



Location, Market Orientation and Organizational Performance in the Colombian Health Industry

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Abstract: *(maximum 300 words)*

This work analyses for service companies (in the health industry) the dynamics and relationships between the variables of Location (i.e. within an industrial cluster), Market Orientation (hereinafter MO) and Organisational/Business Performance (hereinafter OP).

A mixed research methodology (quantitative and qualitative) was applied. For the quantitative analysis, 134 managers of companies in the health sector of the city of Cali (Colombia) were surveyed by telephone. For the qualitative analysis, 6 managers of companies from the same sample were interviewed. For the measurement of MO and OP reliable scales found in the literature were used.

The results obtained validate that health industry firms located in a cluster have higher performance. On the other hand, it was verified that MO generates a positive and significant effect on OP, with Competitor Orientation being the sole component of MO with a significant influence. These results provide empirical evidence to support health firm's managers in their strategic decision making in terms of locating in a cluster and/or in strengthening their MO level, mainly customer orientation, with a view to maintain a sustainable good performance.

Keywords: *Location, Cluster, Market Orientation, Organizational Performance, Competitor Orientation, Health Industry.*

JEL codes: D22; L83; R11; O33; O25.

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1. Introduction

Adam & Savigny (2012) argue that health and other social systems have been described as complex adaptive systems that adjust dynamically, and sometimes unpredictably, to changes within the system itself or in the context in which they operate. This has led to the health industry, to follow the trend that has been noted in manufacturing firms, of seeking to organise in geographic concentrations or clusters. Few studies have investigated service clusters, as they have predominately focused their interest on manufacturing firms (Nordin, 2003; McCann & Folta, 2009). However, there are increasing instances of geographical concentrations of service firms in different parts of the world that requires changes in the focus of analysis. This new approach involves moving the focus of the study from the suppliers-side to the demand environment in which the relationships take place (McCann & Folta, 2009).

Colombia is following the trend of seeking benefits from the influence of service clusters on performance. Delgado, Porter & Stern et al. (2014) argue that empirical evidence shows that cluster-based SMEs have an important competitive advantage over firms that remain isolated, due to the externalities generated by cluster dynamics. In the main cities of Colombia, namely Bogotá, Cali and Medellín, geographical concentrations of health industry firms have been generated, as a response to the characteristics of the industry, as well as the demand conditions.

Given that the health industry is now characterised by a trend towards geographic concentration and growing international competition, there is now a strong need for countries to adopt Market Orientation (hereinafter MO) strategies (Armario & Cossio, 2001), understood as being an organizational culture (Narver & Slater, 1990), capable of creating greater customer value (Narver & Slater, 1990, Zhou & Nakata, 2007, Kaur & Gupta, 2010) and consequently, also, higher firm performance.

Although work has been done to study the impact of MO on Organizational Performance (Kohli & Jaworski, 1990; Narver & Slater, 1990; Desphandé et al., 1993; Ellis, 2006), little has been done in relation to clustering environments. The study of the effect that the cluster (Location) can have on both the level of MO in service industry, and on the Organizational Performance (hereinafter OP), of its constituent firms, and the effect of MO on OP are the main objectives of this work.

In general terms, this work is expected to generate knowledge to increase the understanding in clustering environments of the relationship between MO and OP in the health service industry. Additionally, it will provide strategic information to the leaders and managers, useful for making more informed decisions about their strategies of location and incorporation of OM activities for their respective businesses. In order to achieve the research objectives, this paper is structured as follows. In the second part we carry out a review of the literature that forms the conceptual framework of business clustering, MO and OP in the context of health service firms. Thirdly, a description of the methodology used for the empirical tests of the hypotheses is given. Fourthly, the results are analysed and discussed. Finally, conclusions are reached, management implications are provided and questions are proposed for future research.

2. Literature review and hypotheses setting

2.1 Location effect on Organizational Performance.

Related sectors and productive chains are one of the components that Porter (1990) established within his model of competitiveness analysis. Within this component clear recognition is given to the impact of clusters, as a model of business agglomeration, especially in those economic sectors where a firm is strong or where it has significant previous experience. These geographical agglomerations are very important, not only for the constituent firms (Porter, 1998b; Marco-Lajara; Claver-Cortés; Úbeda-García & del Carmen Zaragoza-Sáez, 2016), but also for the economy of the sector in which these clusters are found (Porter, 1998a; Molina-Morales & Martínez-Fernández, 2010).

Other authors (Camisón, Forés & Boronat, 2016; Eraslan, Donmez & Akgul, 2016; Wennberg & Lindqvist, 2010) recognize the growing importance of the proximity of firms, in order to meet the demands of globalisation in terms of efficiency, innovation and value creation. According to Porter (1998b, p.80), "a cluster allows each member to benefit as if it had greater scale or as if it had joined with others formally, without requirements to sacrifice its flexibility". Clusters are largely models of concentration that generate externalities that support the region and firm competitiveness. In addition to the above, based on one of the most important theories to explain and describe organizational relationships, the Resource Based Vision (Barney, 1991, 2001) and the Theory of Dynamic Capacities (Teece, Pisano & Shuen, 1997, Zollo & Winter, 2002), several authors have studied the differences in the achievement of results by companies over time in the same context (Peteraf, 1993; Barney, 2001). These studies have allowed us to observe how companies internally develop strategic capabilities that will later become competitive advantages. However, more recent studies have analyzed the way in which context factors support the generation of strategic capabilities (Maskell, 2001; Aragón-Correa and Sharma, 2003), this supports the idea that clusters generate externalities, and therefore better performance results for companies.

Specifically in the case of health service firms, clusters create great opportunities. In fact, developing countries have opted for this strategy in order to generate more competitive services, to strengthen their local and internationalization processes. Colombia should follow this trend, since it has a health system well known in Latin America both for its quality and for the level of service sophistication provided by its firms.

According to the conceptual framework, firms located within the business concentrations should achieve better performance (Krugman, 1991; Porter, 1998b). In addition, some authors state that good performance is achieved by collective efficiency and the impact of the relationships and networks formed among the cluster participants (Rabellotti, 1999; Schmitz, 1995). Many studies show the impact of the effect of location on OP (Canina et al., 2005; Wennberg & Lindqvist, 2010). Taking all this into account, it is expected that health service firms located within a cluster will have a

better organizational performance than isolated ones. Therefore, we propose the following hypothesis:

H1: In the health industry, firms located within a cluster of health services will have a better OP than firms that are located outside the cluster.

2.2 Location Effects on Market Orientation in the Health Industry.

MO has been a well-studied topic in the context of business strategy and culture given its effects on OP and its potential as a generator of competitive advantage (Kohli & Jaworski, 1990, Narver & Slater 1990, Desphandé et al., 1993; Kirca et al., 2005). MO can be defined as the degree to which a firm implements marketing concepts (Kohli & Jaworski, 1990) and is understood as an organizational culture that supports the generation of competitive advantage through the creation of superior customer value (Narver & Slater, 1990, Zhou et al., 2007, Kaur & Gupta, 2010). In the literature, two different approaches are identified; the first regards MO as a firm culture or philosophy (Varela et al., 1996; Narver et al., 1998), and the second sees it as a strategic or behavioural approach (Gounaris, Avlonitis & Papastathopoulou, 2004; Olson, Slater & Hult, 2005).

Narver & Slater (1990), with their more cultural focus, verify the relation of MO with organizational performance for them the MO construct is composed of three factors: Customer Orientation, Competitor Orientation and Interfunctional Coordination. Customer Orientation relates to knowledge about the customer, with a view to generating greater customer value. Competitor Orientation is knowledge of the strengths and weaknesses of the competition, its capacity for development and its long-term strategies. Finally, Interfunctional Coordination aims to guide management in the activities that the organisation must carry out to coordinate its resources with a view to generating greater value.

According to Najib, Kiminami & Yagi (2011), clusters are one of the main tools to strengthen the innovative behaviours and MO of SMEs. In addition, a cluster is a geographical concentration where firms benefit from the externalities that are generated

by the dynamics of the model. The firms locate in part in the clusters to reduce the cost of searching for clients (Stahl, 1982). This aspect of clusters with a demand orientation is also underlined by McCann & Folta (2009). In addition, these clusters have created the presence of specialised suppliers, guaranteeing access to services that firms could not access individually (McCann et al., 2015). Along the same lines, Porter (2000) argues that there is strong competition inside the concentrations, not only to gain new clients, but also to retain them, due in part to the strong incentives existing inside the clusters.

The highly competitive environment within clusters should lead businesses to develop continuous action to analyse competitor characteristics such as their strategies and differentiators (Dev, Zhou, Brown & Agarwal, 2009). Similarly, Porter (1980) argues that in highly concentrated markets, leading competitors, have the opportunity to significantly alter market competition conditions, which translates into an increase of use of tactics such as aggressive pricing, advertising, and the incorporation of new products and services. Thus, high levels of Competitive and Customer Orientation should create a higher level of MO in the firms located in the cluster. In accordance with this, we propose this second hypothesis:

H2: In the health industry, firms located in a cluster of health services will have a higher MO than those located outside.

2.3 Market Orientation Effects on Organizational Performance in the Health Industry.

Through the review of the literature on MO, it is noted that many studies confirm its positive influence on OP (Ellis, 2006; Kumar et al., 2011; Shehu & Mahmood, 2014). Kirka et al. (2005) found that the correlation between MO and performance is significant, although it is stronger in manufacturing firms than in service firms. The majority of the studies that analyse this relationship support the proposal that MO has a positive and significant effect on OP. In the health industry, the influence of MO on performance, in the case of large American hospitals, has been verified (Wood, Bhuian & Kiecker, 2000; Kumar et al., 2011).

On the other hand, Lonial and Carter (2015) evidence from the resources based theory, that the organizational orientations, one of them the MO, can be conceived as organizational capacities, and that in the case of SMEs, there is a direct relationship between these orientations and the OP of the companies. This performance is supported by the fact that such guidelines, such as MO, are a capacity that can hardly be duplicated by competitors (Martin, Martin and Minnillo, 2009). This would support the hypothesis that companies in the health sector with a higher OM should have a better performance.

A relevant topic in these types of studies is the tool used to measure OP. Thus, the study by Morgan et al. (2009) gave the result that a subjective measure of performance does not support a significant relationship between performance and MO, while the use of more objective variables would support it significantly. However, other studies support a different relationship. Thus, when using subjective scales, as in this research, the relationship between MO and OP is usually positive and significant. Similar findings arose in the research by Martin-Consuegra & Esteban (2007) in the aeronautical services industry, and Haugland et al. (2007) in the hotel industry.

Therefore, taking into account that the sample of firms studied are mainly SMEs and that the evaluation of the organizational performance variables has been carried out with subjective scales, the following hypothesis is proposed:

H3: In the health industry, firms with higher MO will have a higher OP.

2.4 Market Orientation Components and Organizational Performance.

Some studies show that the components of MO do not all have the same effect on performance (Haugland et al., 2007, Tsiotsou, 2010, Kumar et al., 2011). Therefore, the effect of the MO components on performance might be analysed separately. Thus, Frambach & Ingenbleek (2016), in an investigation of a sample of both services and manufacturing firms, showed that the firms with outstanding results had clear and strong Customer Orientation. Similarly, many studies have shown that the Customer

Orientation factor has a positive effect on OP (Dev et al., 2009, Tsiotsou, 2010, Kumar et al., 2011, Boachie-Mensah & Issau, 2015).

In Colombia, the services provided as part of the General System of Social Security in Health (hereinafter SGSSS) care plan (hereinafter POS) represent the immense majority of the activities carried out by firms in this industry. These services are highly standardized by the Government with a view to making more efficient use of health resources. This means that Customer Orientation is not an important component for health service firms performance, unless they treat patients both domestic and foreign, who privately finance their treatments, which are few in proportion.

Cheng & Krumwiede (2010), in a study of a sample of service firms, found that Competitor Orientation had a positive influence on OP. Kumar et al. (2011) obtained similar results when they investigated service organizations applying differentiation strategies. Thus, it might be expected that Competitor Orientation would have a positive effect on OP for health service firms, since they have similar procedures and their differentiation is in the quality of the service provided¹. O'Dwyer and Gilmore (2017) indicate: "that SMEs seeking optimal organisational performance should pay close attention to direct and indirect competitors in order to identify opportunities and build sustainable competitive businesses". Therefore, we propose this fourth hypothesis:

H4a: In the health industry, the intensity of the relationship between MO and OP will be greater in the component of Competitor Orientation than in the component of Customer Orientation.

Kumar et al. (2011), through a study of large hospitals in the United States, demonstrate that Interfunctional Coordination has a positive effect on a firm's performance. However, several other studies, such as those of Haugland et al. (2007), O'Dwyer & Ledwith (2009) and Smirnova et al., (2011) have managed to demonstrate that Interfunctional Coordination does not directly influence OP. Narver & Slater (1990) argue that, in SMEs, where a single person manages the business, decisions cannot be

¹ Law 100 of 1993 standardises the provision of the health services that make up the Obligatory Health Plan. Therefore, differentiation must be generated through service quality and not through the technical procedures provided.

made by different departments. For his part, Lautamäki (2010) argues that the socialization of customer and competitor knowledge may not be the most important issue in the context of SMEs, since the entrepreneur has centralized decision-making and strategic direction of the firm. In small firms, such as small-scale clinics or consultancies, the reality is the one described above. We propose the following hypothesis:

H4b: In the health industry, the intensity of the relationship between MO and OP will be greater in the Customer Orientation component than in the Interfunctional Coordination component.

By logical deduction one could argue that the effect of Competitor Orientation on OP is greater than that of Interfunctional Coordination. We propose the following hypothesis:

H4c: In the health industry, the intensity of the relationship between MO and OP will be greater in the Customer Orientation component than in the Interfunctional Coordination component.

3. Methodology

3.1 The Colombian health industry.

The health industry in Colombia is defined within the framework of the SGSSS, a model characterised by regulated competition. Competition is created among different insurers by the affiliated population, represented economically by a defined per capita income, the UPC², and an equivalent product, the POS³. By having regulated conditions as to the product, they must offer and to whom they must offer it, the firms are essentially directed to compete in terms of quality of service and care. The system operates mainly under two care schemes: the contributory scheme and the subsidised

² The amount that the EPS receives for each affiliated member and beneficiary. Updated periodically by the National Council of Social Security in Health.

³ The health services that all EPS, without exception, must provide to all people who are affiliated to the Social Health Insurance System.

scheme. The first group includes employed people who are obligatory contributors to the system, while the second group covers the population with the lowest resources.

Although the Colombian health model has shown great advances in terms of population coverage and quality of service, there are still problems of sustainability of the model. The first onere are three main problems in the Colombian health system, namely: equity, increased total expenditure of the model, and opportunities for improvement in quality of service and MO⁴. The strengthening of the Colombian health system would position Colombia as a leading player in health tourism.

3.2 Population and Sample

Given the objectives of this research and the characteristics of the sample, we took a mixed research approach (see Molina-Azorín, 2012) where both quantitative and qualitative techniques were used (see Chart 1). With the first our intention was to generate statistical information to allow us to test the proposed hypotheses. In the second our intention was to generate qualitative information to allow us to complement, deepen and expand the explanation of the results obtained.

Chart 1: Data Sheet.

<p>Universe: Health industry firms in Cali (Colombia). Sample framework: The 671 health industry firms registered with the Cali Chamber of Commerce in 2012.</p>
<p style="text-align: center;"><u>Quantitative methodology</u></p>
<p>Sample size: 134 firms, representing a 20% response rate. Fieldwork: The data was collected between November 2013 and July 2014. Technique: Telephone survey. Survey forms were sent to the Management or Legal Representatives of the firms via e-mail, with information explaining the purpose of the research and how they might participate in it. Junior researchers from the Icesi University (Cali, Colombia) participated in the development of the process. Information collection instrument: Structured questionnaire consisting of 3 main blocks: (1) Classification data, with 13 questions; (2) Market Orientation, with 15 questions; Organizational Performance, with 14 questions.</p>
<p style="text-align: center;"><u>Qualitative methodology</u></p>
<p>Size of the sample: 6 firms randomly selected, half located in the cluster and the other half outside the cluster. Fieldwork: The information was collected in January and February 2017. Technique: In-depth semi-structured interviews were conducted with the managers, partners or legal representatives of the firms. The interviews were recorded and then transcribed for the analysis of the information. This was supported by an additional researcher to ensure logical consistency in the interpretation of the results.</p>

For the quantitative analysis, a sample of 134 health services firms located in Cali (Colombia), 45 being members of the cluster and 89 outside it, was used. The Managers of this group of firms completed a structured questionnaire conducted over the telephone. For the qualitative analysis, 6 firms were selected from the sample, 3 from inside the cluster and 3 from outside the cluster. The Managers of these firms were interviewed personally and in depth using a semi-structured questionnaire.

Porter (1990) defines four levels in a cluster: these levels allow classification of the constituent organisations. Level 1 is formed by primary firms or those that develop the core products or services of the cluster. In Level 2 are the firms that supply the primary firms. In Level 3 are the firms that relate to Levels 1 and 2 by providing services or goods that complement the model. Finally, level 4 is formed by the institutions that provide the management of the cluster, essentially regulatory and control entities. The firms that make up the sample of the present study are in Levels 1 and 2 of the cluster. Level 1 includes hospitals and clinics, specialised consultancies, dental services, alternative medicine centres and aesthetic/spa centres. In L2 are the organisations that make up the group of suppliers or distributors of the L1 firms, among which there are firms that provide diagnostic support services, insurance firms, those firms that provide paramedical services and suppliers of goods, medicines and hospital and surgical equipment, including for aesthetics, for L1 firms.

3.3 Variables and Factors Measurement

The different variables (dependent and independent) taken into account in the study as well as the measurement scales used are described in detail below.

Dependent variable: Organizational Performance (OP)

The scale for OP measurement is based on the tool proposed by Camisón & Cruz (2008) for performance subjective measurement, which is made up of 14 items. The measurement of each variable is done comparing the respondent to its competitors for

each of the items, through a scale ranging from 1 to 7, 1 being much worse than the competitors and 7 being much better than the competitors.

The independent variables were: Cluster and Market Orientation

Cluster (Location)

Following the methodology of Molina-Morales & Martínez-Fernández (2003), as well as the suggestions of Perles-Ribes et al. (2015), we considered that health firms would be regarded as being in a cluster if they fulfilled two simultaneous conditions: (1) the first one is that the firm must be located in a place that fulfils the characteristics of a cluster in terms of level of concentration or geo-visualization (Alcacer & Zhao, 2016); and (2) the Managers must have the perception and feeling of belonging to the cluster.

Market Orientation (MO)

For the measurement of MO, we used the MKTOR scale of Narver & Slater (1990). It is the most commonly used scale when estimating MO in very different sectors and countries (González et al., 2005), and many studies have used it as part of their research (Narver & Slater, 1990, Narver & Slater 2000, Haugland et al., 2007, Boachie-Mensah & Issau, 2015). This construct is formed by three factors and 15 indicators. Customer Orientation is measured by 6 indicators, Competitor Orientation by 4 indicators and Interfunctional Coordination by 5 items. The indicators were evaluated by means of a 7-point Likert scale, 1 being total disagreement and 7 being total agreement with a mid point representing indifference.

4. Hypotheses testing and discussion

4.1 Effect of Location on Health Industry firms performance.

One of the objectives of the present study is to confirm, in the case of health firms, if there is a positive and significant effect of Location on OP. To test this hypothesis (H1) a t-test was applied, in order to evaluate if the two groups differ significantly from each

other in relation to their averages. The groups evaluated were the 45 firms located in the cluster and the 89 firms outside the cluster. The application of statistical process found that the performance measures were different ($t = -3.008$, $p = 0.003$). Thus, firms inside the cluster have higher performance, with a mean OP of 5.38, while firms outside the cluster average 4.91. To complement the analysis a linear regression was carried out with the objective of measuring the effect of Location on OP (see Table 1).

Table 1: Effect of Location on Organizational Performance.

Model	F (p-value)	R ²	β	β std	t (p-value)
1. Total sample	9,049 (0,003)	0,064	0,468	0,253	3,008 (0,003)

From the results it can be inferred that the concentration generates efficiency, due to the relationships and networks that are formed between the cluster participants (Rabellotti, 1999; Schmitz, 1995), which increases their performance (Canina et al., 2005; Wennberg & Lindqvist, 2010). In this way, the externalities generated by a cluster strengthen the performance of those firms that, operating alone, would be less competitive, and more so in the health industry, where the services provided within the SGSSS require a great efficiency and complementarity in the level of care processes. The cluster strengthens the vertical relationships between the firms that belongs to Levels 1 and 2. However, the results of the qualitative study suggest that relationships within the cluster still need to be further strengthened. Although the firms have, to an extent, developed vertical relations, the same is not true for horizontal relations; and it is these horizontal relations that would greatly support operational efficiency. In discussions with the Managers on the benefits of being inside the cluster, the following response was given:

"... The presence of clients, because the industry is dynamic, there is a lot of daily traffic of people seeking health services and being here, having our signage outside, has helped us to attract customers ... " Administrative Leader, Global Pediátrica (Paediatric) (February 4, 2017).

This answer indicate that the managers of health firms located in the cluster recognize the benefits of being in the cluster. The externalities and the way firms take advantage

of them means that firms located in the cluster have a better OP than those located outside.

4.2 Effect of Location on MO in firms located in a Cluster.

Hypothesis 2 (H2) posits that location has an impact on the level of MO in health service firms. To test this hypothesis, as in the previous case, a t-test was applied. The results show that the level of MO of firms inside and outside the cluster is not different ($t = -.512$; $p = .610$). The average of the MO of the firms located in the cluster is 6.09, compared to 6.02 for the firms outside. A linear regression was applied as a complement (see Table 2). The results show a lack of predictive capacity in the model. The linear model is not significant ($F = 0.203$, $p = 0.653$), and the model fit is very low ($R^2 = 0.002$). Neither result supports hypothesis 2.

Table 2: Effect of Location on MO.

Model	F (p-value)	R ²	β	β std	t (p-value)
1. Total Sample	0,203 (0,653)	0,002	0,54	0,39	0,45 (0,653)

While understanding that a cluster is a set of firms that have relationships in terms of knowledge, skills, demand, inputs and that generate externalities (Delgado et al., 2016), it is to be expected that not all components of the MO construct will have the same relevance for firms (Dawes, 2000). Going beyond generating an important Customer Orientation or an effective Interfunctional Coordination, the competitive environment of the cluster leads firms to focus their attention on their competitors in order to strengthen their differentiation in terms of customer service. This is also related to the characteristics and particular features of the Colombian SGSSS, where health services are very standardized, leaving little room to use Customer Orientation to offering a better value proposition.

Another factor that possibly ensures there is no great difference between the MO of the firms both inside and outside the cluster, is that, the enterprises being largely micro-enterprises and SMEs, administrators usually do not have the knowledge to carry out effective MO (Lautamäki, 2010). In many cases, the administrators or firm owners in the health field are professionals who, in addition to attending to their patients, must manage their businesses leaving less opportunity for the development of processes to

ensure more effective administration and strategic management. A manager interviewed responded in this way when asked, within the framework of the qualitative analysis:

"... *Not formal, because I am a bacteriologist... as for administration, I have neither studied it nor have had any training. I have been learning through on the job training in the exercise of my profession...* ". Manager, Laboratorio Clínico Especializado (Specialised Clinical Laboratory) Nohemy Cruz (February 9, 2017).

4.3 Effect of MO on the OP of Health Industry firms.

We now turn to the discussion of the third hypothesis (H3) results, which proposes that firms with higher MO will have higher OP; for this a correlation was developed for the total of the sample. The results obtained show a significant, positive and strong relationship ($\rho_{xy} = 0.374$, $p < 0.001$) between the MO and the OP of health industry firms. In order to complement the analysis and to understand the linear relationship between both variables, three linear regression models were developed, one to evaluate the effect for all firms in the health industry, the second to evaluate the effect on firms that do not belong to the cluster and finally a third model to evaluate the effect for the firms located in the cluster. The resulting information can be seen in Table 3.

Table 3: Effect of MO on Organizational Performance

Model	F (p value)	R ²	β	β adjusted	t (p value)
1. Total Sample n=134 MO-Performance	20,230 (p<0,000)	0,134	0,471	0,366	4,498 (p<0,000)
2. Firms outside cluster n=89 MO-Performance	13,532 (p<0,000)	0,126	0,450	0,369	3,679 (p<0,000)
3. Firms inside cluster n=45 MO-Performance	6,652 (p<0,003)	0,134	0,485	0,366	2,579 (p<0,000)

This result is consistent with other studies that have confirmed the positive influence of this construct on OP (Shehu and Mahmood, 2014, Boachie-Mensah & Issau, 2015, Ordonez & Arboleda, 2017). In fact, MO explains around 13% of OP in all models. On the other hand, to deepen the analysis, the result shown was that the relationship

between MO and OP is significant for both cluster and non-cluster firms, the influence being stronger in the case of the cluster firms ($\beta = 0.485$) than for the non-cluster firms ($\beta = 0.450$). Thus, it can be affirmed that health service firms obtain a higher OP as they develop a higher level of MO. These results not only support those obtained by Wood, Bhuian & Kiecker (2000) and Kumar et al. (2011), who validated this effect in large hospitals in the United States, but also provide empirical evidence in the case of micro-enterprises and SMEs in the health industry. These results allow us to accept hypothesis 3.

The results also allow us to validate that high levels of competition inside the cluster cause a greater effect of MO on OP. Thus, although location does not cause the development of MO, it can help health firms achieve higher levels of OP. In cluster firms it is possible that Competitor Orientation and Customer Orientation are the components of MO that contribute most to performance, but it could be thought that, for the firms outside the cluster, that Competitor Orientation should not be as important as it is for those inside, given that they face less competitive turbulence. In relation to Interfunctional Coordination, it would be expected that it would not be significant, since micro-enterprises and SMEs do not demonstrate the formal coordination between different parts of the firm that would strengthen the customer value proposition, since in these firms the decision maker is usually a single person, the manager.

4.4 Effects of the components of MO on OP.

In order to test hypotheses 4a, 4b and 4c, a multivariate linear regression model was constructed. According to the summary table of the model (see Table 4), the model has predictive capacity ($p < 0.001$) and 17.8% of the performance is explained jointly by Customer Orientation, Competitor orientation and Interfunctional Coordination.

Table 4: Summary of the Model of the evaluation of the effect of the components of MO on OP.

Model	F	p-value	R	R ²
1	9.371	0.001	,422a	,178

Predictors: (Constant), Customer Orientation, Competitor Orientation and Interfunctional Coordination.

Dependent variable: Organizational Performance.

The results obtained provide evidence that of the 3 components of MO, only Competitor Orientation ($B = 0.354$, $p = 0.001$) has a significant effect on OP (see Table 5).

Table 5: Results of the regression.

Model	Non-Standard Coefficients		Standard Coefficients		
	B	Standard Error	Beta	t	Sig.
(Constant)	2,075	,652		3,185	,002
Interfunctional Coordination	,167	,127	,144	1,314	,191
Competitor Orientation	,354	,100	,338	3,530	,001
Customer Orientation	-,012	,133	-,010	-,089	,930

a. Dependent variable: Organizational Performance.

The statistical model, on the one hand, shows that Customer Orientation does not have a significant effect on OP ($B = -0.012$; $p = 0.930$) and this could be related to the high level of standardization of services of the Colombian Health System, which set out a, which means that only a small percentage of all services require an understanding of the needs and additional expectations of clients (private and foreign) on the part of the health firms. On the other hand, in an environment where differentiation is not easy, a high Competitor Orientation should be generated in relation to aspects such as care, availability of appointments, etc. In addition, Competitor orientation would help with the acquisition of resources and the establishment of relationships with other firms (Dev et al., 2009).

In the results obtained through the qualitative analysis, three of the firms interviewed talked about their competitors and managed to identify their strengths and weaknesses; in fact, strategic thinking was shown in this respect. Below we have the extract from one of the interviews where this issue is discussed:

"... Of course, we are constantly talking about competitors. It's about having them present all the time, to be able to be there in force..." Manager, Laboratorio Clínico Especializado (Specialised Clinical Laboratory) Nohemy Cruz (February 9, 2017).

These comments demonstrate a thought process that goes beyond competition between firms in the same industry. As can be seen, the qualitative results support those obtained in the quantitative analysis.

Regarding Interfunctional Coordination, the results obtained ($B = 0.167$, $p = 0.191$) allow us to argue that Interfunctional Coordination has no significant effect on OP. It should be remembered that the vast majority of the firms that make up the research sample are micro-enterprises and SMEs, so the decisions are made only by the Manager, which makes it difficult, in turn, to create true Interfunctional Coordination.

In short, when reviewing the hypotheses, one could say that H4a is corroborated. That is, for firms in the health industry, the intensity of the effect of Competitor Orientation ($B = 0.354$) on Organizational Performance is stronger than that of Customer Orientation ($B = -0.012$). Hypothesis H4b proposes that the relationship between Customer Orientation ($B = -0.012$) and Organizational Performance is more intense than that between Interfunctional Coordination ($B = 0.167$) and performance. Although both are non-significant, the coefficient is clearly higher for the Interfunctional Coordination variable.

Therefore, this result does not support hypothesis 4Hb. The possible reason has been explained previously, namely that the high standardization context of the Colombian health services makes it difficult to exercise effective Customer Orientation. In addition, the great majority of firms in the sample are SMEs and, in the medium-sized ones, and some large ones, there may be some measure of Interfunctional Coordination, although the effect for all firms is not significant. Hypothesis H4c, that the relationship between Competitor Orientation ($B = 0.354$) and OP is more intense than that between Interfunctional Coordination ($B = 0,167$) and performance, is verified.

5. Conclusions

Our main objective was to analyse the relationships between the location of health industry firms in clusters and the effect of MO on OP. These relationships were analysed in a sample of 134 Colombian firms and the results showed that: there is a

"Location Effect" on OP for health firms located in a cluster and that firms located in a cluster do not have a higher level of MO than those outside, that is to say there is no Location effect on MO. Moreover, the empirical analysis shows a significant and positive relationship between MO and OP in the health firms. The positive effect of MO on OP is largely due to Competitor Orientation, since this is the only one of the three components that has a positive and significant effect.

What managerial and academic implications have these results? According to Naver and Slater (1990: 21), Competitor Orientation means that a seller understands the short-term strengths and weaknesses and long-term capabilities and strategies of both the key current and the key potential competitors. This implies that in the geographical concentrations of companies in the health sector the competitive advantage is obtained from the continuous monitoring of the actions of competitors. Faced with the competitive advantage offered in the geographical concentrations of manufacturing companies, cooperation with suppliers and cost savings derived from the proper management of the supply chain, in the agglomerations of service companies such as the city of Cali, the knowledge of the competitors is key. As argued by Zhou et al (2009), an overly focused approach to the competitor could lead to the establishment of strategies based on low prices and the abandonment of strategies based on differentiation.

In other words, for firms in the health industry in emerging economies, and specifically in Colombia, the location in a cluster and the MO is an effective tool to achieve a higher level of OP, particularly the component of Competitor Orientation. However, in the face of the possible emergence of other international competitors with competitive advantages in prices, companies should increase their efforts in the other dimensions of the MO, such as customer orientation. According to Dev et al. (2009), a higher customer orientation based on the acquisition, satisfaction, and retention of customers performance better is the economic situation of the country and better are the conditions of local companies, which is the case of clustered firms.

Finally, we acknowledge some limitations of our study that future research should address in terms of sample, variables and technics. First, our study has a short number

of cases in the sample and the analysis of just one city. Future research could benefit from the replication of our work in similar and dissimilar contexts and services, and larger samples will allow more accurate estimations about the actual intensity of the variables. Second, we have only measured MO. The inclusion of other types of marketing philosophy, i.e. relational marketing, may shed additional light of how the location of SMEs ease marketing in the health and other service clusters. And third, regarding quantitative analysis technics, future studies should be conducted using a complementary PLS estimations in order to explain the variance of the targeted construct of OP and the presence of possible mediator relations.

7. References

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