

Entrepreneurial orientation and innovation as determinants in the internalization of SMEs in Puerto Rico^ξ

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Abstract

This research analyzes the relationship between entrepreneurial orientation, innovative capacity, and internationalization of small and medium enterprises (SMEs) in Puerto Rico. The exploratory study applied an electronic survey to a sample of 217 owners and/or administrators of SMEs, who were selected from the database of the Puerto Rico Trade and Export Company. The variables were analyzed by using Pearson correlations; assuming the proactive and risk-taking dimensions for the entrepreneurial orientation variable and the dimensions of innovative approach and resources for innovation for innovative capacity. The results of the correlations of said variables, together with the exporting or domestic activities, allow to conclude that entrepreneurial orientation and innovation capacity are not determinants for the internationalization of the SMEs in Puerto Rico.

Key words: *Entrepreneurial orientation, Innovation capacity, Internationalization, Small and Medium Enterprises (SMEs), Puerto Rico*

Introduction

Small and medium-sized enterprises (SMEs) are recognized as an important driver of economic growth and job creation for countries. In Puerto Rico, SMEs represent 95 percent of private establishments, concentrated in six economic sectors; retail trade, wholesale trade,

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services, health and social assistance, professional services, scientific and technical services, and the agricultural sector. It is estimated that their value in exports can amount to \$4 trillion dollars, representing an approximate of 5.5 percent in foreign trade (CCE, 2016).

Most of the SMEs in Puerto Rico are oriented to the local market, although an increasing number of companies consider their entry into foreign markets as part of their growth (Ortiz, 2014). The traditional processes of internationalization posed by export as the first stage have been questioned by academic literature, arguing that they do not fully explain the new patterns of internationalization of companies. However, the new international initiatives of SMEs and the emergence of born global companies, presenting a deterministic approach (Johanson & Valhne, 2009), Uppsala Model continues to be relevant to analyze the internationalization of SMEs in Puerto Rico, since it has been identified that they use export as their strategy to enter foreign markets (Maíz-Vázquez, 2010). The validity of this model is based on the strategic variability adopted by companies when entering foreign markets, particularly for those companies that follow the traditional process of growth and expansion.

Limited studies have analyzed the factors related to the decision-making process of internationalization of SMEs in Puerto Rico (Maíz-Vázquez, 2010, Orengo-Serra, 2012, 2017, Ortiz, 2014). Existing research links entrepreneurial orientation as an internal factor to be considered in the internationalization process. Using a qualitative case study methodology, Orengo-Serra (2012) analyzed the dimensions of entrepreneurial orientation as factors that foster internationalization through networks with business partners, concluding that these constitute determinants for the internationalization processes of SMEs in Puerto Rico. However, a previous research done by Maíz-Vázquez (2010), through a quantitative analysis, related the entrepreneurial orientation, the industrial environment, and the competition with the internationalization decisions of the SMEs in Puerto Rico through exports. In his research, Maíz-Vázquez (2010) argued the lack of relationship between entrepreneurial orientation and the internationalization of the SMEs in Puerto Rico. The foregoing contrasts the academic literature of international business that positively relates the entrepreneurial orientation and the internationalization of companies and the attempt of internationalization of SMEs (De Clercq, Sapienza & Crijns, 2005; Meliá-Ripollés, Menguzzato-Boulard & Sanchez-Peinado, 2007; Todd, 2006).

This research aims to expand the existing literature, exploring the relationship between entrepreneurship, innovation capacity, and the internationalization of SMEs in Puerto Rico. The study assumes internationalization from its traditional conception, subject to the export

activities of SMEs and considers the perception of the owners (entrepreneurs) and managers of the companies about the entrepreneurial orientation and the innovative capacity as determinants in the internationalization. After the introduction, the following section discusses the theoretical framework concerning the process of internationalization of companies in order to present the approaches that shape the concepts of entrepreneurial orientation and innovation capacity in the internationalization of companies. Subsequently, the methodology and statistics used to analyze the data are described, followed by the report of results, and, finally, the conclusions and comments.

Uppsala Model and the Internationalization of SMEs

The internationalization of companies from the conception of process is based on the gradual increase of commitment in resources in foreign markets and on the accumulation of knowledge about them (Johanson & Wierdershem, 1975, Johanson & Valhne, 1977; 1990; 2009; Valhne & Bhatti, 2018). From this assumption, the traditional process explained by the Uppsala Model, also known as U-Model and powered by Johanson & Valhne (1977), states that companies adopt a greater degree of internationalization in those markets to which they are more related and have a less psychic distance, or in those countries that result in less socio-cultural divergence. On the other hand, the lack of knowledge is regarded as the biggest obstacle to the internationalization process of companies.

The Uppsala Model presents internationalization through a progressive process called “establishment chain”, which presents the following stages; non-routine export activities, exports through representatives and independent agents, sales subsidiaries, and production or manufacturing (Johanson & Valhne, 2009; Olejnik & Swoboda, 2012). Although the U-Model presents several limitations in the explanation of the new patterns of internationalization of SMEs—for which new theoretical trends have arisen such as those of born global and born-again global companies, administrators will decide on the internationalization of companies and their strategy of entering foreign markets based on the internal and external factors of the organization (Cho & Jin, 2015, Olejnik & Swoboda, 2012, Orengo-Serra, 2012). Thus, organizational capacities are important factors in the international success of companies (Jin & Cho, 2018). Within these factors, the entrepreneurial orientation and innovation capacity of the company can be found (Maíz-Vázquez, 2010, Marques & Ferreira, 2009, Orengo-Serra, 2012).

The entrepreneurial orientation and the innovation capacity in the competitive advantage and the internationalization of companies

The entrepreneurial orientation (EO) is defined as the process that allows analyzing and determining the entrepreneurial activity of a company (Rodrigo, Parra, & García, 2014; Hernández, 2015). EO is a construct usually associated with three dimensions that allow identifying new business opportunities: innovation, proactivity, and risk taking (Gómez, Llonch, & Rialp, 2010; Jin & Cho, 2018; Martins, Rialp, Rialp, & Aliaga, 2015; Sok, Snell, Lee, & Sok, 2017; Taylor, 2013).

For its part, innovation includes the inclination of a company to encourage the development of ideas that allow the generation of new processes, products, and services (Fernández, Alegre, & Chiva, 2012; Rodrigo et al., 2014; Taylor, 2013). Proactivity consists of the improvement or development of products anticipating the changes of the environment. Finally, the assumption of risks is defined as the willingness of companies to take advantage of opportunities without knowing the results (Fernández et al., 2012; Rodrigo et al., 2014; Taylor, 2013).

The EO is an internal resource of the company that facilitates the growth of SMEs (Martins et al., 2015). Additionally, it fosters the generation of entrepreneurial strategies that help SMEs to contribute to sustainable competitive advantages. EO has been positively related to the internationalization of companies (Meliá-Ripolles, Menguzzato-Boulard, & Sanchez-Peinado, 2007; Todd, 2006). This is so since it helps to identify more easily the needs of the consumer. It also allows differentiation and more agile responses to changes in the environment (Rodrigo et al., 2014; Hernández, 2015). This way, the EO is a valuable resource that allows companies to select the best niches and obtain the best results in their internationalization processes (Gómez et al., 2010).

Along with the entrepreneurial orientation, innovation capacity (IC) is recognized as a valuable resource for companies in the search of sustainable competitive advantage (Marques & Ferreira, 2009). It is presented as the ability of the company to generate and transform its products and services (Fernández, 2012; Arias, Durango, & Millán, 2015; Miller & Breton, 2017). Therefore, in the current business environment, competitiveness is more determined by the innovation capacity than by the productivity of companies (Marques & Ferreira, 2009). It is argued that innovation capacity responds to three approaches; functionalist, processes, and assets. The first one focuses on the analysis of the functional areas of the companies. The second focuses on the study of the innovation process from the development of the idea to the

commercialization of the product or service. The third one analyzes the types of innovation (Camisón & Villar, 2014). Since each of these approaches is developed within the organization, it is therefore necessary to create scenarios that propitiate its practice (Otero, Atia, & Miranda, 2016).

The IC depends on four factors that create an ideal environment for innovation; organizational culture, resources, competencies, and relationships with other organizations. The organizational culture determines the value of knowledge and the dissemination of knowledge in the interest of innovation. The resources are related to the capital, physical, and human resources assets available for innovation, while competencies refer to the skills and abilities to coordinate resources. Lastly, organizational relationships are subordinated to the connection of the company with consumers, suppliers, and business partners (Marotti de Melo, Demonele de Lima, Vila Boas, Sbragia, & Marx, 2008; Fernández, 2012). For this reason, IC strengthens the competitiveness of companies aimed at establishing internationalization strategies (Rangel, González, & Contreras, 2018).

The perception that managers have about competitive stimuli directly affects their strategic decisions (Ozblebici & Cetin, 2015; Santos-Álvarez, García Merino & Vallelado-González, 2011). People's perception has direct implications for their decision making; the way in which something is considered, understood and interpreted is part of the cognitive process that processes information sensory (Ozblebici et al., 2015; Prinz, 1997; Santos-Álvarez et al., 2011). Therefore, in this sense, the way in which managers perceive the internal and external factors of companies influences export decisions and, therefore, their internationalization (Suarez-Ortega & Álamo-Rivera, 2005; Stoian & Rialp-Servant, 2010).

Methodology and Data

This research was conducted in an exploratory manner using a quantitative transversal style technique. The conceptual model proposed in Figure 1 arised from the theoretical background that intends to answer if the entrepreneurial orientation and innovation capacity are related to the internationalization of SMEs in Puerto Rico, as perceived by entrepreneurs and managers. To make way for the research, the following hypotheses was outlined:

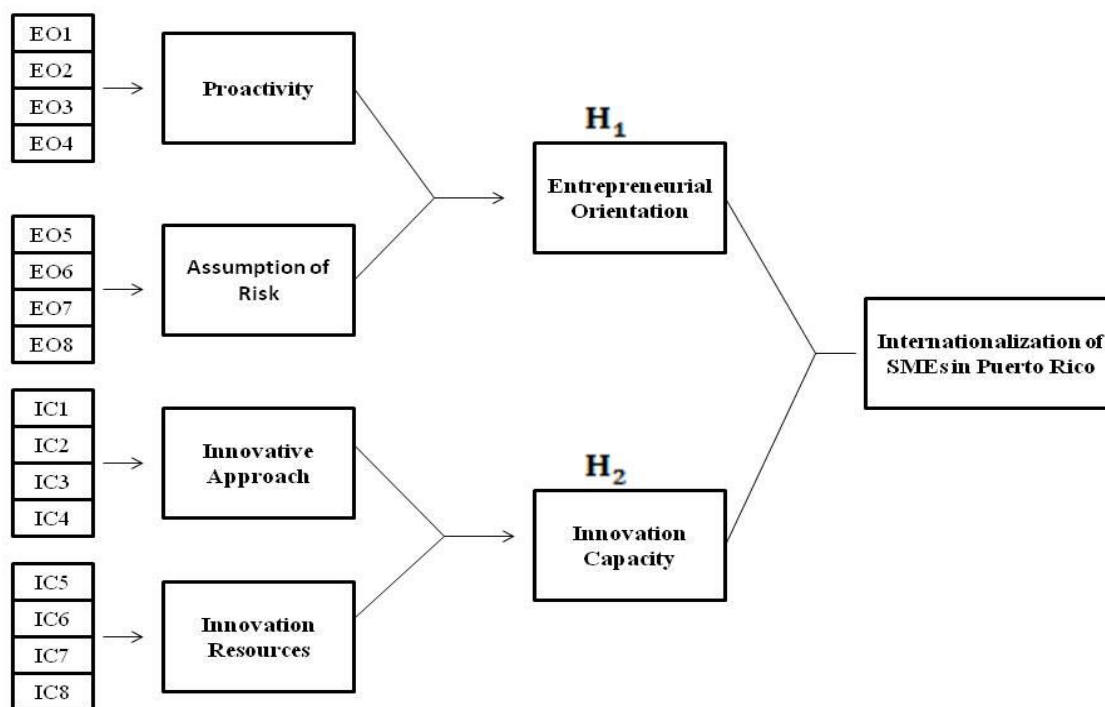
H₁: *The entrepreneurial orientation is a determinant for the internationalization of SMEs in Puerto Rico*

H₂: *The innovation capacity is a determinant for the internationalization of SMEs in Puerto Rico.*

The data were analyzed using Pearson's correlations. The linear correlation between two variables and their strength can be estimated through Pearson correlations (Wiedermann & Hagmann, 2015). The determination of the sample is one of the most important aspects in the robustness of the results (Bonet, 2002; de Winter, Gosling, & Potter, 2016). Based on this assumption, the Pearson correlations are an adequate method of analysis considering a sample of 214 participants, since the objective of this research is to explore the existence of relationships between variables from the perspective of SMEs entrepreneurs. The data were collected through an electronic survey given to owners and/or administrators of SMEs in Puerto Rico. The sample was selected from the database of the Puerto Rico Trade and Export Company. The questions were closed and were developed using the Likert scale, in which participants selected 1 as strongly disagree and 5 as strongly agree.

The survey was designed to measure the independent variables as determining factors in the internationalization of SMEs in Puerto Rico. The **entrepreneurial orientation** was determined by *the proactivity and the assumption of risk* dimensions, while the **innovation capacity** variable was determined by the *innovative approach* and *innovation resources* dimension. The entrepreneurial orientation variable had eight questions, of which four were directed to the dimension of proactivity and four to the assumption of risk. Likewise, for the innovation capacity, eight questions were included, of which four were directed to the innovative approach and four to the resources for innovation. The internationalization of SMEs variable was determined by the type of exporting or local commercial activity carried out by the company. This was based on the assumptions of the Uppsala Model, which considers export as the first stage in the internationalization of companies (Johanson & Vahlne, 1977; 1990; 2009). To validate the instrument, a pre-test was carried out at 30 SMEs in Puerto Rico. The validity results were acceptable.

Figure 1. Conceptual model of the relationship between entrepreneurial orientation, innovation capacity, and the internationalization of SMEs in Puerto Rico



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The data collection process used technique without replacement. According to Malhotra (2010), the data collection without replacement means that once an element is selected to be included in the sample, it is removed from the sampling frame, so it cannot be chosen again. To that end, the survey's programming was previously encrypted and protected, and could only be accessed once. If the participant did not finish the survey or left it incomplete, it was automatically rejected. Thus, for purposes of the analysis, the composition of the sample was 217 respondents, of which 142 answered the survey, presenting n=86 companies that do not perform export activity and n=56 companies that perform export activity (see Table 1).

Table 1. Sample Composition by Type of Business

SEMs Type of Business	Total SEMs		Local Business		Export activities	
	n=142		n=86		n=56	
Agriculture, forest hunting and fishing	1	0.70%	0	0.00%	1	1.79%
Construction Industry	4	2.82%	2	2.33%	2	3.57%

Manufacture	20	14.08%	6	6.98%	14	25.00%
Wholesale trade	5	3.52%	3	3.49%	2	3.57%
Retail trade	16	11.27%	13	15.12%	3	5.36%
Information's System	2	1.41%	0	0.00%	2	3.57%
Finance and Insurance	2	1.41%	1	1.16%	1	1.79%
Real Estate, rent or lease	3	2.11%	3	3.49%	0	0.00%
Professional and technical services	29	20.42%	16	18.60%	13	23.21%
Management Companies	2	1.41%	0	0.00%	2	3.57%
Educational services	9	6.34%	7	8.14%	2	3.57%
Health and social assistance services	6	4.23%	6	6.98%	0	0.00%
Arts, entertainment, and recreation	7	4.93%	3	3.49%	4	7.14%
Tourism and food services	4	2.82%	4	4.65%	0	0.00%
Other services (except public administration)	4	2.82%	4	4.65%	0	0.00%
Other	28	19.72%	18	20.93%	10	17.86%

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For the validity and reliability analysis of the study, the Cronbach's alpha test was performed. The results of the test reflected $\alpha=0.81$ for entrepreneurial orientation and $\alpha=0.89$ for innovation capacity. According to Nunnally (1978), Malhotra (2010), and Hair, Ringle, & Sarstedt (2016), the results were acceptable, since it should reflect values $\alpha \geq .70$.

Results

The results of the tests of the hypotheses can be observed in Table 2. In the analysis of whether the entrepreneurial orientation (H_1) is a determinant factor for the internationalization of SMEs in Puerto Rico, the results of the Pearson correlation tests reflected $.595 p < .05$, thus supporting the null hypothesis when observing that the entrepreneurial orientation is not a significant determinant for the internationalization of SMEs in Puerto Rico. Additionally, in the analysis of whether the innovation capacity (H_2) is a determinant for the internationalization of the SMEs in Puerto Rico, the results of the correlations supported the

null hypothesis when reflecting that the innovation capacity is not a significant determinant for the internationalization of SMEs in Puerto Rico, evidencing $.643 p < .05$.

Table 2. Relationship between the entrepreneurial orientation, the innovation capacity, and the internationalization of the SMEs in Puerto Rico

DEMO06			DEMO06	EOPR	ICPR
NO EXPORT	DEMO06	Pearson	.a	.a	.a
		Correlation			
		Sig. (2-tailed)		.	.
		N	86	86	86
	ENTREPRENEURIAL ORIENTATION	Pearson	.a	1	.595**
		Correlation			
		Sig. (2-tailed)	.		.000
		N	86	86	86
	ICPR	Pearson	.a	.595**	1
Correlation					
Sig. (2-tailed)		.	.000		
	N	86	86	86	
EXPORT	DEMO06	Pearson	.a	.a	.a
		Correlation			
		Sig. (2-tailed)		.	.
		N	56	56	56
	ENTREPRENEURIAL ORIENTATION	Pearson	.a	1	.643**
		Correlation			
		Sig. (2-tailed)	.		.000
		N	56	56	56
	ICPR	Pearson	.a	.643**	1
Correlation					
Sig. (2-tailed)		.	.000		
	N	56	56	56	

** . Correlation is significant at the 0.01 level (2-tailed).

The results among the determinants of the independent variables illustrated in Table 3 reflect that the correlation is significant between innovation resources and the innovative approach, both for companies that do business in the domestic market and for companies that internationalize, although relatively more significant for companies that remain local $.838 p < .05$. Moreover, the results reflect a significant correlation between the determinants of proactivity and assumption of risk in companies that conduct business in the domestic market.

Table 3. Relationship between the determinants of entrepreneurial orientation and innovation capacity and the export activities of the SMEs in Puerto Rico

DEMO06			PROACTIVITY	ASSURISK	INNORES	INNOAP
NO EXPORT	PROACTIVITY	Pearson	1	.721**	.454**	.606**
		Correlation				
		Sig. (2-tailed)		.000	.000	.000
		N	86	86	86	86
	ASSUMPTION RISK	Pearson	.721**	1	.457**	.606**
		Correlation				
		Sig. (2-tailed)	.000		.000	.000
		N	86	86	86	86
	INNOVATION RESOURCES	Pearson	.454**	.457**	1	.838**
		Correlation				
		Sig. (2-tailed)	.000	.000		.000
		N	86	86	86	86
INNOVATIVE APPROACH	Pearson	.606**	.606**	.838**	1	
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		
	N	86	86	86	86	
EXPORT	PROACTIVITY	Pearson	1	.488**	.576**	.546**
		Correlation				
		Sig. (2-tailed)		.000	.000	.000
		N	56	56	56	56
	ASSUMPTION RISK	Pearson	.488**	1	.497**	.464**
		Correlation				
Sig. (2-tailed)		.000		.000	.000	
	N	56	56	56	56	

INNOVATION	Pearson	.576**	.497**	1	.769**
RESOURCES	Correlat ion				
	Sig. (2- tailed)	.000	.000		.000
	N	56	56	56	56
INNOVATIVE	Pearson	.546**	.464**	.769**	1
APPROACH	Correlat ion				
	Sig. (2- tailed)	.000	.000	.000	
	N	56	56	56	56

** . Correlation is significant at the 0.01 level (2-tailed).

Final comments and conclusions

SMEs play an essential role in the economic growth of countries. In Puerto Rico, where it is necessary to reduce the dependence of multinational companies and increase local capital, the development and expansion of these to foreign markets take on a significant relevance due to the limitations posed by the size of the market and the challenges of the economy. It is necessary to highlight that entrepreneurs consider the internal and external factors in their internationalization decisions, being the internal factors determined by the organizational capacities, which contribute to the international success. The present research focused on analyzing the relationship between two of these organizational capacities of SMEs in Puerto Rico: the entrepreneurial orientation and the innovative capacity, while pondering its relationship with internationalization decisions through export activities. The above, based on the perception of the businessmen and managers of the companies.

According to the results obtained from the survey, and in contrast with the academic literature, the statistical tests confirm that entrepreneurs perceive that a relationship does not exist between the entrepreneurial orientation and the export activities of SMEs in Puerto Rico, thus not being a determinant in internationalization. It is worthy to note that previous studies on the internationalization of the SMEs in Puerto Rico and the entrepreneurial orientation are antagonistic according to the applied methodology. Qualitative studies support the assumption endorsed in the literature, while quantitative studies support the absence of such a relationship.

On the other hand, regarding innovative capacity, the statistical evidence shows that entrepreneurs perceive that there is no relationship between the IC and the export activities of

SMEs in Puerto Rico. Although innovation has been a factor studied in internationalization strategies in the body of literature, the innovation capacity presents limited analysis, and in the case of Puerto Rico, no previous research was found that studies it as a determinant of the internationalization of the SMEs. In this sense, this study is an initial reference that contributes to broaden the perspective of analysis on the internationalization of SMEs in Puerto Rico. For its part, the results reflect a significant relationship between the dimensions of resources for innovation and innovative approach as determinants of innovative capacity, the former with greater significance in SMEs that do not perform export activities and only local economic activities. These results suggest that innovation capacity could be a determinant of entrepreneurship and not internationalization.

The main limitations of this research are focused on the limited number of SMEs that carry out export activities in the sample. This research is an exploratory one, so it is recommended to carry out additional studies that consider other types of entry strategies to foreign markets. It is also recommended studies by industrial sector that deepen the relationship of the variables studied according to the particularities of each of the sectors. Similarly, other quantitative analysis methods, such as partial least squares structural equation modeling, may be applicable.

References:

- Arias, P. J., Durango, Y. C. M., & Millán, L. N. T. (2015). Capacidad de innovación de proceso y desempeño innovador: efecto mediador de la capacidad de innovación de producto. *AD-Minister*, (27), 75-93.
- Bonett, D.G. (2002). Sample Size Requirements for Testing and Estimating Coefficient Alpha. *Journal of Educational and Behavioral Statistics*, 27(4), 335-340.
- Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of business research*, 67(1), 2891-2902.
- CCE-Compañía de Comercio y Exportación de Puerto Rico (2016). Segundo informe anual sobre el estado de situación de las SMEs en Puerto Rico en el 2015 de la Junta de Apoyo para las SMEs. Recuperado de <http://www.comercioyexportacion.com/noticias/213-junta-de-apoyo-para-las-SMEs>
- Cho, H.J., & Jin, B. (2015). What explains small-and medium-sized apparel retailers' international market involvement? An application of Uppsala Model. *Fashion and Textiles*, 2(21), 1-17.
- De Clercq, D., Sapienza, H. J., & Crijns, H. (2005). The internationalization of small and medium-sized firms. *Small Business Economics*, 24(4), 409-419.

- De Winter, J.C., Gosling, S.D., & Potter, J. (2016). Comparing the Pearson and Spearman correlation coefficients across distribution and sample sizes: a tutorial using simulations and empirical data. *Psychological Methods*, 21(3), 273-290.
- Fernández, J. C. M. (2012). Determinantes de la capacidad de innovación en SMES regionales. *Revista de Administração da Universidade Federal de Santa Maria*, 5, 749-765.
- Fernández, M. A., Alegre, V. J., & Chiva, G. R. (2012). Orientación emprendedora, capacidad de aprendizaje organizativo y desempeño innovador. *Journal of Technology Management & Innovation*, 7(2), 157-170.
- Gómez, V. J., Llonch, A. J., & Rialp, C. J. (2010). Orientación estratégica, innovación y resultados en SMES de nueva creación: el rol del marketing. *Cuadernos de gestión*, 10, 85-110.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hernández, P. F. (2015). El efecto mediador de la RSE en la relación de la orientación emprendedora y el desempeño de las cooperativas agroalimentarias. *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, (85), 1-30.
- Jin, B., & Cho, J. (2018). Examining the role of international orientation, domestic market competition, and marketing capabilities on SMEs export performance. *Journal of Business & Industrial Marketing*, 33(5), 585-598.
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23-32.
- Johansson, J., & Vahlne, J. E. (1990). The mechanism of internationalization. *International Marketing Review*, 7(4), 11-24.
- Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411-1431.
- Johanson, J., & Wiedersheim, P. F. (1975). The internationalization of the firm—four cases. *Journal of Management Studies*, 12(3), 305-322.
- Malhotra, N. (2010). *Marketing Research: An Applied Orientation*, 6th Ed. Prentice Hall. Upper Saddle: New Jersey.
- Maíz-Vázquez, E.J. (2010). Factores que no propenden la internacionalización de las pequeñas y medianas empresas en Puerto Rico. *Forum Empresarial*, 15(2), 1-26.
- Marques, C.S., & Ferreira, J. (2009). SME Innovative Capacity, competitive advantage and performance in a 'traditional' industrial region of Portugal. *Journal of Technology Management*, 4(4), 53-68.
- Marotti de Melo, A., Demonele de Lima, W., Vila Boas, E., Sbragia, R., & Marx, R. (2008). Innovation capacity and advantage: A case study of Brazilian firms. *Revista de Administração e Inovação*, 5(2), 57-72.
- Martins, I., Rialp, A., Rialp, J., & Aliaga-Isla, R. (2015). El uso de las redes como propulsor para la orientación emprendedora y el crecimiento de la pequeña y mediana empresa. *Innovar*, 25(55), 117-129.
- Meliá-Ripollés, M., Meguzzato-Boulard, M., & Sánchez-Peinado, L. (2007). Entrepreneurial orientation and international commitment. *Journal of International Entrepreneurship*, 5(3), 65-84.
- Miller, D., & LeBreton-Miller, I. (2017). Sources of entrepreneurial courage and imagination: Three perspectives, three contexts. *Entrepreneurship Theory and Practice*, 41(5), 667-675.

- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill .
- Olejnik, E., & Swoboda, B. (2012). SMEs international patterns descriptive dynamics and determinants. *International Marketing Review*, 29(5), 466-495.
- Orengo-Serra, K.L. (2012). Internationalization and entrepreneurial orientation a network perspective: Four cases of Puerto Rican SMEs. *AD-minister, Universidad EAFIT*, (21), 55-69.
- Orengo-Serra, K.L. (2017). Perseverance practices in small and medium enterprises: An entrepreneurial perspective for business growth and internationalization. *Neuman Business Review*, 3 (1), 96-120.
- Ortiz, M. (2014). Actitud y su efecto en la exportación en las pequeñas y medianas empresa en Puerto Rico: estudio multicaseos. *Forum Empresarial*, 19(1), 53-73.
- Otero, M. S., Atia, V. C., & Miranda, P. P. (2016). Gestión de la innovación en pequeñas y medianas empresas de Barranquilla-Colombia. *Revista de Ciencias Sociales*, 22(2), 78-91.
- Ozleblebici, Z., & Centin, S. (2015). The role of managerial perception within strategic management exploratory overview of literature. *Procedia-Social and Behavioral Sciences*, 207, 296-305
- Prinz, W. (1997). Perception and Action Planning. *European Journal of Cognitive Psychology*, 9(2), 129–154. doi:10.1080/713752551
- Rangel, M. J. A., González, A. M., & Contreras, R. H. (2018). La influencia del capital intelectual en la innovación de las SMEs: un estudio empírico. *Red Internacional de Investigadores en Competitividad*, 10(1), 948-966.
- Rodrigo, A. J., Parra, R. G., & García, V. P. M. (2014). Efectividad de la orientación emprendedora: el papel del capital social y las capacidades. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 20(3), 131-139.
- Sok, P., Snell, L., Lee, W. J., & Sok, K. M. (2017). Linking entrepreneurial orientation and small service firm performance through marketing resources and marketing capability: A moderated mediation model. *Journal of Service Theory and Practice*, 27(1), 231-249.
- Stoian, M.-C., & Rialp-Criado, A. (2010). Analyzing Export Behavior Through Managerial Characteristics and Perceptions: A Multiple Case-Based Research. *Journal of Global Marketing*, 23(4), 333–348. doi:10.1080/08911762.2010.504522
- Santos-Álvarez, M.V., García-Merino, M.T., & Vallelado-González, E. (2011). La percepción directiva: influencia del perfil cognitivo y factores contextuales. *Cuadernos de Economía y Dirección de la Empresa*, 14(2), 67-77.
- Suárez-Ortega, S. M., & Álamo-Vera, F. R. (2005). SMES' internationalization: firms and managerial factors. *International Journal of Entrepreneurial Behavior & Research*, 11(4), 258–279. doi:10.1108/13552550510603298
- Taylor, P. (2013). The effect of entrepreneurial orientation of SMEs in developing countries. *African Journal of Business Management*, 7(9), 1927-1937.
- Vahlne, J.E., & Bhatti, W.A. (2018). Relationship development: A micro –foundation for the internationalization process of multinational business enterprise. *Management International Review-Online*, 59(2), 203-228. <https://doi.org/10.1007/s11575-018-0373-z>.
- Wiedermann, W., & Hagmann, M. (2015). Asymmetric properties of the Pearson correlation coefficient: Correlation as the negative association between linear regression residuals. *Communications in Statistics. Theory and Methods*, 45(21), 6263–6283.