Potential and Realized Absorptive Capacity in Colombian Firms: The Mediating Role of the Organizational Climate for Innovation

Francoise Contreras\textsuperscript{1,}\textsuperscript{c}, Ignacio Aldeanueva\textsuperscript{2}, Juan C. Espinosa\textsuperscript{1,}\textsuperscript{d}, and Ghulam Abid\textsuperscript{3,}\textsuperscript{d}

Abstract

The absorptive capacity is related to knowledge evaluation and acquisition (Potential Capacity), as well as to the transformation and exploitation of such knowledge (Realized Capacity). This research aims to analyze the absorptive capacity in Colombian companies and to investigate whether the Realized capacity can be predicted from the Potential capacity. Likewise, due to the importance of the context on the absorptive capacity development, the mediating role of the organizational climate for innovation was tested. Through a cross-sectional study, a total of 260 employees from different companies completed the Absorptive Capacity Scale and the Organizational Climate for Innovation Scale. The results showed that Potential absorptive capacity is needed for Realized absorptive capacity, additionally, organizational climate for innovation exerted a mediator role in this transition. These findings highlight that companies should have an organizational climate that allows them to acquire and transform knowledge in order to increase their innovativeness and be more competitive. Further studies should analyze the organizational innovation in relation to the proposed and tested model, while considering employees from different industrial sectors.

Keywords

potential absorptive capacity, realized absorptive capacity, organizational climate for innovation, Colombian firms

Introduction

Innovation and its importance to companies is not a recent topic for scholars. However, companies’ perception of the nature of the innovation process has changed in the last decades (Zou et al., 2018). Currently, it is widely accepted that innovation should be supported in the continuous creation and transformation of knowledge (Davids & Frenken, 2018; Nan et al., 2018). Accordingly, companies need to develop their abilities to recognize existing knowledge and create new combinations to innovate and compete in a globalized world. This capacity to acquire and transform knowledge is called absorptive capacity (ACAP).

Initially, ACAP was defined as the “ability of the individuals to recognize the value of new, external information, to assimilate it, and to apply it to commercial ends” (Cohen & Levinthal, 1990, p. 128). Subsequently, Zahra and George (2002) defined ACAP as companies’ ability to share, integrate, and adopt new knowledge. They proposed a model where ACAP can be Potential and Realized. The former represents the firms’ ability to evaluate and acquire external knowledge, whereas the latter refers to firms’ ability to transform and exploit such knowledge. In this context, companies not only need to acquire external knowledge (Potential ACAP) but they also need to exploit it (Realized ACAP) to obtain innovative outcomes. However, despite their importance, the organizational and individual variables that moderate the transition from Potential to Realized ACAP have not been sufficiently studied.

Previous studies have shown that ACAP requires employees that can work with others to increase their knowledge capacity, achieving effective learning processes (Magni et al., 2013). Because social interactions are crucial for allowing employees to transform and use new knowledge, companies...
need to encourage interactions between individuals and groups to increase their ACAP (Hotho et al., 2012). This means that ACAP might be encouraged by focusing on the relationships between individuals, groups, and organizations, framed in a stimulating organizational environment (Minbaeva et al., 2014). Evidence has demonstrated that a supportive climate for innovation helps individuals to maintain good internal and external relationships (Ebers & Maurer, 2014). Such an environment promotes individual creativeness as well as an attitude toward change, allowing employees to share knowledge and ideas, thus enhancing the organizational ACAP (Isaksen & Ekvall, 2010).

Accordingly, we propose that ACAP is related to the organizational climate for innovation (OCI), which facilitates the transition from Potential to Realized ACAP; the latter being related to companies’ innovation outcomes. In sum, this study aims to analyze the ACAP of Colombian companies through employees’ perceptions and to observe whether Potential ACAP can predict Realized ACAP. Then, the mediating role of organizational climate for innovation in the transition from Potential to Realized ACAP will be explored. This research contributes to filling the gap in the mediating variables that allow companies to enhance their Realized ACAP, increasing their innovation capacity, which is a specially relevant topic in Latin America, where the empirical evidence about innovation development is still very limited (Zuñiga-Collazos et al., 2020).

**Literature Review and Hypotheses Development**

**Theoretical Framework**

This research is supported in two closely linked theoretical frameworks: dynamic capabilities and knowledge-based theory. Dynamic capabilities are related to organizational processes and resources that allow companies to integrate, build, and configure internal and external competencies in response to changing environments (Teece et al., 1997). Therefore, dynamic capacities refer to the company’s knowledge management capacity, which is one of the most important intangible assets that facilitate companies’ value creation (Bryson et al., 2010).

According to Zahra and George (2002), knowledge becomes a competitive advantage that allows companies to evolve. The approach of ACAP as a dynamic capability is emphasized in processes, routines, and organizational structures that involve multiples learning levels (Sun & Anderson, 2010), which is closely linked to the knowledge-based theory. From this perspective, companies are conceived as systems that integrate knowledge to gain competitiveness (Grant, 1996). Therefore, they need to develop internal processes that facilitate access to new knowledge (Eisenhardt & Martin, 2000).

Supported on the contributions of Sun and Anderson (2010), Butler and Ferlie (2020) assert that both Potential and Realized ACAP involve a specific learning process. In this regard: (1) Acquisition is related to mental models developed by individuals and groups to search opportunities, (2) Assimilation is linked to communication and supportive environments that describe how team composition works, (3) Transformation involves both group and organizational-level processes for sharing understanding, and (4) Exploitation establishes the newly shared understanding in the organization. The first and second stages correspond to Potential ACAP, whereas the third and fourth stages refer to Realized ACAP. These processes depend on external and internal environments, and companies’ social integration mechanisms are critical because the learning process cannot be carried out in isolation. Butler and Ferlie (2020) assert that these mechanisms are crucial for reducing the distance between Potential and Realized ACAP as they help to distribute and use the knowledge inside the company.

Similarly, Jansen et al. (2005) asserted that knowledge exchange is better when the social networks in the companies are characterized by high-quality informal communications. This assertion suggests that companies’ learning processes are influenced by socio-psychological factors that are immersed in both Potential and Realized ACAP (Sun & Anderson, 2010). These organizational features that involve the organizational climate motivate employees to participate in knowledge networks contributing to achieve strategic innovations in the companies (Gebauer et al., 2012). Supported in these evidences, we propose that organizational climate for innovation could mediate the transition from Potential to Realized ACAP.

**Absorptive Capacity (ACAP)**

In the current challenging business environments, ACAP and its underlying organizational learning (Liao et al., 2017) have an important role in attaining competitive advantages (Chang et al., 2019; Flattén et al., 2015; Limaj & Bernroider, 2019; Pradana et al., 2020) by allowing companies to achieve remarkable outcomes (Song et al., 2018). Thus, ACAP helps companies to deal successfully with the current challenging business environment (Camisón & Forés, 2010).

Likewise, ACAP contributes to strategic flexibility that allows company innovation, which is significantly relevant for global competitiveness (Bilgili et al., 2016). Thus, given its dynamic capacity, ACAP is needed to create value as well as to obtain and maintain competitive advantage through external knowledge management (Camisón & Forés, 2010; Segarra-Blasco et al., 2018). Previous empirical studies have shown that ACAP influences innovation, improves financial outcomes (Kostopoulos et al., 2011), accurately predicts performance (Lee et al., 2014; Tavani et al., 2014), promotes the organizational learning, guides the strategic orientation (Zahra & George, 2002), encourages organizational development (Xia & Roper, 2016), and fosters innovative outcomes (Bilgili et al., 2016; Kim et al., 2016).
Previous findings have also demonstrated that the higher the ACAP levels of companies, the more they can efficiently manage external knowledge and show innovative results (Escribano et al., 2009). Therefore, ACAP is a notion linked to knowledge, innovative outcomes, and knowledge sharing (Kang & Lee, 2017). However, it is important to note that being exposed to knowledge does not guarantee companies a high level of ACAP because additional conditions such as intellectual capital are needed (Engelmann et al., 2017). Employees differ in their absorptive capacity in terms of knowledge, cognitive styles (Lowik et al., 2017), creativity (Distel, 2019), and innovation search (Schweisfurth & Raasch, 2018). This knowledge heterogeneity supposes a great challenge for the companies (Enkel & Heil, 2014) that have to build successful strategic alliances to achieve innovation processes (Flatten et al., 2011; Lichtenthaler, 2016). This suggestion implies that companies acknowledge the existence of an interdependence between them when it comes to innovation (Fredrich et al., 2019). However, it is important to point out that, although ACAP impacts external knowledge search, its effects depend on the competition level of the industry where the company operates (Wang & Guo, 2020), as well as on the regional policies that allow companies to better exploit their ACAP, making it possible to utilize the available external knowledge (Quatraro & Usai, 2017).

Studies about ACAP in Latin America are still scarce. Among them, it is important to mention the study conducted in México by Olea-Miranda et al. (2016). They examined 116 small and medium-sized firms (SMEs) and demonstrated that when companies receive knowledge transference (an ACAP feature), they improve their position in the global value chain, thus increasing their sustainability. Along the same lines, Ortigueira-Sánchez et al. (2020) found that, for the case of Peru, ACAP is related to innovation. However, González-Campo and Hurtado (2014) found high ACAP levels in Colombian firms, did not determine their innovation outcomes. These non-conclusive findings suggest the need to create more integrative models that study the relationship between absorptive capacity and firm innovation as it was suggested by Ortigueira-Sánchez et al. (2020). In any case, all these findings indicate that ACAP is not only a desirable organizational characteristic but that it is also crucial for maintaining competitiveness in the current business environment.

**Potential and Realized Absorptive Capacity**

Potential and Realized are different but complementary ACAP dimensions that influence innovative results (Ebers & Maurer, 2014). However, studies that simultaneously analyze these two dimensions of ACAP are still limited. Cepeda et al. (2012) conducted a study in Spain that included 286 companies. According to their results, companies need to develop the ability to keep an appropriate balance between Potential and Realized ACAP. They also demonstrated that Potential ACAP positively impacts Realized ACAP, thus improving the organizational efficiency. Additionally, Leal-Rodríguez et al. (2014) conducted another study in Spain that included 110 companies from the automotive sector and found that Realized ACAP mediated the influence of Potential ACAP on innovative results; this effect was indirectly and positively conditioned by relational learning. Since Potential and Realized ACAP involve human resource management (Jansen et al., 2005), companies have to encourage employees to learn from external sources and to get involved with the absorption of new knowledge (Enkel et al., 2017). This condition seems to facilitate the transition from Potential to Realized ACAP (Sjödin et al., 2019).

Finally, Saraf et al. (2013) found that, in 77 Chinese companies, Potential and Realized ACAP positively impact business system assimilation. This impact is encouraged by both internal experience and external pressures. Recently Limaj and Bernroider (2019) provided empirical evidence about the effect of Potential ACAP on Realized ACAP. Supported in the model proposed by Zahra and George (2002) and on the previous evidence, we posit the following hypothesis:

**H1: Potential absorptive capacity is significantly and positively related to Realized absorptive capacity.**

**Organizational Climate for Innovation (OCI)**

Absorptive capacity and innovation are closely related concepts (Xie et al., 2018; Zobel, 2017) that require an organizational environment characterized by support and open external and internal communication, which are related to Organizational Climate for Innovation (OCI). This notion is linked to the idea that companies need to develop a climate where the external knowledge absorption and exploitation capabilities are encouraged, and the sharing of internal resources through fluid communication is stimulated (Denicolai et al., 2016; Flor et al., 2018), that is, an organizational climate that fosters innovation.

Organizational climate involves several interactions and influences that affect different organizational dimensions (Kuenzi & Schminke, 2009). Kim and Yoon (2015) asserted that organizations drive innovation when they recognize employees’ creativity and promote flexibility to change and when leaders also encourage innovation. A recent study demonstrated that when organizational leaders foster their employees to perform knowledge creation and acquisition activities, the firm achieves increased innovation outcomes (Naqshbandi & Tabche, 2018). Similarly, in an organizational climate where there is a bidirectional communication between employees and managers, the emergence of new and innovative ideas is promoted (Thakur et al., 2012). An organizational climate with these characteristics influences employees to value their work through the recognition of proactive individual behaviors (Shanker et al., 2017).
Organizational Climate for Innovation and Absorptive Capacity

Organizational climate gains relevance in ACAP studies because an internal environment with social integration is required for the acquired sharing and exploitation of knowledge (Zahra & George, 2002). Informal social integration mechanisms, such as social networks for exchanging ideas and experiences, contribute to knowledge assimilation. Thus, this knowledge can be transformed and exploited when companies have a free flow of information. Similarly, these authors suggest that social integration mechanisms could reduce the gap between the Potential and Realized ACAP.

ACAP requires knowledge absorption that largely depends on the interaction between individuals, groups and teams to produce innovative results. As Cohen and Levinthal (1990) asserted, the innovation capacity is related to “links across a mosaic of individual capabilities” (p. 133) that interact positively to maintain internal and external relations for knowledge absorption and transformation (Ebers & Maurer, 2014). Similarly, Von Briel et al. (2019) argued that organizational knowledge absorption is related to social integration within companies.

According to Zahra and George (2002), intra-organizational social integration increases the connection between employees, allowing them to share meanings. These shared meanings shape an organizational climate that can be innovation-oriented when organizational values and norms emphasize innovative outcomes. In addition, Scott and Bruce (1994) asserted that when individuals perceive an organizational climate where their ideas and initiatives are supported, employees tend to be more innovative. Therefore, we propose that there is a positive relationship between ACAP and OCI. However, few studies have been carried out in this regard (Sarros et al., 2008).

H2: Potential absorptive capacity is significantly and positively related to organizational climate for innovation.
H3: Organizational climate for innovation is significantly and positively related to Realized absorptive capacity.

Organizational Climate for Innovation as Mediator

The transition between Potential and Realized ACAP has not been sufficiently explored. Jansen et al. (2005) asserted that knowledge transformation and exploitation are significantly related to internal networks, knowledge sharing, trust, communication, cooperation, and inter-organizational connectedness. Less centralization, flat hierarchy, less visible boundaries, and a more flexible structure are necessary to develop a high organizational ACAP. Likewise, open communication, high connectedness between employees and between them and the external environment also promote

H4: Organizational climate for innovation mediates the relationship between Potential and Realized absorptive capacity.

The conceptual model and hypotheses proposed are presented in the Figure 1.

Methodology

Sample and Procedure

This study is cross-sectional in as much as the data has been collected from participants at one point in time. The data collection was quantitative, the units of analysis were employees, and the data was collected through a purposive sampling technique. The sample was collected between October and November of 2018 and comprised 260 employees that had been working in their companies, all of which were located in Bogotá (Colombia), for at least a year. The researchers personally applied the questionnaires to available groups of employees that had been taking formative courses at the university during the data collection period. Once the
participants knew the purpose of the study and gave their informed consent, the survey was distributed to be completed. The questionnaires had been previously translated and back-translated from English to Spanish, and after a pilot test, they were applied. The participants of this study were completely aware of the study objectives and the researcher assured them that the information provided would remain strictly confidential and would be used for academic and research purposes only.

The sample size was selected using Kline’s (2015) recommendation. According to him, it is necessary to have five participants from the target population against each question (i.e., 5 participants × total study items) related to all the constructs. Our survey tool consisted of 36 questions, so the sample size of 180 respondents was sufficient to test the proposed research model and to infer the best possible results related to the target population. Taking into consideration the non-respondents and missing information, we distributed 282 questionnaires among the target sample. Out of the 282 questionnaires applied, 260 were complete and valid. Slightly more than half of the sample were men (51.5%). A total of 166 participants were employees of big companies (more than 250 employees), whereas 94 were employees from SMEs (less than 250 employees). Participants were invited to participate voluntarily in this study and they did not receive any incentive to participate in this research.

Measures

**Absorptive Capacity Scale.** This scale was designed by Flatten et al. (2011) and comprises 14 items to evaluate both dimensions, Potential and Realized, of ACAP. (1) For Potential ACAP, the *acquisition* has three items and *assimilation* has four items. (2) For Realized ACAP, *transformation* has four items and *exploitation* has three items. The measure used was a seven-point Likert scales (1 = strongly disagree, 7 = strongly agree). The entire scale has demonstrated high reliability (Cronbach’s alpha = .96), and their four components are .73, .85, .93, and .80, respectively. The scale has also shown an acceptable convergent validity (Flatten et al., 2011). Item examples are: “The search for relevant information concerning our industry is every-day business in our company” and “Our employees have the ability to structure and to use collected knowledge”

**Organizational climate for innovation.** This scale was developed by Scott and Bruce (1994) based on Siegel and Kaemmerer (1978). The scale comprises 22 items and evaluates two dimensions: (1) innovation support and (2) resource supply. The measure used was a five-point Likert scales (1 = never, 5 = always). The Cronbach’s alphas for both dimensions were satisfactory (.92 and .77, respectively). Item examples are: “There are adequate resources devoted to innovation in this organization” and “There is adequate time available to pursue creative ideas here”

Results

**Demographic Description of the Sample**

The sample comprised 260 employees, 77.7% of them were younger than 39 years old and almost half of them (48.6%) had been working in their companies for less than 4 years. More than half of the participants belonged to private companies (60.6%), and the others belonged to public (26.6%) and mixed companies (13.1%), most of them were working in big companies (63.8%) with managerial positions (74.2%).

**Demographic Control Variables**

Variables such as gender, positions, firm size, and company type were controlled to verify their possible influence on the studied variables, namely, Potential ACAP, Realized ACAP, and OCI. According to the results, these variables have no effects on the proposed model (Table 1).

| Control variables | ACAP | Potential | F | Sig | Realized | F | Sig | OCI | F | Sig |
|-------------------|------|-----------|---|-----|----------|---|-----|-----|---|-----|
| Gender            | 0.11 | 0.74      | 0.95| 0.33|          |    |     | 0.89| 0.35|
| Positions         | 2.22 | 0.14      | 0.60| 0.44|          |    |     | 0.38| 0.54|
| Firm size         | 0.00 | 0.96      | 1.40| 0.24|          |    |     | 0.01| 0.91|
| Company type      | 0.14 | 0.87      | 0.68| 0.51|          |    |     | 0.23| 0.80|

**Data Normality**

We applied Kurtosis and Skewedness to check the data normality. Kurtosis measures the tail extremity reflecting the presence of outliers, whereas Skewedness measures the direction and degree of asymmetry. The responses for all the items were normally distributed with Kurtosis ranging between +3 and −3 (SE = 0.297–0.298) and Skewedness ranging between +1 and −1 (SE = 0.149–0.150) (Hair et al., 2014).
Table 2. Measurement Model Comparison.

| Models      | Chi-square | CMIN/DF | NFI | IFI | TLI | CFI | RMSEA |
|-------------|------------|---------|-----|-----|-----|-----|-------|
| 5-Factor    | 304.316    | 1.914   | .927| .964| .956| .963| .59   |
| 3-Factor    | 443.240    | 2.753   | .894| .929| .916| .929| .07   |
| 1-Factor    | 1,185.571  | 6.974   | .715| .746| .714| .744| .15   |

Note. 5-Factor Model: All five factors; acquisition, assimilation (Potential), transformation, exploitation (Realized), and climate for innovation were considered independently. 3-Factor Model: acquisition, assimilation (Potential) into one factor, transformation, exploitation (Realized) into another factor, and climate for innovation considered as a separate factor. 1-Factor Model: All items related to the five factors combined into one factor.

Multicollinearity Statistics

Multicollinearity between the predictors that is, Potential and Realized absorptive capacity, were investigated using variance inflation factor (VIF), tolerance and condition index. The VIF should not be >10, tolerance value should not be <.1, and condition index should be <15 (Fox, 1991; Pallant, 2011). In the present study, the VIF values of Potential absorptive capacity and Realized absorptive capacity (2.65) were less than 10. Furthermore, the tolerance value of both the predictors was greater than 0.10 (0.377). Finally the condition index for Potential absorptive capacity (7.05) and Realized absorptive capacity (12.03) were also less than 15. All these indexes suggest that there was no issue of multicollinearity in our study.

Common Methods Bias (CMB)

Harmon’s one-factor test (Harman, 1976) using SPSS was conducted on all the study items related to the Potential absorptive capacity, Realized absorptive capacity and climate for innovation since the data was gathered through self-report measures (Podsakoff et al., 2003). The findings didn’t show the appearance of a single-factor. In addition, the findings also indicate an aggregate 66.70% variance of all the items. Given that the results did not reveal a single factor, and as the first factor could not account for most of the variance, the Harmon’s one-factor test using exploratory factor analysis demonstrates that CMB was not an issue in this study.

Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) using IBM AMOS was performed to see the adequacy of our hypothesized measurement model and factorial structure. Three models were tested: (a) a 5-factor model, (b) a 3-factor model, and 1-factor model. The fit statistics for the 5-factor model and the 3-factor model had an acceptable fit (Hair et al., 2014) and showed to be better than the alternate 1-factor model (Table 2). Moreover, the fit statistics were consistent with the recent study by Ilyas et al. (2021). However, we chose the 3-factor model, as it supports the conceptual and operational definitions of the constructs used for empirical analysis.

Mediation Analysis

We implemented scholar topical tactics to accomplish data analysis and tested the proposed mediation model. Explicit descriptive statistics and correlation analysis were conducted using SPSS software. After the preliminary analysis, hypotheses were tested using bootstrap sampling techniques through PROCESS macro analysis. This technique has been recognized as a solid and rigorous approach for detecting the significance of indirect effects (Hayes, 2018). Table 3 presents the descriptive statistics and bivariate correlation. The results of the bivariate correlations among the study variables hold in the anticipated directions and preliminarily support the direct hypothesized relationships. The results show that Potential ACAP is significantly and positively related to OCI ($r=.60, p<.01$) and Realized ACAP ($r=.80, p<.01$).

We analyzed whether OCI can explain the impact of Potential ACAP on Realized ACAP. The results of the SPSS PROCESS macro analysis (Table 4) demonstrate that Potential ACAP directly impacts Realized ACAP positively and significantly ($\beta=.66, t=14.47, p<.01$), supporting H1. Moreover, Potential ACAP positively and significantly impacts OCI ($\beta=.29, t=12.03, p<.01$), thus supporting H2. Moreover, OCI positively and significantly impacts Realized ACAP ($\beta=.61, t=6.59, p<.01$), which supports H3. Finally, the simple mediation model outcomes show that Potential ACAP indirectly influences Realized ACAP. The Sobel test (Sobel, 1982) was also used to test the mediation impact of OCI and validate whether the mediator explains the relationship between the independent and dependent variables. The two-tailed significance test (assuming a normal distribution) established that the indirect effect (0.18) was significantly positive (Sobel $z=5.77, p<.01$). Bootstrapping techniques, without any assumptions about the shape of the sampling distribution (i.e., normality), confirmed the Sobel test results with a matching indirect effect value of 0.18 as a 95% bootstrap confidence interval for the indirect effect which did not contain 0 (0.12, 0.24), hence supporting H4.

Discussion

In a globalized world, promoting companies’ innovation capacity is crucial to survive and become more competitive in the current business environments (Nan et al., 2018).
organizational characteristic is related to the organizational absorptive capacity. The present research, supported on the model proposed by Zahra and George (2002), aims to describe the ACAP of a group of Colombian firms and to observe whether Potential ACAP influences Realized ACAP. Similarly, the mediating role of OCI in the transition from Potential to Realized ACAP was explored.

Contrary to previous findings by González-Campo and Hurtado (2014), a high ACAP in Colombian firms was not found, rather a middle-level of development was found. This result indicates that ACAP could be an importantly scarce resource developed in Colombian companies, which could be affecting their innovation outcomes. In this regard, Colombian companies could enhance their organizational ACAP through an improvement of their learning processes, which also involves a better and more efficient management of external knowledge (Escribano et al., 2009). By improving the learning processes, companies can enhance their ACAP, which is crucial to gain competitiveness in a global work environment (Bilgili et al., 2016; Chang et al., 2019). Furthermore, it was found that Potential and Realized ACAP had a similar development level, which can be seen as an advantage. According to Cepeda et al. (2012), companies must keep an appropriate balance between these two dimensions of ACAP insofar as they are complementary capacities (Ebers & Maurer, 2014).

Regarding the hypotheses, we found that Potential ACAP positively and significantly impacts Realized ACAP (H1). This finding is consistent with other studies that have demonstrated this effect such as Cepeda et al. (2012) and Limaj and Bernroider (2019). This study also confirms that Potential ACAP impacts OCI (H2) and OCI impacts Realized ACAP (H3). These results are consistent with Zahra and George (2002), who affirmed that companies have to provide an environment that fosters the connection between employees, allowing them to acquire and share meanings. These meanings are needed to transform and exploit the knowledge previously acquired from external sources. These results indicate that ACAP development requires an organizational climate that provides resources and support while keeping an open communication among its members. Such organizational climate is a condition to enhance the firms’ ACAP, allowing them to absorb, transform and use the acquired knowledge. Following the suggestions by Von Briel et al. (2019), companies should encourage social integration mechanisms through an organizational climate for innovation, which is crucial to increasing organizational knowledge absorption. Thus, companies can improve their ACAP and achieve innovative results through the efficient management of external knowledge (Escribano et al., 2009).

Finally, our findings provided evidence about the mediator role of OCI in the transition from Potential to Realized ACAP (H4), this latter being related to innovative organizational outcomes. As Jansen et al. (2005) asserted, knowledge transformation and exploitation are significantly related to internal networks, knowledge sharing, trustful communication, cooperation, and inter-organizational connectedness. These are characteristics of an organizational climate for innovation. Such organizational climate is feasible with social integration mechanisms that encourage learning processes needed to reduce the gap between Potential and Realized ACAP (Butler & Ferlie, 2020). This mechanism is relevant to organizational knowledge absorption as recently affirmed by Von Briel et al. (2019). The mediating role of OCI found in this research is consistent with Baškarada and

### Table 3. Descriptive Statistics and Correlation Matrix.

| Variables                        | Mean | SD  | 1   | 2    | 3    | 4    | 5    | 6    | 7    |
|----------------------------------|------|-----|-----|------|------|------|------|------|------|
| 1. Gender                        | 1.48 | 0.50| 1   | -    | -    | -    | -    | -    | -    |
| 2. Age                           | 1.96 | 0.81| -0.09| 1    | -    | -    | -    | -    | -    |
| 3. Size of organization          | 4.33 | 1.12| -0.03| -0.02| 1    | -    | -    | -    | -    |
| 4. Organization type             | 1.64 | 0.48| -0.03| 0.01 | 0.79**| 1    | -    | -    | -    |
| 5. Potential ACAP                | 4.44 | 1.43| 0.03 | 0.02 | -0.04| 0.00 | 1    | -    | -    |
| 6. Climate for innovation (OCI)  | 3.00 | 0.69| 0.08 | -0.04| -0.02| 0.01 | 0.60**| 1    | -    |
| 7. Realized ACAP                 | 4.46 | 1.48| -0.05| -0.04| 0.02 | 0.07 | 0.80**| 0.66**| 1    |

**Implies that the correlation is significant at \(p < .01\) level (two-tailed).

### Table 4. Regression Results for Simple Mediation.

| Paths                                      | Estimates | SE  | t    | 95% CI          | p   |
|--------------------------------------------|-----------|-----|------|-----------------|-----|
| Potential Absorptive Capacity → Realized Absorptive Capacity | 0.66      | 0.05| 14.47| [0.57, 0.74]    | .00 |
| Potential Absorptive Capacity → Climate for Innovation | 0.29      | 0.02| 12.03| [0.24, 0.34]    | .00 |
| Climate for Innovation → Realized Absorptive Capacity | 0.61      | 0.09| 6.59 | [0.43, 0.80]    | .00 |
| Potential Absorptive Capacity → Climate for Innovation → Realized Absorptive Capacity | 0.18      | 0.03| Z=5.77| [0.12, 0.24]    | .00 |

Note. \(n = 260; \beta = \) unstandardized regression coefficient; SE = standard error; bootstrap sample size = 1,000; CI = confidence interval.
Koronios (2018), who found that an organizational climate that allows the acquisition and sharing of knowledge is needed to achieve Realized ACAP.

Thus, our results highlight the importance of promoting an organizational climate that encourages innovations in Colombian firms. A climate where employees can interact and share knowledge (Hotho et al., 2012; Magni et al., 2013) helps employees to maintain intensive internal and external relationships that are required for both Potential and Realized ACAP (Ebers & Maurer, 2014). Our findings indicate that trough OCI not only the ACAP in Colombian companies can be enhanced, but the gap between Potential and Realized ACAP can also be reduced. Similarly, the results of this research offer companies a culturally framed knowledge that could help them to reduce the distance between Potential and Realized ACAP, which is crucial to increasing competitiveness in current times.

This research also extends the ACAP literature by filling the knowledge gap regarding the variables that allow the transition from Potential to Realized ACAP with the latter being related to innovation outcomes. Likewise, this study contributes to understanding the variables that affect innovation in companies, such as their absorptive capacity. This study provides empirical evidence in this regard, specifically in Colombian companies, contributing to the knowledge of absorptive capacity in Latin America, a subject that, as has been pointed out by other authors (e.g., Ortigueira-Sánchez et al., 2020; Zuñiga-Collazos et al., 2020), has so far been vaguely studied in the region.

This topic remains understudied as was pointed some years ago (Sarros et al., 2008). Similarly, our study provides evidence of the ACAP in the Latin American context, and of the importance of OCI in encouraging the ACAP and facilitating the transition toward Realized ACAP, which increases innovation within companies. Finally, it is important to point out that dynamic capacities and knowledge-based theory constitute adequate frameworks to understand ACAP in companies; even more considering that both ACAP dimensions and their stages are related to a specific learning process (Sun & Anderson, 2010).

Implications and Limitations

In theoretical terms, this research contributes to extending the ACAP literature in the Latin American region and provides new knowledge about ACAP in Colombian firms. Our findings provide new information about a scarcely studied topic in Latin America by providing knowledge about how to increase ACAP in Colombian companies through OCI in order to improve innovativeness. Regarding the transition from Potential to Realized ACAP, this research demonstrated that one affects the other and that this transition is mediated by OCI. The variables that mediate such transition are still not known enough. This study contributes to identifying one of these variables as a preliminary approach. Finally, the proposed model tested in this research has implications for human resource management practices because OCI has been demonstrated to be a crucial variable to encourage ACAP in companies.

Further studies should explore the role of other variables, such as innovate results, innovative processes, and employees’ innovative work behavior. Similarly, considering that ACAP is an organizational characteristic that increases innovative results, further studies should analyze the relationship between Realized ACAP and innovation outcomes in Latin American companies. We suggest exploring the moderating role of OCI in further studies.

Regarding the practical implications, this study has demonstrated that companies should guarantee an organizational climate that allows them to efficiently manage knowledge and facilitate its acquisition and transformation to increase their innovativeness. Likewise, the learning process has to be encouraged within companies to enhance their ACAP and, as a result, be more innovative and competitive.

This study has limitations that are important to mention. First, our cross-sectional design does not provide conclusions about the causal relationship between the studied variables. Further longitudinal studies should be conducted to better understand the relationships proposed in this research. Second, our study did not include innovation assessments. Future models should include organizational innovative capacity as a resultant variable to complement the proposed model. Third, this research is an exploratory study and its results cannot yet be compared with other similar in the Latin American context. In this regard, additional empirical studies in different Latin American countries become necessary, since cultural differences may affect the possibility to extrapolate our findings to the whole region. Finally, this research was conducted before the pandemic, it could be interesting replicate this study in post-pandemic times.

Conclusions

This study confirms the importance of fostering Potential ACAP in Colombian firms to achieve Realized APAC and generate innovation. This finding is supported by the effect of Potential ACAP on OCI (H2), which, in turn, influences Realized ACAP (H3). Our study confirms the mediating role of OCI in the relationship between Potential and Realized ACAP (H4). This finding is consistent with the proposal by Zahra and George (2002), who asserted that companies need an organizational environment to manage knowledge.

This study also extends the ACAP literature in the Latin American context, particularly in Colombian firms, which are gaining a growing interest from academics and practitioners because of their relationship to innovation, a crucial issue for companies in the current times. This research was conducted in Colombia, a developing country in Latin America with a great growth projection and continuous business network expansion. Our findings conclude that Potential ACAP influences the Realized ACAP. Similarly, Potential ACAP influences OCI, which, in turn, affects
Realized ACAP. Moreover, OCI mediated the relationship between Potential and Realized ACAP in Colombian firms. These findings have implications for management and human resources practices that can enhance innovation through promoting an organizational climate that allows companies to acquire, transform and exploit knowledge, and, in this way, become more innovative. We suggest further studies to analyze the organizational innovation concerning the tested model in this research, while considering employees from different industrial sectors.

Acknowledgments
Ignacio Aldeanueva Fernández, as a visiting professor, gratefully acknowledges the funding received from Universidad del Rosario (Colombia) and Asociación Universitaria Iberoamericana de Postgrado (Spain). The authors are grateful for financial assistance for the proofreading service provided by the Universidad del Rosario, Bogotá (Colombia).

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethics Statement
The required ethical considerations were kept.

ORCID iDs
Francoise Contreras https://orcid.org/0000-0002-2627-0813
Juan C. Espinosa https://orcid.org/0000-0002-1643-2233
Ghulam Abid https://orcid.org/0000-0002-3271-9082

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