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Management Competencies and Their Relationship with Organizational Performance in Small and Medium-Sized Family Businesses

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Management skills, Organizational performance, Family businesses, SMEs

Abstract The objective of the research is to analyze the relationship between managers' competencies and their businesses performance. The study was approached from the quantitative paradigm, applying a questionnaire to 114 managers of small and mediumsized family businesses, located in the states of Tamaulipas and San Luis Potosí, Mexico. The results shared show, in the context of a family business, the relationship between the study variables, which allows providing knowledge in the family businesses management, which are important economic units in this country, as sources of employment generation. The structural equations technique was applied in the validation of the research hypotheses. It is inferred that only intrategic and personal effectiveness competencies are positively related to organizational performance, with no positive relationship between strategic competencies and organizational performance.

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PALABRAS CLAVE Competencias directivas, Desempeño empresarial, Empresas familiaLas competencias directivas y su relación con el desempeño en las pequeñas y medianas empresas familiares

Resumen La presente investigación tiene como objetivo analizar la relación existente entre las competencias de los directivos con el desempeño de sus negocios. Para ello se abordó el estudio desde el enfoque cuantitativo, aplicando un cuestionario estructurado a 114 empresarios de pequeñas y medianas empresas familiares de los estados de Tamaulipas y San Luis Potosí, México; este trabajo comparte los resultados del piloto del cuestionario para explorar su construcción al contexto empresarial de las empresas familiares. Se aplicó la técnica de ecuaciones estructurales para la validez de constructos y de las hipótesis de investigación. Se infiere que no todas las competencias de los gerentes están relacionadas con los resultados empresariales.

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1. Introduction

The National Institute of Statistics and Geography (INEGI), in the 2020 census carried out on business demographics, indicates that family businesses in Mexico represent 90% of the economic units and contribute to 85% of the Gross Domestic Product. Likewise, in a study carried out by San Martín and Durán (2017) through the Family Business Research Network in Mexico (RIEF), they mention that of the total family businesses, 57% are microbusinesses, 29% are small and 11% are medium; 39% have been in the market for more than 20 years; 71% do not have a strategic plan, 69% of their sales is regional; 55% have entered new markets during the last three years; 77.41% have a male CEO; 66% are first generation businesses; 67% do not have a training plan; 55% have university training; 73% do not have a succession

Despite their importance and research carried out on business performance among family businesses, they have unique problems whose origin is found in the interdependence between two systems: the family and the company (Basco, 2005). As Soto (2013) mentions, family businesses are a fundamental part of the productive structures of both industrialized and developing economies; they are important entities in countries' economic growth (Samsami & Schott, 2021). While family businesses face the same challenges as nonfamily businesses, Davis (2006) asserts that these economic units can be some of the boldest and most professional in the world, when families at the helm do things right. For Molina et al. (2017), family businesses have common characteristics: they are normally managed by their owners, they tend to have ownership concentrated in the hands of one or several families and to generate interference from the family in decision-making. Family businesses take personnel training, strategic planning, and management skills as competitiveness factors (Garcia & Duréndez, 2007).

On the other hand, Vera-Muñoz et al. (2019) mention that family businesses that manage to remain in the market has been due to their ability to achieve a structural coupling between the family and business systems and the environment; pairing the operations and structures of each system, generating responses to the irritations that each system produces in the other. Likewise, the long-term orientation of some family businesses leads them to develop resilient core competencies in dimensions such as innovation and quality, which allows them to instill customer loyalty (Le Breton-Miller & Miller 2022). Sanchez-Famoso et al. (2015) mention that innovation is essential for family businesses in the current competitive environment; while Taçoğlu, Ceylan and Kazançoğlu (2019) mention that SME owners and managers have begun to focus on family business competencies and human resource management, particularly attracting valuable employees to the organization and turning them into a competitive advantage.

Within micro, small and medium-sized enterprises (MSMEs) are family businesses, although the literature addresses MSMEs and family businesses and their relationship with business performance or competitiveness, this analysis is done separately. Given the importance of both SMEs and family businesses and their relationship with business performance, the literature can address SMEs and family businesses separately. However, it should be mentioned that this study addresses these economic units as a whole (small and medium-sized family businesses) as the object of study.

Therefore, small and medium-sized family businesses are the exploratory context to understand the directive or managerial competencies related to their performance. The interest of this work is established in the central objective of analyzing the relationship of these variables in these economic units due to their relevance in the economic development of the countries (Samsami & Schott, 2021), which have established their economic activity in the States of San Luis Potosí and Tamaulipas. It is intended to categorize managerial competencies through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA); while in order to validate the research hypotheses, the structural equation modeling (SEM) was used.

This work makes a considerate, important contribution by trying to provide empirical evidence on whether management skills have a positive impact on small and medium-sized family businesses performance through the theoretical model proposed in this work. Although not all hypotheses are accepted, there is evidence of the positive relationship between intrategic and personal management competencies towards organizational performance.

The findings of the study allow us to explore and provide empirical data from this point in both states. Likewise, they are useful to small and medium-sized family businesses and allow us to reflect based on the information provided, to establish strategies that strengthen the development of skills in the profile of the appropriate administrator and thus design the lines of action aimed at improving performance within their organizations and therefore their competitiveness in the market or industry where they participate. Although the scope is limited only to small and medium-sized family businesses, paths are opening up for more in-depth research that allows the

inclusion of appropriate strategies and measures for better organizational performance within this type of business.

2. Literature Review

Family businesses have been the subject of numerous studies in recent years due to their capacity to generate employment, as well as their essential role in the process of wealth creation, playing a central role in the economic development of countries (Samsami & Schott, 2021). For Sanchez-Famoso et al. (2015) family businesses are heterogeneous organizations and as such they behave differently. Núñez-Cacho et al. (2012a) mention that performance in family businesses must be measured through two dimensions that include business indicators (growth, employee and financial performance) and indicators of family nature. Likewise, indicators such as return on assets, return on investment, profitability or productivity must be included, indicators that in turn are taken into account by various authors such as Matus (2018), Camisón et al. (2007), Hamann et al. (2013), Crook et al. (2005) to measure performance within organizations.

It is estimated in this work that the skills or competencies of those who manage these economic units represent an important factor in organizational performance and therefore in the survival or longevity of family businesses. This can be explained by the resilience capacity that from the point of view in this study, it is assumed to be a product of the administrator or manager capabilities (García & Duréndez, 2007; Schulze & Bövers, 2022).

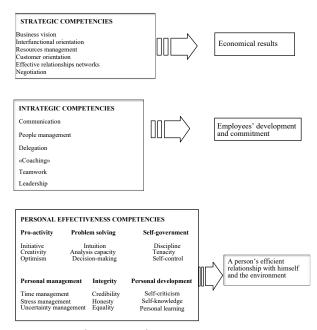
Furthermore, it should be emphasized that, in various contexts, human capital, an intangible asset in organizations, which tends to represent the knowledge, skills and attitudes of people, has been related to factors associated to organizations' performance (García & Duréndez, 2007; Pedraza & De la Gala, 2022; Pedraza et al., 2021). Therefore, it is important to analyze the managerial or directive competencies in these companies due to their important contribution to the economic activity of a nation. Thus, when analyzing theoretical perspectives on the competencies of human capital at the managerial or executive level in companies, indicators or traits are undoubtedly identified that refer to the person's necessary capabilities to achieve economic results, through the creation of work environments that favor the workforce commitment (García-Lombardía et al., 2001).

2.1. Management skills

The change towards a managerial competency model implies a proactive learning style where

decision makers and their staff adopt responses in line with the dynamics of reality. In this way, the organization is oriented towards developing the individuals' potential to learn how to learn, to develop new knowledge that guides them towards performance that can be more satisfactory and beneficial (Hernández-Barrera et al., 2016). Competencies represent the set of knowledge, abilities, skills and attitudes, which in the words of García-Lombardía et al. (2001), managerial competencies (MC) refer to observable and permanent behaviors that facilitate a person's success when executing their managerial roles or functions at the head of their organizations. Thus, based on García-Lombardía et al. (2001), MCs are classified into three categories: strategic, intrategic and personal effectiveness (figure 1), this classification being the basis of the model of managerial competencies in the present re-

Figure 1. Main managerial competencies



Source: García-Lombardía et al. (2001)

Strategic competencies are estimated to involve capabilities related to giving focus or vision to the business, enabling the systemic and interfunctional interaction of organizational processes, the effective management of organizational resources, focused orientation towards customers, the administration of relational capital as well as the effectiveness in negotiation processes, which are considered necessary to obtain the companies economic results (García-Lombardía et al., 2001).

While intrategic competencies are capabilities aimed at managing human capital in organizations, focused on increasing employees' moti-

vation and commitment with their economic entities; while management competencies or personal effectiveness are skills focused specifically on the individual, that is, on the manager himself, which gives him the ability to self-manage his abilities, time, emotions, for the sake of his personal effectiveness and the business (García-Lombardía et al., 2001).

The literature consulted shows (table 1) perspectives that expose the typologies of competencies or management skills (MC), which address various dimensions to measure these competencies within organizations. This construct in general refers to technical, operational, managerial, leadership, management and globalization skills of managers or administrators in business.

Table 1. Analysis of empirical MC identification studies

Operational definition	Authors
Instrument with 36 items divided into five dimensions: general managerial skills, leadership, stress linked to work, teamwork, emotional intelligence. 5-point Likert scale.	Quiroz et al. (2019)
Instrument with 31 items divided into three dimensions. 1 Technical skills, personal treatment skills, conceptual skills. 5-point Likert scale.	Carhuancho et al. (2019)
Instrument with 52 items divided into 3 dimensions: technical and functional competencies, personal competencies, administrative and management competencies. 5-point Likert scale.	
Instrument with 66 items divided into 5 dimensions: Operational and management, strategic administration, strategic planning, vision of globalization, human resources. 7-point Likert scale	
Instrument with 34 items divided into 6 dimensions: administrative process, stress management, problem solving, motivation, leadership, innovation.	Paredes et al. (2017)
Instrument with 22 items divided into three dimensions: personal level, social level, management level	Pereda et al. (2014)

Source: Author's elaboration based on the bibliography consulted

As can be seen, there are various concepts and indicators that can be presented in relation to the definition of managerial competence, however, for this work it has been decided to apply the theoretical proposal of García-Lombardía et al. (2001), so the second study variable in this

work that is related to business performance is presented below.

2.2 Organizational performance

The literature shows us various concepts about organizational performance and its forms of measurement, which are presented in Table 2.

Table 2. Dimensions of organizational performance

Authors	Dimensions	Description			
Bhargava and Sinha (1992)	4-component analysis	Measures performance through productivity, commitment, leadership and interpersonal conflicts			
	Accounting returns	Refers to historical accounting results.			
Crook et al. (2005)	Stock market performance	Contemplates the future performance of organizations through investors.			
	Growth	Describes the change in the size of the organization over time.			
	Business' results	Through three indicators on economic, financial and sales profitability.			
Camisón et al. (2007)	Performance in the stock market	It is valued based on three representative indicators of sales growth, market share gain and wealth creation - market value/book value.			
	Stakeholders satisfaction	It is based on customer and employee satisfaction.			

Authors	Dimensions	Description
Richard et al. (2009)	Interest groups Heterogeneity: resources, the environment and strategy choice Measurement period and performance persistence	It is related to customers, managers, suppliers, employees, shareholders, government and non-governmental organizations own goals to distribute the added value. It is related to the heterogeneous resources and capabilities that must be managed. The adoption of short- and medium-term measures can be highly biased by random fluctuations.
Hamann et al.	Cash flow Profitability	It integrates the return of cash flow per employee, in sales, in assets and in market value, and growth in cash flow. Includes return per employee, in sales, in assets and market value, and revenue growth.
(2013)	Growth	Includes employee growth, sales growth, asset growth, cash flow growth, and revenue growth. It assumes that the total return of investors, Sharpe ratio,
	Performance in the stock market	Jensen's alpha, Treynor ratio, Tobin's Q, return on cash flow at market value and return on market value.
Matus (2018)	Financial and operational performance	Integrates strategies, structures, economic objectives and non-financial indicators, effectiveness, effectiveness, financial results, employee satisfaction, growth, sales, market segment, new products, profitability and operating income as measurement elements

Source: Barradas et al. (2021)

2.2.1. Management competencies and organizational performance as part of business competitiveness

As mentioned previously, managerial competencies refer to the skills or attributes that managers have at the head of an organization, which according to the reviewed literature are measured through economic results, the development and commitment of employees and competencies related to personal effectiveness. Now, organizational performance is measured through the achievement of objectives set by companies, which is related to quantitative factors (accounting and financial results) and qualitative results (customer satisfaction, market participation, organizational resilience capacity, organizational commitment, leadership). Likewise, talking about organizational performance is referring to internal sources of competitiveness since authors such as Mora-Riapira et al. (2015) point out that although business competitiveness is associated with what happens outside the organization (government policies, economic structure of the country, market characteristics, regional variables), depends closely on the internal performance of the same entity, and in this sense precisely this work establishes the objective of analyzing the relationship of management competencies with each organization performance.

Martínez Santa María et al. (2010) mention that managerial resources constitute a group whose great relevance in the generation and maintenance of business success has been highlighted by numerous authors; considering that they are the only ones who have the ability to understand, describe and evaluate the potential for generating economic performance of the company's resource endowment.

That is, given that managerial competencies or capabilities refer to the skills that a manager has which are reflected in the results obtained, organizational performance refers to the internal competitiveness that a company has, which is linked not only to management capabilities, but also marketing, innovation (Sanchez-Famoso et al., 2019) and quality capabilities as mentioned by Martínez Santa María et al. (2010). Therefore, companies that manage to have good internal

performance or internal competitiveness can adapt to the consequent changes in the market and have external competitiveness.

For Arias (2022) competitiveness is fundamental for the growth of the economic sectors of a country, and its analysis and evaluation must begin at the microeconomic level, that is, from within the organizations and contemplates business management which encompasses the process of planning, directing and controlling economic, material and human resources in order to obtain the expected results. In today's economy, a company that survives will be the one that can develop, produce, and deliver products and services to customers faster than its competitors (Miranda-Torrez, 2021). In this way and according to the information presented previously, the following research hypotheses are proposed:

Hypothesis 1. Strategic competencies are positively related to the organizational performance of small and medium-sized family businesses.

Hypothesis 2. Intrategic competencies are positively related to the organizational performance of small and medium-sized family businesses.

Hypothesis 3. Personal effectiveness competencies are positively related to the organizational performance of small and medium-sized family businesses.

3. Methodology

The objective of the study is to explore the relationship between management competencies and organizational performance in the context of small and medium-sized family businesses. This topic of analysis is of interest in academia, because the generation of knowledge in this type of economic entities is relevant to contribute to their development, survival and growth, due to the importance in the generation of employment, productivity and economic development of countries (Samsami & Schott, 2021). Above all, because various studies refer to the contribution of human capital to organizations performance, and when talking about managerial competencies it is invariably related to people's capabilities, abilities, skills and attitudes to perform for the sake of achieving the organizations objectives and goals (Pedraza & De la Gala, 2022; Pedraza et al., 2021).

To achieve this goal, this research was designed from the quantitative paradigm, with a non-experimental and explanatory scope (Hernández et al., 2014). The contribution of this work is considered essential, since organizations are immersed in environments of complexity and dy-

namism that prevail in the markets where their operations are present. This entails the need to generate and contribute to the knowledge of those intangible resources that are identified as management competencies, a variable that is considered relevant for the management and survival of family businesses through the achievement of organizational results that allow them to face the challenges of constant change and the complex contexts of the industries (Flores-Marin & Vanoni, 2016).

To collect information in the study units, a questionnaire was applied. This instrument was developed considering the studies by García-Lombardía et al. (2001) as a reference framework. To measure managerial competencies (strategic competencies, intrategic competencies and personal effectiveness competencies), in terms of the operationalization of organizational performance (DES), the Shu-Mei and Pei-Shan (2014) approach was taken as a basis, who emphasize assess indicators related to the achievement of organizational objectives as a result of the effectiveness of human capital in companies and not so much the predominance of the financial perspective for its measurement, especially due to the implications that in the region where the companies are located there is limited culture to provide hard data on their business finances.

The questionnaire was made up of three sections. For example, the general data section, which was established to collect information on variables such as education, gender, business sector, state, number of employees, among other data related to the respondents and their organizations, the other two sections presented the items on a 7-point Likert-type scale, in order to measure the managerial competencies and performance of the organizations studied. To proceed with the application of the questionnaire, the internet was used. The form was sent by email to companies' accounts with available data in the national directory of economic units (DENUE), managing to integrate a non-probabilistic sample of 114 respondents who responded to the instrument, specifying that since it is a non-probabilistic sample, there is the implication of the generalization of the results from a statistical perspective. However, the study findings allow us to explore and provide empirical data from this limitation in both states.

The official email accounts available in the IN-EGI reports (institute responsible in this country for the generation of statistical information on companies) were used, since it is the official organization that generates and disseminates information on economic units in Mexico. To initially assess the reliability and consistency of the questionnaire, EFA was applied and the reli-

ability indicator was determined with Cronbach's alpha (Avecillas & Lozano, 2016; Frias-Navarro, 2020). The EFA allows generating factors tha' bring together similar indicators or traits, making it a convenient statistical technique to reduce a large number of variables, where the correlation matrix is considered convenient for application when the KMO is equal to or greater than 0.70 and in the case of reliability, when values greater than 0.70 are determined (table 3).

Subsequently, to validate the underlying structure of each latent variable that was identified with the EFA, the CFA was applied using the Smart PLS software (Hair et al., 2014). In this phase, the measurement model was assessed prior to the evaluation of the research hypotheses. In this phase (CFA) the criteria of internal consistency (Cronbach's alpha and composite reliability), convergent validity (average variance extracted)

and discriminant validity (Fornell Larcker) were studied. The decision is based on the interpretation of each of these criteria based on the parameters established in table 4.

In order to validate the research hypotheses, the SEM was used, studying the prediction of the SEM model, the coefficient of determination (R²) was considered (Hair et al., 2014; Martínez & Fierro, 2018; Ruíz et al., 2010) considering in the interpretation of the results the criteria documented in table 3, reviewing the significance value of the statistic (t=1.96) at 95% confidence, so as not to reject the research hypotheses. It should be noted that SEM modeling with variance structure using the Smart PLS software is justified, due to the advantages that the technique offers in the face of limitations in sample size, as is the case of this work (Hair et al., 2014; Pedraza & De la Gala, 2022).

Table 3. Criteria analysis and indicators of the applied statistical techniques

Criteria analysis	Statistical techniques	Interpretation parameters
	Cronbach alpha	
Reliability	Composite reliability	Accepted value equal to or greater than 0.70
Convergent validity	Mean variance extracted (AVE)	Greater value than 0.50,
Discriminant validity	Fornell Larcker Criteria	The square root of the AVE must be greater than the con-
Discriminant validity		struct's correlations with the rest of the variables
CEM model adjustment	D ²	Measures the relevance in the model prediction, expect-
SEM model adjustment	R-	ing values close to 1

Source: Prepared from Hair et al. (2014)

4. General Results of the Analysis Units

Based on 114 questionnaires that were integrated with the participation of managers and business owners who voluntarily agreed to answer the instrument, it was observed that 14.2% are microenterprises, 63.7% are small, 20.4% are mediumsized and with a minority participation of 1.8% of large economic entities. It was determined that the number of family members working for these companies, ranges from 1 to 13, on average it was three people related who work for the business. It was found that 67.3% of businesses are officially registered with the Tax Administration System (SAT) as natural persons and 32.7% as legal entities. 13.3% are companies in the industrial sector, 57.5% are commercial and 29.2% correspond to the service economic activity. Of those who responded to the questionnaire 70.8% are managers, while 29.2% indicate another position such as general accountant or business owner.

4.1 Result of the exploratory factor analysis to characterize management competencies and organizational performance

With the purpose of exploring the scale behavior, before applying the SEM modeling to test the hypotheses, the exploratory factor analysis technique was executed. This analysis process allowed us to observe that the typology of management competencies of García-Lombardía et al. (2001) are present in the management of small and medium-sized family businesses in both states of Mexico. Adequate reliability values of the constructs were determined, with acceptable factor loadings of the indicators, eliminating those traits that exhibited factor loadings less than 0.70 or did not show clear discrimination between factors they loaded. This is how the scale is reduced to the items shown in Table 4, for each latent variable studied in this work. With the application of the EFA, practically all the indicators of the latent variables (CE, CI, CEP, DES) were preserved. However, the dimension

of self-government competence was completely

eliminated, which referred to the capacities of discipline, tenacity and manager self-control.

The findings of the EFA are corroborated with the

CFA, and even more indicators were eliminated

for not meeting the minimum factor loading of

0.70, which can be seen in the results presented in the following section of the work.

Table 4. Factor structure of management competencies and organizational performance

Construct	Items	Factorial load	Reliability	Factorial analysis
Strategic competencies (CE)	CE1 CE2 CE3 CE5 CE6 CE7	0.73 0.81 0.81 0.84 0.87 0.70	Cronbach alpha = 0.91	KMO = 0.90 Square Chi = 488.45 Sig. = 0.000 Variance % = 60.99
Intrategic competencies (CI)	CI1 CI2 CI3 CI4 CI5 CI6	0.81 0.83 0.92 0.89 0.84 0.77	Cronbach alpha = 0.93	KMO = 0.90 Square Chi = 571.53 Sig. = 0.000 Variance % = 72.32
Personal effectiveness competencies (CEP)	CRP1 CRP2 CRP3 CP1 CP2 CP3 PMC1 PMC2 CIN2 CIN3 PEC2 PEC3	0.77 0.83 0.80 0.86 0.85 0.76 0.83 0.72 0.83 0.84 0.79 0.79	Cronbach alpha = 0.95	KMO = 0.92 Square Chi = 1209.90 Sig. = 0.000 Variance % = 65.50
Organizational performance (DES)	DE3 DM2 DM3 DM4 DPC1	0.73 0.86 0.73 0.80 0.73	Cronbach alpha = 0.85	KMO = 0.74 Square Chi = 288.27 Sig. = 0.000 Variance % = 56.38

Note: Personal effectiveness competencies (CEP) integrate the dimensions of: CDP (Personal development competencies), CGP (Personnel management competencies), CIN (Integrity competencies), CP (Proactivity competencies), CR (Problem-solving competencies).

*The variables codification remains in Spanish.

Source: Author's elaboration

4.2. Confirmatory analysis and hypotheses validation in the research (SEM)

The CFA determined results that confirmed the underlying structure of the EFA. However, in this validation phase of the measurement model, more items were eliminated due to factor loadings less than 0.70. For example, the latent variable of IQ finally had its structure formed by 2 items of the six that were initially the theoretical proposal. This conformation and final construct validity of the latent variables is seen in Table 5. By observing the values of the internal consistency indicators (Table 5), adequate levels of reli-

ability of the management competencies dimensions and the construct of business performance are determined. All values greater than 0.70 in Cronbac's alpha and composite reliability. Furthermore, convergent validity showed indicators greater than 0.50 determining also factor loadings greater than 0.70 in all the items that characterize each latent variable (CE, CI, CEP, DES). These values demonstrate the adequate internal consistency (reliability) of the analyzed variables (CDP, CE, CGP, CI, CIN, CP, CR and DES). Likewise, discriminant validity is met as seen in table 6.

Table 5. Reliability and convergent validity of the scales

Latent variable	Cronbach alpha	Composite reliability	Extracted media variance
CDP	0.87	0.93	0.88
CE	0.86	0.90	0.70
CGP	0.76	0.89	0.80
CI	0.72	0.87	0.78
CIN	0.89	0.95	0.90
СР	0.79	0.90	0.82
CR	0.88	0.93	0.81
DES	0.86	0.90	0.64

Note: CDP (Personal development competencies), CE (Strategic competencies), CGP (Personnel management competencies), CI (Intrategic competencies), CIN (Integrity competencies), CP (Proactivity competencies), CR (Problem-solving competencies), DES (Organizational performance) *The variables codification remains in Spanish.

Table 6. Discriminant validity

Latent variable (construct)	CDP	CE	CGP	CI	CIN	CP	CR	DES
CDP	0.94							
CE	0.77	0.84						
CGP	0.75	0.77	0.89					
CI	0.71	0.78	0.75	0.88				
CIN	0.72	0.71	0.76	0.71	0.95			
СР	0.74	0.74	0.79	0.78	0.76	0.90		
CR	0.72	0.82	0.72	0.76	0.74	0.76	0.90	
DES	0.53	0.59	0.58	0.59	0.42	0.45	0.49	0.80

Note: CDP (Personal development competencies), CE (Strategic competencies), CGP (Personnel management competencies), CI (Intrategic competencies), CIN (Integrity competencies), CP (Proactivity competencies), CR (Problem-solving competencies), DES (Organizational performance) *The variables codification remains in Spanish.

Once the constructs were validated, the research hypotheses were studied. The results with SEM allow us to confirm in this work (Figure 2) that 45% (coefficient of determination) of the companies' performance is a product of the different directive powers of management; specifically, intrategic and personal effectiveness competen-

cies, the latter particularly related to the individual. Therefore, these two typologies of managerial competencies are those that are identified as determinants in the prediction of the DES, since the hypothesis testing statistics provide significant values (table 7).

Table 7. Hypothesis proof

Hypothesis	Statistics	P Values
CDP -> DES	0.942	0.347
CE -> DES	1.518	0.130
CGP -> DES	2.131	0.034
CI -> DES	2.828	0.005
CIN -> DES	1.712	0.088
CP -> DES	1.512	0.131
CR -> DES	0.188	0.851

Note: CDP (Personal development competencies), CE (Strategic competencies), CGP (Personnel management competencies), CI (Intrategic competencies), CIN (Integrity competencies), CP (Proactivity competencies), CR (Problem-solving competencies), DES (Organizational performance).

*The variables codification remains in Spanish.

Figure 2. Managerial performance of the predictive model

Source: Author's elaboration

5. Discussion

It has been inferred from the literature review that family businesses are relevant, important entities in the economic activity of different nations (Davis, 2006; Samsami & Schott, 2021; San Martín & Durán, 2017; Sanchez-Famoso et al., 2015; Soto, 2013). It has been determined that these organizations face significant challenges to survive and achieve results that benefit their performance in the industries or markets where they operate (Arias, 2022; Núñez-Cacho et al., 2012b; San Martín & Durán, 2017). Within these challenges, there is precisely the administration or management capabilities (Arias, 2022; Davis, 2006; Hernández-Barrera et al., 2016; Mora-Riapira et al., 2015; San Martín & Durán, 2017) of their resources and capabilities, which leads us to look at those capabilities or assets that are intangible in organizations, and that are related to organizational human capital, which we commonly refer to as managerial skills or managerial competencies, which are ultimately considered as part of the competitiveness factors (García & Duréndez 2007; Martinez Santa María et al., 2010), which affect organizational performance (Pedraza & De la Gala, 2022; Pedraza et al., 2021). There, the general question that triggered the present study and to which the answer is given in this work: What is the relationship between management competencies and organizational performance in small and medium-sized family businesses?

Thus, within the findings of this work, empirical evidence is provided that primarily accounts for managerial competencies (Carhuancho et al., 2019; Gutiérrez-Macías & Córdova-Ruiz, 2020;

Leyva-Carreras et al., 2017; Paredes et al., 2017; Quiroz et al., 2019) that are present in family businesses, from the perception of the managers and/or owners surveyed, confirmed within the framework of García-Lombardía et al. (2001) theoretical proposal which are three categories: strategic, intrategic and personal effectiveness. In relation to strategic competencies, it is observed that the indicators that characterize this latent variable refer to the importance of recognizing and taking advantage of opportunities, dangers and external forces that affect the business' competitiveness; to understand decisions and actions impact on other areas of the business; the convenience of promoting cooperation within their organizations; the need to apply business resources rationally and effectively; as well as analyze its industry or market to identify trends and take action to lock on customers. In other words, competencies that are undoubtedly related to business vision, inter-functional orientation, resource management and customer orientation. These managerial competencies are important for the good performance of the family businesses analyzed, results that coincide with García-Lombardía et al. (2001) and scholars who have identified in other contexts how human capital capabilities are related to the organizations' performance (Arias, 2022; García & Duréndez, 2007; Pedraza & De la Gala, 2022; Pedraza et al., 2021).

As for the intrategic competencies, which are related to capabilities that increase employees' development and commitment to their organization motivated by their leaders' behaviors, two indicators stood out in this study. The first being the relevance of behaving in an upright and

honest manner in any situation and the fact of the superior's ability to listen and transmit ideas effectively, as well as give meaning to his collaborators work, encouraging, motivating them with the proposed objectives, thereby providing empirical evidence to García-Lombardía et al. (2001) proposal with distinctive features on the relevance of the effective direction or personnel administration by managers in family businesses. Regarding personal effectiveness competencies, the findings confirm the proposal of García-Lombardía et al. (2001) theoretical perspective, when confirming the importance of the manager's effective relationship with himself and with the environment where he operates. It also highlights indicators that distinguish this category of managerial competencies, among which personal management related to aspects such as time and stress management; the capacity for proactivity and problem solving, as well as the personal development capacities that are related to topics such as self-criticism and learning (García-Lombardía et al., 2001).

On the other hand, in this study, the indicators that characterize organizational performance (DES) have been determined (Hamann et al., 2013; Matus, 2018; Richard et al., 2009) in family businesses, highlighting the aspects of increased income, increase in customer portfolio, greater market participation and successfully coping with the complex environments of their market or context such as the one they experienced in the face of the COVID-19 pandemic. These indicators coincide with positions that propose measuring the construct DES with financial and non-financial indicators, in contexts of business and nonbusiness organizations (Bhargava & Sinha, 1992; Camisón et al., 2007; Crook et al., 2005; Pedraza & De la Gala, 2022; Pedraza et al., 2021) based on the assumption that the information that can be reflected in a financial statement does not necessarily allow communicating all the tangible and intangible resources that allow an organization to survive and grow in its industry.

After the analysis of the characterization of managerial competencies and organizational performance, it was observed in the present study that there is a positive relationship between managerial competencies and organizational performance, a finding that is considered one of the main contributions of this work. Since it has been empirically determined that the typology of skills or competencies of family business managers are related to their objectives and results achievements (organizational performance). In this sense it is inferred that this finding coincides with what was proposed by Martínez Santa María et al. (2010), who mention that management capabilities contribute to internal competi-

tiveness (companies). It is important to specify that for the purposes of this study, organizational performance was taken as synonymous with internal competitiveness, since authors such as Mora-Riapira et al. (2015) mention that organizational performance refers to internal sources of competitiveness. Therefore, when talking about internal competitiveness it means organizational performance.

It should be emphasized that not all the managerial competencies analyzed showed positive relationships with organizational performance in the small and medium-sized family businesses studied. For example, the first hypothesis where strategic competencies are related to organizational performance was rejected, in contrast to what was proposed in the theoretical model of García-Lombardía et al. (2001). This result that can be explained within the framework of how the performance variable has been measured in this work, which used qualitative and non-financial indicators per se, but which invites us to explore this finding with future case studies or with financial and economic metrics to better understand the relationship of both latent variables. Now, the second research hypothesis is not rejected in this study, empirically confirming that intrategic competencies (communication, teamwork, and leadership, which are oriented to employe's' development and commitment) are related to the organizational performance in the family businesses analyzed. This allows us to observe that the managerial capabilities or skills related to managing and sharing information, ideas, data with their collaborators, as well as motivating them to achieve the proposed objectives, they all favor organizational performance. These results coincide with what is proposed by various scholars on the topic of human capital or talent management and the benefit that this brings to an organizati'n's objectives or goals achievement (García-Lombardía et al., 2001; Pedraza et al., 2021; Pedraza & De la Gala, 2022).

Regarding the third research hypothesis, it is noted that it is partially accepted; based on the determined results, it is identified that not all dimensions of personal effectiveness competencies are positively related to the performance of family businesses. In this work it is confirmed that only the capabilities that refer to proactivity, problem solving, management and personal development, are oriented towards the effective relationship of the person with himself (García-Lombardía et al., 2001) These findings coincide with research carried out by authors in other contexts (Hernández-Barrera et al., 2016).

6. General Conclusions

This research provides empirical evidence that characterizes organizational performance in the small and medium family businesses studied (increase in income, increase in customer portfolio, more market participation and effective management of complex environments with COVID-19), performance indicators that agree with the proposals made by Bhargava and Sinha (1992), which takes into account productivity, commitment and leadership; with Camisón et al. (2007), who agree on measuring performance from an indicators perspective related to market participation and growth.

On the side of managerial competencies, it is concluded that these must be focused on intrategic competencies and personal effectiveness, which implies that the managers or owners of these economic units have the skills for problem solving, innovation (Paredes et al., 2017; Sanchez-Famoso et al., 2019), customer orientation, employee management and motivation, stress management and emotional balance (Quiroz et al., 2019) skills or abilities that without a doubt in this work are identified as necessary for the development of the family businesses analyzed.

Therefore, having the management competencies and their relationship with organizational performance identified is important, since from the identification of these management capabilities in small and medium-sized family businesses, management professionalization strategies can be implemented, in order to develop management skills that build human capital prepared to adapt to a changing and competitive world, so that future generations who will be in charge of these economic entities have effective managerial skills to manage their businesses.

Without a doubt, these findings are useful to small and medium-sized family businesses in the municipalities of San Luis Potosí and Tamaulipas to reflect and based on the information provided, it will allow them to manage the profile of the appropriate businessman and thus design strategies aimed at improving performance within their organizations and therefore their competitiveness. It is useful to the academy to formulate new proposals or lines of future research aimed at measuring the competitiveness of small and medium-sized family businesses taking other performance indicators (economic, financial data) as reference. Likewise, it is proposed to include new lines of research that include indicators oriented with the strategic vision of the business, negotiation power and external competitiveness.

7. Practical Implications

Given the few studies on managerial competencies and the relationship with business performance in small and medium-sized family businesses, a significant contribution is the findings found and explained through the proposed model. Although not all hypotheses are accepted, there is evidence of the relationship between management competencies and the positive impact on organizational performance. It is necessary to consider that the findings cannot be generalized from a statistical perspective, but they are an approach to understanding the management skills that are considered important in the owners or administrators who direct the economic units studied, and that invite us to delve deeper into the explanation of the relationship of both constructs with qualitative research, cross-sectional case studies to carry out holistic analysis that provide knowledge in the study of small family businesses in Mexico.

Declarations of interest

None

Ethical statement

The authors confirm that data collection for the research was conducted anonymously and there was no possibility of identifying the participants.

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