Cultural Values and Knowledge Sharing in the Context of Sustainable Organizations

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Abstract: The current research studied the relationship between cultural values and tacit and explicit knowledge sharing behavior in the context of sustainable organizations. The sample consisted of 751 workers from Colombian organizations. It was found that sharing explicit and tacit knowledge correlated with the cultural dimensions of uncertainty avoidance, individualism–collectivism, and paternalism. On the other side, sharing tacit and explicit knowledge did not correlate with the cultural dimensions of power distance and masculinity–femininity. For organizational managers interested in knowledge sharing, a lesson is to facilitate environments of low uncertainty, care about the needs of workers, and have high collective values such as respect and interest in what others do. These values are essential for the promotion of knowledge sharing, which in turn contributes to sustainable organizations. From the theoretical point of view, the study opens a new line of research that integrates cultural studies and knowledge management to investigate the differential impact of cultural values on tacit and explicit knowledge sharing in organizational contexts.

Keywords: cultural values; knowledge sharing; tacit knowledge; explicit knowledge; knowledge management

1. Introduction

Knowledge is one of the most important resources for the achievement of organizational objectives and to support the sustainability of organizations. Knowledge is defined as personalized information in the brain of individuals about facts, procedures, concepts, interpretations, ideas, observations, and judgments [1]. Knowledge sharing, understood as the exchange of information, experience, and expertise, is a fundamental behavior to create and apply knowledge in the organization. According to Swan et al. [2], knowledge transfer is dependent on organizational culture. In this article, cultural values are considered determinants of knowledge sharing. Cultural values and their dimensions affect the way individuals share both tacit and explicit knowledge. Huff and Huff [3] stated that organizational culture and organizational results are mutually dependent. Research on the relationship between knowledge sharing and cultural values is scarce, especially in the Latin American context. Moreover, there are no studies that inquire about the differential impact of cultural values on the tacit or explicit knowledge that is shared. The research question, based on Hofstede's conceptualization was: which cultural dimensions impact knowledge sharing behavior? In a subsidiary way, do cultural dimensions intervene differently in tacit and explicit knowledge? From the theoretical point of view, the study opens a new line of research that integrates cultural studies and knowledge management, to investigate the differential impact of cultural values on tacit and explicit knowledge sharing in organizational contexts. From the applied point of view, the results of this research contribute to guiding decision-makers in the design of interventions that increase the knowledge sharing behavior, which is essential for the achievement of objectives and organizational sustainability.

2. Literature Review

2.1. Organizational Culture

Socialization is the process by which individuals acquire a cognitive frame of reference and behavior patterns characteristic of their culture [4]. Culture, therefore, is the fundamental mechanism as the members of a social or organizational group give meaning to reality and behave in that direction. In organizational contexts, Deal and Kennedy [5] characterized culture as the way of doing things in the entity. Culture is formed by opinions, beliefs, expectations, and regulations that connect the individual with the organization [6]. In a complementary way, Swidler [7] defined culture as symbolic values of shared beliefs, rituals, practices, and language. Schein [8] described organizational culture as the aggregate of basic assumptions about the surrounding world, which are shared by a group of people and determine the way they perceive, think, and behave. Chevrier [9] stated that people who are embedded in a particular culture share their views of the world. Hartnell et al. [10] described culture as values and beliefs that represent normative expectations, which inform about how individuals will behave. Culture manifests itself through language, symbols, rituals, and behavior [11].

Organizational culture is considered a practice that cultivates awareness, individual development, and diversity in a particular context [12]. Willson [13] found that unresolved conflicts about organizational culture lead to rule-breaking and the prevalence of pessimistic approaches by group members.

One of the best-known analyses of culture is that developed by Hofstede [14], who considered that national culture influences organizational culture. For Hofstede et al. [15], organizational culture is a type of collective programming that helps to distinguish the people of one organization from another. For Hofstede [14], the culture construct, in its initial version, had four dimensions. The first is called power distance and is defined as the degree to which a society accepts the unequal distribution of power. In organizations, the degree of centralization of authority is related to the level of power distance. In lower power distance environments, people from different social statuses tend to have more interactions than those in high power distance environments. The second dimension is individualism–collectivism; individualism occurs when people taking care of themselves is considered a priority and collectivism operates when the priority is expected to be in the needs of the group or society and not of individuals. In individualistic societies, employees' achievements are highly valued. In collective cultures, workers tend to focus on consensus and interdependence. The third dimension is uncertainty avoidance, defined as the degree to which the individual feels threatened by ambiguous situations and therefore avoids them. Uncertainty avoidance organizations reduce ambiguity by establishing formal rules and not tolerating deviant behaviors. The fourth dimension is masculinity–femininity, which indicates the degree to which the values of society are more masculine or feminine. In masculine societies, males have dominant roles to be competitive, while females are expected to take service-oriented roles. Masculine organizations tend to reward top performers. Dorfman and Howell [16] adapted Hofstede's instrument and included a new dimension that they called paternalism, which assesses the degree to which bosses care about the needs of workers and take care of them. Paternalism is a hierarchical relationship in which a leader guides the professional and personal lives of collaborators in a manner resembling a parent, promoting deference. Paternalistic leaders combine benevolence with authority. Paternalism promotes workers' welfare while offering career-related support.

There are studies on the dimensions of culture. Esen et al. [17] found that uncertainty avoidance has a direct effect on purchasing behavior, while collectivism has an indirect effect. Danish et al. [18] concluded that knowledge management practices have a positive effect on organizational effectiveness and that this effect is moderated by organizational culture. In the same direction, Asree et al. [19] found that organizational culture has a positive relationship with the sensitivity of an organization.

2.2. Knowledge Management and Sustainability

Sustainability is a challenging concept which is socially and politically constructed and reflects the interest and values of those involved [20]. Sustainability is starting to transform the competitive landscape, which will force companies to change the way they think about products, technologies, processes, and business models [21]. Organizational sustainability increasingly focuses on how to manage new knowledge of ideas and practices that can expand business [22]. Knowledge management in the context of sustainability is little explored and there are many possibilities of academic research [23]. One of these is the role of culture as a facilitator of knowledge sharing oriented to the achievement of strategic goals.

In the context of sustainability, knowledge management is treated as a new paradigm of development that aims to enhance compliance with the guidelines of economic, environmental, and social sustainability [24]. Any sustainable initiative becomes of great relevance when it causes positive changes in the community involved [25]. From the social dimension, organizations must be concerned about the welfare of their workers [26]. Sustainability should be addressed not only for environmental concerns or society's expectations but because it makes good business sense [27]. Sustainability can enhance business efficiency and the search for competitive advantage [28]. Sustainability is partly based on skills generated by knowledge [29].

2.3. Knowledge Sharing

Knowledge is a crucial asset in organizations, which contributes to obtaining competitive advantages [30] and to organizational effectiveness [31]. Knowledge is classified as tacit and explicit [32]. Explicit knowledge is characterized by being formally codified; therefore, it can be expressed through language and can be explained in steps. It can be transmitted via formal mechanisms in the entity, such as by email. In contrast, tacit knowledge is not yet documented but is in the head of the individual in the form of expertise, experience, intuitions, and beliefs. Tacit knowledge is acquired through observation and assimilation of experiences [33]. It is characterized by containing the abilities of an individual that are difficult to describe through language [34], and therefore difficult to document and store.

Knowledge sharing is a topic that has been growing in the knowledge management literature. Serenko and Bontis [35] stated that knowledge sharing is one of the most important research topics in organizational management. Knowledge sharing is a resource that enables entities to obtain their objectives and reduce unwanted phenomena such as turnover [36], as well as to improve the performance of their areas [37]. This concept is also defined as the exchange of experience and tacit and explicit knowledge between employees [38]. Knowledge sharing is a social interaction that involves the exchange of skills between workers [39], and the exchange of information, ideas, and suggestions [40]. Van den Hooff and de Ridder [41] defined knowledge sharing as the process of mutual exchange of knowledge and its collective construction.

There are multiple studies on the influence of personal variables on knowledge sharing. For example, about personality, Gupta [42] showed that more meticulous people are more involved in knowledge sharing actions. Bock et al. [43] documented a positive relationship between subjective norms and knowledge sharing. Cabrera et al. [44] found a correlation between self-efficacy and knowledge sharing. There is also a positive relationship between the perceived value of knowledge and knowledge sharing [45]. At the same time, Xue et al. [46] showed that the team environment and the support of senior management influence employee attitude to sharing knowledge.

2.4. Knowledge Sharing and Culture

Culture plays an important role for organizations to achieve the concept of sustainability [47]. Culture is the center point for sustainability awareness [48]. Developing an organizational culture that encompasses sustainable issues acts as a powerful source of

competitive advantage [49]. The management practice of sustainability has a direct link with the organizational culture [48].

An issue that has been less studied is how knowledge sharing is influenced by organizational culture. Concerning a topic associated with culture, organizational climate, Bock et al. [43] found that it affects the intention to share knowledge. In another similar study, Jalili and Salemipour [50] established a relationship between the emotional climate of workgroups and the behavior of knowledge sharing. Zhang [51] found a relationship between national culture and the attitude to share knowledge in virtual teams. Turban and Aronson [52] stated that there is a relationship between knowledge sharing and culture. Stojanovic-Aleksic et al. [53] were a step forward and indicated that an organizational culture based on support is a good predictor of knowledge sharing. Yi [54] argued that a leadership style based on the proper example is a relevant mechanism to strengthen an organizational culture oriented to knowledge sharing. In the same direction, Lei et al. [55] showed that a collaborative and knowledge-centered culture mediates the relationship between ethical leadership and the knowledge sharing behavior of employees.

Lee et al. [56] found that clan-like organizational culture positively impacts knowledge sharing. Along the same lines, Rohim and Budhiasa [57] asserted that a clan-like culture moderates the relationship between remuneration and knowledge sharing. Zheng and Zhong [58], in a supply chain study, supported those findings. In his study, Luu [59] found a relationship between an adhocratic culture and knowledge sharing. In addition, Sung-Jin [60] showed that the greater the sharing of knowledge, the greater the innovative organizational culture. Talat et al. [61] evidenced the mediating role of knowledge sharing between the variables of organizational culture oriented to learning and spirituality in the workplace. For their part, Brown and Frame [62] identified collaboration as the mechanism through which organizational culture facilitates knowledge sharing. In the same direction, Memon et al. [63] reported a relationship between an organizational culture that encourages its workers and the sharing of tacit knowledge. Jarrah et al. [64] supported the hypothesis that knowledge sharing mediates the relationship between a culture based on obedience and organizational performance. Suppiah and Sandhu [65] found that organizational culture influenced tacit knowledge sharing. Finally, Kivrak et al. [66], in the context of project development, established that difficulties in communication and lack of trust are critical barriers to sharing knowledge.

Few studies have taken Hofstede's classification as a basis to relate culture and knowledge sharing and none in Latin America. Michailova and Hutchings [67] compared the relationship between knowledge sharing and culture in Russia and China. For them, vertical collectivism led to an intensive relationship between the members of the organization, which facilitated knowledge sharing in both countries. Sandhu and Ching [68] in Malaysia also supported the hypothesis that vertical collectivism, like horizontal collectivism, influenced knowledge sharing behavior. Cummings [69], for his part, asserted that organizations with collectivist cultures share knowledge. Arpaci and Baloglu in Turkey [70] documented that cultural collectivism positively impacted attitudes towards knowledge sharing. Trier et al. [71] found that uncertainty is a barrier for knowledge sharing and workers avoid it. Stock et al. [72] documented that coping with uncertainty is relevant in the context of knowledge sharing linked to new product development projects. Lee et al. [73] in China showed a correlation between paternalistic leadership and knowledge sharing in their collaborators. Pellegrini et al. [74] reported a correlation between paternalism and information exchange between leaders and collaborators in the United States and India. From the above, the following hypothesis was formulated:

Hypothesis 1. *Collectivism, uncertainty avoidance, and paternalism are directed related to sharing tacit and explicit knowledge.*

On the other hand, highly masculine cultures place more emphasis on competitiveness that triggers knowledge hoarding and creates a hurdle for knowledge sharing [75]. Rivera-Vasquez et al. [76] argued that in a culture with a high level of masculinity, communication

tends to be more aggressive and less oriented to knowledge sharing. Persson [77] reported no relation between masculinity and knowledge sharing. Brijball [78] in South Africa found that high masculinity and high distance power were not related to knowledge sharing. Moreover, Ardichvili et al. [79] asserted that when power distance is strong, knowledge sharing is not welcome. Chiu et al. [80] found that the relationship between positive affect and knowledge sharing is negatively moderated by power distance. Finally, Kucharska and Bedford [81] found that the influence of masculinity on knowledge sharing is mediated by job satisfaction. From the above, the following hypothesis was formulated:

Hypothesis 2. *Masculinity and power distance are not directly related to sharing tacit and explicit knowledge.*

There are no published studies that investigate whether the cultural values exposed by Hofstede differentially influence the sharing of tacit and explicit knowledge. This investigation serves as an exploratory study that opens a line of future research. However, there are studies like the one published by Suppiah and Sandhu [65] that reinforce the relationship between organizational cultural and tacit knowledge and the one by Celestine and Perryer [82] in Europe where collectivism and power distance acted as moderator variables in the relationship between intrinsic motivation and tacit knowledge sharing. Zhang [51] in Hong Kong found that participants under cultures with low uncertainty avoidance were responsive to sharing explicit knowledge. From the above, the following hypothesis was formulated:

Hypothesis 3. *Cultural values influence tacit and explicit knowledge in the same way.*

In summary, this study tests the relationship between five cultural values and the behavior of sharing tacit and explicit knowledge.

3. Methods

3.1. Participants

The sample consisted of 751 workers from 76 Colombian companies. In the sample, 55.12% were men, and 43.28% women. Of the participants, 1.6% did not specify their gender. Regarding age, 30.1% of the sample was between 20 and 29 years old, 38.4% between 30 and 39 years old, 18.7% between 40 and 49 years old, 8.5% between 50 and 59 years old, 1.2% between 60 and 69 years old, and 3.1% did not specify age. Regarding the level of the position, 16.91% of the sample was from the managerial level, 27.43% adviser level, 29.43% professional level, 19.84 technical level, and 6.39% did not specify their position. From the sample of 751 participants, 87 questionnaires with missing values were eliminated. A total of 315 participants were included in the exploratory factor analysis and 349 in the confirmatory factor analysis.

3.2. Instruments

To evaluate the cultural dimensions, the instrument proposed by Dorfman and Howell [16] was used, which consists of 29 questions that are grouped into 5 cultural dimensions. The first dimension is uncertainty avoidance which has five items. An example question is "Rules and regulations are important because they inform employees what the organization expects of them". The second dimension is individualism–collectivism with six items. One of the questions is "Being accepted by the members of your workgroup is very important". The third dimension is power distance with six items. An example question is "Managers should seldom ask for the opinions of employees". The fourth dimension is paternalism with seven items. An example of a question is "Managers should help employees with their family problems". Finally, the fifth dimension is masculinity–femininity with five items. One of the items of the dimension is "Solving organizational problems usually requires an active forcible approach which is typical of men". The knowledge sharing instrument used was the one designed by Castaneda and Toulson [83,84], which measures tacit knowledge

and explicit knowledge. An example of a question of explicit knowledge is "My organization share documented successful practices". An example of a tacit knowledge item is "In my organization, workers share intuitive knowledge applicable to work".

4. Results

First, to better understand the demographic characteristics of the study participants, a series of descriptive data are presented. Table 1 summarizes the demographic data of the 751 people who responded to the questionnaires.

Table 1. Demographic data of the sample.

Characteristics	Number	Percentage (%)
Gender		
Male	414	(55.13%)
Female	325	(43.28%)
Unspecified	12	(1.6%)
Age (years)		
20–29	226	(30.1%)
30–39	288	(38.4%)
40–49	140	(18.7%)
50–59	64	(8.5%)
60 or more	9	(1.2%)
Unspecified	24	(3.1%)
Position level		
Executive	127	(16.91%)
Consultant	206	(27.43%)
Professional	221	(29.43%)
Technical	149	(19.84%)
No data	48	(6.39%)
Total	751	

Next, exploratory factor analysis was carried out on the cultural dimensions based on the responses of 315 people, eliminating the missing values of 87 questionnaires. The Kaiser–Meyer–Olkin model adequacy test gave a result of 0.83 and $p = 0.00$ in the Bartlett sphericity test. A total of six factors were found, as shown in Table 2. Questions tended to fit correctly in each of the expected dimensions, which indicates that the questions were adapted to their constructs.

Factor 3 (questions 1 to 5) refers to uncertainty avoidance. Factor 5 (questions 6 to 10) refers to individualism–collectivism. Factor 2 (questions 11 to 17) refers to power distance. Factor 4 (questions 19 and 21 to 24) refers to paternalism. Factor 1 (questions 25 to 29) refers to masculinity–femininity. Thus, the data, in general, adjust to the proposed factors.

Concerning questions 18 and 20, although they were expected to be part of the paternalism construct, they were not. Question 18 inquires whether bosses should help employees with their family problems, while question 20 specifies if the boss should help employees solve their problems. However, these two questions formed Factor 6, which, in its description, corresponds to the leader's support for his collaborators, conceptually part of paternalism.

Table 2. Exploratory factor analysis results.

	Factors					
	Masculinity–Femininity	Power Distance	Uncertainty Avoidance	Paternalism	Individualism–Collectivism	New FactorLeader Support
Q1: It is important to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do.	−0.011	0.000	**0.675**	0.017	0.065	0.053
Q2: Managers expect employees to closely follow instructions and procedures.	−0.009	0.126	**0.683**	0.058	0.065	−0.025
Q3: Rules and regulations are important because they inform employees what the organization expects of them.	−0.033	0.000	**0.754**	0.16	0.106	0.040
Q4: Standard operating procedures are helpful to employees on the job.	−0.069	0.017	**0.679**	−0.044	0.102	0.032
Q5: Instructions for operations are important for employees on the job.	−0.007	−0.065	**0.694**	0.094	0.091	−0.072
Q6: Group welfare is more important than individual rewards.	−0.007	−0.047	0.277	0.010	**0.682**	−0.018
Q7: Group success is more important than individual success.	−0.018	−0.024	0.257	0.023	**0.726**	−0.008
Q8: Being accepted by the members of your workgroup is very important.	0.002	0.039	0.290	0.060	**0.428**	0.236
Q9: Employees should only pursue their goals after considering the welfare of the group.	0.048	0.090	−0.340	−0.088	**0.473**	0.191
Q10: Managers should encourage group loyalty even if individual goals suffer.	0.073	0.087	0.011	0.164	**0.670**	−0.181
Q11: Individuals may be expected to give up their goals in order to benefit group success.	0.163	**0.485**	−0.019	−0.003	0.333	0.207
Q12: Managers should make most decisions without consulting subordinates.	0.112	**0.647**	0.005	−0.092	−0.020	0.067
Q13: It is frequently necessary for a manager to use authority and power when dealing with subordinates.	0.132	**0.559**	0.115	0.146	0.058	−0.056
Q14: Managers should seldom ask for the opinions of employees.	0.325	**0.642**	0.055	0.007	−0.161	0.103
Q15: Managers should avoid off-the-job social contacts with employees.	0.136	**0.676**	−0.009	0.077	0.063	−0.107
Q16: Employees should not disagree with management decisions.	0.161	**0.632**	0.005	0.080	0.068	−0.043
Q17: Managers should not delegate important tasks to employees.	0.210	**0.598**	−0.084	−0.113	−0.045	0.157
Q18: Managers should help employees with their family problems.	0.043	0.085	0.017	0.340	0.055	**0.656**

Table 2. *Cont.*

	Factors					
	Masculinity–Femininity	**Power Distance**	**Uncertainty Avoidance**	**Paternalism**	**Individualism–Collectivism**	**New FactorLeader Support**
Q19: Management should see to it that workers are adequately clothed and fed.	−0.047	0.136	−0.089	**0.665**	0.178	0.111
Q20: A manager should help employees solve their personal problems.	0.152	0.021	0.021	0.196	−0.011	**0.819**
Q21: Management should see that health care is provided to all employees.	−0.158	−0.032	0.202	**0.603**	0.071	−0.321
Q22: Management should see that children of employees have an adequate education.	0.032	−0.043	0.014	**0.743**	0.033	0.069
Q23: Management should provide legal assistance for employees who get in trouble with the law.	0.049	0.011	0.046	**0.646**	−0.101	0.289
Q24: Management should take care of employees as they would treat their children.	0.158	0.030	0.075	**0.616**	0.011	0.232
Q25: Meetings are usually run more effectively when they are chaired by a man.	**0.740**	0.316	−0.012	0.071	−0.059	0.049
Q26: It is more important for men to have a professional career than it is for women to have a professional career.	**0.801**	0.298	−0.081	0.008	0.040	0.118
Q27: Men usually solve problems with logical analysis; women usually solve problems with intuition.	**0.799**	0.152	−0.090	0.039	0.072	−0.005
Q28: Solving organizational problems usually requires an active forcible approach which is typical of men.	**0.823**	0.240	−0.013	0.068	0.041	0.027
Q29: It is preferable to have a man in a high level position rather than a woman.	**0.800**	0.183	0.013	−0.080	0.030	0.100

A confirmatory factor analysis was carried out with 349 participants and the results are observed in Table 3. The coefficients presented and the recommended values for the fit of the model are the most used in research, and together they provide information to make a decision about the fit of the model [85–87]. As it is shown in Table 3, the TLI met the recommended value. The other coefficients were close to the expected values, indicating that the model is adjusted.

Table 3. Confirmatory factor analysis values.

Coefficients of the Model.		
Coefficients	**Recommended Values**	**Present Values of the Model**
NFI	$p \geq 0.90$	0.788
RFI	$p \geq 0.80$	0.760
IFI	$p \geq 0.90$	0.865
TLI	$p \geq 0.80$	0.845
CFI	$p \geq 0.90$	0.863

Next, a correlation analysis was carried out with the intention of verifying the relationship between cultural dimensions and the types of knowledge sharing. As can be seen in Table 4, explicit knowledge correlates with the cultural dimensions of uncertainty avoidance ($r = 0.168$; $p < 0.01$), individualism–collectivism ($r = 0.138$; $p < 0.01$), and paternalism ($r = 0.110$; $p < 0.01$). Tacit knowledge is also correlated with these same dimensions (avoidance: $r = 0.258$, $p < 0.01$; individualism–collectivism: $r = 0.136$, $p < 0.01$; paternalism: $r = 0.142$, $p < 0.01$). These results support Hypothesis 1.

Table 4. Correlation between the types of knowledge and cultural dimensions.

	Sharing Explicit Knowledge	**Sharing Tacit Knowledge**
Uncertainty Avoidance	0.168 *	0.258 **
Individualism–Collectivism	0.138 **	0.136 **
Power Distance	0.061	0.008
Paternalism	0.110 **	0.142 **
Masculinity–Femininity	−0.008	−0.052

Note: * Significant correlation ($p < 0.05$); ** Significant correlation ($p < 0.01$).

In contrast, the two types of knowledge sharing, explicit and tacit, do not correlate with the cultural dimensions of power distance ($r = 0.061$ and $r = 0.008$) or with masculinity–femininity ($r = −0.008$ and $r = −0.052$). These results support Hypothesis 2.

In a second phase, a structural model was made to specify the relationship between the constructs. The measure of each of the dimensions (uncertainty avoidance, individualism–collectivism, power distance, paternalism, and masculinity–femininity) was computed as the mean of the variables for each construct. In the same way, it was done with each of the two types of knowledge sharing (tacit and explicit).

As can be seen in Table 5, the SEM coefficients (NFI, RFI, TLI, CFI) showed that the fit of the model corresponds to what is stated in the literature. In this way, the model indicates that cultural dimensions are influenced by the tacit knowledge that is shared (Figure 1).

Table 5. Results of the adjusted model between the cultural dimensions and the sharing of tacit knowledge.

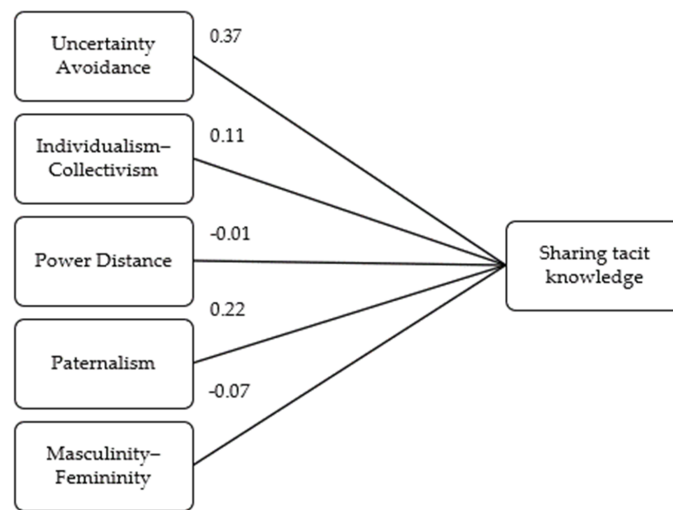| Culture vs. Tacit Knowledge		
Coefficients	**Recommended Values**	**Present Values of the Model**
NFI	$p \geq 0.90$	0.843
RFI	$p \geq 0.80$	0.826
IFI	$p \geq 0.90$	0.900
TLI	$p \geq 0.80$	0.887
CFI	$p \geq 0.90$	0.899

Figure 1. Model of cultural dimensions and tacit knowledge.

As can be seen in Table 6, the SEM coefficients (NFI, RFI, TLI, CFI) showed that the fit of the model is adequate to that reported in the literature. Therefore, the model indicates that cultural dimensions are influenced by the explicit knowledge that is shared (Figure 2). There were no differences in trends, that is, the same cultural dimensions that correlated with sharing tacit knowledge also did so with explicit knowledge, supporting what was proposed by Hypothesis 3.

Table 6. Results of the model adjusted between the cultural dimensions and the sharing of explicit knowledge.

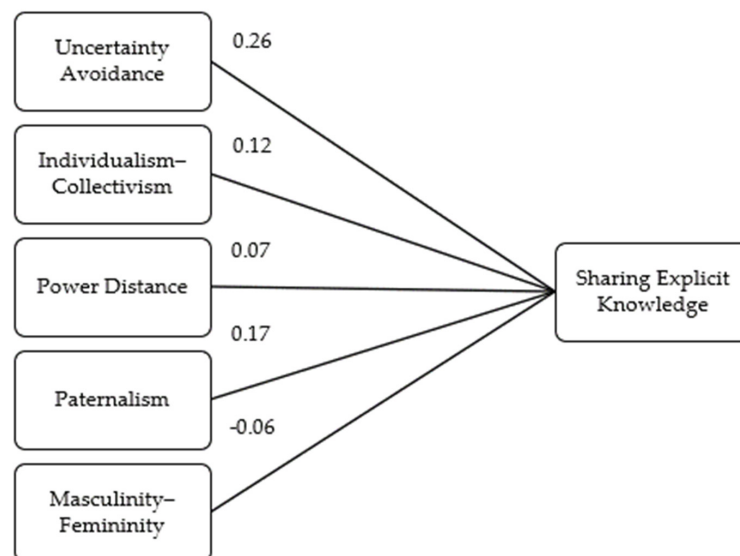| Culture vs. Explicit Knowledge		
Coefficients	Recommended Values	Present Values of the Model
NFI	$p \geq 0.90$	0.850
RFI	$p \geq 0.80$	0.832
IFI	$p \geq 0.90$	0.906
TLI	$p \geq 0.80$	0.894
CFI	$p \geq 0.90$	0.906

Figure 2. Model of cultural dimensions and explicit knowledge.

5. Discussion

Knowledge is one of the most important resources for the achievement of organizational objectives and to support their sustainability. Knowledge sharing is a fundamental process of knowledge management characterized by the transfer of information and expertise oriented to the generation and application of knowledge to support the accomplishment of organizational goals. Organizational sustainability focuses on how to manage new knowledge of ideas and practices that can expand business [22]. It is also related to the welfare of employees. Knowledge sharing in the context of organizational sustainability is little explored and a line of research is the role of culture as a facilitator of knowledge sharing oriented to the achievement of their objectives.

Organizational culture is a social mechanism that contributes to the formation of a collective meaning of reality. Culture is made up of values, beliefs, rituals, and practices. Organizational sustainability is based on ethical principles and values which are linked to the culture. In this study, the conceptual framework of culture was taken from Hofstede [14] and later studies [15]. In this approach, culture has five dimensions: power distance, individualism–collectivism, uncertainty avoidance, masculinity–femininity, and paternalism.

As mentioned in the theoretical framework, few studies have reported the relationship between some dimensions of culture according to Hofstede's [14] classification and knowledge sharing, and none of them in Latin America.

Although there is a relationship between cultural values and knowledge sharing, the correlation is not significant for all dimensions. According to the results, both tacit and explicit knowledge significantly correlate with the cultural dimensions of uncertainty avoidance, individualism–collectivism, and paternalism supporting Hypothesis 1. In contrast, the two types of knowledge sharing do not correlate with the cultural dimensions of power distance or masculinity–femininity supporting Hypothesis 2.

Few existing studies that use the Hofstede classification have supported the relationship between collectivism and knowledge sharing [67,68], a result that was also found in the present study. A possible explanation is that when values that prioritize the group over the individual prevail, the probability of behaviors of collective benefit increases. This is the case of knowledge sharing. The promotion of collectivism in organizational environments constitutes an opportunity for the exchange of knowledge, which in turn is a source of value for the achievement of organizational objectives. The latter is linked to organizational sustainability.

Regarding the positive relationship between uncertainty avoidance and knowledge sharing found in the present study, although there are no previous studies to support it, the possible explanation is that knowledge is declared as a resource of high value to respond to the demands of the environment and contribute to the achievement of organizational objectives. To the extent that the worker knows that he has the required knowledge and that it is valid and up-to-date, he will reduce uncertainty and may improve his attitude toward sharing it.

The third positive relationship in this study was between paternalism and knowledge sharing, a dimension that was added by Dorfman and Howell [16]. Although only one related study was found [74], based on the definition of paternalism which assesses the degree to which bosses care about the needs of workers and take care of them, one way to do it is to facilitate an environment where knowledge can be shared. This is one of the values closest to organizational sustainability, where the concept of welfare is central. Paternalism is characterized by benevolence and authority. Moreover, leaders are the pillars of building the desired culture. To the extent that workers feel directed to share knowledge and perceive that this behavior is valued by their bosses, then the probability that they will present it increases.

Concerning the masculinity dimension, like in the research of Rivera-Vasquez et al. [76], in the present study, no relationship was found with the behavior of knowledge sharing. It is possible that characteristics such as aggressiveness, typical of this dimension, do not

facilitate knowledge sharing. The main characteristic of masculinity is dominance. In this construct, knowing implies power and sharing it is detrimental to that power.

In this study, no relationship was found between power distance and knowledge sharing. A characteristic of this construct is the centralization of authority. In contexts that promote this cultural value, the communication is poor and the motivation to share knowledge is low. In a context perceived as authoritarian, people only present the desired behaviors under conditions of high monitoring, not spontaneously.

This study is novel in the sense of evaluating whether tacit and explicit knowledge are shared in the same way depending on the cultural dimensions. According to the results, the relationship between cultural values and knowledge sharing behavior had the same direction for tacit and explicit knowledge. It is recommended to carry out future studies that integrate variables in which differences between tacit and explicit knowledge have been found. For example, it has been documented that tacit knowledge can only be shared with information and communication technologies that facilitate dialogue. This is not a limitation for explicit knowledge.

6. Conclusions

From this study, it can be concluded that the cultural dimensions of uncertainty avoidance, individualism–collectivism, and paternalism influence the behavior of sharing tacit and explicit knowledge. At the same time, it can be concluded that the cultural dimensions of power distance and masculinity–femininity are not related to that behavior. Furthermore, those cultural values impact the tacit and explicit knowledge that is shared in the same way.

Further studies are recommended in other Latin American countries, a region where research on the relationship between cultural values and knowledge sharing is scarce.

For organizational managers interested in knowledge sharing, a lesson is to facilitate environments of low uncertainty, care about the needs of workers, and foster high collective values such as respect and interest in what others do. These values are essential for the promotion of knowledge sharing, which in turn contributes to sustainable organizations.

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