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The success factors of family and non-family firms: Similarities and differences

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ABSTRACT

Objective: The aim of this article is to identify whether there are similarities or differences between family and non-family firms in terms of the factors which contribute to business success. More specifically, comparison analyses were designed to isolate possible variations related to an enterprise's advantage over its competitors, the internal and external relationships of the enterprise, intangible resources, and an enterprise's financial resources.

Research Design & Methods: The source for empirical data used herein is individual data selected from a country-wide survey conducted by Statistics Poland from December 2017 to January 2018. The survey was carried out electronically using an online questionnaire. Focusing on non-financial businesses with 10-249 employees, it examined how entrepreneurs view the significance and impact of a group of factors on the development and success of their businesses, including a self-assessment of the firm's current situation and development over the last three years. The sample consisted of 43,379 firms, of which 14,686 self-identified as having a family character. Unobservable (latent) variables were used for a more in-depth analysis: one represented a component of enterprise success while the other four were characterised as success factors. An analysis of the main components was used to identify independent variables (success factors) with the relationships between the variables examined through structural equation modelling.

Findings: In the light of the findings, it is possible to show that family firms display partial differences in their rating of the factors that have impacted their success. For this group, aspects including how the firm is organised, financial resource access, and the overall financial situation were less important in comparison to non-family ones. However, family firms showed no differences in their perception of the factors supporting their competitive advantage and their intangible resources.

Implications & Recommendations: An ongoing debate has weighed whether family and non-family firms differ in terms of performance and their internal perception of business success, and numerous studies present rather distinct visions. Some confirm the advantages of family businesses; others deny such benefits exist, and a final group notes no statistically significant evidence that would confirm differences between the two groups. In contrast, the results of our study provide evidence that Polish family businesses partly differ from non-family ones regarding the factors that influence their business success.

Contribution & Value Added: Our study verifies whether family and non-family firms differ in terms of the factors that contribute to business success. We describe both business success and the factors that impact it as unobserved (latent) constructs. This approach is rare in the current literature; more often, success factors and measures are analysed separately. However, this approach allowed us to analyse the relationship in a more consistent and complex way.

Article type:	research article
Keywords:	Family and non-family firms; success factors; success measures; success models; small and medium-sized enterprises; structural equation modelling
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INTRODUCTION

Comparative studies centred around family and non-family firms are a frequent and extremely rewarding research area. The findings have so far been equivocal, representing one of the main challenges facing researchers who aim to show whether there are some character traits and methods of operation specific to family firms that make them different from their non-family counterparts, and if so, clarifying the extent to which and in which areas such differences exist. The comparative criteria focusing on the behaviours of family and non-family firms tend to be based on the standard comparisons covering such aspects as ownership, management, income, remuneration and rewards, relationship network, leadership, or career path of employees (Pacheco, 2019; Stewart & Hitt, 2012). They further include goals, business orientation, competitive strategies, resources, and management style (Mandl, 2008; Zaks *et al*., 2018).

Drawing upon the relevant literature, family firms have distinctive, specific, and unique features linked to management and decision-making (Gersick *et al*., 1997; Gudmundson *et al*., 1999), objectives and strategies to be pursued (Chua *et al.*, 1999; Vazquez & Rocha, 2018; Ward, 1988; Williams Jr *et al*., 2018), structure and preferences in financing operations (Mishra & McConaughy, 1999; Poutziouris, 2002; Strebulaev & Yang, 2013) or the attitude towards corporate social responsibility (CSR) actions (Déniz & Suárez, 2005; Schulze *et al*., 2003). What makes family businesses more distinctive is longevity and succession (Gomez-Mejia *et al*., 2018; Zellweger *et al*., 2012) and their financial logic (Gomez-Mejia *et al*., 2018). Furthermore, the sphere clearly differentiating family from non-family businesses involves human and social capital (Cater & Justis, 2010; Coleman, 1990; Farrington *et al*., 2012; Lochner *et al*., 1999; Putnam, 1993; Schlepphorst & Moog, 2014; Winter, 2000). In this context, an emphasis is placed on *familiness* as a concept embedded in the resource-based view (RBV). For family firms, the concept refers to a set of distinct internal synergistic resources that are available due to family involvement in running a business (Habbershon & Williams, 1999). These resources only appear in family firms and, for practical purposes, cannot be replicated (Sundaramurthy & Kreiner, 2008), thus undoubtedly determining a family firm's distinctiveness as compared to other businesses.

The list of the potential differentiating areas is broad (Mandl, 2008; Stewart & Hitt, 2012) and their identification is complicated given that family firms emulate the operations and market behaviours specific to non-family businesses because of changing market conditions, competition level, increased customer demands, economic and political changes, and technological progress (Pounder, 2015). In more specific concepts, the mere statement that family firms are different from their non-family counterparts becomes a starting point for exploring whether their familial character has a positive or negative impact in terms of behaviours and performance (Donckels & Fröhlich, 1991; Lee & Rogoff, 1996; Stewart & Hitt, 2012; Zellweger & Astrachan, 2008). Despite having developed various concepts and despite the verification attempts embedded in theoretical frameworks, about one-third show that family firms perform better, one-third argue their performance is worse, and one-third maintain that there are no such differences (Audretsch *et al.*, 2013). Similar findings can be found in Mandl's (2008) comprehensive study, in which the author argues that there is no sufficient or statistically confirmed evidence suggesting that family firm performance is better, worse or the same as that of non-family businesses.

We assume that survey result ambiguity is connected with the usage of relatively small samples and the exiguous specificity of the results. Analyses are conducted to take into account the discretionary chosen subject of research (partly intuitively) or performance measures. There is a scarcity of results based on the consistent and complex factors with various impacts on the performance of family and non-family firms. To our best knowledge, the business success of an enterprise could be such an aggregated measure. Nevertheless, the sources of success seem to be an adequate field of comparison to achieve relevant results.

Against this backdrop, it is relatively rare to see success as a criterion for comparison or to consider it (its measures and sources) the differentiating factor between family and non-family firms. This finding is somewhat surprising given that many arguments suggest that family firms can do better in specific situations and perform better than non-family businesses (Zellweger & Astrachan, 2008). Despite this clear research gap, *i.e.* scant in-depth analyses of similarities or differences between family and non-family firms in terms of business success, an analysis of the factors involved in success and its measures is not easy. One fundamental difficulty for researchers is that in the literature, the concept of success has not been devoid of ambiguity (Stafford *et al*., 1999), with businesses defining success according to distinct values and respecting various success determinants. Consequently, a diagnosis revealing whether the same factors play a part in the success of family vs non-family firms will provide greater insight into the core differences between these two groups. In this article, we investigate certain factors influencing the success of small and medium-sized enterprises (SMEs) and explore whether the unique features characterising an enterprise (family or non-family) differentiate it within this area. *The primary purpose of the article is to identify the differences between family and non-family firms in terms of the factors that contribute to business success.*

More specifically, comparison analyses were devoted to isolating possible differentiation among:

1. each enterprise's advantage over its competitors;
2. the internal and external relationships of the enterprise;
3. intangible resources;
4. the enterprise's financial resources.

The discussion presented herein will cover the following areas: the concept of success and its ambiguities, success models, and success factors in an economic entity. These explorations will form a starting point for formulating the research hypothesis. The methodology section will include a sample description and the identification and grouping of dependent and independent variables and research models, *i.e.* structural equation modelling (SEM) that is used to estimating and testing a network of relationships among variables (measured variables and latent constructs). A further section will describe the findings produced, discuss them, and reference the relevant literature. Finally, the article will conclude and presents the research limitations, outlining areas for further exploration in this research field.

LITERATURE REVIEW

Success, Success Measures, and Models

With praxeology theory, success is defined as the result of a specific approach to implementing a unique task, which is positively assessed according to its importance (Sobczyk, 2009). From this point of view, success could be isolated more as a latent and multidimensional construct, and it is connected with a general assessment of the particular situation. Success as a holistic phenomenon could be detailed alongside a subjective assessment of achievement as expressed by one or a set of objective indicators. Faulkner and Bowman (1992) have distinguished between internal (within the organisation) and external (relative to either consumers or competitors) success criteria (de Chematony *et al*., 1998). In other studies, success is described using business-based and consumer-based measures (de Chematony *et al*., 1998). Unquestionably, it is possible to isolate numerous criteria or measures that will depict the meaning of success. If some of the criteria or measures is taken or combined to present a particular kind of success, then this approach is related to building a model of success (Petter *et al*., 2008). The interrelationship among success, success measures and the success model are presented in Figure 1.

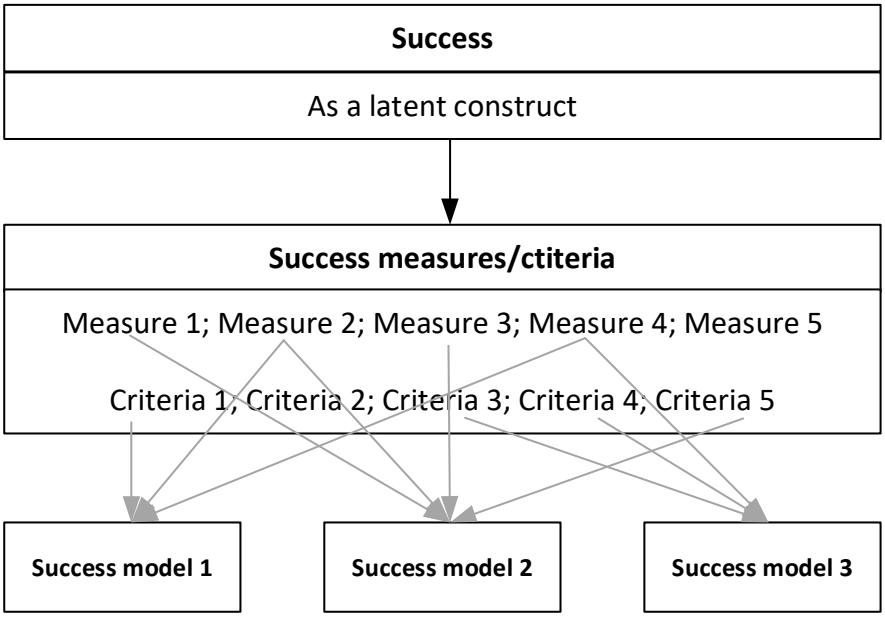


Figure 1. The relationship among success, success measures (criteria) and the success model
Source: own elaboration.

These three aspects are presented in detail in the following subsections.

The concept of success

Analysing the concept of success in popular terms already raises some questions. According to a Polish-language dictionary, success equates to the positive outcome of an action, goal achievement or achieving a desired object or result. This definition implies that if an action's result leads to achieving a goal, then the action may be recognised as a success. However, one might wonder whether every positive (favourable) result or outcome is a success. Performance measures such as profit, sales, growth or the number of employees and customers are not consistently recognised as a success by every enterprise. As a general rule, those measures do not appear to constitute the main goals of certain businesses.

Another problem that comes to light is decoupling the concept of success from that of performance (Simpson *et al.*, 2012). This complication stems largely from success being defined through elements of performance. More specifically, certain types of (high) performance can be identified with success (Brooksbank *et al*., 2003). The discussion on what constitutes success and the best way of defining and measuring performance is longstanding and ongoing (Beaver, 2002; Rogoff *et al*., 2004), producing further equivocal findings. Whereas some authors tend to split performance into financial and non-financial success-related criteria, others refer to performance as economic and non-economic goals (Brooksbank *et al.*, 2003; Reijonen, 2008) or two categories: quantitative and qualitative goals. The most common quantitative factors cited in the literature are economic or financial indicators; including profitability, productivity, and growth rate, a favourable competitive position that leads to superior and sustainable economic performance, and an increase or maintenance of the company's market share (Staniewski, 2016).

In their discussions of success, a considerable number of authors focus on traditional, easily-definable (easily-measurable) financial metrics such as increased turnover, profit and return on investment (Jennings & Beaver, 1997; Sharma, 2004), productivity (Brooksbank *et al*., 2003; Perren, 1999), market share and a better competitive position (Chandler & Hanks, 1993; Man *et al*., 2002), total income and its increase (Fried & Tauer; 2009) and the increase in asset base (Dobbs & Hamilton, 2007). Åstebro *et al*. (2014) argue that despite low risk-adjusted returns, a large share of individuals chose to be engaged in entrepreneurial activities. Åstebro *et al*. (2014) and Sjögren and Schubert (2018) show that a personal preference for autonomy and a desire to achieve social recognition are

both critical drivers of entrepreneurship and success. Some basic literature on individual motivations states that finance is only one of the many factors leading individuals to engage in entrepreneurship. Other factors, such as individual freedom and social benefit, which are also motivations, have been rarely explored and discussed in previous studies, especially regarding entrepreneurial success (Diputra *et al*., 2021; Hasan *et al*., 2020).

In a different approach, other authors argue for the use of alternative criteria for defining success mainly based on the owner-manager's personal goals (Lekovic & Maric, 2015). Consequently, they highlight the need for employing more flexible definitions of success to small enterprises (Gadenne, 1998; Simpson *et al*., 2012), because defining success for those businesses depends on the various financial and non-financial goals they pursue (Olson *et al*., 2003), which further relate to the entrepreneur's motivation to start a business (Rodriguez-Gutierrez *et al*., 2015). Moreover, defining and measuring success grows more complicated for small businesses due to the owner-manager's pursuit of different goals (Hunter & Kazakoff, 2012; Jennings & Beaver, 1997) and the possible need to consider stakeholders' aspirations ('long-lasting satisfaction of the main stakeholders' aspirations'). Some researchers point out that investigating the essence of success for small businesses is further complicated by subjective biases (identified according to attribution theory; Heider, 1958) that manifest in having success attributed to the owner of the firm with failures resulting from externalities (Hienerth & Kessler, 2006).

Entrepreneurs may assign different meanings to common success criteria, which can influence how they design their firms (Angel *et al*., 2018). Hence, many authors argue that success should also be discussed from a subjective perspective. Unfortunately, adopting this perspective does not make the identification of success any easier given that the entrepreneur's perception of success is defined by some researchers as an individual understanding and assessment of the criteria to be fulfilled, which the entrepreneur finds important and motivating personally (Staniewski & Awruk, 2019; Wach *et al.*, 2016). The starting point for the evaluation process is then the owners, entrepreneurs, or managers themselves. They have their own perceptions of success, while the biased criteria in evaluating success represent their personal fulfilment and achievements, *i.e.* the pride and satisfaction derived from their business or flexible lifestyle (Lekovic & Maric, 2015; Simpson *et al.*, 2004; Stenberg, 2004; Walker & Brown, 2004).

Additional studies designate success as the entrepreneurs' assessment of economic indicators like performance and profit (Rauch & Frese, 2007; Richard *et al*., 2009). According to Sjögren and Yusuf (2021), entrepreneurial success is built throughout the life of the entrepreneur rather than linked to a particular business activity or firm. The authors define entrepreneurial success as the existing achievements by an individual professional actor resulting in various types of innovation (technological, market, logistic, social), an increase in the number of employees in one or more firms managed by the entrepreneur and recognition by society. Therefore, it appears impossible to equate success with optimal performance (Jennings & Beaver, 1997) because an undertaking can be successful without reaching an optimal level of performance in terms of business growth and development. However, the empirical findings produced by Simpson *et al*. (2004) and Baron and Markman (2002) suggest a positive correlation between the owners, entrepreneurs and managers' subjective assessment of success and objective measures.

When discussing family firms, the focus is on recognising the good community perception and family business continuity as business success measures (Bujan, 2019). However, this approach is not shared universally, as some point out that it is challenging to designate intra-generational business continuity as an adequate success measure and failure to do so as being unsuccessful (Watson, 1998), considering that a lack of continuity might be due to having achieved the goal for which the business was set up in the first place.

Researchers who support the argument that success should not be perceived in terms of growth (O'Gorman, 2001; Perren, 1999, 2000; Sharma, 2004) maintain that for a significant number of entrepreneurs, keeping their business afloat on a scale that allows them to be sole proprietors is already a success (Simpson *et al.*, 2012). This point mainly refers to small family businesses, in which

owners do not want to expand since this may jeopardise family cohesion (*e.g.* less free time, separation). One might infer that for many economic entities, financial goals are not as critical as the desire of owners and managers to be personally involved, independent, and responsible for the quality and style of their life (Jennings & Beaver, 1997). For many small-sized firms, success means the ability to sustain an income level that is acceptable for the owners and their employees by maintaining a level of performance that is optimal for them to handle (Beaver, 2002). One should also consider the factors that can moderate the perception of firm success and success measures. In terms of success measures, there are other differences among businesses depending on the owner's gender (Alsos *et al*., 2006; Dafna, 2008; Grilo & Irigoyen, 2006) or the level of family involvement in running the firm (Audretsch *et al*., 2013).

Success is, therefore, a complex and multidimensional concept, especially for family-owned enterprises (Lussier & Pfeifer, 2000; Shane & Venkataraman, 2000). As such, it can hardly be described based on just one criterion (Ioniţă, 2013) because individual failures can undo individual successes. Real success is made up of successes achieved in multiple fields, areas, and aspects. Hence, the paradigm advocating the need for exploring simultaneously a variety of aspects involved in success has become a starting point for identifying and isolating multifactor measures and models of success.

Success Measures

In the literature, the search for adequate measures means uncovering different reference points (goals, values, or subjective feelings). In the case of ownership, firms investigating success from the perspective of delivering the pursued objectives implies confronting traditional business goals with personal goals (*e.g.* that of the owners; Gorgievski *et al*., 2011). Considering that in practice, one encounters both perspectives, the suggestion is to employ non-confrontational logic and include both optics, *i.e.* business goals, which involve profit, continuity, growth and innovations, and non-business goals that reflect their value-based orientation (Gorgievski *et al*., 2011; Toninelli *et al*., 2013). Various factors for entrepreneurial success in Staniewski's research (2016) belong to two groups: 1) organisational factors, meaning features that organisations possess (i.e. an entrepreneur's or company's specific internal features): age and company size, managerial and employee skills, knowledge and competences and ownership structure; 2) non-organisational factors (external factors reflecting the conditions in which entrepreneurs operate, including the industry and spatial and macroeconomic factors): technology, scale economies, entry rates, and sector growth rates.

A considerable number of authors tend to centre their research on traditional and easy-to-define financial measures, such as increased turnover, profit, and return on investment (Dej, 2010); however, others see the possibility of defining success by adopting alternative criteria based on the owner-manager's personal goals (Jennings & Beaver, 1997; Przepiórka, 2017). Some authors consider non-financial success measures as secondary (not of equivalent significance) to financial measures. When applying non-financial measures, it is implicitly understood that an enterprise has already achieved a certain level of financial security (ergo, its financial objectives have been realised) or that the owner does not consider the enterprise to be the main source of income (Jennings & Beaver, 1997). This lack of consensus concerning the measures refers predominantly to small and medium-sized enterprises, usually with a family or ownership character, in which emotional and non-business aspects play a significant role (Brundin & Härtel, 2014).

The theoretical proposals that consider these guidelines are different and move towards multiplying the success measure components. They refer either to the entrepreneur – with success measured based on *e.g.* satisfaction derived from the job and running the business – or they refer to the business, in which success manifests in, *e.g.* specific financial results. Additional studies rely on the context of the environment, in which success is associated with having a specific competitive position (or prestige). It is not infrequent that the concepts suggested by the research comprise all such elements. This approach towards success – perceived as 'a compound of measures' – can, for instance, be found in Gorgievski *et al*. (2011). The authors indicate ten success criteria: personal satisfaction, profitability, satisfied stakeholders, good life-work balance, innovations, business survival and continuity, usability,

contribution to society, public recognition, and development. The criteria include both subjective factors – person-oriented (e.g. personal satisfaction, satisfied employees and customers) – and business-oriented criteria, which, among others, include profitability, growth (number of employees, sales, market share) and innovations, further followed by business survival and continuity, understood here as a generational transfer or profitable sale of the business (Gorgievski *et al*., 2011).

The concepts presented so far with respect to success measures (and synthetic measures) are based on the bibliometric analysis or empirical studies conducted on small-sized samples (Fisher *et al*., 2014; Gorgievski *et al.*, 2011); from the perspective of one region (e.g. family businesses from a border region in eastern Austria (Hienerth & Kessler, 2006); Spanish family businesses (Nuntilde, 2012); among SME managers in Malaysia (Ahmad *et al*., 2011); among Dutch owners of small enterprises (Gorgievski *et al*., 2011); small-sized enterprises in Western Australia (Walker & Brown, 2004); small businesses in Serbia (Lekovic & Maric, 2015); and for selected industries, *e.g.* small event companies in the UK (Wood, 2006).

Success Models

Building on the literature review and their empirical research, Gorgievski *et al.* (2011) suggest using a two-dimensional success model, including a dimension covering the subjective criteria – person-oriented (e.g. personal satisfaction, satisfied employees, customers) – and a business-oriented dimension encompassing, among others, the following four key criteria: profitability, growth (number of employees, sales, market share), innovations (introducing new products or production methods), and business survival or continuity, understood here as a generational transfer or profitable sale of the business. Applying multidimensional scaling, Gorgievski *et al.* (2011) demonstrate that innovativeness was more closely linked to self-improvement orientation than openness to change. Based on empirical research carried out among the Spanish family businesses, Utrilla & Torraleja (2012) suggest using a model-based approach to success underpinned by three primary structures: the first one includes dynamic variables, illustrating enterprise growth (e.g. an increase in sales over the last three years, in market share); the second structure comprises human resources variables (e.g. satisfaction level, absenteeism level, and lower staff turnover); and the third addresses objective financial and economic performance, reflecting the enterprise's situation (e.g. return on equity, return on assets, and profit margin).

In contrast, having conducted a confirmatory factor analysis of the sample covering Malaysian SME founders-managers, Ahmad *et al*. (2011) argue that business success is a four-factor structure reflecting the following factors: (a) financial performance satisfaction, (b) non-financial performance satisfaction, (c) performance in relation to competitors, and (d) business development. Moreover, Maltz *et al*. (2003) propose a multiple-criteria system for assessing organisational success (performance). It comprises five key measures that could help businesses self-check and improve their opportunities for sustainable success. These measures include financial measures, representing the traditional approach to organisational success and covering, e.g. sales, profit or return on investment; customer and market relationship measures describing the relationships between the organisation and its customers; process measures, which reflect organisational efficiency and process improvement; people development measures, enabling one to recognise the key role played by the stakeholders in organisational success and preparing for the future measures (future activities).

Considering the multidimensionality of the concept of success, we come across a variety of proposals for the structure of a universal model of success. In general, a non-observable structure – success – is devised, which can be measured by a set of observable variables – components of success (non-standardised). The choice of the components making up a success measure is arbitrary. It is based on the literature review or the researchers' empirical work conducted as in-depth interviews; suitable case studies (Fisher *et al*., 2014); some additional econometric methods for the variable selection, e.g. confirmatory factor analysis (Ahmad *et al.*, 2011); or using configurational matching (based on the analysis of interactions unfolding among different success factors (Hienerth & Kessler, 2006). According to Wach *et al*. (2020), 'entrepreneurs' achieved success' was conceptualised as a multi-faceted

construct that includes entrepreneurs' self-reported achievement of firm performance, workplace relationships, personal fulfilment, community impact and personal financial rewards. It was measured via the subjective entrepreneurial success-achievement scale (SES-AS). Through factor analysis, Nuvolari *et al*. (2018) also reduce the characterisation of a successful entrepreneur into three factors: economic success, celebrity, and social mobility. A different statistical method is prosopography, in which standardised biographies of outstanding successful entrepreneurs are systematically compiled and analysed using quantitative methodology (Sjögren & Yusuf, 2021).

An analogous approach was adopted in this article. What was recognised as a measure of success was an assessment of nine aspects (variables) making up the overall success measure for an enterprise. The nine aspects covered the changes observed over the last three years in such areas as the number of employees, serviced customers, cooperating parties, suppliers, financial condition, net income, net current assets, equity, investment outlays, and competitive enterprise position on the market. For measuring the success of a particular enterprise, a five-point scale was employed according to which a representative of an enterprise could assess whether the situation in a given area had improved or deteriorated over the last three years; from 1 'significant reduction/deterioration' to 5 'significant growth/improvement'). Bearing in mind the ambiguous research findings as to whether family businesses perform better than non-family ones (Audretsch *et al.*, 2013; Mandl, 2008) and accounting for the fact that the accumulated information was on family and non-family firms, we postulate that family enterprises are not different from non-family enterprises in terms of factors impacting their market success. Because the factors of market success in this article were reflected by the self-perception of competitive advantage of the enterprise, internal and external networks, intangible resources and access to finance and financial situation, the hypotheses were formulated as follows:

- **H1:** Family enterprises are not different from non-family enterprises in terms of the significance of the self-perception of competitive advantage factors as an aspect of market success.
- **H2:** Family enterprises are not different from non-family enterprises in terms of their internal and external networks as an aspect of market success.
- **H3:** Family enterprises are not different from non-family enterprises in terms of the intangible resources of the enterprise as an aspect of market success.
- **H4:** Family enterprises are not different from non-family enterprises in terms of access to finance and financial situation as an aspect of market success.

In light of the current state of entrepreneurship development across Poland, its relatively brief history and market determinants, we argue that familiness and succession reduced to a pragmatic dimension bring about the need for a firm's resources to be adapted to market conditions. That is why the 'family business' label has become more of a trademark rather than an element of the firm's identity or a reference point for its actual or planned activities (Safin *et al*., 2014), which affect the distinctive and observable differences between family and non-family firms, including those relating to the perceived multidimensional success.

The concept of success devised as a non-observable variable described through a set of observable variables has been employed previously, for example, in structural equation models: Utrilla and Torraleja (2012) use a sample of Spanish family businesses, and Diputra and Arismunandar (2021) consult a sample of micro and small business actors in Indonesia. An example model of the relationship between the determinants of success and the variables describing this success for Polish enterprises from the SME group is proposed by Łobos *et al.* (2018) and connects to the psychological determinants of entrepreneurial success and life satisfaction by Przepiórka (2017). One may encounter a range of proposals in the literature as to the application of synthetic success measures (depending on the theoretical framework adopted by the authors) referring to a firm's value, added value or measures describing its financial management, marketing activities, and marketing effects (Kay, 1995; Urbanowska-Sojkin, 2013).

RESEARCH METHODOLOGY

Data Collection Process and Research Sample

The primary source of the empirical data used in this analysis is individual data selected from a country-wide survey of an experimental character conducted by Statistics Poland from December 2017 to January 2018 within the project 'Entrepreneurship development determinants in the SME sector.'[1] The survey was carried out online through the Statistics Poland reporting portal, with the support of interviewers: the statistical office employees.

The survey targeted enterprises from the non-financial sector[2] with between 10 and 249 employees (*i.e.* small and medium-sized enterprises). This survey was the first time that Statistics Poland distinguished family businesses as a research subject. In reference to this aspect, respondents were asked to classify their enterprises either as a family or other enterprise according to the definition suggested by the Polish Agency for Enterprise Development (PARP) and adopted in the survey. According to the definition, a family enterprise is an economic entity in which at least two members of the owner's family or persons related to that family are employed, with at least one of them exercising influence over management; additionally, the family or persons related to it hold more than 50% of enterprise shares. Entities registered as sole proprietors count as family enterprises, provided they employ staff (Kowalewska *et al.*, 2009).

The subject matter of the survey was to rate the importance and impact of a group of factors on enterprise development and success and to assess the current situation of an enterprise and its development over the last three years. In total, the sample included 43,379 enterprises, of which 14,686 represented family businesses and 28,693 were classified as non-family firms. The description of the sample, broken down into family and non-family businesses, is presented in Table 1.

From the entire sample of companies (43,379), 33.9% declared themselves family firms. Among small business entities (10-49 employees), family firms accounted for 35.4%; in the group of medium-sized firms, 27.4%. Due to the activity range-market, from all businesses that declared local market share as dominant, 32% are family firms. In terms of regional market share, 39.5% are family businesses, and 34.9% of these businesses operate internationally. Taking into account the size of the businesses, the percentage of family firms was similar in circa 30-35% respectively. Moreover, χ^2 tests for the structures (see Table 1) confirmed that family and non-family firms in the sample were similar statistically.

Dependent Variables

The success of the enterprise was expressed by a non-observable (latent) variable that covered nine areas of the enterprise activities, *i.e.* the number of employees, serviced customers, cooperating parties, suppliers, financial condition, the value of net income, net assets, net current assets, equity, investment outlays, and competitive position in the market. For measuring each kind of activity, a five-point scale was employed according to which an enterprise representative could assess whether the situation in a given area had improved or deteriorated over the last three years, from 1 'significant reduction/deterioration' to 5 'significant growth/improvement.' The scale of success measurement was adopted by an official survey methodology that was developed by Statistics Poland (2018). The descriptive statistics of the variables are included in Attachment 1.

[1] The research study *Determinants of the entrepreneurship development in the SME sector* was implemented in 2017–2018 by Statistics Poland under the project '*Supporting the monitoring system of cohesion policy in the financial perspective 2014–2020 as well as programming and monitoring cohesion policy after 2020.*' The report is available at: http://stat.gov.pl/statystyka-regionalna/statystyka-dla-polityki-spojnosci/.

[2] The survey did not include enterprises engaged in activities that were classified as part of the following economic sectors: A (agriculture, forestry, hunting and fisheries), K (finance and insurance), and O (public administration and defense, compulsory social security).

Table 1. Sample characteristics

Specification	Family enterprises	Non-family enterprises
Total number of respondents (n)	14,686	28,693
Size classes (%)		
Small (10-49 employees)	84.0	78.3
Middle (50-249 employees)	16.0	21.7
Years of activity (%)		
Less than 3 years	3.6	4.2
3-6	8.9	10.9
6-9	8.5	9.9
9-15	19.5	20.2
15 or more years	59.5	54.8
By legal form (%)		
Sole proprietors	43.7	28.4
Civil law partnerships	10.4	4.2
Commercial companies	45.7	60.3
Other forms	0.2	7.1
By type of business relationship (%)		
Ownership (autonomous)	90.6	80.2
Partnerships	3.8	3.7
Linkages (linked enterprise)	5.6	16.1
By activity range – market (%)		
Local	30.2	31.9
Regional	17.3	14.8
Domestic	34.8	36.0
International	17.7	17.2

Source: own study.

The scale was evaluated using an α-Cronbach coefficient and confirmatory factor analysis (CFA) procedures. The value of the α-Cronbach coefficient for the scale was 0.931, RMSEA=0.034, CFI=0.930, TLI=0.902, suggesting a high-reliability level. According to the recommendations, the RMSEA should be less than 0.1 (Browne & Cudeck, 1992), while the CFI and TLI should be over 0.9 (Hu & Bentler, 1999). The SRMR is not indicated in the STATA software, given the lack of observations. Moreover, it should be stressed that the differences within the average self-assessment proved to be smaller for non-family enterprises than for family enterprises, and they were also statistically significant.

Independent Variables

A set of independent variables represents the factors that were identified and which, on the one hand, included both self-assessment of own resources as compared to competitors and assessment of the significance of internal and external resources perceived as the source of the enterprise operations. In total, there were 22 variables measured on ordinal scales; an ordinal scale ranging from 1 'significantly lower' to 5 'significantly higher was used for comparisons with major market competitors;' for the other remaining variables, the scale ranged from 1 'entirely insignificant' for 5 'of key importance.' The descriptive statistics for the variables are included in Attachment 2. For the dependent variables, an analysis of the Principal Component Analysis (PCA) was carried out to identify unobservable (latent) variables. The findings produced by the analysis allowed four dimensions to be identified: KMO measure of sampling adequacy was 0.930, was Bartlett's test of sphericity – $p<0.001$. The results of grouping are shown in Table 2.

The first dimension (C1) encompasses the factors involving the enterprise's advantage over its competitors; meeting quality standards; business experience; technological equipment, and instrumentation; employees' knowledge, skills, qualifications, and experience; implementation of innovative

solutions; ability to ensure a positive work atmosphere and development of partnerships with other enterprises. The second area (C2) may be described as the 'internal and external network of the enterprise' consisting of the following components: leader's qualities, operation method, competitive position, and internal communication. The third dimension (C3) was specified as intangible resources covering the following elements: operation strategy, quality management, risk management, enterprise management system, computer technologies, information and communication technologies, entrepreneurial orientation, and external cooperation. The last dimension (C4) relates to the enterprise's financial resources, such as access to finance and financial situation.

Table 2. Explanatory variables and latent components

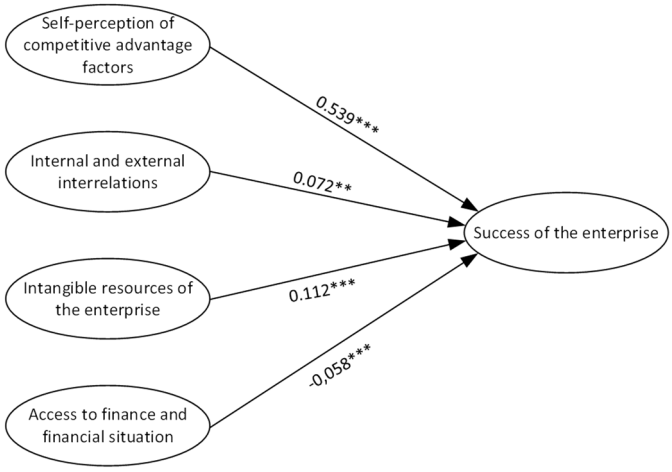
Independent variables	C1	C2	C3	C4
Financial resources	0.639			
Meeting quality standards	0.771			
Business experience	0.819			
Technological equipment and instrumentation	0.815			
Employees' knowledge, skills, qualifications, and experience	0.818			
Implementation of innovative solutions	0.745			
Ensuring a good work atmosphere, employee loyalty, and interpersonal relationships	0.694			
Partnership development with other enterprises	0.738			
Leader's qualities		0.715		
Method of operation		0.687		
Competitive position		0.661		
Internal communication		0.768		
Operation strategy			0.681	
Quality management			0.743	
Risk management			0.763	
Enterprise management system			0.771	
Computer technologies			0.769	
Information and communication technologies			0.659	
Entrepreneurial orientation			0.662	
Cooperation			0.512	
Access to finance				0.773
Financial situation				0.687

Source: own elaboration based on direct surveys.

Research methods

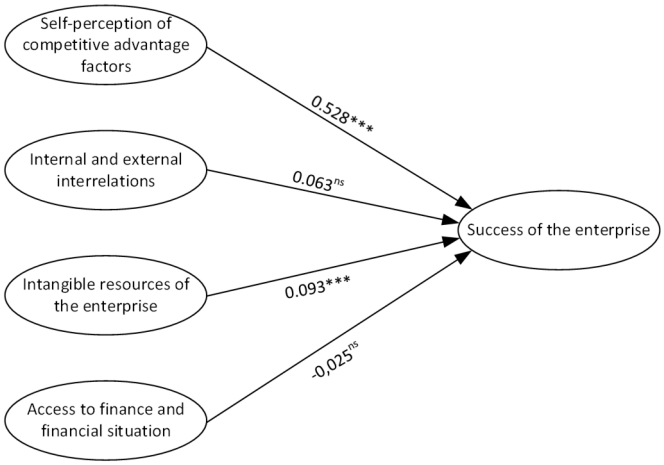
The statistical measurement and verification of relationships between the dependent variable and explanatory variables were carried out using structural equation modelling (SEM) in STATA 15.1. This methodology represents, estimates, and tests a network of relationships among variables (measured variables and latent constructs). In this case, the interrelationships among the four latent constructs representing success factors (see Table 2) and the latent variable reflecting the perception of enterprise success (dependent variable) were checked. It should be mentioned that all parameters between observed variables and latent constructs were statistically significant. Additionally, R-squared, equation-level variance decomposition and Bentler-Raykov squared multiple-correlation coefficient meet the criteria of the measurement model fit (Marsh *et al*., 2004).

The analyses were conducted separately for non-family and family businesses. Both the model estimated for the family business group and one for the non-family group showed an adequate level of matching (Figure 1 and 2).



$\chi^2[424] = 42782.4$; RMSEA = 0.059; CFI = 0.911; TLI = 0.903;
SRMR is not reported in STATA because of missing values; ***p<0.001; **p<0.01

Figure 2. Equation model estimated for non-family businesses
Source: own elaboration based on direct surveys.



$\chi^2[424] = 23244.5$; RMSEA = 0.061; CFI = 0.911; TLI = 0.903;
SRMR is not reported in STATA because of missing values; ***p<0.001

Figure 3. Equation model estimated for family businesses
Source: own elaboration based on direct surveys.

Hence, satisfactory conclusions can be drawn as to the influence of the latent variables, reflecting the controls on the enterprise success factors.

RESULTS AND DISCUSSION

For both family and non-family businesses, the relationship between self-perception of competitive advantage and enterprise success appeared to be statistically significant (p<0.001). This result would suggest that at an aggregate level, all the factors analysed played a crucial role in achieving enterprise's success (Figure 2 and 3). Simultaneously, these findings confirm hypothesis 1. It means the greater the competitive advantage compared to other businesses in a sector or industry, the more likely it is that a business entity will achieve economic success.

Taking into account internal and external networks as a factor of success, in non-family firms, a positive and statistically significant relation was isolated (p<0.01). Hence it was confirmed that for

non-family businesses, aspects including a leader's qualities, method of operation, competitive position and internal communication are more critical in achieving market success than in family firms. Therefore hypothesis 2 was not verified.

The intangible resources of the enterprise in both family and non-family firms were positively connected with their market success and statistically significant ($p<0.001$). These results suggest that better equipment in intangible resources or the implementation of different intangible solutions could support the achievement of the business success of the enterprise, independent of whether it is a family or non-family firm. Therefore, it could be stated that hypothesis 3 was verified.

The negative value of the parameter among the explanatory variables refers to 'financial resources.' However, one should consider the structure of the measurement scale for the detailed variables. Respondents were asked 'how important are the factors listed for the development and success of your enterprise?' while having to indicate the most applicable answer according to the scale from 1 'entirely unimportant' to 5 'very important (critical).' It is possible to interpret these ratings to suggest that those respondents who reported low values on the scale had no issues with financing and accessing finance, and so these factors were of little concern to them. Moreover, those who rated these factors very important were likely to have made this choice because of their minimal access to finance. Hence, the negative value indicates that the enterprises with relatively easy access to finance are also more likely to assess their economic success positively. The impact of financial resources on economic success was statistically significant in the group of non-family firms ($p<0.001$); therefore, it leads to the rejection of hypothesis 4. In the case of non-family firms, access to financial resources is relatively unimportant, and it could be understood that these businesses have better possibilities to finance their development and such a situation positively influences their market success.

Discussion

According to the findings presented herein, for family businesses, less significant aspects (seen as factors determining how family businesses perceive their market success) relate to the internal workings of an enterprise organisation and the importance of internal and external networks. This result may be the effect of the differences in human and social capital (Arregle *et al*., 2007; Basco & Perez Rodriguez, 2009). This resource is unique, primarily manifested in the duality of the relationships unfolding between family members involved in family business activities. They are result of parallel interactions, arising from business and family overlap and are developed between them. This process, in turn, translates to ensuring that the relationships with key internal and external stakeholders are long-lasting and sustainable (De Carolis & Saparito, 2006). Since this kind of relationship is to some extent common across family enterprises and is not brought about by the systemic building of internal and external relations, these relationships, which in some sense go on unnoticed, might be viewed by the representatives of family enterprises as less critical to their success.

Moreover, family enterprises represent a group of entities that tend to be more focused on staying independent from third parties at the expense of their development, while their behaviour towards external financing tends to be quite conservative (Pernsteiner & Węcławski, 2016). As the research shows, family enterprises are also smaller in terms of equity than their non-family counterparts, showing a lower level of debt financing and a lower rate of dividends (Gallo *et al*., 2004). These lower levels, in turn, translate to lower risk and consequently create easier access to finance in both good and bad economic times (D'Aurizio *et al*., 2015). Having less difficulty accessing finance combined with a higher level of internal financing may translate to the perception that the financial situation is less critical for achieving market success. In addition, one should bear in mind that one of the unique resources available solely to family enterprises is survivability capital, which Sirmon and Hitt (2003) have defined as a set of personal resources that family members can borrow, lend, engage, and share for the benefit of family enterprise. Survivability capital comprises such activities as unpaid work or working for lower remuneration and the financial support offered by family members or other businesses owned by other family members (Lins *et al*., 2013; Mzid, 2017; Olson *et al.*, 2003; Zheng, 2010). In specific situations, those resources can be absorbed without having to resort to external financial support, which in turn translates to having a specific perception of one's financial situation.

Unobserved factors of entrepreneurial success that have the same significant impact in family and non-family businesses were the self-perception of competitive advantage factors and the intangible resources of the enterprise. Self-perception of competitive advantage is an internal company performance measure (next to market-based and accounting-based measures; Orlitzky *et al.*, 2003). Due to its relatively general significance in a company's success assessment (Staniewski, 2016), it is no surprise that this factor is crucial for both groups. Considering intangible resources, this group of factors belong to organisational factors, *i.e.* skills, knowledge and competencies (Staniewski, 2016). In this research, they were combined based on aspects that are not typical for family firms, *e.g.* family social capital (Irava & Moores, 2010), and additional features, e.g. quality of management, management system or risk management (see Table 2). Considering their general importance for all businesses, it is no surprise that they were perceived as equally crucial by family and non-family firms.

CONCLUSIONS

This study evaluated the relationships among the multidimensional success factors and multidimensional success measurements of family and non-family businesses. The central assumption was that small and medium-sized enterprises, independently assigned to one of these two groups of businesses, similarly assess the success factors discussed. This assumption was based on the analysis of previous findings that showed, on the one hand, contrary findings in this field; on the other, they were somewhat fragmented or based on relatively small and partly intuitively chosen samples. We proposed a far more complex approach to success factors and success measures of enterprise and used relatively numerous random samples. Employing SEM as a method of hypotheses verification, we confirmed no differences between family and non-family firms considering such aspects as the self-perception of competitive advantage factors and intangible resources of the enterprise. These success factors do not rely on business specificity and have the same significance for each enterprise. In the case of factors that are more strongly connected with business entity specificity, *i.e.* whether it is a family or non-family firm, we isolated distinct differences. For family firms, internal and external interrelations and access to finance and financial situation are less crucial due to their distinct embeddedness, long-term orientation, preservation, independence, and general familiness.

To summarise, we can state that in some aspects of behaviour, the significance of some success factors in family firms differ from their non-family counterparts. The significance of our findings for the praxis connects to the operations of advisers to family firms. Namely, in advising processes and actions, they have to consider that family-oriented objectives are more crucial than strictly business-oriented ones, and therefore, there is no need to change this specificity. Advice should be rather oriented towards how to optimise the economic achievements of family firms in such circumstances.

The survey findings have some limitations since they refer predominantly to Polish family and non-family firms. Having the results verified on samples from other countries seems advisable from a scientific perspective. One could argue that an interesting strand of research could be some in-depth analyses that do not draw on the latent structures of the dependent variables but rather build on the observable variables in both dependent and explanatory groups. Such analyses would make it possible to identify direct relationships among the measured variables. Another research area going beyond the discussion presented herein is an analysis that would show the relationship of success factors or their groups to economic and financial performance, expressed by adequate metrics and indicators within enterprise success models (Ahmad *et al*., 2011; Gorgievski *et al*., 2011; Utrilla & Torraleja, 2012). This approach would allow a broader context to be demonstrated, shedding light on the importance of different success factors in the enterprise's activities.

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Appendixes

Appendix 1. Descriptive statistics of dependent variable components

Dependent variable components	N	Mean	Standard deviation	Skew-ness	Kurtosis	Non-family firms		Family firms		p-value for differ-ence in means
						N	Mean	N	Mean	
Number of employees	43 379	3.14	0.990	-0.075	0.034	28 693	3.11	14 686	3.18	0.0000
Number of serviced customers	43 379	3.28	0.946	-0.192	0.226	28 693	3.26	14 686	3.31	0.0000
Number of cooperating parties (e.g. suppliers)	43 379	3.18	0.736	0.012	1.846	28 693	3.17	14 686	3.21	0.0000
Financial condition	43 379	3.10	0.943	-0.239	0.208	28 693	3.09	14 686	3.13	0.0001
Net income value	43 379	3.22	1.009	-0.319	-0.152	28 693	3.21	14 686	3.24	0.0026
Net current assets value	43 379	3.18	0.888	-0.237	0.452	28 693	3.17	14 686	3.20	0.0000
Equity value	43 379	3.14	0.804	-0.176	1.233	28 693	3.13	14 686	3.17	0.0000
Investment outlays value	43 379	3.10	0.956	-0.231	0.430	28 693	3.08	14 686	3.13	0.0000
Competitive position on the market	43 379	3.10	0.783	-0.172	1.474	28 693	3.08	14 686	3.14	0.0000

Source: own calculations based on direct surveys.

Appendix 2. Descriptive statistics of components of variables

Components of dependent variables	N	Mean	Standard deviation	Skew-ness	Kurtosis	Non-family firms		Family firms		p-value for differ-ence in means
						N	Mean	N	Mean	
Financial resources	40 051	2.75	0.891	-0.423	0.576	25 944	2.74	14 107	2.77	0.001
Meeting quality standards	40 051	3.25	0.713	0.780	1.902	25 944	3.23	14 107	3.29	0.000
Business experience	40 051	3.26	0.732	0.575	1.566	25 944	3.24	14 107	3.29	0.000
Technological equipment and instrumentation	40 051	3.14	0.777	0.152	1.643	25 944	3.12	14 107	3.17	0.000
Employee knowledge, skills, qualifications and experience	40 051	3.19	0.714	0.483	2.126	25 944	3.19	14 107	3.19	0.472
Implementation of innovative solutions	40 051	2.92	0.845	-0.222	1.120	25 944	2.91	14 107	2.94	0.000
Ensuring a positive work atmosphere, employee loyalty, interpersonal relationships	40 051	3.32	0.764	0.591	1.107	25 944	3.31	14 107	3.34	0.000
Developing partner cooperation with other firms	40 051	3.12	0.698	0.211	2.811	25 944	3.11	14 107	3.15	0.000
Leader's qualities	20 908	4.29	0.540	-1.155	3.111	12 685	4.29	8 223	4.28	0.046
Operation method	43 379	3.87	0.866	-0.144	1.086	28 693	3.85	14 686	3.90	0.000
Competitive position	39 074	3.79	0.704	-0.713	1.531	25 231	3.78	13 843	3.82	0.000
Internal communication	42 436	4.03	0.734	-0.933	1.730	27 985	4.04	14 451	4.01	0.001
Operations strategy	38 564	3.56	0.841	-0.568	0.754	25 444	3.56	13 120	3.54	0.029
Quality management	37 325	3.36	0.886	-0.392	0.465	24 540	3.36	12 785	3.36	0.620
Risk management	36 917	3.36	0.868	-0.576	0.709	24 369	3.36	12 548	3.35	0.254
Enterprise management system	35 732	3.15	0.844	-0.530	0.811	23 610	3.16	12 122	3.14	0.028
Computer technologies	37 412	3.35	0.919	-0.525	0.444	24 739	3.36	12 673	3.32	0.000
Information and communication technologies	40 156	3.38	0.925	-0.361	0.046	26 413	3.36	13 743	3.43	0.000
Entrepreneurial orientation	39 293	3.40	0.859	-0.560	0.685	25 758	3.38	13 535	3.45	0.000
Cooperation	12 552	3.76	0.626	-0.441	1.345	8 284	3.76	4 268	3.78	0.108
Access to finance	38 355	3.36	0.984	-0.436	-0.005	24 893	3.32	13 462	3.43	0.000
Financial situation	42 188	4.04	0.760	-0.900	1.414	27 752	3.98	14 436	4.14	0.000

Source: own calculations based on direct surveys.

Appendix 3. Correlation coefficients for the variables

Variables	Y	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20	X21	X22
Success perception (Y)	1.000																						
Financial resources (change over last 3 years) (XI)	0.364**	1.000																					
Meeting quality standards (change over last 3 years) (X2)	0.291**	0.400**	1.000																				
Business experience (change over last 3 years) (X3)	0.255**	0.441**	0.654**	1.000																			
Technological equipment and instrumentation (change over last 3 years) (X4)	0.290**	0.499**	0.554**	0.627**	1.000																		
Employee knowledge, skills, qualifications and experience (change over last 3 years) (X5)	0.285**	0.401**	0.557**	0.619**	0.636**	1.000																	
Implementation of innovative solutions (change over last 3 years) (X6)	0.331**	0.486**	0.434**	0.465**	0.573**	0.541**	1.000																
Ensuring positive work atmosphere, employee loyalty and interpersonal relationships (change over last 3 years) (X7)	0.271**	0.240**	0.497**	0.483**	0.450**	0.544**	0.421**	1.000															
Developing partnerships with other firms (change over last 3 years) (X8)	0.309**	0.357**	0.455**	0.490**	0.487**	0.525**	0.520**	0.602**	1.000														
Leader's qualities (X9)	0.168**	0.063**	0.157**	0.162**	0.141**	0.169**	0.163**	0.185**	0.184**	1.000													
Operation method (X10)	0.126**	0.032**	0.148**	0.129**	0.101**	0.125**	0.104**	0.149**	0.140**	0.443**	1.000												
Competitive position (X11)	0.143**	0.017**	0.151**	0.138**	0.118**	0.137**	0.127**	0.167**	0.164**	0.439**	0.591**	1.000											
Internal communication (X12)	0.178**	0.043**	0.198**	0.171**	0.159**	0.209**	0.159**	0.278**	0.217**	0.514**	0.536**	0.597**	1.000										
Operation strategy (X13)	0.187**	0.070**	0.150**	0.140**	0.140**	0.148**	0.188**	0.166**	0.180**	0.404**	0.501**	0.560**	0.543**	1.000									
Quality management (X14)	0.170**	0.068**	0.162**	0.127**	134**	0.136**	0.165**	0.132**	0.161**	0.334**	0.455**	0.472**	0.448**	0.655**	1.000								
Risk management (X15)	0.144**	0.045**	0.117**	0.113**	0.104**	0.111**	0.125**	0.110**	0.155**	0.364**	0.476**	0.490**	0.443**	0.602**	0.647**	1.000							
Enterprise management system (X16)	0.120**	0.044**	0.102**	0.096**	0.091**	0.099**	0.127**	0.107**	0.146**	0.295**	0.415**	0.422**	0.384**	0.520**	0.582**	0.643**	1.000						
Computer technologies (X17)	0.196**	0.075**	0.148**	0.138**	0.154**	0.155**	0.192**	0.150**	0.177**	0.349**	0.470**	0.485**	0.467**	0.561**	0.580**	0.595**	0.598**	1.000					
Information and communications technologies (X18)	0.151**	0.065**	0.116**	0.114**	0.119**	0.115**	0.173**	0.114**	0.142**	0.301**	0.414**	0.442**	0.380**	0.471**	0.439**	0.480**	0.461**	0.592**	1.000				
Entrepreneurial orientation (X19)	0.179**	0.047**	0.149**	0.139**	0.130**	0.136**	0.173**	0.151**	0.187**	0.398**	0.465**	0.513**	0.439**	0.522**	0.519**	0.576**	0.548**	0.570**	0.587**	1.000			
Cooperation (X20)	0.114**	0.029**	0.097**	0.087**	0.092**	0.099**	0.101**	0.103**	0.151**	0.373**	0.400**	0.404**	0.390**	0.398**	0.420**	0.473**	0.438**	0.446**	0.445**	0.500**	1.000		
Access to finance (X21)	0.093**	-00.006	0.059**	0.063**	0.070**	0.059**	0.063**	0.050**	0.086**	0.215**	0.338**	0.319**	0.259**	0.319**	0.370**	0.447**	0.391**	0.370**	0.437**	0.432**	0.446**	1.000	
Financial situation (X22)	0.098**	-0.021**	0.135**	0.122**	0.086**	0.103**	0.044**	0.137**	0.108**	0.368**	0.451**	0.457**	0.474**	0.372**	0.344**	0.409**	0.326**	0.363**	0.379**	0.420**	0.434**	0.504**	1.000

Note: **: Correlation significance at 0.01 (two-tailed).
Source: own calculations based on direct surveys.

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Conflict of Interest

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