Adjustment between collectivist/individualist attributes of a person with the perceived culture of the work unit: An analysis of its influence on organizational citizenship behavior

Ajuste entre atributos colectivistas/individualistas del sujeto con la cultura percibida de la unidad de trabajo: Un análisis de su influencia sobre el comportamiento ciudadano organizacional

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Abstract

This research analyze whether the fit between Individualistic/Collectivistic attributes of subjects and the perceived culture of work unit influence the Organizational Citizenship Behavior (OCB). Information was collected of 248 individuals who work in a foreign subsidiary of a transnational United States company operating in Costa Rica. The hypothesis was evaluated with linear mixed regressions. The results reveal that Horizontal Individualism exerts more OCB as the perceived adhocratic culture degree in the work unit increase. On the other hand, Vertical Collectivism exert more OCB as more hierarchical culture is perceived. Research provides new scientific evidence, since no study has previously assessed whether collectivists and individualists attributes are more convenient in certain cultures to promote OCB. In terms of practical applicability, the findings suggest that organizations can promote OCB placing the individuals in work units with an organizational culture compatible to their attributes.

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Resumen

El presente estudio analiza si el ajuste entre los atributos individualistas/colectivistas de los sujetos y su percepción sobre la cultura de su unidad de trabajo influye el Comportamiento Ciudadano Organizacional (CCO). Para el análisis se recopiló información de 248 sujetos que trabajan en una compañía transnacional. Las hipótesis se evaluaron con modelos de regresión lineal. Los resultados obtenidos revelan que los sujetos con mayor grado de individualismo horizontal ejercen mayor CCO conforme aumenta el grado de cultura adhocrática percibida en su unidad de trabajo. También, los sujetos con mayor grado de colectivismo vertical ejercen mayor CCO conforme más jerárquica sea la cultura percibida. La investigación aporta nueva evidencia científica, ya que anteriormente ningún estudio ha valorado si los atributos colectivistas e individualistas son más convenientes en ciertas culturas para promover el CCO. En términos de aplicabilidad práctica los hallazgos obtenidos sugieren que las organizaciones pueden promover el CCO ubicando al sujeto en unidades con culturas afines a sus características (individualistas/colectivistas).

Código JEL: M140
Palabras clave: Comportamiento Ciudadano Organizacional; Individualismo; Colectivismo; Cultura organizativa.

Introduction

Organizational citizenship behavior (OCB) is understood as every behavior that surpasses the expectations that are formally required for a collaborator in the performance of a certain role (Organ, 1998). Because of the importance of these behaviors on the performance of the organization (Ueda, 2011; Podsakoff and Mackenzie, 1997; Podsakoff, MacKenzie, Paine & Bachrach; 2000), various research studies have been carried out to try to explain the variables that determine these types of behavior.

Many of these researches have focused on explaining this additional contribution of the collaborators through different variables, one of them has been the adjustment between the subject and the organization (PO fit) or the adjustment between the subject and the work group (GO fit). PO fit refers to the beliefs employees have about how well their personal values coincide with the culture of the organization (Cable & DeRue, 2002; Kristof, 1996). GO fit is understood as the compatibility between the individual and the work group (Kristof, 1996).

Wei (2012), Yaniv, Lavi and Siti (2010) and Cable and Derue (2002) find a direct and positive relationship between OCB and the perception of the subject on how their values fit in with organizational values. For their part, Kristof, Zimmerman and Johnson (2005) perform a meta-analysis in which they determine that the convergence of values between the subject and the group influences extra performance. According to Cable and DeRue (2002), if an employee shares the values of your organization, they may identify and trust your organization more and be more willing to make an additional effort. In turn, Schein (1985) stresses that when the values of individuals are consistent with the values of the organization defined by the manager, personal interactions, cognitive processing of information and communication are facilitated, generating positive attitudes towards work.

Farzaneh, Dehghanpour and Kazemi (2014) note that the relationship between OCB and person-organization value adjustment is mediated by organizational engagement, although they also found direct influence of adjustment on OCB. Vilela, González and Ferrin (2008) find an

indirect relationship of individual-organizational adjustment with OCB. The findings show that a greater degree of adjustment increases satisfaction and emotional commitment and that these elements in turn determine OCB.

At global level, Shin and Choi (2010) analyze the influence of the fit between group and organizational values on the group OCB. According to the researchers, when group members perceive that the values and objectives of the group are consistent with those of the organization, they are more likely to perceive a favorable environment for their group work, a greater sense of legitimacy and significance of the group, and a greater willingness to engage in organizational citizenship behavior.

The findings described above demonstrate the importance for the attributes of the subject to be aligned with the culture of the area where they work to strengthen OCB. Under this perspective, this study aims to analyze whether the adjustment (compatibility) between the individualist/collectivist attributes of the collaborators and their perception of the culture of the unit where they work influences organizational citizenship behavior. It is important to note that the effect of the adjustment between both constructs is determined by analyzing whether the influence of the individualist and collectivist features of the subjects (valued from the perspective of Singelis, Triandis, Bhawuk & Gelfand, 1995) on their organizational citizenship behavior is modified according to the culture of their work units (the culture is assessed with the "Competing Values Framework" model by Cameron and Quinn, 2006). In this way, it can be determined whether there is a more appropriate type of culture for certain individualist/collectivist attributes.

It is important for researchers and professionals to understand the effects of the adjustment between I-C (Individualism-Collectivism) and the perception of culture in the work unit, given the interest that has been shown in analyzing the effects of I-C on organizational behavior (Parkes, Bochnner & Schneider, 2001). Furthermore, exploring the effect of this adjustment provides new scientific evidence, as no previous study has assessed whether collectivist and individualist attributes are more suitable in certain group cultures for promoting OCB.

This research also aims to analyze the direct relationship between individualism/collectivism and OCB. Although significant relationships between individualism/collectivism and OCB have been found, the relationship in various cultures and regions must be further analyzed (Cohen and Avrahami 2006), because there is no guarantee that it will occur in all contexts. For example, Asgari *et al*. (2008) find no association between the constructs in Asian culture.

Review of the literature and hypothesis

Organizational Citizenship Behavior (OCB)

The term organizational citizenship behavior was introduced in the 1980s by Denis Organ and some of his colleagues (Bateman & Organ, 1983). In 1988 Organ defines it as any behavior that exceeds the expectations formally required of a collaborator in the performance of a given role. Since then, the concept has become increasingly relevant as an object of research (Podsakoff *et al*., 2000), partly because of the influence it has shown on the effectiveness of organizations (Podsakokk, McKensy & Hui, 1993). Podsakoff, MacKenzie, Moorman and Fetter (1990), using Organ (1988) as a reference, define the concept through five types of behavior:

a) Sportsmanship. Willingness to tolerate the inconveniences and impositions of work without complaining.

b) Organizational compliance. Behaviors that exceed the expectations of formal rules. For example, exact compliance with regulations even if no one is monitoring you, punctuality of attendance, exact compliance with rest or recess periods, among others.

c) Civic virtue. Involvement and concern of the collaborator with the organization. For example, willingness to actively participate in activities and meetings, willingness to be informed of what is happening in the organization, among others.

d) Helpful behavior. Voluntarily helps others when they need it.

e) Courtesy. Avoid problems and inconveniences with co-workers

Some authors divide OCBs into two categories: a) OCBs at the organizational level and b) OCBs at the individual level (Jiao & Richards, 2011). The former is oriented towards organization, for example: sportsmanship, organizational compliance, civic virtue. The latter are oriented towards the individual, for example: helpful behavior, courtesy (Ilies, Smithey, Spitzmuller & Johnson, 2009).

Competing Values Framework (CVF)

Several models and instruments have emerged to measure organizational culture, Jung *et al*. (2009) report more than 70. One of the most important of these is the OCAI (Organizational Culture Assessment Instrument), developed by Cameron and Quinn (1999, 2006). This instrument makes it possible to make the framework of value competition operational. It should be noted that it was initially developed to identify factors of organizational effectiveness (Quinn & Rohrbaugh, 1983), but was later used to understand organizational culture, to the point of becoming the dominant model in quantitative research on organizational culture according to Kwan & Walker (2004). For this reason, it has been applied to a wide range of organizational problems (Kalliath, Bluedorn & Gillespie, 1999). The OCAI, as a measurement instrument, has also been used in various regions and has been subjected to psychometric validation by various authors (e.g., Kalliath, Bluedorn & Gillespie, 1999; Heritage, Pollock & Roberts, 2014; Choi, Seo, Scott & Martin, 2010).

The instrument proposes a typology of four types of culture:

f) Clan: The organization is like a family where people share with each other. The leadership of the organization is paternal. Teamwork and consensus are promoted.

g) Adhocratic: The organization focuses on entrepreneurship, creativity, and innovation. It is a flexible and dynamic place. Leadership encourages risk taking.

h)   Hierarchical: The structuring and formalization of things is deeply rooted in this type of organization. Procedures and rules prevail over everything else. The leader cares about stability and control.

i)   Market. It is an aggressive organization that focuses on being the best in its area. This makes it a competitive organization, focused on achieving its goals and objectives. Leaders are also competitist and are always concerned about success.

According to Cameron and Quinn (2006), Clan and Hierarchical cultures show an internal orientation, while Adhocratic and Market culture show an external orientation. In turn, Clan and Adhocratic cultures are flexible and discreet, while Hierarchical and Market cultures are stable and controlling.

Individualism and collectivism

Parsons and Shils introduced the terms individualism and collectivism in 1951 (Parsons & Shils, 2001), distinguishing between those behaviors of an individual nature and those generated by collectives that result from being part of a social system. In general, both terms are presented as opposite elements in the same continuum; nevertheless, Singelis, Triandis, Bhawuk & Gelfand (1995) conceptualize individualism-collectivism as two independent factors.

These researchers have gone beyond simple individualism and collectivism to propose two different approaches in each of these dimensions. Thus, they establish Horizontal Individualism (singularity or uniqueness), Vertical Individualism (achievement oriented), Horizontal Collectivism (cooperation), and Vertical Collectivism (sense of duty). Addressing these concepts in a broader way, it is understood that Horizontal Individualism is linked to people who want to be unique and different from other groups. These people are highly self-sufficient, but do not seek to be better than others or to have more status. On the other hand, Vertical Individualism focuses on people who want to be different and acquire status, that is why they are in a state of competition with others. They are competitive and hedonistic, and they value freedom but not equality.

At the other extreme is Horizontal Collectivism. Here are the people who consider themselves similar to the others, seek common objectives with others, are interdependent, very sociable, and do not submit easily to authority. They value equality but not freedom. Vertical Collectivism is about people who are part of a group and willing to sacrifice their own interests for the benefit of others. Their main difference with Horizontal Collectivists is that they are more authoritarian and subject to authority. They support competition between their group and other groups. Other characteristics that represent them are: traditionalism, interdependence, and hedonism.

Individualism – Collectivism and OCB

Some studies have shown that more collectivist people tend to exercise OCB to a greater extent than individualist people (Omar & Urteaga, 2008; Cohen & Avrahami, 2006; Omar, Ferreira Oliveira, Uribe, Assmar, Terrones & Flores, 2007; Dávila & Finkelstein, 2011; Asgari, Silong, Ahmad & Samah, 2008; Moorman & Blakely, 1995). Collectivism has been found

to be associated with OCB of aid and civic virtue (Omar *et al.*, 2007, Ueda 2011), affective commitment to the organization and sense of belonging (Omar *et al.*, 2007), helpful behavior, loyalty to the organization and individual initiative (Moorman & Blakely, 1995). Dávila and Finkelstein (2011) analyze the influence of individualism and collectivism on individual-oriented Organizational Citizenship Behaviors (e.g., helping others) and organizational-oriented Organizational Citizenship Behaviors (e.g., individual initiative to improve the organization).

The authors found an association between collectivism and both types of OCB. Ueda (2011) agrees with Dávila and Finkelstein, finding a positive relationship between collectivism and individual- and organization-oriented OCBs. Cohen and Avrahami (2006) find a positive relationship between a collective attribute, such as the supremacy of group objectives with OCB, and a positive relationship between the absence of an individualist attribute, such as competitiveness with OCB.

As can be seen, there are several findings that relate collectivism to OCBs. This relationship is supported by the fact that collectivists seek the welfare of others above their own and for that reason it is not surprising that, through additional efforts, they seek the welfare of their co-workers and the organization (Davila & Finkelstein, 2011). In addition, collectivists develop a commitment to the organization through the bonds they establish with their co-workers and supervisors, while individualists develop a commitment through the incentives they may receive (Cohen & Avrahami, 2006).

In the present study, two dimensions of Collectivism are handled: Vertical and Horizontal. The major difference between the two constructs, as mentioned above, is that the horizontal bets on equality among the subjects, while the vertical bets on differentiation and hierarchy (Singelis *et al.*, 1995). However, both have in common the prioritization of the group over individual interests. Because of this prioritization and the evidence that has shown an association between collectivism and OCB, the following hypothesis is put forward:

Hypothesis 1. Horizontal and vertical collectivism is associated with greater Organizational Citizenship Behavior.

Studies from the 1990s suggest that collectivists perform better and cooperate more in environments that foster collectivism (Chatman & Barsade, 1995; Earley, 1993), while individualists perform better in environments where work is more individual (Earley, 1993). Like Triandis and Gelfand (1998), they divide individualism and collectivism into two types: horizontal and vertical, and then consider which type of culture from the typologies of Cameron and Quinn (2006) is more in line with the types of individualism and collectivism. In addition, this affinity is expected to promote OCB.

Horizontal collectivism and clan culture

In Clan culture, subjects are like one big family. Collaboration and cohesion among members is promoted (Cameron & Quinn, 2006). Since Horizontal Collectivism is based on group unity and is associated with values such as equality and universalism (Oishi, Schimmack, Diener & Suh al, 1998), it is logical to think that this type of collectivism is related to Clan culture. Clan culture is focused on interdependence and teamwork. This also goes in the same line as Horizontal Collectivism, since according to Triandis and Gelfand (1998) horizontal

collectivism is represented by people who look for common objectives with others, show interdependence and sociability. In addition to the above, Gadner, Reithel, Foley, Cogliser and Walumbwa (2008) mention that Horizontal Collectivism, like Clan culture, focuses on the internal group, as well as the discretion and flexibility of the collaborator. Given the affinity that exists between clan culture and horizontal collectivism, the following hypothesis is presented:

Hypothesis 2. Clan culture positively moderates the relationship between Horizontal Collectivism and OCB. In other words, Horizontal Collectivism will have a more positive effect on OCB the more it is perceived that the culture of the work unit is similar to the Clan culture.

Vertical collectivism and hierarchical culture

Vertical Collectivism promotes group unity but supports hierarchies and the defense of authority (Shavitt, Torelli & Riemer, 2011; Singelis et al., 1995), respect for rules and norms (Singelis et al., 1995), as does hierarchical culture (Cameron & Quinn, 2006). Hierarchical culture provides clear lines of authority and control over organizational processes (Helfrich, Li, Mohr, Meterko & Sales, 2007). This would sit well with Vertical Collectivists, who expect control and authority. Vertical Collectivism is also associated with other values related to hierarchical culture such as conformity, security, and tradition (Nelson & Shavitt, 2002). Gadner et al. (2008) argue that Vertical Collectivism as well as Hierarchical culture focus on the internal group, stability, and control. Due to the affinity that exists between Hierarchical culture and Vertical Collectivism, the following hypothesis is presented:

Hypothesis 3. Hierarchical culture positively moderates the relationship between Vertical Collectivism and OCB. In other words, Vertical Collectivism will have a more positive effect on OCB the more it is perceived that the culture of the work unit is similar to hierarchical culture.

Horizontal Individualism and adhocratic culture

Horizontal Individualism is primarily related to attributes that could contribute to innovation and entrepreneurship such as self-sufficiency, autonomy, and uniqueness. Both innovation and entrepreneurship are related to Adhocratic culture (Cameron & Quinn, 2006); therefore, someone with a high degree of Horizontal Individualism would reinforce the essence of that culture. In fact, Abraham (1997) found evidence linking Horizontal Individualism with entrepreneurship. Adhocratic culture promotes the decentralization of labor (Vuuren, Veldkamp, De Jong & Seydel, 2007) and this would eventually be valued in Horizontal Individualism, since according to Singelis, Triandis, Bhawuk and Gelfand (1995), Horizontal Individualists appreciate independence. Gadner et al. (2008) determine that Vertical Individualism as well as Adhocratic culture focus on the external side of the group, discretion, and flexibility.

As Adhocratic culture seems to be related to Horizontal Individualism, the following is proposed:

Hypothesis 4. Adhocratic culture positively moderates the relationship between horizontal individualism and OCB. This means that the effect of Horizontal Individualism on OCB will be more positive the more the culture of the work unit is perceived to resemble Adhocratic culture.

Vertical individualism and market culture

Competition and autonomy characterize Vertical Individualism. Triandis and Gelfand (1998) stress that in societies with a high degree of Vertical Individualism, people want to be different and acquire status and, therefore, are in a state of competition with others. Market culture also fosters competitiveness and the spirit of winning, so it is possible to think that Vertical Individualism fits this type of culture well. Triandis (1995) points out that Vertical Individualism focuses on achievement, which is consistent with Cameron and Quinn (2006) in that the achievement and attainment of objectives are characteristic of Market culture. For their part, Gadner et al. (2008) find that Vertical Individualism as well as Market culture focus on the external aspects of the group, control, and stability.

Hypothesis 5. Market culture positively moderates the relationship between Vertical Individualism and OCB. This means that Vertical Individualism will have a more positive effect on OCB the more the culture of the work unit is perceived to resemble Market culture.

Methodology

Type and design of the research

By obtaining the data through a survey that was applied only in a given period of time, it is defined as non-experimental/transversal. In addition, since the significant relationships between variables are analyzed, it is considered correlational.

Sample and population

The information was collected from a U.S. transnational company located in Costa Rica in August 2014. The population under study are the employees of the company who have worked for at least three months in their work units. Subjects with less than three months of stay are excluded because they do not have adequate time to respond to the cultural items of their unit. A sample of collaborators who met the characteristics of the study population was randomly selected for their supervisors to evaluate their Organizational Citizenship Behavior. At the same time, the collaborator was asked to respond to the Individualism-Collectivism scale, the items of organizational culture, and other additional scales included in the instrument. A total of 248 subjects were interviewed, corresponding to approximately 42% of the study population. These subjects come from 59 different work units. On average there are 4 subjects per unit, although

in some cases only one subject was collected, while in others up to 7 subjects were collected.

The sample was comprised of 40% women. Of the total number of subjects interviewed, 69% had a university degree, while the remaining percentage had secondary education or lower. The average age of the subjects was 29.7 years, although they ranged from 19 to 54 years. They had an average working time of 23 months in the unit, but generally ranged from 3 to 83 months.

Variables
Organizational Citizenship Behavior (OCB)

The OCB scale found in the article by Podsakoff, MacKenzie, Moorman and Fetter (1990) was used, which was elaborated by Organs (1988) and has twenty-four (24) items. The scale has 5 categories of responses: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree. The Cronbach's alpha value on the scale was of 0.92.

Individualism - Collectivism

We took the 16 items from the Individualism and Collectivism scale by Triandis and Gelfand (1998) plus five additional items from the Singelis and Brown (1995) scale that were added to strengthen the internal consistency of the four dimensions of the scale, as they presented a Cronbach's alpha lower than 0.70 when applied in Spanish in a study conducted in Chile (Rojas-Méndez, Coutiño, Bhagat & South, 2008). The scale measures the following four dimensions with a total of 20 items: horizontal collectivism ($\alpha = 0.72$), vertical collectivism ($\alpha = 0.73$), horizontal individualism ($\alpha = 0.60$), and vertical individualism ($\alpha=0.67$). The scale items had five response categories: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree).

Organizational culture of the work unit

It was evaluated with the items proposed by Cameron and Quinn (2006). Each subject is asked to divide 100 points between four statements representing different types of culture, depending on how similar the statement is to their work unit. Thus, the subject provides more points when the affirmation more closely resembles the culture of unity. The statements are grouped into six dimensions: management style, dominant characteristic of the group, type of leadership, criteria that keep the group together, strategic emphasis and criteria that define success. The Cronbach's alpha value of Clan culture was of 0.77, whereas that of Adhocratic culture of 0.57, that of Market culture of 0.63, and that of Hierarchical culture of 0.69.

Control Variables

Two control variables were used: Gender, which was coded in two categories 1. Man and 0. Female; and Age, in years of age that people had at the time of the interview. They were used as a control because they have shown a relationship with the OCB builder (Organ and Ryan, 1995) and with Individualism/Collectivism (Hui and Yee, 1994; Ma and Schoeneman, 1997).

Statistical procedure

Multiple linear regression models with random intercept and fixed slopes were estimated to evaluate the hypotheses presented. The reason for using a mixed model is because individuals are nested in working groups and the intercept varies significantly between groups. Avoiding this situation by estimating classical linear regressions would lead to the analysis of biased

standard errors and thus erroneous conclusions about the significance of coefficients (Senijders & Boskerm, 1999). It should not be ignored that a principle of classical linear regression (using ordinary least squares) is that residuals is independent, although when the study units are nested in groups or conglomerates, as in the case of this study, the assumption tends to be breached. With mixed models, this situation is overcome because the variability derived from the group is incorporated into the model, breaking down the total residuals into components (Rabe-Hesketh & Skrondal, 2005).Finally, it is important to clarify that hypotheses 2, 3, 4 and 5, which evaluate the effect of moderation of culture on the relationship between Collectivist/Individualist and OCB attributes are analyzed with interactions in the multiple linear regression model between Collectivist/Individualist attributes and types of culture. In addition, these interactions capture the adjustment effect between Collectivist/Individualist attributes and culture, as a significant interaction would indicate that the influence of a Collectivist or Individualist value on OCB may increase as the particular presence of a typology of culture is perceived.

Results

Descriptive statistics

Table 1 shows that the attribute with the greatest presence is Horizontal Collectivism and that with the least presence is Vertical Individualism, which suggests that the population has a greater tendency towards Collectivism. In addition, the culture with the greatest presence is the Hierarchical, and that with the least presence is the Adhocratic. The correlations show that women have less Individualism and older people have less Vertical Individualism. It should also be highlighted that OCB only shows association with Horizontal Collectivism.

Table 1
Correlations and descriptive statistics of the study variables (n=248)

Variables	M	Dev.	1	2	3	4	5	6	7	8	9	10
OCB	72.8	14.2	-									
Age	29.7	5.9	-.001	-								
Gender (woman)	0.4	0.5	-.038	-.043	-							
HI	67.1	14.2	-.115	-.139**	.007	-						
VI	53.2	16.1	.004	-.114*	-.116**	.299**	-					
VC	68.9	18.0	.025	.075	-.059	-.047	.150**	-				
HC	80.1	11.9	.141*	-.010	.012	-.103*	.048	.423**	-			
Clan	26.7	13.8	.112	.014	-.064	-.158**	-.109*	.047	.215**	-		
Adhocratic	17.2	8.3	.034	.048	-.018	-.052	.062	.019	.048	.002	-	
Market	27.2	12.0	-.104	-.003	.011	.094*	.118**	.029	-.097*	-.573**	-.105*	-
Hierarchical	28.9	14.1	-.043	-.040	.066	.110*	-.027	-.083	-.163**	-.522**	-.507**	-.207**

Note: HC=Horizontal Collectivism, HI=Horizontal Individualism, VC=Vertical collectivism, VI=Vertical individualism OCB= Organizational Citizenship Behavior, M=mean, Dev=Standard deviation
**p< 0.10. *p< 0.05.
Own elaboration

Models to evaluate the hypotheses

The hypotheses were evaluated following the methodology of Baron and Kenny (1986). This involves developing several linear regressions, adding variables by steps. In the first step the control variables are included, in the second step the variable with direct influence on OCB is included, and finally in a third step the moderation variable is included (Table 2). Nine models were generated; numbers 2, 4, 6, and 8 allow us to assess the effect that the variables of collectivism and individualism have on OCB. Together they provide the answer to scenario 1. Model 3 evaluates scenario 2, model 5 scenario 3, model 7 scenario 4, and model 9 scenario 5.

When observing the results obtained in models 2, 4, 6 and 8 in Table 2, it can be seen that the coefficients of Vertical Collectivism, Vertical Individualism, and Horizontal Individualism are not statistically significant ($p>0.05$ and $p>0.10$ in coefficients, see columns of models 4, 6, and 8); therefore, it cannot be concluded that these variables have an influence on OCB. The only dimension of the Individualism/Collectivism construct of Triandis that is associated with OCB turned out to be the Horizontal Collectivism ($p<0.05$ in coefficient, column from model 2).

The moderating effects established in the hypotheses, which basically assess the influence of the adjustment between Collectivist/Individualist attributes and types of culture on OCB, are evaluated using the interaction coefficients in models 3, 5, 7, and 9. The interaction coefficients of models 3 and 9 are not significant ($p>0.05$ and $p>0.10$), therefore, it is concluded that Clan culture does not moderate the influence of Horizontal Collectivism on OCB, as well as that Market culture does not moderate the influence of Vertical Individualism on OCB. That is, the adjustment between Clan culture and Horizontal Collectivism, and the adjustment between Market culture and Vertical Individualism, do not promote OCB.

On the other hand, the interaction coefficients of models 5 and 7 were significant ($p<0.05$), which suggests that Adhocratic culture moderates the influence of Horizontal Individualism on OCB ($p<0.05$) and that Hierarchical culture moderates the influence of Vertical Collectivism on OCB.

Table 2
Multi-level regression coefficients of the effects of individualism and collectivism on OCB (n=248)

Effects	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Fixed Effects									
Intercept	0.007	-0.028	-0.017	-0.021	-0.031	-0.013	-0.003	-0.011	-0.025
Gender	-0.023	0.012	0.020	-0.001	0.032	-0.008	0.000	-0.013	-0.007
Age	-0.008	-0.030	-0.021	-0.038	-0.025	-0.036	-0.017	-0.012	-0.008
HC		0.129*	0.115						
Clan		0.116*	0.116						
HC*Clan			-0.068						
HI				-0.092	-0.101				
Adhocratic				0.024	0.006				
HI*Adhocratic					0.166*				

VC						0.043	0.031		
Hierarchical						-0.062	-0.012		
VC*Hierarchical							0.12*		
VI								0.029	0.024
Market								-0.122**	-0.101
VI*Market									0.096
Random Effects									
Residual	0.767	0.733	0.729	0.761	0.718	0.763	0.738	0.756	0.746
Intercept	0.266	0.272	0.269	0.265	0.302	0.269	0.277	0.269	0.273
-2 log Likelihood	699.120	679.210	677.880	686.537	678.370	687.680	681.330	685.650	683.157

Note: HC= Horizontal Collectivism, HI=Horizontal Individualism, VC=Vertical Collectivism, VI=

Vertical Individualism, OCB= Organizational Citizenship Behavior (Dependent variable in all models)
The values represent standardized coefficients

Note: **p< 0.10. *p< 0.05.

Source: Own elaboration

Figures 1 and 2 show the moderating effects that were significant. These are constructed from predictions obtained from models 5 and 7. According to what has been observed, subjects with a greater degree of Horizontal Individualism exercise greater OCB as the degree of Adhocratic culture they perceive in the work unit increases (Figure 1). While the subjects with a greater degree of Vertical Collectivism exercise greater OCB as the degree of Hierarchical culture they perceive in the group increases (Figure 2).
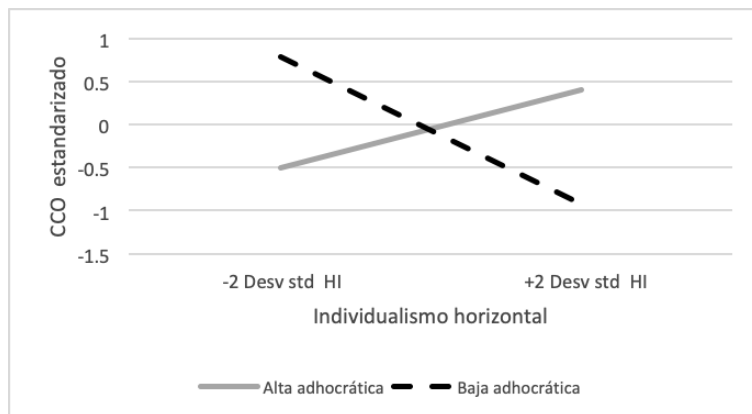

Figure 1. OCB of subjects according to the degree of horizontal individualism, and degree of presence of Adhocratic culture.

Note. OCB=Organizational Citizenship Behavior -2 Std. Dev. VC=Value that represents -2 standard deviations of the Horizontal Individualism average. 2 Std. Dev. VC=Value that represents +2 standard deviations of the Horizontal Individualism average.
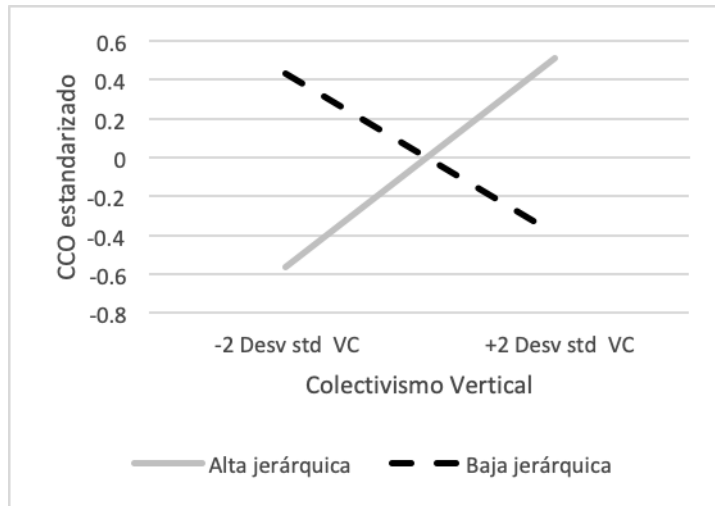Source: Own elaboration

Figure 2. OCB of subjects according to the degree of horizontal individualism, and degree of presence
of Adhocratic culture

Note. OCB=Organizational Citizenship Behavior -2 Std. Dev. VC=Value that represents -2 standard deviations of the Vertical Collectivism average. 2 Std. Dev. VC=Value that represents +2 standard deviations of the Vertical Collectivism average.
Source: Own elaboration

Conclusions and discussion

This article presents five hypotheses aimed at determining the influence of Individualism-Collectivism on OCB, but mainly the moderating effect that the perception of the culture of unity of work has on this relationship.

The first hypothesis is that Vertical and Horizontal Collectivism promotes OCB. This hypothesis is partially supported, since it is demonstrated that Horizontal Collectivism is associated with OCB, but that is not the case with Vertical Collectivism. Horizontal Collectivism favors the union of groups and social interactions within the group (Nelson & Shavitt, 2002), so it is not surprising that with a greater degree of Horizontal Collectivism there is a greater willingness to maintain the welfare of relationships through civic behaviors.

Vertical Collectivists conform to standards that please those with high authority, while Horizontal Collectivism, due to focusing more on group sociability, conforms to standards that favor benevolent interactions with co-workers (Shavitt, Torelli & Riemer, 2011) and that, ultimately, could encourage Organizational Citizenship Behaviors such as altruism and courtesy. Another aspect that justifies the result obtained is that Horizontal Collectivist orientation (not Vertical Collectivist orientation) encourages the transmission of a socially appropriate image, to maintain the social relations of cooperation (Shavitt, Torelli & Riemer, 2011).

This study has some similarities with the study conducted by Gardner *et al.* (2008). The researchers showed that when culture—measured by the typology of Cameron and Quinn (2006)—is related to the Individualism and Collectivism dimensions of Triandis and Gelfand (1998), the attraction of subjects to the organization is enhanced. In addition to the findings of Gardner *et al.* (2008), this study determines that only in certain cases does affinity have positive effects on the response variable.

This research shows that the effect of Horizontal Individualism and Vertical Collectivism on the OCB is moderated by the perception of the organizational culture of the unit. Both Horizontal Individualism and Adhocratic culture are characterized by the search for autonomy and independence of the subject. This similarity between the attribute and the organizational culture seems to become a potentializing element of OCB. On the other hand, Hierarchical culture promotes values compatible with Vertical Collectivism. The adjustment between these values also becomes a potentializing element of OCB.

It is not possible to demonstrate that the positive effect of Horizontal Collectivism on OCB is enhanced by a culture related to the dimension, such as is the case of Clan culture. It seems that Horizontal Collectivists tend to exercise greater OCB, regardless of whether or not they perceive that the culture of the unit favors group unity behaviors.

Another hypothesis that was not proven is the moderating effect of Market culture on the relationship between Vertical Individualism and OCB. Perhaps the fact that Market culture fosters external competitiveness in the search for leadership in its business market (Cameron & Quinn, 2005) is not entirely compatible with the competitiveness that characterizes Vertical Individualism, so that subjects with a greater degree of Vertical Individualism feel motivated and identified with this type of culture. Vertical Individualists always seek to win and be better than others, but not necessarily outwardly, with respect to the competence of the organization, but also inwardly with respect to other members of the group and the organization. This is easily derived by detailing the items measured by the builder, for example: "It is important for me to do the job better than others" or "When someone does things better than me I feel tense".

Additionally, Market culture defines success on the basis of winning in the market and beating the competition. This demands teamwork and collective goals, which require putting internal competitiveness aside in certain situations and focusing on external competitiveness.

Another aspect that may influence the two effects of moderation described above to not be significant is that the vast majority of subjects point out the presence of the four types of culture in their work unit; this means that a culture is not completely Clan, Adhocratic, Market or Hierarchical. In the same way, subjects are not completely Collectivists or Individualists either, but rather combine aspects of both. This implies that a subject may have traits that fit some elements of the culture that they perceive and disagree with other elements, or an organizational culture may have traits that fit some traits of the subject but not others.

Practical implications

The results obtained have a practical implication for those who are managers of the Human Resources in Organizations. They pose the challenge of paying attention to the adjustment that exists between the characteristics of the subject and the culture of the group where they develop within the organization. There are attributes of the subject such as Horizontal Individualism and Vertical Collectivism that can help promote a favorable behavior for the organization if those who possess these attributes are located in organizational cultures related to them, such as Adhocratic culture and Hierarchical culture, respectively. It should also be borne in mind that if organizations wish to promote OCB, they must ensure that the new recruitment profiles generate affinity between the characteristics that predominate most in the subject and the predominant culture of the group in which they will work. Finally, the study highlights that OCB can be promoted when there are subjects who are characterized as being Horizontal Collectivists.

Limitations and future lines of research

One of the main limitations of this study is that it was conducted in a single company, the global organizational culture may influence the cultures of the work units. It would be ideal to carry out research that includes different organizations, so that there is greater heterogeneity among the working groups and the results are supported by a broader universe. Another weakness is that not all scales demonstrate sufficient internal consistency, so it becomes relevant to restructure the scales in the context where the study was conducted.

Although it often sounds trite when the need to move from a correlational study like the present one to an experimental study is highlighted, it is relevant to mention it. In an experimental design, working groups with a strong tendency towards a specific culture could be formed. In this way, the moderating effect of organizational culture on the relationship between Individualism-Collectivism and OCB can be analyzed in a clearer way.

Future studies should test possible variables that measure the relationships established, but also analyze how culture moderates the relationship between other characteristics of the subject and OCB. This is a line of research that can have a major impact on the decisions organizations make to encourage positive behaviors in individuals. With various studies, it could be possible to define the pattern of the subject that is most convenient for the different cultures in the working groups.

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