learning, knowledge management, knowledge sharing...

### RESUMEN

La presente investigación buscó identificar la relación del clima organizacional y sus dimensiones desde el instrumento prueba de medición de clima organizacional PMCO (Cárdenas y Villamizar, 2008, citado por Cardenas, Arciniegas y Barrera, 2009), en la conducta de compartir conocimiento, la cual fue medida desde la prueba Variables

### Palabras Clave:

Clima organizacional, aprendizaje

\* **Corresponding author:** Milena Margarita Villamizar Reyes, Faculty of Psychology, Universidad San Buenaventura Medellín, Colombia.

Email address: [psico.organizacional@usbmed.edu.co](mailto:psico.organizacional@usbmed.edu.co)



psicosociales y condiciones organizacionales de la conducta de compartir conocimiento (Castañeda y Fernandez, 2007). Los participantes fueron 100 trabajadores del conocimiento de dos organizaciones: una de carácter privado y otra pública. Se encontró una correlación del 0,578 entre el clima organizacional y la conducta de compartir conocimiento. Al realizar el análisis por entidades se encontró que en la pública el nivel de correlación entre clima y compartir conocimiento es altamente significativa con un nivel de confianza superior al 99%. En la entidad privada se encontró que no hay correlación entre las dos variables estudiadas con un  $r$  de 0,093 a un 95%. En cuanto a las dimensiones de clima y compartir conocimiento en la universidad pública se encuentra que todas incluyendo nivel de trabajo que presento la relación más baja son estadísticamente significativas al 99.9%. En la universidad privada solo se encontró relación con la dimensión crecimiento personal al 95%.

organizacional,  
gestión del  
conocimiento,  
compartir  
conocimiento..

## 1. INTRODUCTION

Organizational climate is defined as the perception that the members of an organization have of the characteristics that define and differentiate it. An emphasis of the concept has been placed on “the perceptions shared by a group of subjects about their working environment” (Brow y Moberg, 1991, p. 55). Perceptions can refer to structural processes such as supervision style, organizational policies, practices, procedures and working environment, among others. It is about a multidimensional concept and, because of this, it has been claimed that the climate of an organization constitutes a group of properties or characteristics of the working internal environment, perceived directly or indirectly by the workers of an organization, which influence the worker’s behavior (Martínez, 2001).

The first studies on organizational climate were carried out around the 30s by Kurt Lewin, who coined the term psychological atmosphere aiming to study climate as an empirical reality. Lewin, Lippit and White (1939) designed an experiment, which allowed them to learn the effect that a particular kind of leadership had in relation to climate; they found that for different types of leadership, different types of social atmospheres emerged. In research literature concerning organizational behavior, the notion of organizational climate is mainly defined in terms of the shared views on organizational policies, practices and procedures (Reichers & Schneider, 1990). Organizational climate reflects the way things are done in a particular work environment.

Dessler (1993) suggested that in terms a meaning for the word climate hasn’t been reached. Definitions go from purely objective factors such as structure, policies and regulations, to perceived subjective factors such as support and kindness.

Due to this lack of consensus, Dessler (1993) identified a definition for the term based on the focus that experts on the field give to it. The first is the structuralist focus by Forehand and Gilmer (1964),

who defined climate as a group of fixed characteristics that allow to describe an organization, differentiate it from another one, and which has an influence on the behaviors of those that constitute it.

Litwin and Stringer (1971), define organizational climate as a relatively stable characteristic within the internal environment of an organization, which is experienced by its members, influences their behavior, and can be described in terms of the values of a particular group in the organization. Furthermore, organizational climate has characteristics that maintain a relation with the working environment and have certain durability in spite of changes due to critical situations. This means that one can rely on a certain stability of an organization’s climate with relatively gradual changes; nonetheless, such stability can suffer significant disturbances.

Sandoval (2004) relates the terms proposed by Halpins and Crofts, and Litwin and Stringer (cited in Dessler, 1993), to find similarities in the definitions given by all these authors. To this author, climate is the way an individual perceives the organization he or she works for and the way he or she has formed an opinion in terms of autonomy, structure, rewards, regard, care and support.

According to Brunet (1997), work climate constitutes the identity of an organization, and this in turn influences the behavior of those that integrate it, hence, the relevance of a rigorous closer look to identify an organization’s climate. Chiavenato (1990), Brow and Moberg (1991), Hall (1996), and Gonçalves (2000) agree on the fact that organizational climate is an intervening phenomenon that mediates among the factors of the organizational system and the motivational tendencies, which are translated in some kind of behavior that has repercussions on the organization (productivity, satisfaction). To Cabrera (1999), because of this multidimensionality, it has been claimed that an organization’s climate constitutes its “personality” because just as the personality characteristics of an

individual define his or her personality, the climate of an organization is also constituted from its characteristics.

In relation to the dimensions of organizational climate, the climate measurement instrument PMCO proposes seven variables (Cardenas, Arciniegas & Barrera, 2009). The following dimensions have a theoretical foundation from a perceptual focus. Here, the climate is the result of the individual variables and the individual's psychological implications. However, James and Sells (1981), elaborated on the definition claiming that organizational climate refers to the cognitive representations of circumstantial events expressed in terms that reflect the psychological meaning and the situation for the individual.

Such dimensions are: (a) direction style, (b) personal growth, (c) management model, (d) level of work, (e) interpersonal relationships, (f) organizational communication, and (h) corporate image, which are defined as follows:

**Direction Style:** This variable is defined as the perception that helpers have of their managers in terms of the flexibility and acknowledgement in the communication processes. The direction style constitutes the managers' adopted form of guiding and leading the organization's actions, creating authority and reliability, showing management capacity, awareness of the citizens' needs and those interested in the organization, commitment to the control and mission, vision, plans and programs' compliance, good treatment to public employees and a transparent and efficient use of the resources (Zutta, 2008).

**Personal Growth.** To Vallejo (2004), personal growth refers to the upgrade of human potential (psychological and spiritual) that a person can reach beyond his or her natural development in terms of age. Personal growth allows for an individual to learn through his or her own consciousness, take advantage of his or her own abilities to think, feel and act to use autonomous thinking, free will, and rule a responsible freedom by being his or her own leader and having emotional health.

**Management Model:** It refers to the perception of the organizational structure and how its design allows a good working environment (Echavarría, 2007).

**Level of Work:** Perception of helpers in terms of the amount of work, pressure for the achievement of goals and objectives, time spent and probability of reaching the goals on the established deadline. The overload notion seems to be closely related to the concept of mismatch between what is needed from the worker and what he or she is capable of achieving (Ucymat, 2001).

**Interpersonal Relationships:** Perception of the work environment from the interactions among the

individuals within the organization. In 1994, Argyle found that interpersonal relationships refer to social situations that involve two or more people.

**Organizational Communication:** It is defined as the perception that one has of the formal systems of communication. It also refers to the process by which, an individual or part of an organization gets in contact with another part of it.

**Corporate Image:** Perception of the organization's positioning and subjective impact. According to Ruperti (2009), the corporate image is the organization's personality; in other words, what defines it: It is a definite element of differentiation and positioning.

Next, a characterization of the knowledge-sharing behavior variable (of interest for this particular study) will be presented along with some studies about its relation to organizational climate will be presented.

To share knowledge comes from the expression in English, knowledge-sharing, which has two meanings: The first implies to give a part, which constitutes an act of generosity; the second means to have something in common like in the "the shared beliefs system" (Fong & Chu, 2006).

Sharing knowledge is a means by which an organization gets access to its own knowledge and that of other organizations' (Nonaka, 1991). Knowledge sharing study has emerged as a research area in the fields of technology and innovation transference, and recently in the strategic management field.

This concept emerges in the 90s decade from the signature theory: the vision based on knowledge, which claimed that companies should become creation, transmission, integration and knowledge profiteering laboratories, where it would be acknowledged as the most important strategic resource (Grant, 1996) since its appropriate use would lead to the achievement of sustainable and competitive advantages through new innovations and products that result from knowledge creation (Nonaka & Takeuchi, 1995); Besides, if the organization takes good advantage of the knowledge that is produced and transmitted to the employees, it can obtain an adequate implementation of improvements in working methods that will generate more operations efficiency.

Sharing knowledge can be considered a public good available to all the members of a community or organization regardless of whether the members contributed to its construction or not. The authors contest that in organizations with a positive focus on social interaction among the staff, there are substantial benefits generated through knowledge sharing (Allee, 1997; Brown & Duguid, 2000; Connelly & Kelloway, 2003; Nonaka, 1991; Spender, 1999).

Nonaka and Takeuchi (1995) understood Knowledge sharing as the willingness that the individual has to share knowledge, understanding all the process that this knowledge exchange involves, and aiming, from this new individual knowledge, for organizations to be more efficient, spread it and incorporate it to new technologies, products and services.

McDermott and O'Dell (2001) highlighted the relevance of maintaining an evident link between sharing knowledge and business crisis by using the tools and knowledge structures that are compatible with the organization's general style.

Kim and Lee (2005) defined knowledge sharing as an organization's employees' ability to exchange experiences, expert knowledge, values, contextual information and insights, aiming at creating institutional frameworks for the assessment and inclusion of new experiences and information; sharing knowledge is some people's action not a systems' information action.

Christensen (2003) defined knowledge sharing as the identification and application of organizational knowledge intending to carry out processes in a faster, more efficient and safe way. This definition places an emphasis on the characterization and use of existent knowledge, not on its generation from the employees (Castañeda y Fernandez, 2007).

The success of knowledge sharing implies that knowledge is channeled between a sender and a receiver (Allee, 1997). It has been found that the fact of sharing knowledge is crucial to sustainability and organizational competitiveness. The same author claims that the wider the content knowledge, the bigger the final product value will be, and knowledge will be easier to replicate.

Allee (1999) suggests that the value chain of a company is truly a knowledge chain, where knowledge is promoted as the value increase because knowledge expands through its use. However, Bender and Fish (2000), point out that although people can transfer data or information, knowledge in itself has to be a process of interpretation, internalization and application.

Sharing knowledge has also become an important strategic management focus, where knowledge is seen as "the most important strategic resource that organizations have" (Grant, 1996) and a fundamental source of value creation (Nonaka, 1991; Spender & Grant, 1996; Teece, Pisano & Shuen, 1997).

Cummings (2003) suggests there are three types of activities to assess knowledge-sharing: In the first place, the analysis in the manner and location of knowledge is important because it can affect each of

the types of participation in the processes that will be necessary, the same as, how challenging these processes can be. In second place, the kinds of agreement, intervention regulations, and management practices embraced by the parts are relevant to assess the extent to which resources flow and knowledge among the parts can be arranged, and the measurements taken to overcome and accept significant differences of relation among the parts. In third place, the used knowledge exchange activities are important in the sense that they are the means by which the parts intend to promote the exchange of knowledge. As a consequence, any type of assessment aims at detecting whether the activities related to the manner and integration of knowledge, creation and management of adequate administrative structures are being used, and to foster the presence of knowledge-sharing behavior.

King and Marks (2008) established a difference between knowledge-sharing and knowledge transference. For the authors, when there is knowledge transference the individual does not know who the receiver of his or her knowledge will be; he or she simply knows that the knowledge will take part in a bank of information; in case of sharing knowledge, the person who does it knows who the receiver of his or her knowledge is.

Swift and Huang (2008) proposed a model that explains the effects of organizational context (management practices of human resources and climate) and the nature of the relationships among coworkers in relation to knowledge sharing behavior. The authors found that when someone who has knowledge perceives that his or her organization fosters teamwork and learning, and then he or she tends to assess knowledge-sharing behavior in a more positive way than when he or she perceives a climate oriented towards risk in knowledge acquisition matters. The latter weakens the possibility of sharing knowledge because people tend to worry more about the evaluation that others will do of their skills.

As far as the studies conducted on organizational climate and knowledge sharing, we can mention Chen and Hang's in 2007, which analyzed the organizational climate effects and knowledge structure from a social interaction perspective. They found that if companies had a higher degree of innovative and cooperative climate, interaction among the members of the organization would be more favorable and thus, the knowledge Exchange degrees would be improved.

The following study was conducted by Gengatharen, Standing and Knight in 2009. This study contributes to the literature about research and practice of knowledge management if two aspects are taken into account: in the first case, because it aims at understanding success and failure of knowledge

production at a university with an organizational climate characterized by uncertainty and change. In the second, because it acknowledges the decisive influence of organizational culture and a climate of trust, free information exchange and close work cooperation with others, which can affect management initiatives in a positive way.

In 2010, Li, Zhu and Luo, conducted a study called, Influence of Organizational Climate in Knowledge-Sharing Behavior in an organization in the south of China. The authors proposed a model of research about the factors of organizational climate that influence the behavior in the exchange of knowledge among companies. This empirical study showed that the components of organizational climate that were measured (favorable relation to innovation and justice) contributed significantly to the knowledge-sharing behavior and the self-efficacy and expectation behaviors.

A more recent study, one that includes the two variables that were taken into account for this project, was carried out by Abzari and Abbasi in 2011. The purpose of this research was to study the effect of organizational climate in the components of planned behavior theory (TPB), with the purpose of studying knowledge-sharing behavior among the employees of the Isfahan University.

It is important to understand that this theory asserts that the most relevant factor for behavior to be present is intention (Ajzen, 1991). Authors conclude that an appropriate organizational climate for the exchange of knowledge can become some sort of epidemic in the organization.

Tormo and Osca (2011), carried out research that purported to analyze in an exploratory manner the role of three organizational and personal antecedents in the intentions of sharing knowledge: Support, climate and commitment to the organization. Particularly what were studied were the direct relations of climate (specifically from task orientation and innovation support dimensions) on the basis of knowledge sharing. Results showed that task orientation has a direct effect on the intentions of knowledge sharing, for this is understood as a shared worry to achieve the quality in work results (Anderson y West, 1998).

The purpose of this study was to understand the relation of organizational climate and its dimensions and knowledge sharing conduct in a public and a private company of knowledge workers.

From the studies discussed above, this study formulates the following hypothesis:

H1: The dimensions of organizational climate relate to knowledge sharing behavior.

H2: The direction style dimension of organizational climate relates to knowledge sharing behavior.

H3, H4, H5, H6, H7, H8: The personal growth, management model, level of work, interpersonal relationships, communication and corporate image dimensions are each related to knowledge sharing behavior.

## 2. METHOD

### 2.1 Type of Study

This is a non-experimental, quantitative study. This non-experimental study aims at observing phenomena the way they occur in their natural setting to analyze them afterwards. (Hernández, Fernández & Baptista, 2007).

### 2.2 Design

This type of study is transactional-correlational. Hernández, Fernández and Baptista (2007), define it as a research process of describing relations among two or more categories, concepts or variables in a given moment. It is a procedure, which consists of measuring one or generally more variables in a group of people or objects, and it provides correlations in a certain given time.

### 2.3 Participants

The sample of this study is non-probabilistic. In this type of sample, sampling units are not randomly chosen, but purposefully chosen by the person in charge of collecting the sample (Malhotra, 2004).

A sample of 100 people was collected: 50 from a public entity and 50 from a private educational entity; male and female individuals, whose ages ranged from 20 to 45 years old. They had three years working in the company and had a professional background. The participants in the public entity had a full time permanent contract, and those in the private entity had a contract by hours. Both entities belonged to the high education sector.

### 2.4 Instruments

The organizational climate PMCO measurement test was developed by Cárdenas and Villamizar (2008) as cited in Cardenas, Arciniegas and Barrera (2009). It measures seven dimensions: 1. Direction style; 2. Personal growth; 3. Management model; 4. Level of work; 5. Interpersonal relationships; 6. Organizational communication and 7. Corporate image. This questionnaire consists of 45 items. Reliability with Alfa of Crombach indicator was of 0.96

To measure the knowledge-sharing behavior a sub-scale of knowledge sharing of the instrument "Psychosocial Variables and organizational conditions

of knowledge sharing behavior” was used, which was developed by [Castañeda and Fernandez \(2007\)](#). The instrument consists of 50 questions, of which four measure knowledge-sharing behavior. The Alpha of Cronbach coefficient obtained for this sub-scale is 0.81.

**2.5 Procedure**

Phase 1: It consisted in the process of getting closer to the participants and sensitize them. It should be noted that participation was volunteer.

Phase 2: Instruments were used to collect data: That is the organizational climate PMCO measurement test and psychosocial variables and organizational conditions of knowledge sharing behavior.

Phase 3: The results obtained in each of the institutions by means of the statistical program SPSS 10 were analyzed using linear regressions, which helped us understand general climate effects on knowledge sharing behavior in order to be able to answer the formulated hypothesis. knowledge sharing havior in order to be able to answer the formulated hypothesis.

show averages of 3.5, 4.1, 4.0, 4.1, 3.6, 3.5, 3.8 and deviations of 0.7, 0.5, 0.6, 0.6, 0.7, 0.7 y 0.6, respectively, which means that the data are accurate and reliable.

**Table 2. Public University Descriptive Statistics**

	Average	Desviation tip.	N
<b>Knowledge sharing</b>	5,7	1,2827	50
<b>Organizational climate</b>	3,8487	0,2739	50
<b>Organizational communication</b>	3,54	0,7879	50
<b>Personal growth</b>	4,195	0,5516	50
<b>Direction styles</b>	4,066	0,6019	50
<b>Corporate image</b>	4,1	0,6776	50
<b>Management models</b>	3,68	0,7126	50
<b>Level of work</b>	3,54	0,7879	50
<b>Interpersonal relationships</b>	3,82	0,6908	50

**3. RESULTS**

The statistical analysis of the collected data on the two samples will be presented below with the instruments selected for this study in order to answer the research, hypothesis, and goals planned.

**3.1 Total Sample Descriptive Analysis**

[Table 1.](#) Organizational climate in general (understanding general as the union of the two samples) had an average of 4,34 (acceptable according to the parameters established by the authors). The knowledge sharing behavior obtained a measurement of 5,23 meaning that the behavior is present in the tested participants.

**Table 1. Descriptive Statistics**

	Average	Desviation Tip.	N
<b>Knowledge sharing</b>	5,23	1,37	100
<b>Organizational climate</b>	4,34	1,44	100

[Table 2](#) shows a response average in the variable of knowledge sharing of 5,7, with a deviation of 1,28, and in the organizational climate an average of 3,8 with a 0,5, which means that the obtained data, besides being reliable are also accurate. The organizational communication, personal growth, direction style, corporate image, management model, level of work and interpersonal relationships scales

[Table 3](#) shows a response average in the variable of knowledge-sharing of 5,31, with a deviation of 1,55 and in the organizational climate variable an average of 3,69 with a deviation of 0,5; this means that the obtained data, besides being reliable are accurate, this is, they are not very disperse.

The organizational communication, personal growth, direction style, corporate image, management model, level of work and interpersonal relationships scales show averages of: 3.5, 4.1, 3.8, 4.2, 3.4, 3.1, 3.6 respectively and a deviation of 0.7, 0.5, 0.6, 0.6, 0.7, 0.7 y 0.7, which means that data are accurate and reliable.

[Table 4](#) shows that the general correlation between organizational climate (X) and the variable of knowledge sharing (Y) is 0,578, with a level of reliability of 99.9%; this means that there is a highly significant relation between these two variables. Besides this, we can observe the correlation between organizational climate variable and knowledge sharing in the public entity with a moderate correlation coefficient of 0,499 and a level of trust higher to 99%, where  $p < 0,01$  which is an indicator that there is a highly significant relation. As for the private entity, there is no correlation between the organizational climate variable and knowledge sharing with an  $r$  of 0.093; this is not a significant correlation to a 95%. Then, the null hypothesis is accepted and the alternative hypothesis is rejected, for there is no relation between the studied variables ([Table](#)

5). Correlation Between the Organizational Climate and Knowledge Sharing Dimensions at a Private University.

Table 3. Private University Descriptive Statistics

	Average	Desviación típ.	N
Knowledge sharing	5,31	1,558	50
Organizational climate	3,695	0,5243	50
Organizational communication	3,54	1,558	50
Personal growth	4,16	0,7879	50
Direction styles	3,895	0,5481	50
Corporate image	4,22	0,6183	50
Management models	3,44	0,7329	50
Level of work	3,16	0,7103	50
Interpersonal relationships	3,64	0,7762	50

Table 4. General Correlations Between Organizational Climate and Knowledge-Sharing. Public and Private Entities' correlation

		Compartir conocimiento general	Clima organizacional general	Compartir conocimiento pública	Clima organizacional pública	Compartir conocimiento privada	Clima organizacional privada
Correlación de Pearson	Compartir conocimiento	1	0,578	1	0,499	1	0,093
	Clima organizacional	0,578	1	0,499	1	0,093	1
Sig. (unilateral)	Compartir conocimiento	,	0	,	0	,	0,261
	Clima organizacional	0	,	0	,	0,261	,
N	Compartir conocimiento	100	100	50	50	50	50
	Clima organizacional	100	100	50	50	50	50

Table 5 shows that the only scale that establishes a significant correlation with the knowledge sharing variable is personal growth. The others are not 95% significant

Table 6 shows that the dimensions of organizational climate, which are related to the knowledge sharing variable are: Communication, personal growth, direction style, corporate image, management model, and interpersonal relationships. The level of work dimension has a low relation, but

statistically significant at 99.9% (Table 7). Knowledge Sharing Variance Analysis Between the Public and Private Universities.

The results of the organizational climate and knowledge sharing behavior differences in the public and private entities are given from Kolmogorov's analysis, in order to look at data. The table above indicates that data are not parametric, and for this reason for the variance analysis Mann-Whitney was used instead.

Table 5. Correlation Between the Organizational Climate and Knowledge Sharing Dimensions at a Private University.

		Compartir Conocimiento	Comunicación Organizacional	Crecimiento Personal	Estilos de Dirección	Imagen Corporativa	Modelo de Gestión	Nivel de Trabajo	Relaciones Interpersonales
<b>Correlación de Pearson</b>	<b>Compartir Conocimiento</b>	1.000	.063	.346	.064	-.059	.010	.028	.024
<b>Sig. (unilateral)</b>	<b>Compartir Conocimiento</b>	.	.333	.007	.330	.343	.472	.423	.434
<b>N</b>		50	50	50	50	50	50	50	50

Table 6. Correlation Between Organizational Climate and Knowledge Sharing Dimensions at the public University

		Compartir Conocimiento	Comunicación Organizacional	Crecimiento Personal	Estilos de Dirección	Imagen Corporativa
<b>Correlación de Pearson</b>	<b>Compartir Conocimiento</b>	1.000	.306	.351	.565	.417
<b>Sig. (unilateral)</b>	<b>Compartir Conocimiento</b>	.	.015	.006	.000	.001
<b>N</b>		50	50	50	50	50

Table 7 indicates that there are significant differences between the public university and the private university in what concerns the knowledge-sharing variable.

Table 7. Knowledge Sharing Variance Analysis Between the Public and Private Universities.

Estadísticos de contraste	
	Compartir Conocimiento total
<b>U de Mann-Whitney</b>	1031
<b>W de Wilcoxon</b>	2306
<b>Z</b>	-1,517
<b>Sig. Asintót. (bilateral)</b>	0,129

Taking into account that the organizational climate data present a parametric, the t of student was used to establish the difference between the private and public entities. As shown in table 8, there are no significant differences between the public and the private universities in what relates to organizational climate.

Table 8. Análisis de Varianza de Clima organizacional Entre la Universidad Pública y la Privada

		Clima Organizacional total	
		Se han asumido varianzas iguales	No se han asumido varianzas iguales
<b>Prueba de Levene para igualdad de varianzas</b>	<b>F</b>	0,367	
	<b>Sig.</b>	0,546	
<b>Prueba T para la igualdad de medias</b>	<b>T</b>	-1,062	-1,062
	<b>GI Sig. (bilateral)</b>	97	96,824
		0,291	0,291

#### 4. DISCUSSION

Taking into account the objectives of this study, it could be established that after carrying out the measurements, the organizational climate (understanding general as the union of the two samples), was found to be at an ideal level since it had an average of 4,34, which allows to understand that the internal variables typical of these organizations affect the behaviors and perceptions that each individual has of it, which has an effect on the next variable of this study that is knowledge-sharing behavior. It had an average of 5,23,

considered a high percentage in quantitative terms, which means that the behavior is present in the studied participants and can be identified in the studies carried out by different authors who assert that in the organizations where there is a positive focus in the social interaction among the staff members, there are noticeable benefits generated through knowledge exchange (Allee, 1997; Brown & Duguid, 2000; Connelly & Kelloway, 2003; Nonaka, 1991; Spender, 1999).

In the private entity the organizational climate variable and the knowledge sharing variable threw resulting values of 3,6 y 5.3 respectively, which shows us that the knowledge sharing behavior is present in the participants of this study. Besides, results can be supported by Peiró's study in 1986, elaborated by Vega (2006) in which both authors mentioned that the organization is a context psychologically significant to its members and this has led to the "organizational climate" concept construction; Szulanski (2000) and Kim and Lee (2005), defined knowledge sharing as the ability of the employees of some organization to exchange experiences, expert knowledge, values, contextualized information and insights aiming to create institutional frameworks for assessment and the inclusion of new information and experiences; sharing knowledge is an act of people: not an information systems' act.

In the public entity the organizational climate is perceived in an acceptable manner with a tendency to being perceived as good since it obtained a 3,8 result, and the knowledge sharing behavior had a result of 5.7, which evidences that the behavior is present. Martínez, (2001), defines climate as interaction between personal and organizational characteristics, which affects directly or indirectly people's behavior within an organization Cotton (2008), Allee (1999) and Chen and Huang (2007), found that if companies had a higher innovative and cooperative climate, the interaction among the organization's members would be more favorable and thus, the degrees of knowledge exchange would also be improved.

As for the climate dimensions in the private entity, personal growth with a 4,1; corporate image with 4.2, can be perceived as adequate. Organizational communication with 3,5; direction style 3.8; interpersonal relationships 3.6 are perceived as acceptable and management model with 3.4 and level of work with 3.1, are perceived as bad. Concerning organizational climate, it is important to take into account the valuation of both, the individuals' perceptions through their behaviors and the properties of organizational structure (Argyle, 1994; Cardenas, Arciniegas y Barrera, 2009; Echavarría, 2007; González-Gutiérrez, Moreno-Jiménez, y

Garrosa, 2005; Muñiz, 2006; Ruperti, 2009; Vallejo, 2004; Zutta, 2008).

In the public entity the climate dimensions perceived as good were personal growth 4.1; corporate image 4.1; direction style 4.0. As acceptable, were organizational communication 3.5; management model 3.6; level of work 3.5, and interpersonal relationships 3.8. Organizational climate has characteristics that keep a relation to the work environment and have certain stability despite the changes caused by critical situations. This means that under relatively gradual changes, one can count on certain stability in an organization's climate (Argyle, 1994; Cardenas, Arciniegas y Barrera, 2009; Echavarría, 2007; Muñiz, 2006; Raineri, 2006; Ruperti, 2009; Ucymat, 2001; Valdivia, 2009).

In general terms, there is a relation between the organizational climate variable and the knowledge sharing behavior if the alternative hypothesis is accepted and the null rejected. Mahon (1992) and Abzari and Abbasi (2011) point out that if there is an adequate organizational climate, the presence of knowledge sharing behavior emerges as an epidemic in the whole organization.

In the private entity there is no relation between the organizational climate variable and the knowledge sharing behavior. The null hypothesis is accepted and the alternative is rejected which means that there is no relation between the studied variables. These results differ from those of Kim and Lee in 2005, which found that in the private sector there is a stronger perception of knowledge sharing that in the public sector.

In the public sector there is a relation between the organizational climate and knowledge sharing behavior. The alternative hypothesis is accepted and the null is rejected. This means that there is a relation between the studied variables. Li, Zhu and Luo (2010) claim that in an organization where there is knowledge exchange, there is a climate that allows all the staff to have a common perception about the fact that this phenomenon happens inside the place and besides it reflects the knowledge exchange relation among the employees.

Once carried out the correlations between the chosen organizational climate dimension for this study and the knowledge-sharing behavior for the private university, it was possible to establish that the only dimension that has a significant correlation is personal growth. The others are not significant at 95%. The scales of organizational climate variable do not explain the knowledge-sharing behavior variable. To Vallejo (2004), personal growth or personal development is understood as the upgrade in human potential (psychological and spiritual) that the person can reach beyond his or her natural development according to

his or her age. Every participant in the sample had a professional background of Masters or Specialization, which presumably means that not having to spend all the time in the company, gives them time to carry out activities that allow them to enrich their knowledge. However, not sharing it with those surrounding them except for the students they have in charge, does not mean they share it, but only transmit it.

As for the existing relation between the organizational climate and knowledge sharing behavior, all dimensions are related to the knowledge sharing behavior. Alternative hypothesis are accepted and null hypothesis are rejected. According to Tormo and Osca (2011), the results seem clear; an organizational climate oriented towards task (which seeks for excellence, or the best way of doing things), influences directly on the intentions of sharing knowledge with coworkers perhaps because the existence of rules and clear procedures prompts employees to follow them and act accordingly.

Both, the public and private entities can be framed in Swift and Hwang's (2008) model, which explained the effects of organizational context (management practices of human resources and climate) and the nature of the relationships between coworkers in terms of knowledge sharing behavior. They found that when that who has knowledge perceives that his or her organization fosters teamwork and learning, he or she tends to assess his or her behavior in a more positive way than when there is a perception of climate oriented towards risk in knowledge acquisition matters.

Finally, different results were found in both institutions where population samples had similar characteristics such as schooling level, and it can be assumed that these characteristics likely had a strong effect on the final results.

Results of the present study gain special relevance for the analyzed variables since other issues need to be studied such as the context in which institutions function on the daily basis, but especially, in how some are capable of transmitting the knowledge they have, and how some others can accept it, apprehend it, and transform it to give it back to the context they lead their lives in.

As for the limitations found on this study, we have to mention that the sample was small, participants were hard to find and not very willing to complete the tests with good disposition due to time constraints. Besides this, some of the uncompleted tests had to be discarded in each institution. More studies of this nature are necessary using different instruments that measure different dimensions to understand more the effects of climate on the knowledge sharing behavior and what other aspects of climate need to be accounted for. It is also

recommended to take this study to another type of population and take into account variables other than climate. It would also be relevant to invite other researchers interested in organizational climate to share knowledge in order to deepen in this area of organizational psychology.

## 5. REFERENCES

- Abzari, M. & Abbasi, R. (2011). Investigating Impact of Organizational Climate on Intention to knowledge Sharing Behavior by Using Theory of Planned Behavior (TPB). *Interdisciplinary journal of contemporary research in business*, 2(12), 121-134.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50, 179 -211.
- Allee, V. (1999). The art and practice of being a revolutionary. *Journal of Knowledge Management*, 3(2), 121-131.
- Allee, V. (1997). *The Knowledge Evolution: Expanding Organizational Intelligence*. Boston: Butterworth-Heinemann.
- Anderson, R. & West, A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. *Journal of Organizational Behavior*, 19, 235-258.
- Argyle, M. (1994). *Psicología del comportamiento interpersonal*. Madrid: Alianza Editorial.
- Bender, S. & Fish, A. (2000). The transfer of knowledge and the retention of expertise: the continuing need for global assignments. *Journal of Knowledge Management*, 4(2), 125-137.
- Brow, W. y Moberg D. (1991). *Teoría de la organización y la Administración: enfoque integral*. México: Editorial Limusa.
- Brown, J. & Duguid, P. (May-June, 2000). *Balancing Act: How to Capture Knowledge without Killing It*. Harvard Business Review. Recuperado de <http://www.conference-board.org/retrievefile.cfm?filename=Capture%20OK%20Without%20Killing%20It.pdf&type=subsite>
- Brunet, L. (1997). *El clima de trabajo en las organizaciones*. México: Trillas.
- Cabrera, A. (1999). *Clima organizacional en empresas chilenas*. Recuperado de <http://www2.uel.br/ccb/psicologia/revista/oclima.htm>
- Cardenas, L., Arciniegas, Y. C., y Barrera, M. (2009). Modelo de intervención en clima organizacional. *International Journal of Psychological Research*, 2(2), 121- 127.

- Castañeda, D. y Fernández, M. (2007). Validación de una escala de niveles y condiciones de aprendizaje organizacional. *Revista Universitas Psychologica*, 6, 245-254.
- Chen, C., & Huang J. (2007). How organizational climate and structure affect knowledge management. The social interaction perspective. *International Journal of Information Management*, 27, 104–118.
- Chiavenato, I. (1990). *Administración de recursos humanos*. Bogotá: McGraw Hill.
- Christensen, P. (2003). *Knowledge sharing-time sensitiveness and pull-push strategies in a non-hype organization*. Retrieved from <http://openarchive.cbs.dk/bitstream/handle/10398/6331/wp12-2003phc.pdf?sequence=1>
- Connelly, C. E. & Kelloway, E. K. (2003). Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organizational Development Journal*, 24(5), 294-301.
- Cotton, P. (2008) Desarrollando un clima organizacional óptimo. Sidney, Australia.
- Cummings, J. (2003). Knowledge Sharing: A Review of the Literature. The World Bank Operations Evaluation Department. Retrieved from [http://ieg.worldbank.org/Data/reports/knowledge\\_eval\\_literature\\_review.pdf](http://ieg.worldbank.org/Data/reports/knowledge_eval_literature_review.pdf)
- Dessler, G. (1993). *Organización y administración enfoque situacional*. Prentice Hall International.
- Echevarría D. (2007). *Cultura organizacional y estilos de dirección desde la perspectiva de género: desafíos de la empresa Cubana*. La Habana.
- Fong, P. S.-w., & Chu, L. (2006). Exploratory Study of Knowledge Sharing in Contracting Companies: A Sociotechnical Perspective. *Journal of construction engineering and management*, 132(9). 928 - 939.
- Forehand, G. & Gilmer, B. (1964). Environmental variation in studies of organizational behavior. *Psychological Bulletin*. 62, 361- 382.
- Gengatharen, D., Standing, C., & Knight, S. (2009). *Knowledge Management in an Organizational Climate of Uncertainty and Change: A Longitudinal Case Study of an Australian University*. Retrieved from <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1470&context=ecuworks>
- Gonçalves, A. (2000). *Fundamentos del Clima Organizacional*. Sociedad Latinoamericana para la calidad. México: Editorial Trillas.
- González-Gutiérrez, J. Moreno-Jiménez, B. y Garrosa, E. (2005). *Carga mental y fatiga laboral*. Madrid: Pirámide.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17, 109- 122.
- Hall, R. (1996). *Organizaciones, Estructura, Procesos y Resultados*. (2da Edición). México: Prentice Hall.
- Halpin, A. & Croft, D. (1963). *The organizational climate of schools*. Chicago: The University of Chicago. Midwert Administrative Center.
- Hernández, R., Fernández, C., & Baptista, P. (2007). *Metodología de la Investigación*. México: McGraw-Hill.
- James, L. & Sells, S. (1981). Psychological climate: Theoretical perspectives and empirical research. En Magnusson, D. (Ed.). *Toward a psychology of situations: An interactional perspective*, (pp. 275-295.). LEA.
- Kim, S., & Lee, H. (Jan, 2005). *Employee knowledge sharing capabilities in public and private organizations: Does organizational context matter?* Proceedings on the 38th Hawaii International Conference on System Sciences.
- King, W. & Marks, P. (2008). Motivating knowledge sharing through a knowledge management system. *Omega*, 36, 131-146.
- Li, Z., Zhu, T., & Luo, F. (2010). A Study on the Influence of Organizational Climate on Knowledge-Sharing Behavior in IT Enterprises, *Journal of Computers*, 5(4), 508-515.
- Lewin, K, Lippitt, R. & White, R.K. (1939). Patterns of aggressive behavior in experimentally created "social climates". *Journal of Social Psychology*, 10(2), 271-299.
- Litwin, G. & Stringer, R. (1971). *Motivation and organization climate*. Cambridge: Harvard University.
- Mahon. (1992). *Comunicación Organizacional*. México: Prentice Hall.
- Malhotra, N. (2004). *Investigación de Mercados: Un enfoque aplicado* (4th Edición), Prentice Hall.
- Martinez, B. (2001). *Análisis del clima laboral*. México.
- McDermott, R., & O'Dell, C. (2001). Overcoming cultural barriers to sharing knowledge. *Journal of Knowledge Management* 5(1), 76–85.
- Muñiz, R. (2006). *Marketing en el siglo XXI*. Madrid: Centro Estudios Financieros.
- Nonaka, I. (1991). The Knowledge-Creating Company. *Harvard Business Review*, November-December, pp. 96-104.
- Nonaka, I. & Takeuchi, H. (1995). *Creating Knowledge in Practice*. International Thomson Business Press.
- Peiró, J. (1986). *Psicología de la Organización*. Madrid: UNED.

- Raineri, A. (2006). Estilos de dirección como determinante del clima laboral en Chile. *Revista ABADANTE*, 9(1), 3-33.
- Reichers, A. E., & Schneider, B. (1990). Climate and culture: An evolution of constructs. In Schneider, B. (Ed.), *Organizational climate and culture* (pp. 5-39). San Francisco: Jossey-Bass.
- Ruperti, C. (2009). *Comunicación Organizacional y Relaciones Públicas*. Retrieved from <http://corpimfor.blogspot.com/>
- Sandoval, M. (2004). *Concepto y dimensiones del clima organizacional*. México: Hitos Ediciones.
- Spender, J. C. (1999). Organizational Knowledge, Collective Practice and Penrose Rents. In Zack, M. (Ed.) *Knowledge and Strategy*. Woburn, (pp. 117-132). MA: Butterworth-Heinemann.
- Spender, J. C. & Grant, R. M. (1996). Knowledge of the firm: Overview. *Strategic Management Journal*, 17, 5-9.
- Swift, P. E. & Hwang, A. (2008) Learning, dynamic capabilities and operating routines: A consumer package goods company. *The Learning Organization*, 15(1), 75-95.
- Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. *Organizational Behavior and Human Decision Processes*, 82(1), 9- 27.
- Teece, D, Pisano, G, & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18, 509-533.
- Tormo, G y Osca, A. (2011). Antecedentes Organizacionales y Personales de las Intenciones de Compartir Conocimiento: Apoyo, Clima y Compromiso con la Organización. *Revista de Psicología del Trabajo y de las Organizaciones* 27(3), 213-226.
- UCYMAT-Dirección del Trabajo. (2001). *Problemas actuales en salud de los trabajadores*. Santiago: LOM. Ediciones.
- Valdivia. (2009). *Crecimiento Personal*. Recuperado de [http://www.helios3000.net/astrop/crecimiento\\_personal.shtml](http://www.helios3000.net/astrop/crecimiento_personal.shtml)
- Vallejo, J. (2004). *La personalidad integradora: El doble logro de ser sí mismo y vincularse*. Barcelona: Ediciones CEDEL.
- Vega, D. (2006). Panorama sobre los estudios de Clima Organizacional en Bogotá, Colombia (1004-2005). *Revista Diversitas-Perspectivas en Psicología*, 2(2).
- Zutta, M (2008). Estilo de dirección. Equipo Operativo MECI-SGC. San Juan de Pasto (Colombia).