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Market orientation in service clusters and its effect on the marketing performance of SMEs

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Abstract

Purpose – This paper aims to address research gaps with regard to the relationship between market orientation and marketing performance when small- and medium-sized enterprises (SMEs) are located within a service cluster. The three main objectives of this research are to determine the effect that the cluster can have on both the market orientation of clustered companies and their marketing performance and to furthermore evaluate the effect of the market orientation of companies in the cluster on their marketing performance.

Design/methodology/approach – This research used executive-level data that were obtained by carrying out a survey involving a unique dataset of 133 Colombian health-related businesses located in the city of Cali (Colombia) in 2014. A system of equations was modeled using SMART PLS. This analysis was complemented by a qualitative study that involved conducting in-depth interviews in six companies.

Findings – The results showed that, among the SMEs, membership in an urban services cluster did not significantly influence marketing performance or the implementation of marketing orientation practices. No differences were observed in internal managerial practices implemented between companies that were co-located and isolated. However, a higher level of competitor orientation was associated with greater marketing performance. Given the verified absence of moderating and mediating effects, our work provides a reasonable basis for proposing future research and practical recommendations.

Originality/value – While research has demonstrated the relationship between a company's market orientation and marketing performance, this type of analysis has not been carried out on service SMEs in geographic concentrations or clusters.

Keywords Location, Service cluster, Market orientation, Marketing performance, Health sector

Paper type Research paper

1. Introduction

There are increasingly more cases of geographical agglomerations of companies that belong to the same sector, and in many cases, their geographical scope is purely local (Arai *et al.*,

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2004). However, there is still a lack of literature on this subject (McCann and Folta, 2009). When the main activities of urban clusters include restoration, retail distribution, or health care and health services, we also find geographical areas within the same city that are characterized by a concentration of activity in restaurants and cafes, fashion stores and health clinics. There are two main characteristics of this variant in the location model, namely, the high geographical proximity between competitors and the fact that they are mainly SMEs. We dedicate this work to the study of this variant, which we term SME Service Clusters (SME-SCs).

According to Delgado *et al.* (2014), clustered SMEs have a competitive advantage over companies that remain isolated, as they achieve greater collective efficiency through the externalities generated by the dynamics of the cluster. Therefore, it is logical to theorize that restoration, retail distribution, health care or service companies in Colombia, which are mostly SMEs, would tend to implement a geographical concentration strategy to benefit from the efficiencies and externalities generated by the cluster.

The clustering of service companies constituted the object of this research, while the market orientation (MO) construct and its potential existence in the cluster formed were conceptual reference. MO can be understood as an organizational culture that supports the generation of competitive advantage by enhancing customer value (Narver and Slater, 1990; Zhou and Nakata, 2007; Kaur and Gupta, 2010). Kirca *et al.* (2005) concluded that MO had a positive impact on overall organizational performance. Alrubaiee (2013) demonstrated that, in addition to the impact that it has on financial performance, MO had a positive effect on the company's marketing performance (MP). Although some studies have examined the impact of MO on MP, little research has evaluated this relationship in clustered environments and health service SMEs.

However, despite the popularity and importance of the existing literature on clusters and on MO, there is a lack of research that interconnects both variables, especially in the services sector, which are characterized by their atomization in emerging economies. Therefore, the three main objectives of this research are to examine the effect of the cluster on the MO of clustered companies, on the MP of these companies, and the effect of MO on the MP of companies in the cluster. Therefore, this article is structured as follows: First, a literature review was carried out to create a conceptual framework of business clusters and MO, with a view to developing the hypotheses from the perspective of service SMEs, the effect of localization on MP, the effect of localization on MO, the mediating effect of MO on the relationship between location and MP and, finally, the moderating effects that localization can have on the relationship between MO and MP. Second, we describe the methodology that was adopted for the development of the study, and furthermore outline the qualitative and quantitative techniques, samples and variables that were used. The partial least squares (PLS) method was employed for our data analysis which was causal, and we conducted in-depth interviews to complement the analysis of the results. Finally, we present our conclusions and business implications, and highlight some limitations of the study, while proposing directions for future research.

2. Literature review and hypotheses setting

2.1 The location effect on MP

According to Porter (1998), a service cluster can be defined as an important geographic agglomeration of service companies, which are mostly SMEs that are geographically close, productively interconnected, linked by common aspects and that are complementary to the development of their activities.

The strategic implications of the formation of business clusters have been termed externalities. Delgado *et al.* (2016) argued that the origin of the externalities of a cluster is

based on three closely related elements: (1) customer/supplier relationships that are based on a certain principle of productive specialization between companies located within it; (2) the existence, in the local area, of a large qualified labor market, which allows companies to easily access specialized labor; and (3) the constant exchange of information and knowledge that occurs between its members due to its physical proximity and commercial interaction.

It has long been established that MP is very important for a company's overall performance, including SMEs (Langerac, 2003; Kara *et al.*, 2005). Similarly, Deakins (1991) and Gilmore *et al.* (2006) posited that, by creating networks and relationships with the owners and/or managers of other companies, SMEs can address their resource restriction problems, as well as strengthen their marketing activities. Lamprinopoulou and Tregear (2011) concluded that clustering had a positive impact on the MP of SMEs. Accordingly, one might think that the relationships between the members of a group of co-located SMEs will provide a greater probability of achieving better MP. From this point of view, the study of the MP of services SMEs in clusters becomes especially relevant.

To measure the "location effect," studies in the literature have analyzed the differences in performance between clustered and non-clustered firms within the same industry (McCann and Folta, 2009; Claver *et al.*, 2019). More recent research carried out in the hotel sector also shows this influence of location on the competitiveness of hotels (Rodriguez-Victoria *et al.*, 2017). However, in the literature on services and clustering companies, some authors warn of the negative externalities that arise from such agglomerations as a result of commercial cannibalization (Baum and Mezias, 1992). These factors have led authors, such as McCann and Folta (2009), to demand new models and theoretical approaches to fill the research gap that exists with regard to these realities.

The management literature evokes an essential debate about whether or not the location effect is context-independent (McDonald *et al.*, 2007). That is, although the location effect can be analyzed by comparing companies in the same sector located inside and outside that model, it can also be expected that the effect will not always be either positive or uniform, nor will it be observed among all of the companies that share a location within the analyzed sector (Molina-Morales and Martinez-Fernandez, 2003). Indeed, this effect may not occur within all of the locations that share a sector of activity (Rodriguez-Victoria *et al.*, 2017; Puig *et al.*, 2013). This becomes more relevant when studying a multidimensional concept such as MP and a location in an emerging economy. However, given the abundance of previous literature that supports a location or cluster effect on the performance of companies, especially among smaller ones, we propose the following hypothesis:

H1. SME-SCs will show a higher MP than their non-clustered counterparts.

2.2 The location effect on MO

MO is a subject that has long been studied within the context of business strategy (Castellanos-Ordoñez and Solano-Arboleda, 2017). MO can be understood as the extent to which a company implements marketing concepts (Kohli and Jaworski, 1990) or as the culture of the organization that most effectively and efficiently stimulates the behaviors that are necessary to generate superior value for the buyer and, therefore, a continuous superior performance for the business (Narver and Slater, 1990). In respect to the latter, these behaviors are based on the buyer's knowledge, with a view to generating a higher value, understanding the strengths and weaknesses of the competition, and the role that management plays in coordinating business resources.

According to Najib *et al.* (2011), clusters are one of the main tools that strengthen the innovative behavior and MO (as well as their components) of the SMEs that are located within them. In addition, it should be remembered that a cluster is a concentration, wherein companies benefit from the externalities that are generated by the dynamics of the model.

Thus, they are, in part, co-located to take advantage of the number of clients that are attracted by similar companies in the same location. Porter (2000) stated that strong competition is observed within concentrations, such that companies not only strive to attract new customers but also compete to retain them. In short, an emphasis is placed on making the client a strategic focus of the organization (McEachern and Warnaby, 2005), with a view to improving performance (Kumar *et al.*, 2011a, b; Boachie-Mensah and Issau, 2015). Thus, the following hypothesis is proposed:

H2a. SME-SCs will show a higher customer orientation than its non-clustered counterparts.

Competitors play an important role in the strategy formation of organizations to improve their performance (Gatignon and Robertson, 1993). A competitor orientation can strengthen the response of organizations toward satisfying the needs of their customers, generate greater value, loyalty and increased profitability (Martin and Grbac, 2003). Porter (1980) stated that, in highly concentrated markets, the leading competitors have an opportunity to significantly alter their market competition conditions, which can translate into an increase in tactics, such as aggressive pricing, advertising and the introduction of new products and services. Furthermore, if customers perceive these companies as being similar, the companies will intensify competition to attract and retain customers (Porter, 2000). Therefore, it is essential that companies monitor its closest competitors and adopt an attitude of vigilance toward them (Slater and Narver, 1994). Based on this reasoning, the following hypothesis is proposed:

H2b. SME-SCs will be more competitor-oriented than their non-clustered counterparts

Through interfunctional coordination, organizations guarantee communication between functional areas that support the creation of market conditions in order to generate superior customer value (Asomaning and Abdulai, 2015). The geographic location of a company that is concentrated in the same sector, as seen in the case of a cluster, should serve to stimulate the company to develop a more coordinated management model between the different areas, which is in contrast to a company that is not located in such a competitive environment. However, many SMEs, for example, lack functional areas, so this line of reasoning is difficult to adopt. Narver and Slater (1990) supported the idea that, in SMEs, businesses are managed by a single person, which means that decisions are not taken by different divisions, but by a single decision-maker.

Levy and Powell (1998) suggested that, due to their structure, SMEs do not have effective communication systems or models that allow them to integrate customer information, which can make interfunctional coordination difficult. Lautamäki (2010) stated that the socialization of customer knowledge and competition may not be the most critical issue in the context of SMEs since the entrepreneur has centralized decision-making and strategic development. Furthermore, research carried out by Balakrishnan (1996), Haugland *et al.* (2007), O'Dwyer and Ledwith (2009) and Smirnova *et al.* (2011) showed that interfunctional coordination had no effect on business performance. Thus, it seems that this component of MO does not play a significant role in SMEs, which led us to formulate the following hypothesis:

H2c. SME-SCs will show a similar, albeit insignificant, level of interfunctional coordination when compared with their non-clustered counterparts.

2.3 The effects of MO on MP

Marketing scholars suggest that, as a business increases its MO level, it will also increase its level of MP (Levitt, 1960; Webster, 1988; Kotler, 2002). Alrubaiee (2013) was able to demonstrate that MO had a direct impact on a company's MP. The study stated that, as a

business increases its MO level, it will also increase its MP level (Lukas and Ferrell, 2000; Armario *et al.* 2008; Carr and López, 2007; Carbonell and Rodríguez, 2010) However, the multidimensional nature of the MO construct leads us to question whether MO is always directly related to MP in the case of SMEs. On the one hand, numerous studies have concluded that highly customer-oriented and competitive companies achieve better organization performance (Narver and Slater, 1990; Jaworski and Kohli, 1996; Slater and Narver, 2000; Cheng and Krumwiede, 2010; Tsiotsou, 2010; Kumar *et al.*, 2011a, b; Boachie-Mensah and Issau, 2015). On the other hand, Pelham and Wilson (1995) noted that, in the case of SMEs, customer orientation was significantly and positively related to company performance. Coviello *et al.* (2006) suggested that SMEs can develop better customer orientation through proximity to and knowledge of their clients. Accordingly, one might expect that customer orientation in SME-SCs will positively influence MP. Moreover, a company that is more effective than its competitors at creating, delivering and communicating a higher value to its target markets will have a better MP, and by monitoring its competitors, the company can better anticipate their strategies (Slater and Narver, 1994; Kotler and Keller, 2006). However, as we have argued, when companies are small in size, they have a limited ability to implement interfunctional coordination, which supports our argument that it will not have a significant effect on MP (Levy and Powell, 1998; Lautamäki, 2010; Smirnova *et al.*, 2011; Marjanova *et al.*, 2015). Therefore, the following hypothesis is proposed:

H3. SME-MO affects MP in the dimensions of customer orientation and competitor orientation and does not affect the interfunctional coordination dimension.

2.4 The moderating effects of clustering on the interrelation between MO and MP

As mentioned above, the literature continues to evoke debate about how the context influences the location effect. This aspect has its origin in that within the same activity; clustered companies may differ in their size and the strategies that they adopt, and not all companies benefit equally from the externalities that are generated by the cluster (Puig and Marques, 2011; Puig *et al.*, 2013). Studies that have specifically examined service companies also showed that MO had a positive impact on overall organizational performance (Van Egeren and O'Connor, 1998; Wood *et al.*, 2000; Sin *et al.*, 2005; Panigyrakis and Theodoridis, 2007). This relationship can also be extended to service companies MP (Ghosh *et al.*, 1994; Pitt and Jeantrout, 1994; Raju *et al.*, 2000; Panigyrakis and Theodoridis, 2007; Boachie-Mensah and Issau, 2015). However, authors such as Subramanian and Gopalakrishna (2001) and Raju *et al.* (2011) suggested the need to measure the ways in which the context affects the MO–MP relationship. Clusters generate externalities that, in some way, affect environmental conditions. Therefore, we can argue that, in the case of service clusters, it is also possible to find a certain moderation effect between both variables, namely, MO and MP, due to clustering among firms. This is because clusters generate externalities that affect the conditions of the competitive environment by creating a type of market that is organized in a useful way and that benefits the companies that operate within it (Maskell and Lorenzen, 2004; McCann and Folta, 2009).

Authors such as Raju *et al.* (2011) suggested that a customer-oriented service company could be expected to generate higher MP than companies that are not located within the cluster. This is justified, given the fact that business concentrations not only establish horizontal relationships with competitors but also vertical relationships with companies that complement the value chain, which has a positive impact on MP (Grunert *et al.*, 2005). Accordingly, we formulated the following hypothesis:

H4a. The effect of customer orientation on MP will be higher for companies that belong to the cluster than for their non-clustered counterparts.

Considering the relationship between competitor orientation and company performance, this has been validated by several studies (Kirca *et al.*, 2005; Ellis, 2006; Kaliappen and Hilman, 2013). Having carried out a study that focused on the health services sector (hospitals), Kumar *et al.* (2011a, b) demonstrated the impact of competitor orientation on organizational performance, which showed a strong relationship when these types of companies adopted a differentiation strategy. The fact that a company is within a cluster, where there are many competitors and, thus, a high level of competition, stimulates companies to develop cost leadership or differentiation strategies. As such, monitoring competitors becomes fundamental (Slater and Narver, 1994). Since competitor orientation has an impact on the overall organization and its MP (Kirca *et al.*, 2005; Suliyanto and Rahab, 2012; Webster, 1988; Kotler, 2002), we therefore propose the following hypothesis:

H4b. The effect of competitor orientation on MP will be higher for companies that belong to the cluster than for their non-clustered counterparts

Interfunctional coordination is the basis for successful planning and the successful implementation of organizational marketing (Piercy and Lane, 1996). Kumar *et al.* (2011a, b) showed that all MO components had an impact on organizational performance, and Mohsen and Eng (2016) found a positive relationship between interfunctional coordination and organizational MP. However, Marjanova *et al.* (2015) found that small companies had a low level of interfunctional coordination. Similarly, the work of Liu (1995) demonstrated that a company's size affected its ability to generate MO, with smaller companies being the least capable of doing so. According to the above, one might theorize that SMEs in clustered environments would find it difficult to create a high level of interfunctional coordination, and therefore, we propose the following hypothesis:

H4c. Interfunctional coordination will have no significant effect on MP and no difference will be observed between companies that belong to the cluster and those that do not.

In summary, the structural model (including variables, factors and their interrelations) that we have analyzed in this paper is shown below in Figure 1.

3. Methodology

This study aimed to analyze the predictive capacity of a model composed of a dependent construct (MP) and to maximize its explained variance by means of predictive variables (i.e. location and MO). Thus, the partial least squares (PLS) method was employed for the analysis (Cepeda and Roldan, 2004).

3.1 Population, sampling frame, sample and questionnaire

As the third leading economy in Latin America, with 48 million inhabitants, Colombia and its main cities, such as Bogotá, Cali and Medellín, are characterized by health clusters that are a

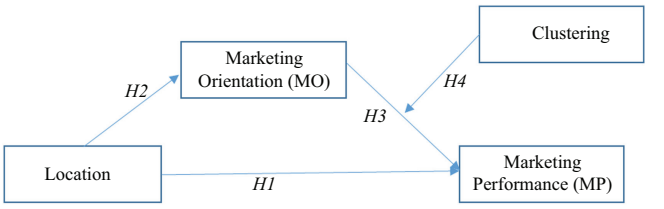


Figure 1.
Model for testing hypothesis

clear example of the phenomenon described in the introduction. These agglomerations are formed by SMEs that have arisen in response to the characteristics of atomization and the public–private duality of the Colombian health services, as well as to the demand for personalized services and cosmetic surgery which are not covered by the public healthcare sector (Rojas *et al.*, 2013).

In accordance with the objective of this paper, the population-based sample of our research consisted of 670 health service companies located in the city of Cali (Colombia), of which 133 firms were included in the sample used in this study. These firms were identified from that sampling frame and all of the firms completed the questionnaire that had previously been distributed to them in March 2014.

The sample consisted of companies that were in Levels 1 and 2 of the cluster, according to Porter's classification (1990). Level 1 comprised hospitals and clinics, specialized consultancies, odonatological services, alternative medicine centers and beauty/spa centers. Level 2 included organizations that consisted of the group of suppliers or distributors that serviced the Level 1 companies, i.e. clinical laboratories and diagnostic imaging, insurers, paramedical services and suppliers of consumables, medicines and medical and hospital equipment. Of the 133 companies surveyed, 33.8% (45) were located inside the Tequendama neighborhood cluster and 66.1% (88) were located outside of it, though all of the companies were based within the city of Cali.

We decided to approach each establishment's manager or owner directly and request them to take part in a phone survey which was conducted by one member of the research team. The questionnaire consisted of four parts (classification data, MO, business performance, strategies and public actions) and 50 questions (available under request). Roughly 86% of the respondents were CEOs, while the other 14% held high-level positions, e.g. operations or marketing manager. In respect to the length of service, 60% of the employees had held their posts for five years or less, 24% for 5–10 years and the remaining 16% for more than 10 years. Approximately 85% of the surveyed businesses employed up to 25 workers, 9% employed between 26 and 50 employees and the remaining 6% employed more than 50 workers.

To elucidate our understanding of the findings obtained from the quantitative analysis, the authors carried out a qualitative study in 2017 by conducting six in-depth interviews which were between one and two hours in duration. The individuals who were interviewed belonged to companies in the sample and they had strategic responsibilities within their organization, e.g. managing director, partner or administrator. The topics covered the following: strategy, decision making, competitive advantages, functional areas, customer value, market information, knowledge of the competitor and its strengths and weaknesses. Of the six companies, two were medium to large-sized companies and four were small companies. In addition, we specifically selected three companies that were located within the cluster and three that were based outside of it. Four of the companies were in Level 1 and two operated in Level 2. The companies were randomly selected by applying these criteria. Interviews were recorded, transcribed and analyzed by categorizing topics and related questions. To avoid any subjectivity bias in respect to the interpretation and to enhance the reliability of the analysis, an independent researcher verified our interpretation of the results.

3.2 Variables and factors measurement

In our analysis, the *dependent variable* was MP. To measure MP, this study used a scale similar to that proposed by Camisón and Cruz (2008), which consisted of 14 items, of which three items represented the variable in question, i.e. price, ability to adapt to customer requirements and marketing activities. The measurement of each variable was carried out in

a subjective manner. That is, for each item, the respondents compared themselves with their competitors. The scale scores ranged from 1 (much worse than competitors) to 7 (much better than competitors).

In this study, the *independent variables* were defined according to the hypotheses, which focused on one structural characteristic (location) and one strategic characteristic (MO) of the firms when the companies were competitors in the health service sector. We also included a *control variable* in the analysis, i.e. company size.

Location (Cluster): The literature evidences that no general consensus has been reached regarding the methodology that is most appropriate for identifying and delimiting a cluster (Martin and Sunley, 2003). Given the characteristics of our research, we followed the suggestions of Alcacer and Zhao (2016), who established a process based on three stages: (1) Definition of the activity (health sector) and phenomenon (city of Cali); (2) establishment of the unit of analysis on the subsequent examination (business units); and (3) the establishment of a number of agglomerated firms to label that area as a cluster. As Arai *et al.* (2004) stated, the locational analysis of the companies was obtained by utilizing Geographical Information System (GIS) techniques (see the results in Figure 2). After this analysis, we delimited the Barrio de Tenquedama as the urban cluster of Cali. We defined this variable as a dummy. Of the 133 companies surveyed (black boxes in Figure 2), 33.8% (45) belonged to the urban cluster (see chart on the right) and 66.1% (88) of the companies were located outside of it.

The MKTOR model was used to measure MO (Narver and Slater, 1990; Van Egeren and O'Connor, 1998; Slater and Narver, 2000; Harris, 2001; Sin *et al.*, 2005; Haugland *et al.*, 2007; Boachie-Mensah and Issau, 2015), as this model utilizes the most widely adopted scale to measure MO in highly diverse sectoral and national contexts (González *et al.*, 2005). Accordingly, we selected a set of 15 indicators that were used to construct the MO scale. Customer orientation was measured using six indicators, competitor orientation was measured using four indicators and inter-functional coordination was measured using five items. The items were assessed according to Likert-type scale ranging from 1 (total disagree) to 7 (total agree), such that 4 indicated indifference (neither agree nor disagree).

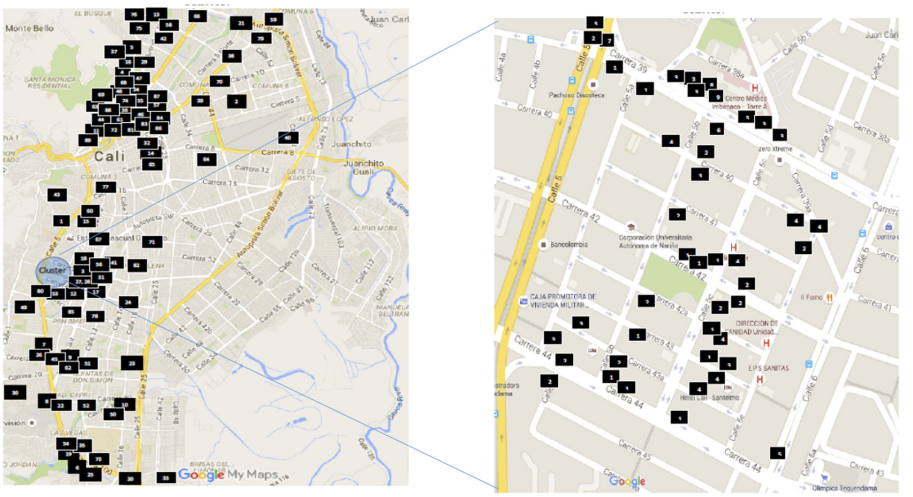


Figure 2.
Localization of the analyzed firms

Size: The total annual number of employees during the last full year (i.e. 2013) was included to control the possible impact of size on MP. It is important to note that 98% of the companies in the sample were SMEs. This was transformed by means of the natural logarithm in order to control for the effect of units of measure when making a comparison with the other dependent variables.

3.3 Exploratory analysis

To identify the underlying structure of the dimensions, we performed an exploratory factor analysis using SPSS version 22. We subsequently checked the model using SMART PLS version 3 software (Ringle *et al.*, 2015).

The factor analysis identified four factors with eigenvalues greater than 1.0, which accounted for 73.14% of the variance. The Equimax rotation offered a clearer solution since it contained the lowest number of high cross-loadings between items and factors. Bartlett's test of sphericity was statistically significant ($p < 0.001$). The Kaiser–Meyer–Olkin measure of sampling adequacy was 0.842, which exceeded the minimum threshold of 0.50 proposed by Kaiser (1974). Therefore, the factor analysis was logical and we were then able to conduct the PLS analysis. The MP factor was formed by the expected three items. Only customer orientation was composed of five items. The indicator related to *postsalesservice* was dropped from the analysis (item-total correlation was below the cut-off point of 0.5). The competitor orientation and interfunctional coordination factors showed the expected 4 and 5 indicators, respectively.

We included all of these items in their respective latent constructs, the variable *Location*, and the control variable *Size* in the subsequent path analyses using PLS.

3.4 PLS procedure, confirmatory path analysis, data adequacy and convergent validity

The PLS procedure is designed to explain the variance (R^2) of the dependent construct MP. This procedure is more robust than a multivariate regression in the presence of possible mediating relations in conditions of small- to medium sample sizes (Chin, 1998). In line with Hair *et al.* (2012) and Henseler *et al.* (2009), to implement this technique, it is necessary to verify the following: (1) Data adequacy for PLS and test potency for the dependent variable (R^2); (2) reflective outer model evaluation (indicator reliability, internal consistency reliability, convergent validity and discriminant validity); and (3) formative inner model evaluation (endogenous constructs' explained variance; effect size; relative predictive relevance; path, indirect and total effect coefficient and significance).

In terms of the data, an initial concern relates to the sample size, depending upon the number of relations that need to be evaluated. Chin's (1998) widely used rule of thumb was applied, and it states that the overall sample size is 10 times the largest of two possibilities: (1) The block that has the largest number of indicators or (2) the dependent variable that is impacted by the largest number of independent variables. In our model with interaction effects, the first possibility was equal to five (*customer orientation),* while the second was equal to four (the number of arrows arriving at *MP)*. Accordingly, the minimum sample size was $5 \times 10 = 50$ and the sample under analysis contained 133 cases. Additionally, we calculated the test power for the dependent variable (R^2) for four predictors, $\alpha = 0.005$, and a moderate effect size of 0.15. The minimum level for social sciences is 0.8 (Cohen, 1998). The result shows a test power ($1-\beta$) over 0.95 for a sample size of 133 ($n = 129$; $1-\beta = 0.95$). In relation to variables measurement, according to Hair *et al.* (2012), PLS can process nominal (categorical), ordinal, interval and ratio scaled variables, so it can accommodate the analysis of our data.

To evaluate the convergent validity, a bootstrap test was conducted over 5,000 resamples, with no sign changes in the resampling. Thereafter, we compared the results

with sign changes at the construct level and in relation to individual changes. We used a one-tailed test with a significance level of 0.05. The results were consistent across the three methods. All of the indicators were loaded above 0.7 in terms of their respective reflective constructs. In addition, an analysis of the cross-loadings of the indicators with all of the latent variables did not show any indicator whose construct should be changed (see Table 1).

Finally, construct reliability was assessed using Cronbach's alpha (CA) as the standard criterion (Nunnally and Bernstein, 1994), though only for the MP factor. As Cronbach's alpha tends to underestimate the internal consistency reliability of latent variables in PLS path models (Werts *et al.*, 1974), we applied different measures for the reflective constructs (Chin, 1998). In respect to composite reliability (CR) (Fornell and Larcker, 1981), scores of around 0.6 are acceptable (Bagozzi and Yi, 1988). As can be seen in Table 2, all of the constructs exceeded the minimum thresholds of CA = 0.7 and CR = 0.60. Convergent validity between the reflective constructs was assessed by the average variance extracted (AVE). All constructs scored higher than the minimum threshold of 0.5 suggested by Hair *et al.* (2012). Fornell and Larcker (1981) proposed an additional check of discriminant validity: The square root of each

Table 1. Reflective and formative constructs: variables loadings and weights

Indicator	Loadings: Customer orientation	Loadings: Competitor orientation	Loadings: Interfunctional coordination	Weights (FIV): Marketing performance
OM1		0.762		
OM2	0.730			
OM3		0.783		
OM4	0.864			
OM5			0.937	
OM6			0.836	
OM7	0.807			
OM8			0.826	
OM9	0.952			
OM10	0.927			
OM12		0.837		
OM13			0.690	
OM14		0.928		
OM15			0.734	
MP1				0.347 (1.287)*
MP2				0.544 (1.223)*
MP3				0.430 (1.191)*

Note(s): *t value significant at $p < 0.001$ level

Table 2. Reflective factors reliability and convergent validity assessment

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	Correlation matrix Fornell–Larcker criterium		
Competitor orientation	0.848	0.898	0.689	0.830		
Customer orientation	0.911	0.933	0.739	0.484	0.859	
Interfunctional coordination	0.866	0.904	0.655	0.498	0.659	0.809
Marketing performance	0.620					

latent variable's AVE should be greater than the correlations between the latent variables, a requirement that our results met (see Table 2). In addition, we ran the heterotrait–monotrait ratio (HTMT) (Henseler *et al.*, 2015) to test discriminant validity. All of the HTMT ratios in absolute value were below the threshold of 0.90, which indicated that discriminant validity existed between the reflective factors.

4. Analysis and discussion of results

Beforehand, we carried out a descriptive analysis of data. Table 3 shows the average scores and standard deviations of the three MO factors, as well as the MP construct in relation to its location inside or outside the urban health cluster in Cali. The inside cluster factors scored slightly higher. Competition orientation showed the largest difference among the MO factors. In general, service companies within the cluster had a better MP.

To assess the structural model, we analyzed the variance of the dependent latent variables, which was explained by the predictive constructs. Therefore, the R-squared statistic was applied, and this criterion should be higher than 0.1 (Falk and Miller, 1992). In addition to R-squared, Hair *et al.* (2012) suggested the use of the effect size (f^2), as well as path coefficients with their respective t-values for models with reflective indicators. We also assessed the cross-validated redundancy index (Q^2) by means of blindfolding (Stone, 1974; Geisser, 1975), which, along with R-squared, provides information about the predictive capacity of endogenous constructs, with values above zero indicating that the model has predictive relevance (Chin, 1998). In the case of mediation, they proposed that total and indirect effects should be reported and compared, in addition to the estimated path effect. At this point, we used the results of 5,000 bootstrap resamples.

Table 4 shows the PLS results without interaction effects. At first glance, it can be observed that, on the one hand, location did not have a significant direct effect (path coefficient = −0.009) on MP. This result neither supported hypothesis H1 nor the conclusions

Factor	Outside cluster (n = 88)	Inside cluster (n = 45)
Customer orientation	6.13 (0.78)	6.16 (0.63)
Competitor orientation	5.72 (0.83)	5.86 (0.83)
Interfunctional coordination	6.11 (079)	6.16 (0.68)
Marketing performance	5.27 (0.95)	5.44 (1.03)

Table 3. Factors' descriptives

Variables	Standard path coefficient	t-value (bootstrap)	f^2	Q^2	R^2
Location→Marketing performance (MP)	−0.009	0.117	0.000	0.115	0.248*
Location→Customer orientation	0.025	0.297	0.011	−0.000	0.001
Location→Competitor orientation	0.106	1.194	0.001	0.003	0.011
Location→Interfunctional coordination	0.037	0.426	0.001	−0.002	0.001
Customer orientation→MP	0.067	0.661	0.003		
Competitor orientation→MP	0.422	4.799*	0.166		
Interfunctional coord→MP	0.068	0.598	0.003		

Note(s): *p < 0.001

Table 4. PLS results without interaction effects

reached by Lamprinopoulou and Tregear (2011) which found that geographical clustering had a positive effect on the MP of SMEs. The control variable *Size* was not significant (−0.095; $t = 1.135$, $p = 0.128$). Therefore, it seems that, regardless of the company's size, networks and relationships with other companies were not intensively developed within the cluster. In addition, in contrast to Deakins (1991) and Gilmore *et al.* (2006), marketing activities were not strengthened and, as such, MP was not affected. This result supported the concerns of McDonald *et al.* (2007) and Molina-Morales and Martinez-Fernandez (2003) regarding the context-independent location effect, such that the location effect is not always observed in a positive or uniform manner among all of the companies within the cluster.

On the other hand, and in contrast to the ideas proposed by Najib *et al.* (2011), clusters did not strengthen the MO (and its components) of the SMEs that comprise them. In other words, location did not have a significant effect on MO. This means that Consumer Orientation (0.025), Competitor Orientation (0.106) and Interfunctional Coordination (0.037) in clustered health business did not increase the level of MO when compared with non-clustered health businesses. Therefore, these results led to the rejection of hypotheses H2a and H2b, although they offered support for hypothesis H2c.

On the one hand, these findings suggest that, in the case of health SMEs, the acquisition of clients was not a strategic focus nor did the companies regard monitoring their closest competitors as essential, which was pointed by McEachern and Warnaby (2005) and Slater and Narver (1994). On the other hand, in terms of interfunctional coordination, no difference was observed between service SMEs that were based in a cluster and those that were located outside of it. This was mainly due to conditions related to the size of the companies (SMEs), which was in line with the findings and conclusions of Levy and Powell (1998), Lautamäki (2010) or Narver and Slater (1990). These studies proposed that small businesses lack adequate customer information, which is necessary for coordination. Moreover, decision-making and strategic development tend to be centralized to the extent that they are the responsibility of a single individual. The above findings were corroborated by the results of the qualitative analysis in this study, which showed that, in companies within the cluster and those outside of it, client-related strategic decisions were taken by the partners or by the manager or administrator directly. The following phrases reinforce this argument:

> . . . as I am observing, I (Manager) am the one who took them . . . Specialized Clinical Laboratory Manager Nohemy Cruz (February 9, 2017)

> . . . The important needs of the client, and mainly the owner, who is also in the provision of service. . . Pediatric Global Administrative Leader (February 4, 2017)

Furthermore, in Table 4 we can observe the path coefficients of MP. With the exception of Competitor Orientation (0.422) ($p = 0.001$), the other two factors were not significant. These results did not support the findings of Coviello *et al.* (2006), which suggested that SMEs can increase MP through customer orientation. However, hypothesis H3 was partially supported, since competitor orientation did increase MP. Therefore, in the case of businesses that were located in the cluster and those that were not, competitor orientation led to a significant increase in the MP of these companies. Having studied the hotel sector, Dev *et al.* (2009) found that, in developing-country markets, which differ from developed economies in which customer orientation has a greater impact, competitor orientation had a greater impact on performance. The above was corroborated by statements made by several of the respondents who participated in the qualitative study, who stated that the current conditions of the Colombian Health System had affected the financial solvency of companies in the sector, including companies outside of the cluster as well as those that comprised it:

> . . . (The income) Look. . . unfortunately, they have not grown. They have not grown because this is an IPS that depends on an EPS, then who affiliates is the EPS. If the EPS does not affiliate, there will be no users. . . the population falls, and unfortunately, with this EPS, the population has dropped . . . Servimedic Quirón Manager (February 10, 2017).

> . . . (profitability) has also grown although it is affected by the portfolio, because one sells more, sells many services, but the recovery of the wallet is hard, and that affects the profitability . . . Nohemy Cruz Specialized Laboratory (February 9, 2017).

Finally, in order to analyze the moderating effect of the cluster on the effects of MO on MP, we checked the results of Q^2. In Table 4, we can see that the latent variables achieved values close to (0.003) or below zero (−0.000; −0.002) in the inner model. However, the Q^2 of the relations to MP achieved 0.115, which was interesting, and this indicated that the model had a certain predictive capacity. This result led us to perform an additional analysis to check the possible moderating effect of clustering on customer orientation, competitor orientation and interfunctional coordination (see Table 5).

After applying the product indicator option and a bootstrapping procedure over 5,000 samples, no significant moderating effect was found. Although these results implied that the cluster did not moderate the effects of MO on MP, and only supported hypothesis H4c, they were consistent with the results obtained in respect to the H2c hypothesis, which verified that, in SMEs, interfunctional coordination was difficult to implement, given the centralized decision-making environment.

According to the previous literature review, we could expect a certain positive moderation effect between MO and MP, because of externalities generated by the cluster, as well as the horizontal and vertical relationships that are observed between geographically clustered companies, which strengthen customer and competitor orientation (Grunert *et al.*, 2005; Maskell and Lorenzen, 2004; McCann and Folta, 2009). However, in respect to customer and competitor orientation, the cluster did not have a moderating effect on MP (hypothesis H4a and H4b), which could, on the one hand, be largely attributed to the fact that health companies located in the cluster had not yet managed to establish strong horizontal relationships (with their competitors) to achieve alliances that would strengthen their competitiveness. On the other hand, vertical relationships were observed (suppliers and partners of the value chain), but they were not yet strong, which indicated that the cluster was still in a consolidation stage. The following extracts present the statements of an administrator who worked for one of the companies in the cluster when asked about their relationship with other companies in the cluster:

> . . . Relationship not much, patients are referred sometimes, but it is not that we have agreements with them, no alliances or agreements have been made . . . just this year we will begin to look for those alliances and agreements . . . Administrative Leader of Global Pediatric (February 4, 2017).

In order to test the effect of location, as a mediator, on MP and MO, we analyzed the total, indirect and direct (path) effects in the model (see Table 6). We followed the approach adopted by Chin (2010), who proposed a two-step process using PLS. First, the direct and indirect paths were included in a bootstrap resampling that yielded the estimation for total, indirect

Table 5. Cluster moderating effects on market orientation

Moderating effect	Path coefficient	*t*-value	*p* value
Cluster × Customer orientation	−0.156	0.913	0.181
Cluster × Competitor orientation	0.200	1.298	0.097
Cluster × Interfunctional coordination	0.126	0.126	0.200

and direct effects. Second, the significance was estimated using a percentile bootstrap method, which produced a 95% confidence interval.

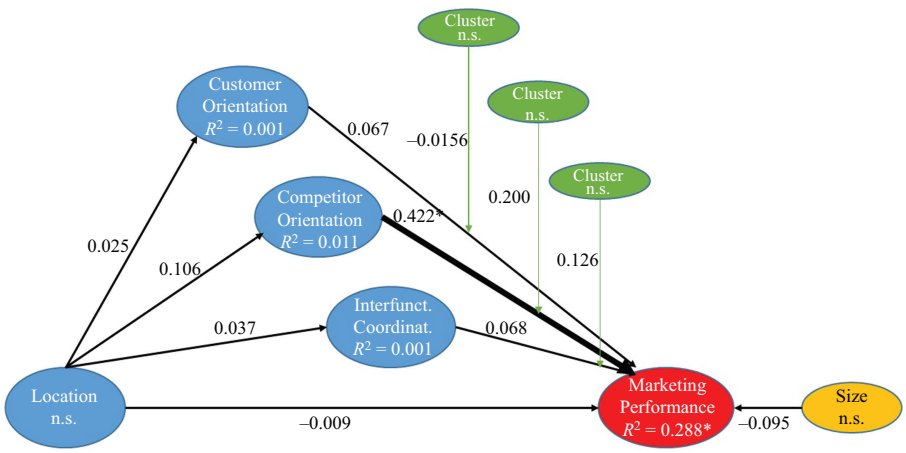
Since the confidence intervals included zero, all of the effects were not significant. These results led us to conclude that there was no mediation effect. In fact, the analysis of the confidence intervals in the upper limit implied that both direct and indirect effects had a similar albeit insignificant impact on MP. Figure 3 shows the refined path analysis.

The result obtained for the indirect and direct effects of the cluster on MP was consistent with the findings obtained in regard to the previous hypotheses. The relationship, both direct and indirect, between location and MP, will be fundamentally affected because, within the cluster, factors such as horizontal relationships (i.e. alliances and agreements with the companies that provide the same services), must still be strengthened. In fact, of the three companies in the cluster that were interviewed, only one maintained formal relationships with other companies in the cluster; the others maintained occasional relationships or simply had no relationships. In addition, when asked to comment specifically on their performance in relation to their marketing activities, companies both inside and outside of the cluster stated that they did not conduct formal marketing activities; at best, such activities were more informal and sporadic. Although the cluster companies had better overall

Table 6. Total indirect and direct effects of location on marketing performance through marketing orientation

Mediator effect	Point estimate coefficient	*t*-value	CI 95% Lower	CI 95% Upper
Total effect of location on marketing performance	0.04^{ns}	0.402	−0.110	0.195
Direct effect of location on marketing performance	-0.009^{ns}	0.116	−0.139	0.127
Indirect effect of Location through marketing orientation implementation (point estimates)				
Location through CustOrientation	0.049^{ns}	1.057	−0.030	0.124
0.025 × 0.067 = 0.001675				
Location through CompOrientation				
0.106 × 0.422* = 0.0447				
Location through InterfCoordination				
0.037 × 0.068 = 0.002516				

Note(s): No significant based on *t*(5,100), one-tailed test



Note(s): *$p < 0.001$

Figure 3. Path model

performance, the quantitative results indicated that this relationship (direct/ indirect) was not significant.

5. Conclusions

The main objective of this study was to examine the interconnected relationship between co-located SME service companies in clusters, the implementation of MO and the MP of these firms. We analyzed these potentially causal relationships by studying a primary sample of 133 Colombian health services companies, which was complemented by a qualitative analysis. As a result of this research, we have been able to provide a better explanation of the Location–MO–MP relationship that is observed in SME-SCs in the health sectors of emerging countries.

This paper carried out an original analysis of three different factors including the effect of geographical clustering on MP, how the cluster influences the MO of the companies within it and the moderating and mediating effects of location on that Cluster–MO–MP relationship, which previous literature has largely failed to explore, particularly from a SMEs–SC context. In this study, we utilized the multi-dimensional MO construct developed by Naver and Slater (1990) and analyzed the relationships between the factors, as well as the effects that can be observed on dimensions including Customer Orientation, Competitor Orientation and Inter-functional Coordination. While the latter is not context-dependent, its lack of significance confirmed our previous hypotheses: In SMEs, location is not associated with differences in internal management. These companies lack a formal internal structure, which means that important decisions about enhancing customer value are made by the managers or owners. Thus, there is no coordination between the different areas or levels within the companies. This question was also considered in the qualitative study, which showed that, in general, managers were took client-related strategic decisions.

However, when we analyzed the effect of the urban cluster on the first two MO components, we found only partial support for one of our hypotheses: SMEs, in environments that are characterized by strong rivalry and geographic proximity, direct their actions towards competitors, mainly because they offer greater value for their clients. Our exploration also detected that clustering had no moderating and mediating effects on the MO–MP relationship. Nevertheless, the quantitative results showed that location played a positive moderating role in terms of the effects of Competitor Orientation on MP ($p < 0.1$), which requires further research. A cluster that strengthens neither the dynamics nor the integration of its components will hardly moderate the relationship between MO and MP. One of the most important conclusions of the present study is that, although the services cluster, which primarily consisted of SMEs, had high visibility, it was also in need of a certain level of development and maturity to generate sufficient internal and external relations. The dynamics of the cluster depend not only on the physical presence of the companies but also on the will and strategic clarity of each of its members. The strength and maturity of a company's network of relationships determines the extent to which the externalities of a cluster have a positive impact on MP.

Some other conclusions reached in our study indicated that, in general, the SME-SCs increased their marketing efforts, especially those related to customer orientation. The latter does not imply that the managers or leaders of the companies had a closer relationship with their clients; rather, they were more efficient in exploiting the information that they obtained from the client. Confronted with this finding, Lautamäki (2010) stated that the biggest challenge for SMEs is to understand the nature and context of customer information, since it is easy to obtain, but interpreting the results requires a deep understanding of the context, and it is perhaps this issue that prevents the cycle from being

closed. Something similar is observed in the case of competition orientation. This should be an important tool to confront the high level of competition that exists within clusters; however, we found that companies, at best, carried out informal, non-systematic analyses of their competitors, which prevented the use of information that is needed to strengthen the value proposition for the client.

Furthermore, with regard to the SME-SCs, we showed that these firms were located in the cluster largely because the area had developed a reputation for providing these types of services. However, significant weaknesses were observed in relation to the shortage of vertical (value chain) and horizontal (among competitors) relationships that was maintained between them. The latter is a topic that is of great relevance, because it means that it is difficult to generate externalities within the cluster (Molina-Morales and Martinez-Fernandez, 2010; Perles *et al.*, 2017). At present, although the cluster of health services in the Tequendama neighborhood is highly recognized, it fails to generate the impact and synergies that its participants expect. The evolution of the clusters depends not only on the physical presence of the companies but also on the will and strategic clarity that each of its participants has (Potter and Watts, 2011). The extent to which companies begin to densify relationships (i.e. form alliances) determines whether or not the cluster has a significant positive effect on performance, which is necessary to ensuring that companies can cope more effectively with strong international competition.

Finally, we acknowledge some limitations of our study in relation to the sample, variables and techniques that were employed, which future research should address. First, the sample in our study included a small number of cases and the analysis focused on just one city and sector. Future research could benefit from replicating our work in both similar and dissimilar contexts; business size and services, and larger samples will allow for more accurate measurements of the effects of the actual factors and variables. Second, we only measured MO. The inclusion of other types of marketing paradigms (e.g. relational marketing) may shed additional light on how the SME-SCs use marketing in these clusters. Third, regarding the quantitative analysis techniques, future studies could adopt a complementary regression approach. The OLS and PLS estimations inform us about what happens at the mid-point, but several scholars have warned that the impact of the cluster may be unequally distributed among the firms.

References

Alcácer, J. and Zhao, M. (2016), "Zooming in: a practical manual for identifying geographic clusters", *Strategic Management Journal*, Vol. 37 No. 1, pp. 10-21.

Alrubaiee, L. (2013), "An investigation on the relationship between new service development, market orientation and marketing performance", *European Journal of Business and Management*, Vol. 5 No. 5, pp. 1-26.

Arai, Y., Nakamura, H., Sato, H., Nakazawa, T., Musha, T. and Sugizaki, K. (2004), "Multimedia and internet business clusters in central Tokyo", *Urban Geography*, Vol. 25 No. 5, pp. 483-500.

Armario, J.M., Ruiz, D.M. and Armario, E.M. (2008), "Market orientation and internationalization in small and medium-sized enterprises", *Journal of Small Business Management*, Vol. 46 No. 4, pp. 485-511.

Asomaning, R. and Abdulai, A. (2015), "An empirical evidence of the market orientation–market performance relationship in Ghanaian small businesses", *Educational Research International*, Vol. 4 No. 2, pp. 69-86.

Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.

Balakrishnan, S. (1996), "Benefits of customer and competitive orientations in industrial markets", *Industrial Marketing Management*, Vol. 25 No. 4, pp. 257-269.

Baum, J.A. and Mezias, S.J. (1992), "Localized competition and organizational failure in the Manhattan hotel industry, 1898-1990", *Administrative Science Quarterly*, Vol. 37 No. 3, pp. 580-604.

Boachie-Mensah, F. and Issau, K. (2015), "Market orientation and the performance of small and medium-sized manufacturing enterprises in the accra metropolis", *International Journal of Marketing Studies*, Vol. 7 No. 3, p. 39.

Camisón Zornoza, C. and Cruz Ros, S. (2008), "La mediación del desempeño organizativo desde una perspectiva estratégica: creación de un instrumento de medida", *Revista Europea de Dirección y Economía de la Empresa*, Vol. 17 No. 1, pp. 79-102.

Carbonell, P. and Rodríguez Escudero, A.I. (2010), "The effect of market orientation on innovation speed and new product performance", *Journal of Business and Industrial Marketing*, Vol. 25 No. 7, pp. 501-513.

Carr, J.C. and Lopez, T.B. (2007), "Examining market orientation as both culture and conduct: modeling the relationships between market orientation and employee responses", *Journal of Marketing Theory and Practice*, Vol. 15 No. 2, pp. 113-125.

Castellanos-Ordoñez, G. and Solano-Arboleda, D. (2017), "Meta-análisis de la relación entre la orientación al mercado y los resultados de la empresa", *Estudios Gerenciales*, Vol. 33 No. 142, pp. 87-94.

Cepeda, G. and Roldán, J.L. (2004), "Aplicando en la práctica la técnica PLS en la administración de empresas", *Conocimiento y Competitividad*, XIV Congreso Nacional ACEDE, Murcia, pp. 74-78.

Cheng, C. and Krumwiede, D. (2010), "The effects of market orientation and service innovation on service industry performance: an empirical study", *Operations Management Research*, Vol. 3 Nos 3-4, pp. 161-171.

Chin, W.W. (1998), "The partial least squares approach for structural equation modeling", in Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence Erlbaum Associates, Mahwah, NY, pp. 295-336.

Chin, W.W. (2010), "How to write up and report PLS analyses", in Vinzi, V.E., Chin, W.W., Henseler, J. and Wang, H. (Eds), *Handbook of Partial Least Squares*, Springer-Verlag, Berlin, pp. 655-690.

Claver-Cortés, E., Marco-Lajara, B., Seva-Larrosa, P. and Ruiz-Fernández, L. (2019), "Competitive advantage and industrial district: a review of the empirical evidence about the district effect", *Competitiveness Review: An International Business Journal*, Vol. 29 No. 3, pp. 211-235.

Cohen, J. (1998), *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed., Lawrence Erlbaum Associates, Hillsdale, NY.

Coviello, N.E., Brodie, R.J. and Munro, H.J. (2006), "An investigation of marketing practice by firm size", *Journal of Business Venturing*, Vol. 15 No. 5, pp. 523-545.

Deakins, D. (1991), "Effective networks of agency support for small businesses", *14th National Small Firms' Policy and Research Conference*, Blackpool, pp. 20-22.

Delgado, M., Porter, M.E. and Stern, S. (2014), "Clusters, convergence, and economic performance", *Research Policy*, Vol. 43 No. 10, pp. 1785-1799.

Delgado, M., Porter, M.E. and Stern, S. (2016), "Defining clusters of related industries", *Journal of Economic Geography*, Vol. 16 No. 1, pp. 1-38.

Dev, C.S., Zhou, K.Z., Brown, J. and Agarwal, S. (2009), "Customer orientation or competitor orientation which marketing strategy has a higher payoff for hotel brands?", *Cornell Hospitality Quarterly*, Vol. 50 No. 1, pp. 19-28.

Ellis, P. (2006), "Market orientation and performance: a meta-analysis and cross-national comparison", *Journal of Management Studies*, Vol. 43 No. 5, pp. 1089-1107.

Falk, R.F. and Miller, N.B. (1992), *A Primer for Soft Modeling*, University of Akron Press, Akron, OH.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Gatignon, H. and Robertson, T.S. (1993), "The impact of risk and competition on choice of innovations", *Marketing Letters*, Vol. 4 No. 3, pp. 191-204.

Geisser, S. (1975), "The predictive sample reuse method with applications", *Journal of the American Statistical Association*, Vol. 70 No. 350, pp. 320-328.

Ghosh, B., Schoch, H., Taylor, D., Kwan, W. and Sock Kim, T. (1994), "Top Performing Organizations of Australia, New Zealand and Singapore: a comparative study of their marketing effectiveness", *Marketing Intelligence and Planning*, Vol. 12 No. 7, pp. 39-48.

Gilmore, A., Carson, D. and Rocks, S. (2006), "Networking in SMEs: evaluating its contribution to marketing activity", *International Business Review*, Vol. 15 No. 3, pp. 278-293.

González, L., Vijande, M. and Vazquez-Casielles, R. (2005), "Escalas de medida del concepto de orientación al mercado. Revisión crítica de su contenido y de sus propiedades psicométricas", *ESIC Market*, Vol. 120, pp. 121-202.

Grunert, K.G., Fruensgaard Jeppesen, L., Risom Jespersen, K., Sonne, A.M., Hansen, K., Trondsen, T. and Young, J.A. (2005), "Market orientation of value chains: a conceptual framework based on four case studies from the food industry", *European Journal of Marketing*, Vol. 39 Nos 5/6, pp. 428-455.

Hair, J.F., Sarstedt, M., Pieper, T.M. and Ringle, C.M. (2012), "The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications", *Long Range Planning*, Vol. 45 No. 5, pp. 320-340.

Harris, L.C. (2001), "Market orientation and performance: objective and subjective empirical evidence from UK companies", *Journal of Management Studies*, Vol. 38 No. 1, pp. 17-43.

Haugland, S.A., Myrtveit, I. and Nygaard, A. (2007), "Market orientation and performance in the service industry: a data envelopment analysis", *Journal of Business Research*, Vol. 60 No. 11, pp. 1191-1197.

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), "The use of partial least squares path modeling in international marketing", *New Challenges to International Marketing*, Emerald Group Publishing, pp. 277-319.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modelling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.

Jaworski, B. and Kohli, A. (1996), "Market orientation: review, refinement and roadmap", *Journal of Market-Focused Management*, Vol. 1 No. 2, pp. 119-135.

Kaiser, H.F. (1974), "An index of factorial simplicity", *Psychometrika*, Vol. 39 No. 1, pp. 31-36.

Kaliappen, N. and Hilman, H. (2013), "Enhancing organizational performance through strategic alignment of cost leadership strategy and competitor orientation", *Middle-East Journal of Scientific Research*, Vol. 18 No. 10, pp. 1411-1416.

Kara, A., Spillan, J.E. and DeShields, O.W. (2005), "The effect of a market orientation on business performance: a study of small-sized service retailers using MARKOR scale", *Journal of Small Business Management*, Vol. 43 No. 2, pp. 105-118.

Kaur, G. and Gupta, M.C. (2010), "A perusal of extant literature on market orientation-concern for its implementation", *The Marketing Review*, Vol. 10 No. 1, pp. 87-105.

Kirca, A., Jayachandran, S. and Bearden, W. (2005), "Market orientation: a meta-analytic review and assessment of its antecedents and impact on performance", *Journal of Marketing*, Vol. 69 No. 2, pp. 24-41.

Kohli, A. and Jaworski, B. (1990), "Market orientation: the construct, research propositions and managerial implications", *Journal of Marketing*, Vol. 54 No. 2, pp. 1-18.

Kotler, P. (2002), *Marketing Management: Analysis, Planning, Implementation and Control*, 11th ed., Prentice-Hall, New Jersey.

Kotler, P. and Keller, K. (2006), *Marketing Management*, 12th ed., Prentice Hall, Upper Saddle River, NJ.

Kumar, K., Subramanian, R. and Strandholm, K. (2011a), "Market orientation and performance: does organizational strategy matter?", *Journal of Applied Business Research*, Vol. 18 No. 1, pp. 37-49.

Kumar, V., Jones, E., Venkatesan, R. and Leone, R.P. (2011b), "Is market orientation a source of sustainable competitive advantage or simply the cost of competing?", *Journal of Marketing*, Vol. 75 No. 1, pp. 16-30.

Lamprinopoulou, C. and Tregear, A. (2011), "Inter-firm relations in SME clusters and the link to marketing performance", *Journal of Business and Industrial Marketing"*, Vol. 26 No. 6, pp. 421-429.

Langerac, F. (2003), "The effect of market orientation on potential advantage and organisational performance", *Journal of Strategic Marketing*, Vol. 11 No. 2, pp. 93-115.

Lautamäki, S. (2010), "Market orientation in SMEs", *Global Conference on Business and Finance Proceedings*, Vol. 5, No. 2, pp. 466-470.

Levitt, T. (1960), "Marketing myopia", *Harvard Business Review*, Vol. 38 No. 4, pp. 24-47.

Levy, M. and Powell, P. (1998), "SME flexibility and the role of information systems", *Small Business Economics*, Vol. 11 No. 2, pp. 183-196.

Liu, H. (1995), "Market orientation and firm size: an empirical examination in UK firms", *European Journal of Marketing*, Vol. 29 No. 1, pp. 57-71.

Lukas, B.A. and Ferrell, O.C. (2000), "The effect of market orientation on product innovation", *Journal of the Academy of Marketing Science*, Vol. 28 No. 2, pp. 239-247.

Marjanova Jovanov, T., Sofijanova, E., Davcev, L. and Temjanovski, R. (2015), "Inter-functional coordination and entrepreneurial firms' financial performance: a developing economy", *Economic Development and Entrepreneurship in Transition Economies: Assessment of the Last 25 Years, Going Beyond the Transition*, Vol. 4 No. 4, pp. 844-854.

Martin, J.H. and Grbac, B. (2003), "Using supply chain management to leverage a firm's market orientation", *Industrial Marketing Management*, Vol. 32 No. 1, pp. 25-38.

Martin, R. and Sunley, P. (2003), "Deconstructing clusters: chaotic concept or policy panacea?", *Journal of Economic Geography*, Vol. 3 No. 1, pp. 5-35.

Maskell, P. and Lorenzen, M. (2004), "The cluster as market organisation", *Urban Studies*, Vol. 41 Nos 5-6, pp. 991-1009.

McCann, B.T. and Folta, T.B. (2009), "Demand-and supply-side agglomerations: distinguishing between fundamentally different manifestations of geographic concentration", *Journal of Management Studies*, Vol. 46 No. 3, pp. 362-392.

McDonald, F., Huang, Q., Tsagdis, D. and Tüselmann, H.J. (2007), "Is there evidence to support Porter-type cluster policies?", *Regional Studies*, Vol. 41 No. 1, pp. 39-49.

McEachern, M. and Warnaby, G.G. (2005), "Improving customer orientation within the fresh meat supply chain: a focus on assurance schemes", *Journal of Marketing Management*, Vol. 21 Nos 1-2, pp. 89-115.

Mohsen, K. and Eng, T.Y. (2016), "The antecedents of cross-functional coordination and their implications for marketing adaptiveness", *Journal of Business Research*, Vol. 69 No. 12, pp. 5946-5955.

Molina-Morales, F. and Martínez-Fernández, M. (2003), "The impact of industrial district affiliation on firm value creation", *European Planning Studies*, Vol. 11 No. 2, pp. 155-170.

Molina-Morales, F. and Martínez-Fernández, M. (2010), "Social Networks: effects of social capital on firm innovation", *Journal of Small Business Management*, Vol. 48 No. 2, pp. 258-279.

Najib, M., Kiminami, A. and Yagi, H. (2011), "Competitiveness of Indonesian small and medium food processing industry: does the location matter?", *International Journal of Business and Management*, Vol. 6 No. 9, p. 57.

Narver, J. and Slater, S. (1990), "The effect of a market orientation on business profitability", *Journal of Marketing*, Vol. 54 No. 4, pp. 20-35.

Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, 3rd ed., McGraw Hill, Nueva York.

O'Dwyer, M. and Ledwith, A. (2009), "Determinants of new product performance in small firms", *International Journal of Entrepreneurial Behavior and Research*, Vol. 15 No. 2, pp. 124-136.

Panigyrakis, G.G. and Theodoridis, P.K. (2007), "Market orientation and performance: an empirical investigation in the retail industry in Greece", *Journal of Retailing and Consumer Services*, Vol. 14 No. 2, pp. 137-149.

Pelham, A. and Wilson, D. (1995), "A longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimensions of small-firm performance", *Journal of the Academy of Marketing Science*, Vol. 24 No. 1, pp. 27-43.

Perles-Ribes, J.F., Rodriguez-Sanchez, I. and Ramón-Rodríguez, A.B. (2017), "Is a cluster a necessary condition for success? The case of Benidorm", *Current Issues in Tourism*, Vol. 20 No. 15, pp. 1575-1603.

Piercy, N. and Lane, N. (1996), "Marketing implementation: building and sharing real market understanding", *Journal of Marketing Practice: Applied Marketing Science*, Vol. 2 No. 3, pp. 15-28.

Pitt, L. and Jeantrout, B. (1994), "Management of customer expectations in service firms: a study and a checklist", *Service Industries Journal*, Vol. 14 No. 2, pp. 170-189.

Porter, M.E. (1980), *Competitive Strategy*, Free Press, New York.

Porter, M.E. (1998), "Clusters and the new economics of competition", *Harvard Business Review*, Vol. 76 No. 6, pp. 77-90.

Porter, M. (1990), *The Competitive Advantages of Nations*, Free Press, New York, NY.

Porter, M.E. (2000), "Location, competition, and economic development: local clusters in a global economy", *Economic Development Quarterly*, Vol. 14 No. 1, pp. 15-34.

Potter, A. and Watts, H.D. (2011), "Evolutionary agglomeration theory: increasing returns, diminishing returns, and the industry life cycle", *Journal of Economic Geography*, Vol. 11 No. 3, pp. 417-455.

Puig, F. and Marques, H. (2011), "The dynamic evolution of the proximity effect in the textile industry", *European Planning Studies*, Vol. 19 No. 8, pp. 1423-1439.

Puig, F., García-Mora, B. and Santamaría, C. (2013), "The influence of geographical concentration and structural characteristics on the survival chance of textile firms", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 17 No. 1, pp. 6-19.

Raju, P.S., Lonial, S.C., Gupta, Y.P. and Ziegler, C. (2000), "The relationship between market orientation and performance in the hospital industry: a structural equations modeling approach", *Health Care Management Science*, Vol. 3 No. 3, pp. 237-247.

Raju, P.S., Lonial, S.C. and Crum, M.D. (2011), "Market orientation in the context of SMEs: a conceptual framework", *Journal of Business Research*, Vol. 64 No. 12, pp. 1320-1326.

Ringle, C.M., Wende, S. and Becker, J.M. (2015), "SmartPLS 3", available at: http://www.smartpls.com (accessed 5 July 2015).

Rodríguez-Victoria, O.E., Puig, F. and González-Loureiro, M. (2017), "Clustering, innovation and hotel competitiveness: evidence from the Colombia destination", *International Journal of Contemporary Hospitality Management*, Vol. 29 No. 11, pp. 2785-2806.

Rojas, L.A.R., Bermudez, G.M.T. and Morales, A.A.O. (2013), "A knowledge management model applied to health tourism in Colombia", *7th International Conference on Knowledge Management in Organizations: Service and Cloud Computing*, Springer, Berlin, Heidelberg, pp. 537-546.

Sin, L.Y., Alan, C.B., Heung, V.C. and Yim, F.H. (2005), "An analysis of the relationship between market orientation and business performance in the hotel industry", *International Journal of Hospitality Management*, Vol. 24 No. 4, pp. 555-577.

Slater, S.F. and Narver, J.C. (1994), "Does competitive environment moderate the market orientation-performance relationship?", *Journal of Marketing*, Vol. 58 No. 1, pp. 46-55.

Slater, S. and Narver, J. (2000), "The positive effect of a market orientation on business profitability: a balanced replication", *Journal of Business Research*, Vol. 48 No. 1, pp. 69-73.

Smirnova, M., Naudé, P., Henneberg, S.C., Mouzas, S. and Kouchtch, S.P. (2011), "The impact of market orientation on the development of relational capabilities and performance outcomes: the case of Russian industrial firms", *Industrial Marketing Management*, Vol. 40 No. 1, pp. 44-53.

Stone, M. (1974), "Cross-validatory choice and assessment of statistical predictions", *Journal of the Royal Statistical Society, Series B (Methodological)*, Vol. 36 No. 2, pp. 111-133.

Subramanian, R. and Gopalakrishna, P. (2001), "The market orientation–performance relationship in the context of a developing economy: an empirical analysis", *Journal of Business Research*, Vol. 53 No. 1, pp. 1-13.

Suliyanto, S. and Rahab, R. (2012), "The role of market orientation and learning orientation in improving innovativeness and performance of small and medium enterprises", *Asian Social Science*, Vol. 8 No. 1, p. 134.

Tsiotsou, R. (2010), "Delineating the effect of market orientation on services performance: a component-wise approach", *The Services Industries Journal*, Vol. 30 No. 3, pp. 375-40.

Van Egeren, M. and O'Connor, S. (1998), "Drivers of market orientation and performance in service firms", *Journal of Services Marketing*, Vol. 12 No. 1, pp. 39-58.

Webster, F.E. (1988), "The rediscovery of the marketing concept", *Business Horizons*, Vol. 31 No. 3, pp. 29-39.

Werts, C.E., Linn, R.L. and Jöreskog, K.G. (1974), "Intraclass reliability estimates: testing structural assumptions", *Educational and Psychological Measurement*, Vol. 34 No. 1, pp. 25-33.

Wood, V.R., Bhuian, S. and Kiecker, P. (2000), "Market orientation and organizational performance in not-for-profit hospitals", *Journal of Business Research*, Vol. 48 No. 3, pp. 213-226.

Zhou, Z. and Nakata, C. (2007), "Reexamining the link between customer orientation and business performance: the role of information systems", *Journal of Marketing Theory and Practice*, Vol. 15 No. 3, pp. 187-203.

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