

Rational versus intuitive cognition and influence of dynamic managerial capabilities on SMEs' perceived international performance: evidence from emerging economy

Rational
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cognition

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Abstract

Purpose – This study aims to investigate the relationships between managers' cognitive styles, dynamic managerial capabilities and firms' perceived international performance. The study is based on cognitive-experiential self-theory, dynamic managerial capabilities and international entrepreneurship.

Design/methodology/approach – Data were collected from 283 managers of small medium enterprises (SMEs) in Türkiye, an emerging economy. The research was conducted using quantitative methods, and Smart partial least squares (PLS) 4 software was used for data analysis. The data were examined through structural equation modelling and mediation analyses.

Findings – Findings indicate that rational cognitive styles positively influence managerial human capital, managerial social capital, managerial cognition and perceived international performance. However, the effect of intuitive cognitive styles was confirmed only on managerial cognition. Additionally, it was found that managerial cognition positively affects perceived international performance, whereas managerial social capital has a negative impact. However, the effects of managerial human capital could not be confirmed. Moreover, a full mediation relationship of managerial cognition between intuitive cognitive styles and perceived international performance was identified.

Originality/value – This research carves out a unique niche by synergizing cognitive-experiential self-theory with dynamic managerial capabilities to investigate their conjoined effect on firms' international performance, an area previously underexplored. Unveiling insights from burgeoning economies like Türkiye enriches the existing body of knowledge, offering substantial contributions to the field of international business.

Keywords Cognitive-experiential self-theory, Cognitive styles, Dynamic managerial capabilities, Perceived international performance, SMEs

Paper type Research paper

1. Introduction

Recent studies have increasingly delved into the nexus between dynamic managerial capabilities and the perceived international performance of small medium enterprises

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(SMEs) (Mostafiz *et al.*, 2021). Despite significant scholarly attention, the extent to which cognitive styles and psychological factors influence firms' international performance remains ambiguous (Acedo and Jones, 2007; Khan *et al.*, 2020). Researchers advocate for further examination of these antecedents, particularly within the purview of national economic development in emerging economies and their assimilation into the global market (Kiss *et al.*, 2012; Tabares *et al.*, 2015; Tabares *et al.*, 2020).

Dynamic managerial capabilities, within the context of this relationship, are frequently perceived as a culmination rather than variables affected by preceding factors (Mostafiz *et al.*, 2019a). This points to a significant gap in the research on cognitive precursors that shape these capabilities. Addressing this, Kryeziu *et al.* (2024) explored the interplay among cognitive styles, dynamic managerial capabilities and international performance within Kosovo's transitioning economy. Nevertheless, their analysis did not rationalize the exclusion of the managerial human capital dimension, nor did it integrate cognitive styles into an overarching theoretical framework. Concurrently, Tabares *et al.* (2023) scrutinized dynamic managerial capabilities and their connection to international opportunity-driven behaviour and perceived performance in Colombia's emerging economy, omitting cognitive styles from their precursor analysis.

Considering this research gap, this study aims to explore the relationships between managers' cognitive styles, dynamic managerial capabilities and firms' perceived international performance. This research seeks to answer two research questions (RQ):

- RQ1. What are the effects of managers' cognitive styles on dynamic managerial capabilities and firms' perceived international performance?
- RQ2. What are the effects of managers' dynamic managerial capabilities on firms' perceived international performance, and what is the mediating role of these capabilities in the relationship between cognitive styles and perceived international performance?

In this context, surveys collected from managers of firms conducting international activities in Türkiye have been examined using a quantitative research method, using structural equation modelling (SEM) and mediation analyses. Acknowledging the potential overlap in roles such as "manager," "founder" and "entrepreneur" within certain SMEs, these terms are used interchangeably throughout this research (Teece, 2012). The recent export-oriented international entrepreneurial activities of SMEs in Türkiye, as a developing economy, can offer a unique context for advancing the literature on firms' perceived international performance (Demirbag *et al.*, 2007; Glaister *et al.*, 2009; Ilhan-Nas *et al.*, 2018; Gölgeci *et al.*, 2019). The substantial increase in Türkiye's trade volume, from €38bn to €223bn in 2022 (Republic of Türkiye - Ministry of Trade, 2023), provides a laboratory setting for examining firms' international performance. In addition, Türkiye's proximity to advanced markets in Europe and emerging markets in the Middle East and Central Asia and its efforts to expand trade volume with other countries provide a suitable context for examining the perceived international performance of SMEs (Demirbag *et al.*, 2007; Demirbag *et al.*, 2014; Ciftci *et al.*, 2019; Tatoglu *et al.*, 2015).

Drawing on the cognitive-experiential self-theory (Epstein, 2003) and dynamic managerial capabilities (Helfat and Peteraf, 2015; Bağış *et al.*, 2022), we confirm the positive impact of managers' rational cognitive styles on dynamic managerial capabilities and firms' perceived international performance. However, we could only confirm the effects of intuitive cognitive styles on managerial cognition. Furthermore, our findings reveal that managerial cognition positively influences perceived international performance, while managerial social capital has a

negative impact. In addition, our results indicate that managerial cognition fully mediates the relationship between intuitive cognitive styles and perceived international performance.

This research makes four significant contributions: firstly, it enriches the intersection of cognitive-experiential self-theory, dynamic managerial capabilities and international entrepreneurship literature. Secondly, it provides an interdisciplinary explanation of firms' perceived international performance (macro) by using rational-intuitive cognitive styles (micro) based on cognitive psychology and dynamic managerial capabilities (micro) based on strategic foundations. This effort contributes to strategic management in general and specifically to the micro-foundations of dynamic capabilities (Felin and Foss, 2005; Teece, 2007; Helfat and Martin, 2015) and to behavioural strategy research (Powell *et al.*, 2011; Hodgkinson and Healey, 2011). The facilitation of explanations at both individual and firm levels allows for a more nuanced understanding of firms' perceived international performance. This multi-level analysis contributes to a holistic view of the factors at play. Thirdly, findings regarding the stronger impact of rational cognitive styles compared to intuitive cognitive styles on dynamic managerial capabilities and perceived international performance have provided insights for managers on the necessity of using both rational and intuitive cognitive styles together. Finally, it has been identified that Türkiye's economy, as an emerging economy, can offer a critical context for enriching the existing literature (Tatoglu *et al.*, 2015; Ciftci *et al.*, 2019; Bağış *et al.*, 2023). In particular, the non-confirmation of the effects of intuitive cognitive styles and managerial human capital on perceived international performance underscores the difference in managerial capabilities in this region compared to developed economies (Europe, the USA and Asia). In addition, this research responds to calls for more studies on individual-level capabilities focused on developed countries (Helfat and Martin, 2015) and for further research on firms' international performance in developing countries (Tabares *et al.*, 2021).

The research, apart from the introduction, is structured into four sections. The theoretical foundations and hypotheses of the study are presented in Section 2. The methodology of the research is detailed in Section 3. The research findings, based on SEM and mediation analyses, are displayed in Section 4. Section 5 explains theoretical and managerial implications, limitations and provides directions for future research to conclude the study.

2. Literature review and hypothesis development

2.1 Cognitive-experiential self-theory

Cognitive styles are based on the cognitive-experiential self-theory, which postulates the existence of two parallel and interactive information processing and thinking systems, thereby integrating cognitive and psychodynamic unconsciousness (Epstein, 1994; Epstein *et al.*, 1996). Rational (analytical) and intuitive (experiential) cognitive styles are structures that interact and work in parallel with each other (Kahneman, 2011). Some viewpoints consider the analytic and intuitive distinction as opposite ends of a single continuum (Dhami and Thomson, 2012), whereas others assert that rational and intuitive styles are independent structures (Hodgkinson and Sadler-Smith, 2003). Discussions on this subject are beyond the scope of this research. Cognitive styles in this research are based on the analytical and intuitive distinction of the cognitive-experiential self-theory.

Cognitive styles refer to the preferred pathways of an individual in collecting, processing and evaluating data (Messick, 1984). These styles are defined as individual differences in the representation, organization and processing of information during thinking (Messick, 1996). From the strategic management perspective, cognitive styles are how managers organize, evaluate, interpret and process information. These differences lay the micro-foundations for the variations in performance, success and competitive advantage among firms

(Hodgkinson and Healey, 2011). Cognitive styles influence our scanning of the environment for information, the organization and interpretation of the gathered data and the process of integrating our interpretations into mental models that guide our behaviour (Allinson and Hayes, 1996).

2.1.1 Rational cognitive styles and dynamic managerial capabilities. Rational cognitive styles represent the analytic aspect of the human mind. This style is characterized as deductive, meticulous, constrained, formal and critical (Epstein, 2003) and is associated with analytical thinking that processes information in a systematic, linear order, step by step (known as “System 2”) (Ornstein, 1977; Evans and Stanovich, 2013; Healey and Hodgkinson, 2014; Thaler and Sunstein, 2009; Kahneman, 2011). Managers exhibiting this cognitive style base their decisions on objective and comprehensive information, relying on intellectual reasoning and devoid of time pressure (Akinci and Sadler-Smith, 2013). Such decisions are considered rational. The hallmark attributes of the rational process include formality, planning and an intensive cognitive effort (Randerson *et al.*, 2016).

Rationality drives managers to collect information from various sources to tackle problems and choose the best solutions (Hart, 1992). They thoroughly identify and assess environmental opportunities, threats and issues, making decisions through a systematic and analytical approach (Elbanna, 2006). This rational cognitive style is believed to influence managerial cognition, affecting decision-making processes (March, 2008; Helfat and Peteraf, 2015). Empirical studies support this, showing that managers’ cognitive styles significantly impact the development of organizational dynamic capabilities (Narayanan *et al.*, 2009; Krupskiy and Grynko, 2018).

Further research indicates that rational cognitive styles affect internal entrepreneurship and innovation outcomes (Marques *et al.*, 2022). Another study found that managers’ cognitive structures and processes impact social capital, business model design and market dynamics (Wang *et al.*, 2023). These findings suggest that managers’ cognitive styles are crucial in understanding and managing international market dynamics and performance. Such cognitive orientations and styles are essential for developing innovative methods in international market tracking, handling uncertainties, fostering collaborations and enhancing international performance (Acedo and Jones, 2007; Muzychenko and Liesch, 2015; Nowiński and Rialp, 2015). Based on these research findings, we argue that rational cognitive styles significantly impact managers’ dynamic managerial capabilities. In this context, we propose the following hypotheses:

H1a. Managers’ rational cognitive styles positively affect managerial human capital.

H1b. Managers’ rational cognitive styles positively affect managerial social capital.

H1c. Managers’ rational cognitive styles positively affect managerial cognition.

2.1.2 Rational cognitive styles and perceived international performance. The impacts of rational cognitive styles have been examined in various research. According to these investigations, rational cognitive styles play a significant role in adaptive sales practices, seller-customer orientations and perceived sales performance relationships (McIntyre *et al.*, 2000). The influence of this cognitive style is undeniable in managers’ identification of international opportunities (Glavas *et al.*, 2017), entrepreneurial orientations and strategic entrepreneurial behaviours (Zollo *et al.*, 2021). The associations of rational styles with these variables suggest potential effects on perceived international performance. Research has proposed that rational decision-making styles may moderate the relationship between the information generation process and organizational performance (Abubakar *et al.*, 2019). Moreover, some studies have found that rational thinking positively impacts organizational

performance in stock-flow problems (Hendijani *et al.*, 2023). Certain research has concluded that the instrumental use of knowledge, based on rational decision-making processes, is associated with performance in stable and dynamic environments (Goll and Rasheed, 1997; Mueller *et al.*, 2000). Investigations scrutinizing the relationships between rational cognitive style and non-financial performance under stable contextual conditions have established a positive correlation between these variables (Lee-Ross, 2014). Drawing upon these studies, we argue that rational cognitive styles will positively influence firms' perceived international performance. Hence, we propose the following hypothesis:

H2. Managers' rational cognitive styles positively affect the perceived international performance.

2.1.3 Intuitive cognitive styles and dynamic managerial capabilities. Intuitive cognitive styles represent the experiential aspect of the human mind. This cognitive style is characterized by automatic, quick, instinctive, intuitive, uncontrollable, effortless and unconscious thinking, also known as "System 1" (Hodgkinson and Healey, 2011; Kahneman, 2011). Within the purview of this cognitive style, managers make decisions based on subjective and incomplete information, within conditions of uncertainty and under time pressure (Akinci and Sadler-Smith, 2013). These are bounded rational decisions (Simon, 1947; Kahneman, 2003). In such corporate and organizational environments, it is reasonable that managers base their decisions on intuitive solutions and experiences (Sadler-Smith and Shefy, 2004).

Research suggests a tendency for entrepreneurs in well-established firms to exhibit more analytical cognitive styles, while those involved in establishing and expanding new ventures often lean towards intuitive styles (Armstrong and Hird, 2009). Moreover, a study conducted among 117 firms in the Canadian manufacturing sector concluded that the intuitive cognitive style predominated among managers with a high entrepreneurial impulse (Doyle *et al.*, 2002). Based on this relationship between the intuitive cognitive style and entrepreneurial impulse, we posit that there might be a correlation between managers' cognitive styles and dynamic managerial capabilities. Evidence from SME-focused research reinforces this notion, indicating that managers' intuitive cognitive styles significantly influence resource allocation decisions and innovation performance within SMEs (De Visser and Faems, 2015). The resource allocation and innovation performance of SMEs are likely guided by the dynamic managerial capabilities of managers, which in turn are shaped by their intuitive cognitive styles. In this context, a study identified the effects of prevailing logic encompassing managers' cognitive structures and processes on managerial human capital, social capital and cognition (Khan *et al.*, 2020).

Research reveals intuition as one of the fundamental mechanisms underlying perception and decision-making capabilities (Hodgkinson and Healey, 2014). In this context, intuition not only aids decision-makers in managing uncertainty but also promotes creative cognition necessary for generating and discovering new problem solutions, ideas and related business opportunities (Hodgkinson *et al.*, 2009; Calabretta *et al.*, 2017). Moreover, intuition is widely claimed to play a central role in entrepreneurial cognition, referring to the ways entrepreneurs process and use the information for assessments, judgments or decisions involving opportunity evaluation, venture creation and growth (Mitchell *et al.*, 2002; Baldacchino, 2019). Furthermore, research indicates that one of the factors contributing to the construction of social capital involves social processes inherent in an intuitive approach (Lee and Jones, 2008; Lang and Ramirez, 2017). Finally, research suggests that managerial human capital is influenced by intuitive cognitive styles (Ambrosini and Altintas, 2019). Within the framework of these discussions, we suggest that the intuitive cognitive style

positively impacts managerial human capital, social capital and cognition and propose the following hypotheses:

H3a. Managers' intuitive cognitive styles positively affect managerial human capital.

H3b. Managers' intuitive cognitive styles positively affect managerial social capital.

H3c. Managers' intuitive cognitive styles positively affect managerial cognition.

2.1.4 Intuitive cognitive styles and perceived international performance. Intuitive cognitive styles have demonstrated influence across various entrepreneurial aspects such as entrepreneurial orientation, passion (Zollo *et al.*, 2021), behaviours (Aamir *et al.*, 2021) and internationalization strategies (Torkkeli *et al.*, 2018), as well as impacting international strategies and performance (Tasheva and Nielsen, 2020). A study on SMEs in the United Arab Emirates found no correlation between managers' intuitive cognitive styles and organizational performance (Zacca *et al.*, 2017). On the other hand, several studies have determined that intuitive cognitive styles are effective in adaptable sales practices, seller–customer orientations and perceived sales performance relationships (McIntyre *et al.*, 2000). The economic context in which firms operate, whether unstable or stable, will likely affect the relationships between intuitive cognitive styles and firm performance. One such study determined that intuitive cognitive styles positively influence organizational performance in unstable environments, while in stable environments, the effect is negative (Khatri and Ng, 2000). Certain studies have found no relationship between intuitive cognitive style and non-financial performance in unstable contextual conditions (Lee-Ross, 2014). Conversely, Sadler-Smith and Shefy (2004) concluded that there was a positive relationship between intuitive decision-making style and perceived organizational performance. Given the contradictory results of these studies, we expect that managers' intuitive cognitive styles will positively influence perceived international performance, leading us to propose the following hypothesis:

H4. Managers' intuitive cognitive styles positively affect perceived international performance.

2.2 Dynamic managerial capabilities

Studies examining dynamic capabilities at a macro analysis level (Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Protogerou *et al.*, 2011; Makkonen *et al.*, 2014) have overlooked the contributions of upper and middle-level managers and employees to these capabilities. Therefore, recent years have seen a growing focus on research exploring the impacts of managers' dynamic managerial capabilities on organizational-level dynamic capabilities, firm performance and strategic change (Åberg and Torchia, 2020; Heubeck and Meckl, 2021). Dynamic managerial capabilities have been defined as capabilities through which managers construct, aggregate and redesign organizational resources and competencies (Karhu and Martin, 2015).

Research on dynamic management capabilities gives the impression of two separate lines of research in strategic management. The first group of studies classifies these capabilities into managerial human capital, social capital and cognition (Adner and Helfat, 2003). This classification emphasizes individual capabilities. The second group of studies categorizes them as sensing, seizing and reconfiguring (Teece, 2007; Helfat and Martin, 2015). The primary concern of this classification is enterprise-level capabilities. However, there is also an emphasis on the effects of managerial cognition on enterprise capabilities

(Teece, 2007). Although some studies suggest that these classifications can be used in the same sense (see Kryeziu *et al.*, 2024; Helfat and Peteraf, 2015), the distinctions between the concepts of the two lines of research are clear (see Adner and Helfat, 2003; Teece, 2007). Moreover, in the second group of classifications, the study of Helfat and Peteraf (2015) overlooks the effects of managerial social capital and human capital. Therefore, to avoid possible confusion, this research examines managerial human capital, managerial social capital and managerial cognitive capabilities.

The impact of dynamic managerial capabilities on firms' financial performance, especially on perceived international performance, has not been extensively explored beyond a few studies, and this impact has not been tested in contexts with different levels of economic development (Kryeziu *et al.*, 2024). Research has shown that specific managerial capabilities influence the pursuit of international opportunities (Haapanen *et al.*, 2020) and affect international performance in countries at different levels of economic development (Kiss *et al.*, 2012).

2.2.1 Managerial human capital and perceived international performance. Managerial human capital is a composite derived from the assembly of managers' and employees' skills, knowledge, capabilities and experiences (Becker, 1964; Adner and Helfat, 2003; Kor and Mesko, 2013). Human capital is crucial to achieving business success (Bosma *et al.*, 2004). Research shows that industry-specific human capital is needed to progress in markets with different institutions (Mostafiz *et al.*, 2021). For a firm's development, managerial human capital assumes a significant role in shaping the dominant logic of managers. Coupled with past experiences brought together with particular strategies and resource bundles, this capital is highly influential in managing organizational processes such as resource distribution, development and acquisition (Kor and Leblebici, 2005). Furthermore, this capital spearheads vital managerial decisions in the business world regarding strategic problem-solving, elimination of dilemmas and numerous aspects influencing firm performance (Boudreau, 2010; Rasmussen and Ulrich, 2015).

Human capital directs matters such as firm growth, diversification, competitive positioning, capability acquisition and development (Kor and Mesko, 2013) and identifying international opportunities and performance. The international dimension of human capital encompasses international education, work experience, knowledge, skills and capabilities (Tasheva and Nielsen, 2020). Studies show that education (Eriksson *et al.*, 2014), international business experience (Karra *et al.*, 2008), market knowledge, internationalization strategies and intercultural knowledge affect performance and identify opportunities in international markets. In addition, managers' proficiency in English or several other languages has also been identified as influential in firms' pursuit of international opportunities and their performance (Hurmerinta *et al.*, 2015). Considering the results of past research (Haber and Reichel, 2007; Dimov, 2010) suggesting that managerial human capital influences the perceived international performance of firms, we propose the following hypothesis:

H5. Managerial human capital positively affects perceived international performance.

2.2.2 Managerial social capital and perceived international performance. Managerial social capital is a structure that enables the sharing of resources, knowledge, trust and values within a social network (Granovetter, 1973; Burt, 1992; Woolcock, 1998; Wang *et al.*, 2023). From a managerial standpoint, these networks encompass internal colleagues, employees and external contacts such as fellow managers, firms, professional associations, trade groups, politicians and policymakers (Adner and Helfat, 2003). Such networks offer access to valuable information, provide temporal advantages and ensure effective representation of managerial and firm interests when and where needed (Mat Isa and Ameer, 2007). Research

has found that firm managers who maintain close social and political connections with government officials have easier access to significant opportunities such as projects, certifications and financial incentives (Peng and Luo, 2000; Acquaaah, 2007). Social networks are effective in the growth and long-term performance of SMEs (Poon *et al.*, 2012), business model innovations (Heubeck and Meckl, 2021), success in international markets (Jeong and Chung, 2022), identification of international opportunities, organizational learning processes (Karra *et al.*, 2008; Leite *et al.*, 2016), access to customer and institutional knowledge (Adner and Helfat, 2003) and access to financial resources (Lindstrand and Hånell, 2017).

Various studies in international entrepreneurship have demonstrated that managers benefit from relations and networks such as export-supporting institutions, distributors, trade fairs, conferences and informal connections (Tabares *et al.*, 2020). These social networks play a crucial role in granting firms access to valuable information pertaining to opportunities, risks, customers, suppliers, policies, economic factors and competitive resources in their international endeavours (Leite *et al.*, 2016; Chen *et al.*, 2018). Firms that share a common language with their international ties internationalize faster and outperform firms that do not share a common language. Despite these positive effects of social networks, research in emerging economies has identified traps and misconceptions among SME managers in international operations due to overreliance on personal information sources (Musteen *et al.*, 2010). These information sources may be based on individuals' subjective perceptions and are far from definitive (Adobor, 2006). Paradoxically, these connections can adversely affect SME managers' perception of international opportunities and threats, leading to suboptimal outcomes in international performance (Goerzen, 2007). Considering the prevalence of smaller firms in our SME sample, we assume that managers place greater trust in their personal social networks. In this context, we argue that managerial social networks will negatively affect perceived international performance. In light of the above arguments, we propose the following hypothesis:

H6. Managerial social capital negatively affects perceived international performance.

2.2.3 Managerial cognition and perceived international performance. Managerial cognition encompasses mental models that emerge from managerial beliefs, knowledge and processes that are the foundation for decision-making (Walsh, 1995). Managers' education, experiences, learning and social capital shape these models (Helfat and Martin, 2015; Karhu and Ritala, 2020). The acquisition, interpretation, evaluation, association with prior knowledge and application of internal- and external-firm information are directed by managers' cognitive structures and processes (Felin *et al.*, 2012; Majhi *et al.*, 2023). Managerial cognition influences firm-level strategic decisions, dynamic capabilities (Felin *et al.*, 2015), managerial logic (Kor and Mesko, 2013) and performance.

Research examining firms' international activities proposes that managerial cognition shapes strategic decisions and outcomes, including responses to changes in the external environment (Maitland and Sammartino, 2015a). Managerial cognition affects firms' internationalization processes (Torkkeli *et al.*, 2018; Niittymies and Pajunen, 2020; Betty Feng *et al.*, 2023), decision-making in politically precarious international environments (Maitland and Sammartino, 2015b), entrance into new markets (Tyler and Gnyawali, 2002; Eggers and Kaplan, 2009), monitoring of international opportunities (Glavas *et al.*, 2017) and their international performance. Building upon these studies, we posit that managerial cognition positively impacts firms' perceived international performance. Within this context, we propose the following hypothesis:

H7. Managerial cognition positively affects perceived international performance.

2.2.4 Mediation effect of dynamic managerial capabilities. A substantial number of studies in the literature have been conducted regarding the mediating effect of dynamic capabilities (Sapienza *et al.*, 2006; Lara and Salas-Vallina, 2017; Pitelis and Wagner, 2018; Khan *et al.*, 2020). Various investigations have established that dynamic capability at the macro level, positively or negatively, impacts short- and long-term international performance (Rothaermel and Deeds, 2004; Zahara *et al.*, 2023). SMEs are typically recognized as firms with limited material resources, a scarcity that restricts their investments. Many studies argue that SMEs, especially smaller-scale ones with scarce resources, can succeed in international markets by using their social networks (Coviello and McAuley, 1999). It is posited that organizational-level research and opportunity-seeking capabilities mediate the relationship between social networks' structural, relational and cognitive dimensions and international performance (Pinho, 2011). In another study, it was discovered that organizational learning capability mediates the relationship between managerial capabilities and managers' commitments (Lara and Salas-Vallina, 2017). Finally, it has been identified that dynamic marketing capability mediates the relationship between knowledge acquisition and firm performance (Mostafiz *et al.*, 2022).

While numerous studies have explored the mediating relationship of dynamic capabilities at the organizational level, they have often overlooked dynamic managerial capabilities at the individual level. Several scholars have focused on this particular area, scrutinizing the relationships between dynamic managerial capabilities and perceived international performance (Sapienza *et al.*, 2006; Solano Acosta *et al.*, 2018). One group of these studies has identified that dynamic managerial capabilities directly influence international performance. These investigations have concluded that perception capability (Faiz Masnan and Saad, 2018), managerial human capital, experience (Santhosh and Bala Subrahmanya, 2020) and international social networks (Musteen *et al.*, 2010) have a direct impact on perceived international performance. On the other hand, another research cluster has determined that the variables of international opportunity identification (Tabares *et al.*, 2023) and entrepreneurial orientation (AlShehhi *et al.*, 2022) serve as mediators between dynamic managerial capabilities and perceived international performance.

Despite the existing body of research examining the direct impacts of dynamic managerial capabilities on international performance and the mediating variables in this relationship, studies focusing on the mediating role of dynamic managerial capabilities in the association between different variables and perceived international performance are significantly limited. One study in this field shows that dynamic managerial capabilities mediate the relationship between managers' dominant logic and SMEs' innovation performance (Khan *et al.*, 2020). Managers' dominant logic refers to how managers make critical resource allocation decisions in conceptualizing the business, using technologies, developing products, distribution, advertising or human resources management (Prahalad and Bettis, 1986). It represents the amalgamation of chief executive officer (CEO) and top management's strategic perceptions (Lampel and Shamsie, 2000), shaped by the interplay of their cognitive models within specific business environments (Kor and Mesko, 2013; Jantunen *et al.*, 2022). In this context, it can be postulated that managers' rational and intuitive cognitive styles could influence perceived international performance via dynamic managerial capabilities. Stemming from these debates in the literature, we argue that managers' rational and intuitive cognitive styles will impact international performance through dynamic managerial capabilities. In light of this, we propose the following hypotheses:

- H8a.* Managers’ managerial human capital mediates the effect of managers’ rational cognitive styles on perceived international performance.
- H8b.* Managers’ managerial social capital mediates the effect of managers’ rational cognitive styles on perceived international performance.
- H8c.* Managers’ managerial cognitions mediate the effect of managers’ rational cognitive styles on perceived international performance.
- H9a.* Managers’ managerial human capital mediates the effect of managers’ intuitive cognitive styles on perceived international performance.
- H9b.* Managers’ managerial social capital mediates the effect of managers’ intuitive cognitive styles on perceived international performance.
- H9c.* Managers’ managerial cognitions mediate the effect of managers’ intuitive cognitive styles on perceived international performance.

The research model depicted in [Figure 1](#) posits that, at the micro-analysis level, managers’ rational and intuitive cognitive styles exert distinct influences on dynamic managerial capabilities—specifically, managerial human capital (*H1a* and *H3a*), managerial social capital (*H1b* and *H3b*) and managerial cognition (*H1c* and *H3c*). The figure elucidates that rational and intuitive cognitive styles operate independently, each impacting dynamic managerial capabilities uniquely.

Furthermore, the model hypothesizes that these dynamic managerial capabilities, as assessed at the micro-analysis level, are determinants of perceived international performance at the macro-analysis level. It suggests a direct impact of managerial human capital (*H5*), while managerial social capital (*H6*) and managerial cognition (*H7*) are also posited to play

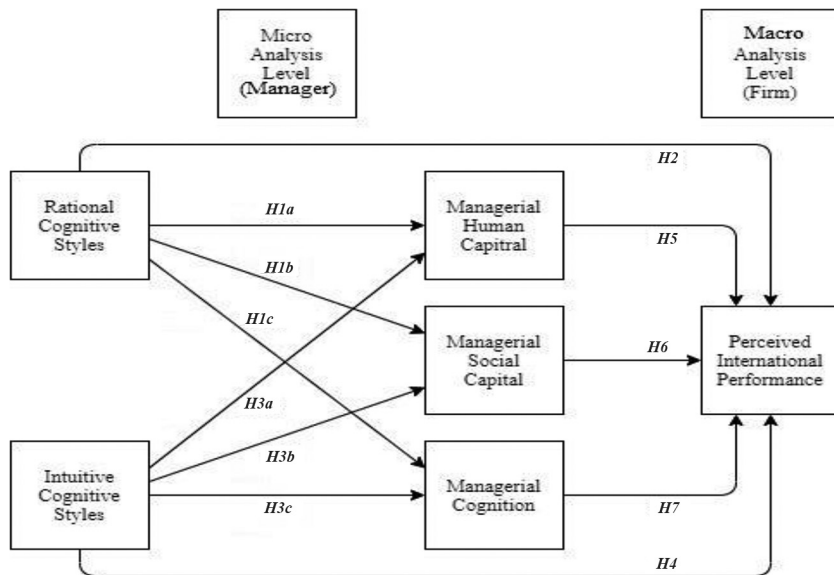


Figure 1.
Research model

Source: Created by authors

contributory roles. Moreover, the model posits two direct hypotheses: managers' rational cognitive styles (*H2*) and intuitive cognitive styles (*H4*) may directly influence the firm's perceived international performance. In summary, the model underscores the significance of managers' cognitive styles and individual managerial capabilities in determining the perceived international performance of firms. It advocates for a multilevel framework to comprehend the intricacies of international business performance dynamics.

3. Methodology

3.1 Sample features

This study examines businesses in Türkiye that engage in foreign trade, employ fewer than 250 people and have an annual net sales revenue not exceeding €22.5m. As of 2023, Türkiye's total number of SMEs has been recorded at 3.421 million. When analysing the activities of these firms, it is observed that SMEs account for 36.4% of Türkiye's total exports and 24% of its total imports (Turkish Statistical Institute, 2021). The SME classification used in this research is divided into three categories based on the legal regulations of the Turkish Republic, Official Newspaper:

- (1) Micro-enterprises, which are companies with fewer than ten employees and a turnover of up to €450,000.
- (2) Small enterprises have fewer than 50 employees and a turnover of up to €4.5 m.
- (3) Medium-sized enterprises have fewer than 250 employees and a turnover of up to €22.5m (Small Business Regulation, 2023).

This study used a random sampling methodology driven by the necessity to represent all SMEs in Türkiye meaningfully (Mackey and Gass, 2012). The sample consisted of firms that fall under the SME category, engage in international entrepreneurship activities and conduct exports, regardless of their operating region or city. During the data collection process, we managed to reach 303 firms. Data collection was accomplished face-to-face through surveys directed to the firms. The surveys were administered to the owners or managers of firms who oversee international operations and make decisions regarding international ventures. Consistent with previous research, we assert that international entrepreneurs (founder-managers or top executives) constitute an appropriate unit of analysis as they can influence the performance of an international company (Korhonen and Leppäaho, 2019). Furthermore, based on the assumption found in different studies that top executives and founders can influence organizational behaviours and outcomes, we accept them as suitable representations and units of analysis for measuring firm performance (Tabares *et al.*, 2021).

3.2 Data collection

This study gathered data on cognitive styles, dynamic managerial capabilities and perceived international performance through a structured questionnaire featuring fixed-choice queries. The questionnaire underwent translation from English to Turkish via the back-translation method and was subsequently reviewed by three Turkish-speaking individuals to ensure accuracy. To uphold respondent confidentiality, the initial page of each survey assured participants that their information would remain confidential, not be disclosed to third parties and that their anonymity would be preserved (Solano Acosta *et al.*, 2018). In addition, a pilot test involving three academics and 50 international venture managers was conducted to assess the questionnaire's efficacy. The collected data underwent analysis using Smart partial least squares (PLS) 4 and statistical package for the social sciences (SPSS) 26 software for the pilot study. The results aligned with expectations, prompting the continuation of the data collection process.

The data collection for this research was conducted between August and September 2022, resulting in the acquisition of 303 questionnaires. Out of these, 283 questionnaires targeting SME managers were deemed valid. A total of 20 questionnaires, either incompletely filled or exhibiting the same score for all statements, were excluded from the analysis. Consequently, an effective response rate of approximately 93% was achieved by administering one survey per company.

Firstly, demographic statistics were compiled. The research findings show that 48.76% of the companies have 1–10 employees, 26.83% have 11–49 employees and 24.41% have 50–249 employees. In terms of operational duration, 14.52% of the companies participating in the survey are 1–5 years old, 15.84% are 6–10 years old, 15.51% are 11–15 years old, 17.16% are 16–20 years old and 36.97% have been operating for 20 years or more. Regarding ownership type, 31.02% of the companies are family businesses, and 68.97% are non-family businesses. Concerning the sector they operate in, 52.80% of the companies are in manufacturing, 15.18% are in services, 28.05% are in retail and 3.97% operate in other sectors.

After this initial analysis, further analyses were performed, including structural validity and reliability tests, discriminant validity analyses (Heterotrait-Monotrait (HTMT) ratio, Fornell Larcker criterion and cross-loading model), measurement model evaluations and mediation analyses.

3.3 Construct measurement

The construct items used in this study have been derived based on scales well-grounded in the literature. The survey comprises seven sections with 54 statements. All scales and items are presented in [Appendix](#). The initial four questions of the questionnaire cover the number of employees in the firms, the age of the firms, the type of ownership and the sector in which they operate.

The scales used in the research have been selected from measures validated for reliability and validity, exhibiting high factor loadings in three different studies ([Allinson and Hayes, 1996](#); [Mostafiz et al., 2019c](#)). The scales have been rated on a seven-point Likert scale, with the response categories ranging from 1 = strongly disagree to 7 = strongly agree.

The *first scale* used as an independent variable is the cognitive styles scale, adapted from the dimensions of rational and intuitive cognitive styles presented in the work by [Allinson and Hayes \(1996\)](#). This scale, also known as the cognitive style index, was primarily designed for use in managerial and professional groups, yet its successful application has also been documented in studies with students and non-managerial employees. Each of these dimensions comprises 10 statements. In addition, the validity and reliability of this scale have previously been tested in various studies ([Allinson et al., 2000](#)).

The *second scale* used in this research, serving as both an independent variable and a mediating variable, is the dynamic managerial capabilities scale, adapted from the studies conducted by [Mostafiz et al. \(2019b; 2019c\)](#). This scale encompasses the dimensions of managerial human capital (4 statements), managerial social capital (13 statements) and managerial cognition (7 statements). The validity and reliability of this scale have been tested in various studies conducted in emerging economies ([Mostafiz et al., 2019c](#)). The selection of this scale is informed by the research context being set in an emerging economy and the fact that these scales have previously undergone testing within the context of emerging economies in prior research.

The *final scale* used as the dependent variable is the perceived international performance scale, adapted from the research conducted by [Mostafiz et al. \(2021\)](#). This scale is composed of six statements. Variables such as financial performance, non-financial performance, perceived international performance and innovation performance are present when measuring companies' performance. While financial performance is designated an objective

measurement criterion in research, international performance is evaluated within the scope of subjective or perceived performance (Solano Acosta *et al.*, 2018). This study aims to measure information related to the firms' non-financial perceived international performance.

We have examined factor loadings, weights, *t*-values, variance inflation factors (VIF) (Kock, 2015) and *p*-values in the construct measurement. The results of these analyses are presented in Table 1. The fact that the *p*-values for all 27 statements are less than 0.05 indicates that all the items used in our model are statistically significant (Hair *et al.*, 2010; Greenland *et al.*, 2016).

In its original form, excluding demographic questions, the questionnaire consists of 50 items, and the analysis was initiated with this number of items. The reliability values were obtained once the validity threshold was surpassed, and 23 items with low factor loadings were excluded from the analysis. The 27 items arrived at as a result of the analysis are provided in Table 1.

3.4 Construct validity and reliability

Construct validity accurately represents the theoretical construct by a set of computed statements (Cole and Maxwell, 1985; Pedhazur and Schmelkin, 1991). Cronbach's alpha, used to assess internal consistency and reliability, gauges the similarity of indicator loadings,

Construct	Item	Load	Weight	<i>t</i> stat	VIF	<i>p</i> - values	
Rational and intuitive cognitive styles	RCS1	0.853	0.212	23.268	3,260	0.000	
	RCS2	0.926	0.230	34.208	4,609	0.000	
	RCS4	0.873	0.217	22.579	4,473	0.000	
	RCS5	0.875	0.218	23.225	3,867	0.000	
	RCS9	0.897	0.223	26.587	4,996	0.000	
	ICS1	0.777	0.181	13.624	3,322	0.000	
	ICS2	0.694	0.161	7.761	1,825	0.000	
	ICS4	0.811	0.189	15.837	6,423	0.000	
	ICS5	0.845	0.197	12.393	3,488	0.000	
	ICS6	0.944	0.220	34.633	7,503	0.000	
	ICS9	0.902	0.210	22.907	2,772	0.000	
	Managerial human capital, managerial social capital and managerial cognition	MHC2	0.853	0.403	21.832	1,536	0.000
		MHC3	0.769	0.364	14.694	3,425	0.000
MHC4		0.794	0.375	16.442	3,372	0.000	
MSC1		0.888	0.543	20.587	2,354	0.000	
MSC2		0.854	0.523	18.026	2,354	0.000	
MC1		0.906	0.234	28.783	2,861	0.000	
MC2		0.633	0.163	13.670	6,528	0.000	
MC3		0.650	0.168	14.191	5,357	0.000	
MC4		0.670	0.173	17.153	5,472	0.000	
MC5		0.934	0.241	22.539	5,676	0.000	
MC7		0.866	0.224	22.760	4,617	0.000	
Perceived international performance	PIP1	0.999	0.189	46.718	7,089	0.000	
	PIP2	0.942	0.178	36.997	5,208	0.000	
	PIP3	0.949	0.180	55.697	10,897	0.000	
	PIP4	0.871	0.165	43.880	14,073	0.000	
	PIP5	0.909	0.172	51.467	9,963	0.000	
	PIP6	0.922	0.175	56.433	13,337	0.000	

Note: A bootstrap (5,000 sub-samples) was used to estimate loadings, weights, *t*-statistics, VIF and *p*-values for each construct operationalized in a structured questionnaire

Source: Created by authors

Table 1.
Measurement model

MRR

ensuring robustness in the analysis (Hair *et al.*, 2014; Hair *et al.*, 2019). In this study, data was split into two segments to calculate correlation coefficients, resulting in an average value equivalent to Cronbach's alpha – a widely acknowledged measure of scale reliability (Field, 2009).

It's widely accepted in the literature that a Cronbach's alpha value exceeding 0.7 signifies significant reliability (Hair *et al.*, 2010). When examining Table 2, Cronbach's alpha value has been calculated individually for multiple variables. Cronbach's alpha value is considered above the sufficient level due to its value > 0.7 (Nunnally, 1978).

3.5 Discriminant validity

Discriminant validity is used to determine the level of difference between structures that are conceptually quite similar (Campbell and Fiske, 1959; Henseler *et al.*, 2014). To ascertain discriminant validity, we used criteria such as internal consistency (Cronbach's alpha), construct validity (cross loading), convergent validity (average variance extracted [AVE]), discriminant validity, Fornell–Larcker criterion and HTMT ratio. In PLS-SEM analysis, the measurement model was evaluated as a priority. Our goal is to determine the extent to which the questions posed to respondents load onto the hypothesized structure.

The criterion proposed by Fornell and Larcker (1981) specifies that the square root of the AVE values of the dimensions included in the analysis should be higher than their correlation. The values in Table 2 indicate that the square root of the AVE value for each dimension is higher than its correlation with other dimensions. The AVE values, regarded as the average variance for all variables, exceed the threshold value for average variance (AVE > 0.50) (Hair *et al.*, 2010; Henseler *et al.*, 2014). Consequently, it can be accepted that the criterion suggested by Fornell and Larcker (1981) for discriminant validity is met (see Table 3).

Table 2.
Reliability
coefficients of the
scales

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
RCS	0.947	0.948	0.960	0.826
ICS	0.929	0.939	0.945	0.743
MHC	0.850	0.859	0.908	0.768
MSC	0.863	0.867	0.936	0.879
MC	0.912	0.915	0.931	0.694
PIP	0.976	0.977	0.981	0.894

Source: Created by authors

Table 3.
Fornell Larcker
criterion

Variables	RCS	ICS	PIP	MC	MSC	MHC
RCS	0.909					
ICS	0.783	0.862				
PIP	0.402	0.363	0.945			
MC	0.457	0.465	0.712	0.833		
MSC	0.591	0.464	0.203	0.310	0.938	
MHC	0.486	0.400	0.186	0.245	0.479	0.876

Source: Created by authors

3.6 Heterotrait-Monotrait ratio rate

The Heterotrait-Monotrait ratio in our analysis represents the ratio of the average value of correlations of all statements possessed by all variables in our analysis to the geometric mean of the correlations of the statements possessed by the same variable (Netemeyer *et al.*, 2003). In the literature, it has been found that the HTMT ratio is evaluated within specific threshold values. If the values are in dimensions close to each other in content, it is stipulated that they should be less than 0.90, and if they are in distant dimensions, they should be less than 0.85 (Henseler *et al.*, 2014). The HTMT ratios are provided in Table 4.

The results of the HTMT analysis are below the threshold values generally accepted in the literature. Therefore, it can be stated that the HTMT criteria recommended by Henseler *et al.* (2014) have been met. The models, where discriminant validity is accepted, have been interpreted considering these values. Once it was determined that they represented good and fit models, the hypotheses built on the model were tested.

The common method bias (CMB) issue refers to the shared variance due to similar methods used to collect variables within the research model, which can lead to biased results (Podsakoff *et al.*, 2003). To mitigate this bias in our study, we conducted a variance measurement with the help of SPSS using the confirmatory factor analysis (CFA) marker technique (Spector *et al.*, 2019; Jordan and Troth, 2020). The first factor's variance interpretation was 36.115% of the overall variance, which is below 40%. Consequently, our study has no CMB issue (Lindell and Whitney, 2001; Chang *et al.*, 2010; Kock, 2015).

4. Results

4.1 Structural equation modelling

This study used the PLS-SEM method to calculate direct, indirect and mediation effects within a defined complex model. SEM is recognized as a statistical technique aimed at testing and evaluating theoretical models of complex relationships among variables (Hair *et al.*, 2014; Hair *et al.*, 2019). Furthermore, PLS-SEM has been endorsed as an appropriate tool in international business and entrepreneurship research (Solano Acosta *et al.*, 2018).

The selection of this modelling technique is grounded on four main rationales:

- (1) Firstly, existing discussions related to PLS underscore its capabilities in modelling formative indicators (Hair *et al.*, 2019) and estimating mediation effects (Nitzl *et al.*, 2016).
- (2) Secondly, PLS-SEM is not constrained by restrictive assumptions about multivariate normal distribution (Solano Acosta *et al.*, 2018; Hair *et al.*, 2019).
- (3) Thirdly, the literature advises such a data analysis approach when the dependent variable in our study is both exploratory and causal-predictive (Shmueli *et al.*, 2019).

Variables	RCS	ICS	PIP	MC	MSC	MHC
RCS						
ICS	0.834					
PIP	0.417	0.382				
MC	0.486	0.502	0.737			
MSC	0.652	0.512	0.218	0.341		
MHC	0.533	0.443	0.194	0.264	0.566	

Source: Created by authors

Table 4.
HTMT rate

- (4) Lastly, PLS-SEM can handle complex models and simultaneously alleviate data requirements and relational characteristics (Hair *et al.*, 2014; Hair *et al.*, 2019).

In this research, a two-stage approach was adopted to analyse and interpret the PLS results:

- (1) evaluating the outer model (measurement); and
- (2) estimating the inner model (structural).

In the measurement model, rational cognitive styles, intuitive cognitive styles, managerial human capital, managerial social capital and managerial cognition constitute independent (exogenous) variables, while perceived international performance represents the dependent (endogenous) variable. In addition, managerial human capital, social capital and cognition have been used as mediating variables. Figure 2 displays the outcomes of the measurement model.

The PLS algorithm and a blindfolding analysis were used to ascertain linearity and path coefficients in the measurement model (Schumacker and Lomax, 2010). This analysis involves generating 5,000 subsamples from the original sample and calculating *t* and *p* values using the bootstrapping resampling technique. The primary objective of this technique is to measure the significance of the PLS path coefficients (Ullman, 2001). Our test was conducted using a 97.5% upper confidence interval, with significant/acceptable results noted at *p* (<0.05), *t* (>1.96) and $\beta > 0$ (original sample). According to Figure 2, the model includes 6 constructs and 11 path coefficients.

The analysis *firstly* demonstrates that the effect of rational cognitive styles on perceived international performance is statistically significant and positive (*t*-values: 2.051, *p*-value: 0.040 and β coefficient: 0.246). Furthermore, the influence of rational cognitive styles on managerial human capital shows positive results (*t*-values: 5.201, *p*-value: 0.000 and β coefficient: 0.543). Similarly, when considering the impact of rational cognitive styles on managerial social capital (*t*-values: 7.507, *p*-value: 0.000 and β coefficient: 0.725), it is evident that there is a statistically significant and potent effect. In addition, the impact of rational cognitive styles on managerial cognition has been identified as statistically significant and positive (*t*-values: 1.952, *p*-value: 0.051 and β coefficient: 0.247). However, the influence of

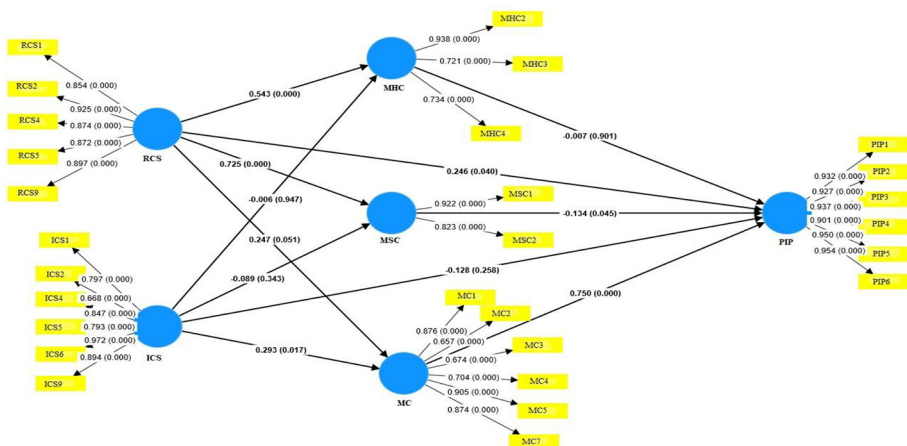


Figure 2. Measurement model

Source: Created by authors

rational cognitive styles on managerial cognition should be cautiously assessed. The analysis results of *H1c* are very close to the 5% margin of error. Considering the 10% significance level, it can be said that this hypothesis is supported.

Secondly, a significant effect of intuitive cognitive styles on managerial cognition has been identified (*t*-values: 2.395, *p*-value: 0.017 and β coefficient: 0.293). Moreover, the influence of managerial cognition on perceived international performance (*t*-values: 17.412, *p*-value: 0.000, β coefficient: 0.750) has been determined to be statistically significant and positively oriented. Finally, the effect of managerial social capital on perceived international performance (*t*-values: 2.005, *p*-value: 0.045, β coefficient: -0.134) has been established as statistically significant and negatively oriented. For other identified paths, no significant results have been obtained because *t*-values are under 1.96 and *p*-values are above 0.05. Table 5 displays the results of direct relationships in the structural model, including path coefficients, *t*-values and significance levels.

4.2 Mediating analysis

The mediating analysis explores how an independent variable affects a dependent variable indirectly through a mediating variable (Iacobucci, 2008). Among six conceptualized mediating hypotheses for rational and intuitive cognitive styles, only the intuitive cognitive styles (ICS) > managerial cognition (MC) > perceived international performance (PIP) pathway is statistically significant ($\beta = 0.225$; $p = 0.019$), validating *H9c*. Managerial cognition completely mediates the impact of managers' intuitive cognitive styles on perceived international performance. The other five hypotheses are not statistically significant, as their *t*-values are below the threshold of 1.96 (Hair et al., 2014). The remaining hypotheses, namely, *H8a*, *H8b*, *H8c*, *H9a* and *H9b*, are not supported in Table 6.

5. Discussion and implications

5.1 Theoretical implications

This research has investigated the relationships among cognitive styles, dynamic managerial capabilities and the perceived international performance of SMEs. The theoretical contributions of the study can be summarized under several headings. *Firstly*, the research findings indicate that rational cognitive styles positively impact managerial human capital, social capital, cognition and perceived international performance. According to the

Hypotheses	Original sample	Sample mean	SD	<i>t</i> statistics	<i>p</i> - values	Decision
<i>H1a</i> : RCS>MHC	0.543	0.531	0.104	5.201	0.000	Supported
<i>H1b</i> : RCS>MSC	0.725	0.722	0.097	7.507	0.000	Supported
<i>H1c</i> : RCS>MC	0.247	0.250	0.127	1.952	0.051**	Supported
<i>H2</i> : RCS>PIP	0.246	0.239	0.120	2.051	0.040	Supported
<i>H3a</i> : ICS>MHC	-0.006	0.001	0.095	0.067	0.947	Not supported
<i>H3b</i> : ICS>MSC	-0.089	-0.087	0.093	0.948	0.343	Not supported
<i>H3c</i> : ICS>MC	0.293	0.286	0.123	2.395	0.017	Supported
<i>H4</i> : ICS>PIP	-0.128	-0.123	0.113	1.132	0.258	Not supported
<i>H5</i> : MHC>PIP	-0.007	-0.010	0.055	0.125	0.901	Not supported
<i>H6</i> : MSC>PIP	-0.134	-0.132	0.067	2.005	0.045	Supported
<i>H7</i> : MC>PIP	0.750	0.754	0.043	17.412	0.000	Supported

Notes: *A bootstrap (5,000 sub-samples) was used to assess path coefficients; **10% significance level

Source: Created by authors

Table 5.
Model path coefficients

study results, hypotheses *H1a*, *H1b*, *H1c* and *H2* related to the effects of rational cognitive styles have been supported. From this perspective, our findings are in alignment with both empirical (Goll and Rasheed, 1997; Haarhaus and Liening, 2020; Niittymies and Pajunen, 2020; Betty Feng *et al.*, 2023) and theoretical (Eisenhardt and Martin, 2000; Hodgkinson and Healey, 2011; Teece, 2014; Helfat and Peteraf, 2015) studies suggesting a positive linkage between rational cognitive styles, dynamic managerial capabilities and perceived international performance. Accordingly, it has been found that rational cognitive styles may be predecessors to perceived international performance and dynamic managerial capabilities. In this context, in Türkiye, a developing economy, analytical and rational aspects of managerial cognition stand out as the cognitive style that significantly impacts the relations between dynamic managerial capabilities and perceived international performance.

The study found that intuitive cognitive styles have a statistically significant and positive impact on managerial cognition, but they do not influence perceived international performance, managerial social capital or managerial human capital. These findings support hypothesis *H3c* about intuitive cognitive styles. Moreover, the research results align with past empirical studies (Agor, 1986; Allinson *et al.*, 2000; Sadler-Smith and Shefy, 2004; Armstrong and Hird, 2009; De Visser and Faems, 2015). However, hypotheses *H3a*, *H3b* and *H4* were not supported. From this perspective, the study's findings suggest that intuitive cognitive styles may be the predecessor to managerial cognition. When the effect of rational cognitive styles on managerial human capital, managerial social capital and perceived international performance is compared, it is seen that the impact of intuitive cognitive styles is not on these variables. This observation is intriguing, especially considering the prevalence of analytical tendencies among SME managers. This emphasis on analytical aspects may stem from the necessity for accurate information and data, rather than relying on intuition-driven knowledge, particularly within Türkiye's emerging economy during a turbulent phase. Further testing within Türkiye's evolving landscape could provide additional insights into these results.

Secondly, the results regarding dynamic managerial capabilities show that managerial human capital has no impact on perceived international performance. In this regards, the research findings corroborate those of some past studies (Bhagavatula *et al.*, 2010; Mostafiz *et al.*, 2019b) yet contradict others (Haber and Reichel, 2007; Dimov, 2010). This discrepancy may result from the individual skills, knowledge, capabilities and experiences assessed under managerial human capital generating different effects on SMEs in developed and developing countries. It can also be considered that, in developing economies, the lack of managerial experience and training across other sectors among executives might be a factor. In contrast, in developed countries, entrepreneurship training programs are widely

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	<i>p</i> - values
<i>H8a</i> : RCS → MHC → PIP	-0.003	-0.005	0.031	0.106	0.916
<i>H8b</i> : RCS → MSC → PIP	-0.094	-0.093	0.053	1.786	0.074
<i>H8c</i> : RCS → MC → PIP	0.178	0.181	0.093	1.919	0.055
<i>H9a</i> : ICS → MHC → PIP	0.000	-0.000	0.005	0.007	0.994
<i>H9b</i> : ICS → MSC → PIP	0.011	0.012	0.016	0.732	0.464
<i>H9c</i> : ICS → MC → PIP	0.225	0.222	0.096	2.356	0.019

Table 6.
Summary of the
mediating effects

Source: Created by authors

implemented during and after formal education, unlike in developing economies. Moreover, in developing countries like Türkiye, most SME managers cannot renew their firm's resource and capability bases due to limitations in innovative activities, making it difficult for these managers to gain experience in different industries.

The findings related to managerial social capital indicate that this form of capital has a negative impact on perceived international performance. In this regard, hypothesis *H6* is supported. Our results confirm the findings of past research (Goerzen, 2007). This negative impact might stem from SME managers excessively relying on personal knowledge resources in international operations, possibly due to challenges in accessing international markets (Adobor, 2006). The inconsistencies in export activities could also contribute to this outcome. Notably, some studies have shown no impact of managerial social capital on perceived international performance (Kryeziu *et al.*, 2024), while others have demonstrated that social networking capabilities positively reflect on SMEs' international performance (Felicio *et al.*, 2014; Solano Acosta *et al.*, 2018). Hence, it is apparent that further testing is needed in different contexts regarding outcomes related to managerial social capital and perceived international performance.

The research findings indicate that managerial cognition positively influences perceived international performance. The empirical evidence supports *H7*, thereby validating the outcomes of previous studies (Felicio *et al.*, 2014; Khan *et al.*, 2020; Kryeziu *et al.*, 2024). These findings illustrate that managerial cognitive capabilities are a significant antecedent in identifying opportunities in international markets and the firm's perceived international performance. However, these results contradict some past research (Nedzinskas *et al.*, 2013). This discrepancy may stem from measuring sensing, seizing and reconfiguring capabilities as a single variable (Nedzinskas *et al.*, 2013). The divergence of findings from those of Tabares *et al.* (2023) in emerging economies is intriguing, possibly hinting at the impacts of institutional heterogeneity between the two countries. Therefore, the relationship between managerial cognition and perceived international performance must be tested with different variables and in various contexts. According to the results, the study provides insights that managerial cognition and social capital, among dynamic managerial capabilities, may be predecessors to perceived international performance among SMEs.

Thirdly, in examining the mediating relationship between rational and intuitive styles and perceived international performance, the results confirm the full mediating role of managerial cognition in the relationship between intuitive cognitive styles and perceived international performance. This finding supports *H9c* and aligns with previous empirical studies (Faiz Masnan and Saad, 2018; Rodríguez-Serrano and Martín-Armario, 2017; Buccieri, 2020; Santhosh and Bala Subrahmanya, 2020; Zhe *et al.*, 2022). However, *H8a*, *H8b*, *H8c*, *H9a* and *H9b* are not statistically significant.

5.2 Managerial implications

This study has significant implications for managerial practice. *Firstly*, the findings highlight that managers rely on a knowledge-based cognitive structure in their companies' international operations rather than solely depending on their own experiences. It is recommended that managers enhance their awareness of the potential benefits derived from intuition and experience-based inferences.

Secondly, the impacts of rational cognitive styles on managerial social capital and human capital have been identified. This suggests that a knowledge-nourished cognitive structure effectively shapes the social capital of SME managers in developing economies. It is recommended that SME managers in emerging economies understand the importance of social capital and invest in informal relationship patterns with politicians, bureaucrats,

scientists and various strategic alliances. In addition, managers should place importance on connections within trade and industry chambers to access information through these links.

From this perspective, creating a decentralized managerial structure and organizational design that facilitates the flow of information inside and outside the firm could contribute to developing managerial social capital (Andrews, 2010). Furthermore, it is acknowledged that managerial social capital is influential in the perceived international performance of SMEs, and managers are recommended to strengthen their social capital in international operations (Pinho, 2011).

Thirdly, the acknowledgment that managerial cognition can facilitate the recognition of international opportunities (Andersson and Evers, 2015) underscores its potential influence on firms' perceived international performance. Research in this area emphasizes that the cognitive processes of managers and entrepreneurs contribute significantly to the design of firm-level internationalization strategies and performance, urging managers to consider these processes (Martins, 2023). *Fourthly*, managers should recognize that dynamic managerial capabilities may be associated with perceived international performance and early successful internationalization, urging them to focus on developing these capabilities (Vuorio and Torkkeli, 2023).

Finally, managers are encouraged to embrace transboundary technologies such as social media, online communities and wikis to enhance their skills (human capital), relationships (social capital) and knowledge structures (cognition). This approach can facilitate the decision-making process for managers in complex, uncertain and turbulent business environments, thereby contributing to the overall performance of the firms (Heubeck, 2023).

5.3 Research limitations and future research

Like all research, this study has limitations and offers suggestions for future research. *Firstly*, the focus on individual-level variables such as cognitive styles and dynamic managerial capabilities provides insights into their impact on SMEs' perceived international performance. However, it does not delve into the institutional context affecting SMEs' perceived international performance. Numerous studies have demonstrated that the institutional context significantly influences managers' decision-making processes and SME performance (Kalinic and Brouthers, 2021; Tajeddin *et al.*, 2023). Therefore, future research could explore the relationship between the institutional context and SMEs' perceived international performance.

Secondly, our research did not incorporate managers' cognitive biases, cognitive maps and schemas. Considering that managers' cognitive biases are likely to influence their cognitive styles and decision-making processes (Hristov *et al.*, 2022), future research could investigate the impact of managers' cognitive biases on cognitive styles, dynamic managerial capabilities and firms' perceived international performance, grounded in cognitive psychology. *Thirdly*, this study provides a cross-sectional view of SMEs' perceived international performance. Consequently, future research could adopt a longitudinal approach to examine the perceived international performance of SMEs over time. *Fourthly*, the research sample is limited to SMEs in Türkiye, posing constraints on both sample size and generalizability. While the sample represents a developing economy, its applicability to other developing economies may be limited due to the heterogeneity of institutional contexts between countries (North, 1990; Acemoglu and Robinson, 2021). Therefore, future studies could consider testing the proposed model in different countries.

Finally, the performance variables in this study include financial performance, non-financial performance, international performance, R&D performance, sustainability performance, export performance and innovation performance. Financial performance is

considered an objective measurement criterion, whereas international performance is evaluated subjectively or in terms of perceived performance (Solano Acosta *et al.*, 2018). Future research may explore the measurement of various performance types, such as financial performance, non-financial performance, R&D performance, sustainability performance, export performance and innovation performance.

References

- Aamir, M., Sarfraz, M., Khawaja, K.F., Usman, H. and Hu, Z. (2021), "Signifying the effect of relational and experiential cognitive styles on entrepreneurial behavior: a mediated moderated model", *Frontiers in Psychology*, Vol. 12, p. 762403, doi: [10.3389/fpsyg.2021.762403](https://doi.org/10.3389/fpsyg.2021.762403).
- Åberg, C. and Torchia, M. (2020), "Do boards of directors foster strategic change? A dynamic managerial capabilities perspective", *Journal of Management and Governance*, Vol. 24 No. 3, pp. 655-684, doi: [10.1007/s10997-019-09462-4](https://doi.org/10.1007/s10997-019-09462-4).
- Abubakar, A.M., Elrehail, H., Alatailat, M.A. and Elçi, A. (2019), "Knowledge management, decision-making style and organizational performance", *Journal of Innovation and Knowledge*, Vol. 4 No. 2, pp. 104-114, doi: [10.1016/j.jik.2017.07.003](https://doi.org/10.1016/j.jik.2017.07.003).
- Acedo, F.J. and Jones, M.V. (2007), "Speed of internationalization and entrepreneurial cognition: insights and a comparison between international new ventures, exporters and domestic firms", *Journal of World Business*, Vol. 42 No. 3, pp. 236-252, doi: [10.1016/j.jwb.2007.04.012](https://doi.org/10.1016/j.jwb.2007.04.012).
- Acemoglu, D. and Robinson, J. (2021), "Culture, institutions and social equilibria: a framework", *SSRN Electronic Journal*, doi: [10.3386/w28832](https://doi.org/10.3386/w28832).
- Acquaah, M. (2007), "Managerial social capital, strategic orientation, and organizational performance in an emerging economy", *Strategic Management Journal*, Vol. 28 No. 12, pp. 1235-1255, doi: [10.1002/smj.632](https://doi.org/10.1002/smj.632).
- Adner, R. and Helfat, C.E. (2003), "Corporate effects and dynamic managerial capabilities", *Strategic Management Journal*, Vol. 24 No. 10, pp. 1011-1025, doi: [10.1002/smj.331](https://doi.org/10.1002/smj.331).
- Adobor, H. (2006), "The role of personal relationships in inter-firm alliances: benefits, dysfunctions, and some suggestions", *Business Horizons*, Vol. 49 No. 6, pp. 473-486, doi: [10.1016/j.bushor.2006.03.003](https://doi.org/10.1016/j.bushor.2006.03.003).
- Agor, W.H. (1986), "The logic of intuition: how top executives make important decisions", *Organizational Dynamics*, Vol. 14 No. 3, pp. 5-18, doi: [10.1016/0090-2616\(86\)90028-8](https://doi.org/10.1016/0090-2616(86)90028-8).
- Akinci, C. and Sadler-Smith, E. (2013), "Assessing individual differences in experiential (intuitive) and rational (analytical) cognitive styles", *International Journal of Selection and Assessment*, Vol. 21 No. 2, pp. 211-221, doi: [10.1111/ijssa.12030](https://doi.org/10.1111/ijssa.12030).
- Allinson, C.W. and Hayes, J. (1996), "The cognitive style index: a measure of intuition-analysis for organizational research", *Journal of Management Studies*, Vol. 33 No. 1, pp. 119-135, doi: [10.1111/j.1467-6486.1996.tb00801.x](https://doi.org/10.1111/j.1467-6486.1996.tb00801.x).
- Allinson, C.W., Chell, E. and Hayes, J. (2000), "Intuition and entrepreneurial behaviour", *European Journal of Work and Organizational Psychology*, Vol. 9 No. 1, pp. 31-43, doi: [10.1080/135943200398049](https://doi.org/10.1080/135943200398049).
- AlShehhi, M.R., Cherian, J.P., Farouk, S. and Al Nahyan, M. (2022), "Influential dynamic capabilities and small and medium enterprises' internationalization success: mediating role of international entrepreneurial orientation", *Review of International Business and Strategy*, Vol. 33 No. 1, pp. 55-78, doi: [10.1108/ribs-12-2021-0171](https://doi.org/10.1108/ribs-12-2021-0171).
- Ambrosini, V. and Altintas, G. (2019), "Dynamic managerial capabilities", *Oxford Research Encyclopedia of Business and Management*, pp. 1-18, doi: [10.1093/acrefore/9780190224851.013.20](https://doi.org/10.1093/acrefore/9780190224851.013.20).
- Andersson, S. and Evers, N. (2015), "International opportunity recognition in international new ventures: a dynamic managerial capabilities perspective", *Journal of International Entrepreneurship*, Vol. 13 No. 3, pp. 260-276, doi: [10.1007/s10843-015-0149-5](https://doi.org/10.1007/s10843-015-0149-5).
- Andrews, R. (2010), "Organizational social capital, structure and performance", *Human Relations*, Vol. 63 No. 5, pp. 583-608, doi: [10.1177/0018726709342931](https://doi.org/10.1177/0018726709342931).

-
- Armstrong, S.J. and Hird, A. (2009), "Cognitive style and entrepreneurial drive of new and mature business owner-managers", *Journal of Business and Psychology*, Vol. 24 No. 4, pp. 419-430, doi: [10.1007/s10869-009-9114-4](https://doi.org/10.1007/s10869-009-9114-4).
- Bağış, M., Altınay, L., Kryeziu, L., Kurutkan, M.N. and Karaca, V. (2023), "Institutional and individual determinants of entrepreneurial intentions: evidence from developing and transition economies", *Review of Managerial Science*, Vol. 18 No. 3, pp. 1-30, doi: [10.1007/s11846-023-00626-z](https://doi.org/10.1007/s11846-023-00626-z).
- Bağış, M., Kryeziu, L., Akbaba, Y., Ramadani, V., Karagüzel, E.S. and Krasniqi, B.A. (2022), "The micro-foundations of a dynamic technological capability in the automotive industry", *Technology in Society*, Vol. 70, p. 102060, doi: [10.1016/j.techsoc.2022.102060](https://doi.org/10.1016/j.techsoc.2022.102060).
- Baldacchino, L. (2019), "Intuition in entrepreneurial cognition", in Caputo, A. and Pellegrini, M.M. (Eds), *The Anatomy of Entrepreneurial Decisions. Contributions to Management Science*, Springer, Cham, doi: [10.1007/978-3-030-19685-1_3](https://doi.org/10.1007/978-3-030-19685-1_3).
- Becker, G. (1964), *Human Capital*, University of Chicago Press, Chicago.
- Betty Feng, J., Liu, S.Y. and Anne Liu, L. (2023), "Cognitive antecedents of EMNEs' dynamic capabilities: a case study of global identity at Lenovo", *Journal of Business Research*, Vol. 154, p. 113312, doi: [10.1016/j.jbusres.2022.113312](https://doi.org/10.1016/j.jbusres.2022.113312).
- Bhagavatula, S., Elfring, T., Van Tilburg, A. and Van de Bunt, G.G. (2010), "How social and human capital influence opportunity recognition and resource mobilization in India's handloom industry", *Journal of Business Venturing*, Vol. 25 No. 3, pp. 245-260, doi: [10.1016/j.jrp.2012.12.001](https://doi.org/10.1016/j.jrp.2012.12.001).
- Bosma, N., Van Praag, M., Thurik, R. and De Wit, G. (2004), "The value of human and social capital investments for the business performance of startups", *Small Business Economics*, Vol. 23 No. 3, pp. 227-236, doi: [10.1023/b:sbej.0000032032.21192.72](https://doi.org/10.1023/b:sbej.0000032032.21192.72).
- Boudreau, K. (2010), "Open platform strategies and innovation: granting access vs. devolving control", *Management Science*, Vol. 56 No. 10, pp. 1849-1872, doi: [10.1287/mnsc.1100.1215](https://doi.org/10.1287/mnsc.1100.1215).
- Buccieri, D. (2020), "International entrepreneurial culture, innovation differentiation strategy and early internationalisation: evidence from Indian born globals", *International Journal of Services, Economics and Management*, Vol. 11 No. 3, p. 274, doi: [10.1504/ijsem.2020.111198](https://doi.org/10.1504/ijsem.2020.111198).
- Burt, R.S. (1992), *Structural Holes: Social Structure of Competition*, Harvard University Press, Cambridge.
- Calabretta, G., Gemser, G. and Wijnberg, N.M. (2017), "The interplay between intuition and rationality in strategic decision making: a paradox perspective", *Organization Studies*, Vol. 38 Nos 3/4, pp. 365-401, doi: [10.1177/0170840616655483](https://doi.org/10.1177/0170840616655483).
- Campbell, D.T. and Fiske, D.W. (1959), "Convergent and discriminant validation by the multitrait-multimethod matrix", *Psychological Bulletin*, Vol. 56 No. 2, pp. 81-105, doi: [10.1037/h0046016](https://doi.org/10.1037/h0046016).
- Chang, S.J., Van Witteloostuijn, A. and Eden, L. (2010), "From the editors: common method variance in international business research", *Journal of International Business Studies*, Vol. 41 No. 2, doi: [10.1057/jibs.2009.88](https://doi.org/10.1057/jibs.2009.88).
- Chen, M., Liu, H., Wei, S. and Gu, J. (2018), "Top managers' managerial ties, supply chain integration, and firm performance in China: a social capital perspective", *Industrial Marketing Management*, Vol. 74, pp. 205-214, doi: [10.1016/j.indmarman.2018.04.013](https://doi.org/10.1016/j.indmarman.2018.04.013).
- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M. and Zaim, S. (2019), "Corporate governance and firm performance in emerging markets: evidence from Turkey", *International Business Review*, Vol. 28 No. 1, pp. 90-103, doi: [10.1016/j.ibusrev.2018.08.004](https://doi.org/10.1016/j.ibusrev.2018.08.004).
- Cole, D.A. and Maxwell, S.E. (1985), "Multitrait-multimethod comparisons across populations: a confirmatory factor analytic approach", *Multivariate Behavioral Research*, Vol. 20 No. 4, pp. 389-417, doi: [10.1207/s15327906mbr2004_3](https://doi.org/10.1207/s15327906mbr2004_3).
- Coviello, N.E. and McAuley, A. (1999), "Internationalisation and the smaller firm: a review of contemporary empirical research", *MIR: Management International Review*, Vol. 39 No. 3, pp. 223-256, available at: www.jstor.org/stable/40835788

- De Visser, M. and Faems, D. (2015), "Exploration and exploitation within firms: the impact of CEOs' cognitive style on incremental and radical innovation performance", *Creativity and Innovation Management*, Vol. 24 No. 3, pp. 359-372, doi: [10.1111/caim.12137](https://doi.org/10.1111/caim.12137).
- Demirbag, M., Collings, D.G., Tatoglu, E., Mellahi, K. and Wood, G. (2014), "High-performance work systems and organizational performance in emerging economies: evidence from MNEs in Turkey", *Management International Review*, Vol. 54 No. 3, pp. 325-359, doi: [10.1007/s11575-014-0204-9](https://doi.org/10.1007/s11575-014-0204-9).
- Demirbag, M., Glaister, K.W. and Tatoglu, E. (2007), "Institutional and transaction cost influences on MNEs' ownership strategies of their affiliates: evidence from an emerging market", *Journal of World Business*, Vol. 42 No. 4, pp. 418-434, doi: [10.1016/j.jwb.2007.06.004](https://doi.org/10.1016/j.jwb.2007.06.004).
- Dhami, M.K. and Thomson, M.E. (2012), "On the relevance of cognitive continuum theory and quasirationality for understanding management judgment and decision making", *European Management Journal*, Vol. 30 No. 4, pp. 316-326, doi: [10.1016/j.emj.2012.02.002](https://doi.org/10.1016/j.emj.2012.02.002).
- Dimov, D. (2010), "Nascent entrepreneurs and venture emergence: opportunity confidence, human capital, and early planning", *Journal of Management Studies*, Vol. 47 No. 6, pp. 1123-1153, doi: [10.1111/j.1467-6486.2009.00874.x](https://doi.org/10.1111/j.1467-6486.2009.00874.x).
- Doyle, W., Fisher, R. and Young, J.D. (2002), "Entrepreneurs: relationships between cognitive style and entrepreneurial drive", *Journal of Small Business and Entrepreneurship*, Vol. 16 No. 2, pp. 2-20, doi: [10.1080/08276331.2002.10593300](https://doi.org/10.1080/08276331.2002.10593300).
- Eggers, J.P., and; Kaplan, S. (2009), "Cognition and renewal: comparing CEO and organizational effects on incumbent adaptation to technical change", *Organization Science*, Vol. 20 No. 2, pp. 461-477, doi: [10.1287/orsc.1080.0401](https://doi.org/10.1287/orsc.1080.0401).
- Eisenhardt, K.M. and Martin, J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, Vol. 21 Nos 10/11, pp. 1105-1121, doi: [10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E).
- Elbanna, S. (2006), "Strategic decision-making: process perspectives", *International Journal of Management Reviews*, Vol. 8 No. 1, pp. 1-20, doi: [10.1111/j.1468-2370.2006.00118.x](https://doi.org/10.1111/j.1468-2370.2006.00118.x).
- Epstein, S. (1994), "Integration of the cognitive and the psychodynamic unconscious", *American Psychologist*, Vol. 49 No. 8, pp. 709-724, doi: [10.1037/0003-066X.49.8.709](https://doi.org/10.1037/0003-066X.49.8.709).
- Epstein, S. (2003), "Cognitive-experiential self-theory of personality", *Handbook of Psychology*, John Wiley and Sons, Hoboken, NJ, doi: [10.1002/0471264385.wei0507](https://doi.org/10.1002/0471264385.wei0507).
- Epstein, S., Pacini, R., Denes-Raj, V. and Heier, H. (1996), "Individual differences in intuitive-experiential and analytical-rational thinking styles", *Journal of Personality and Social Psychology*, Vol. 71 No. 2, pp. 390-405, doi: [10.1037/0022-3514.71.2.390](https://doi.org/10.1037/0022-3514.71.2.390).
- Eriksson, T., Nummela, N. and Saarenketo, S. (2014), "Dynamic capability in a small global factory", *International Business Review*, Vol. 23 No. 1, pp. 169-180, doi: [10.1016/j.ibusrev.2013.03.007](https://doi.org/10.1016/j.ibusrev.2013.03.007).
- Evans, J.S.B.T. and Stanovich, K.E. (2013), "Dual-process theories of higher cognition: advancing the debate", *Perspectives on Psychological Science*, Vol. 8 No. 3, pp. 223-241, doi: [10.1177/1745691612460685](https://doi.org/10.1177/1745691612460685).
- Faiz Masnan, N.M. and Saad, A.A.R. (2018), "Assessing the implications of dynamic capability and international opportunity recognition on export performance of manufacturing SMEs in Malaysia", *International Journal of Academic Research in Business and Social Sciences*, Vol. 8 No. 8, doi: [10.6007/IJARBS/v8-i8/4474](https://doi.org/10.6007/IJARBS/v8-i8/4474).
- Felicio, J., Couto, E. and Caiado, J. (2014), "Human capital, social capital and organizational performance", *Management Decision*, Vol. 52 No. 2, pp. 350-364, doi: [10.1108/md-04-2013-0260](https://doi.org/10.1108/md-04-2013-0260).
- Felin, T. and Foss, N.J. (2005), "Strategic organization: a field in search of micro-foundations", *Strategic Organization*, Vol. 3 No. 4, pp. 441-455, doi: [10.1177/1476127005055796](https://doi.org/10.1177/1476127005055796).
- Felin, T., Foss, N.J., Heimeriks, K.H. and Madsen, T.L. (2012), "Microfoundations of routines and capabilities: individuals, processes, and structure", *Journal of Management Studies*, Vol. 49 No. 8, pp. 1351-1374, doi: [10.1111/j.1467-6486.2012.01052.x](https://doi.org/10.1111/j.1467-6486.2012.01052.x).

- Felin, T., Foss, N.J. and Ployhart, R.E. (2015), "The microfoundations movement in strategy and organization theory", *Academy of Management Annals*, Vol. 9 No. 1, pp. 575-632, doi: [10.5465/19416520.2015.1007651](https://doi.org/10.5465/19416520.2015.1007651).
- Field, A. (2009), *Discovering Statistics Using SPSS*, 3rd ed, Sage Publications, London.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, p. 382, doi: [10.2307/3150980](https://doi.org/10.2307/3150980).
- Glaister, K.W., Dincer, O., Tatoglu, E. and Demirbag, M. (2009), "A comparison of strategic planning practices in companies from the UK and Turkey", *Journal of Management Development*, Vol. 28 No. 4, pp. 361-379, doi: [10.1108/02621710910947380](https://doi.org/10.1108/02621710910947380).
- Glavas, C., Mathews, S. and Bianchi, C. (2017), "International opportunity recognition as a critical component for leveraging internet capabilities and international market performance", *Journal of International Entrepreneurship*, Vol. 15 No. 1, pp. 1-35, doi: [10.1007/s10843-016-0191-y](https://doi.org/10.1007/s10843-016-0191-y).
- Goerzen, A. (2007), "Alliance networks and firm performance: the impact of repeated partnerships", *Strategic Management Journal*, Vol. 28 No. 5, pp. 487-509, doi: [10.1002/smj.588](https://doi.org/10.1002/smj.588).
- Gölgeci, I., Assadinia, S., Kuivalainen, O. and Larimo, J. (2019), "Emerging-market firms' dynamic capabilities and international performance: the moderating role of institutional development and distance", *International Business Review*, Vol. 28 No. 6, p. 101593, doi: [10.1016/j.ibusrev.2019.101593](https://doi.org/10.1016/j.ibusrev.2019.101593).
- Goll, I. and Rasheed, A.M. (1997), "Rational decision-making and firm performance: the moderating role of the environment", *Strategic Management Journal*, Vol. 18 No. 7, pp. 583-591, doi: [10.1002/\(sici\)1097-0266\(199708\)18:7<583::aid-smj907>3.0.co;2-z](https://doi.org/10.1002/(sici)1097-0266(199708)18:7<583::aid-smj907>3.0.co;2-z).
- Granovetter, M.S. (1973), "The strength of weak ties", *American Journal of Sociology*, Vol. 78 No. 6, pp. 1360-1380, doi: [10.1086/225469](https://doi.org/10.1086/225469).
- Greenland, S., Senn, S.J., Rothman, K.J., Carlin, J.B., Poole, C., Goodman, S.N. and Altman, D.G. (2016), "Statistical tests, *p* values, confidence intervals, and power: a guide to misinterpretations", *European Journal of Epidemiology*, Vol. 31 No. 4, pp. 337-350, doi: [10.1007/s10654-016-0149-3](https://doi.org/10.1007/s10654-016-0149-3).
- Haapanen, L., Hurmelinna-Laukkanen, P. and Puumalainen, K. (2020), "When strategic consensus matters: dynamic managerial capabilities and firm internationalization as seen by TMT", *Cross Cultural and Strategic Management*, Vol. 27 No. 3, pp. 285-315, doi: [10.1108/CCSM-09-2018-0134](https://doi.org/10.1108/CCSM-09-2018-0134).
- Haarhaus, T. and Lening, A. (2020), "Building dynamic capabilities to cope with environmental uncertainty: the role of strategic foresight", *Technological Forecasting and Social Change*, Vol. 155, p. 120033, doi: [10.1016/j.techfore.2020.120033](https://doi.org/10.1016/j.techfore.2020.120033).
- Haber, S. and Reichel, A. (2007), "The cumulative nature of the entrepreneurial process: the contribution of human capital, planning and environment resources to small venture performance", *Journal of Business Venturing*, Vol. 22 No. 1, pp. 119-145, doi: [10.1016/j.jbusvent.2005.09.005](https://doi.org/10.1016/j.jbusvent.2005.09.005).
- Hair, J.F. Jr., Sarstedt, M., Hopkins, L. and Kuppelwieser, V. (2014), "Partial least squares structural equation modeling (PLS-SEM): an emerging tool in business research", *European Business Review*, Vol. 26 No. 2, pp. 106-121, doi: [10.1108/EBR-10-2013-0128](https://doi.org/10.1108/EBR-10-2013-0128).
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, Pearson, New York, NY.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24, doi: [10.1108/EBR-11-2018-0203](https://doi.org/10.1108/EBR-11-2018-0203).
- Hart, S.L. (1992), "An integrative framework for strategy-making processes", *The Academy of Management Review*, Vol. 17 No. 2, pp. 327-351, doi: [10.5465/amr.1992.4279547](https://doi.org/10.5465/amr.1992.4279547).
- Healey, M.P. and Hodgkinson, G.P. (2014), "Rethinking the philosophical and theoretical foundations of organizational neuroscience: a critical realist alternative", *Human Relations*, Vol. 67 No. 7, pp. 765-792, doi: [10.1177/0018726714530014](https://doi.org/10.1177/0018726714530014).

- Helfat, C.E. and Martin, J.A. (2015), "Dynamic managerial capabilities: review and assessment of managerial impact on strategic change", *Journal of Management*, Vol. 41 No. 5, pp. 1281-1312, doi: [10.1177/0149206314561301](https://doi.org/10.1177/0149206314561301).
- Helfat, C.E. and Peteraf, M.A. (2015), "Managerial cognitive capabilities and the microfoundations of dynamic capabilities", *Strategic Management Journal*, Vol. 36 No. 6, pp. 831-850, doi: [10.1002/smj.2247](https://doi.org/10.1002/smj.2247).
- Hendijani, R., Ghafourian, F. and Attari, I. (2023), "The effect of rational-experiential thinking style on stock-flow performance: the mediating role of cognitive reflection", *Current Psychology*, Vol. 42 No. 2, pp. 867-881, doi: [10.1007/s12144-021-01459-3](https://doi.org/10.1007/s12144-021-01459-3).
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2014), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135, doi: [10.1007/s11747-014-0403-8](https://doi.org/10.1007/s11747-014-0403-8).
- Heubeck, T. (2023), "Managerial capabilities as facilitators of digital transformation? Dynamic managerial capabilities as antecedents to digital business model transformation and firm performance", *Digital Business*, Vol. 3 No. 1, p. 100053, doi: [10.1016/j.digbus.2023.100053](https://doi.org/10.1016/j.digbus.2023.100053).
- Heubeck, T. and Meckl, R. (2021), "Antecedents to cognitive business model evaluation: a dynamic managerial capabilities perspective", *Review of Managerial Science*, Vol. 16 No. 8, pp. 2441-2466, doi: [10.1007/s11846-021-00503-7](https://doi.org/10.1007/s11846-021-00503-7).
- Hodgkinson, G.P. and Healey, M.P. (2011), "Psychological foundations of dynamic capabilities: reflexion and reflection in strategic management", *Strategic Management Journal*, Vol. 32 No. 13, pp. 1500-1516, doi: [10.1002/smj.964](https://doi.org/10.1002/smj.964).
- Hodgkinson, G.P. and Healey, M.P. (2014), "Coming in from the cold: the psychological foundations of radical innovation revisited", *Industrial Marketing Management*, Vol. 43 No. 8, pp. 1306-1313, doi: [10.1016/j.indmarman.2014.08.012](https://doi.org/10.1016/j.indmarman.2014.08.012).
- Hodgkinson, G.P. and Sadler-Smith, E. (2003), "Complex or unitary? A critique and empirical re-assessment of the Allinson-Hayes cognitive style index", *Journal of Occupational and Organizational Psychology*, Vol. 76 No. 2, pp. 243-268, doi: [10.1348/096317903765913722](https://doi.org/10.1348/096317903765913722).
- Hodgkinson, G.P., Sadler-Smith, E., Burke, L.A., Claxton, G. and Sparrow, P.R. (2009), "Intuition in organizations: implications for strategic management", *Long Range Planning*, Vol. 42 No. 3, pp. 277-297, doi: [10.1016/j.lrp.2009.05.003](https://doi.org/10.1016/j.lrp.2009.05.003).
- Hristov, I., Camilli, R. and Mechelli, A. (2022), "Cognitive biases in implementing a performance management system: behavioral strategy for supporting managers' decision-making processes", *Management Research Review*, Vol. 45 No. 9, pp. 1110-1136, doi: [10.1108/MRR-11-2021-0777](https://doi.org/10.1108/MRR-11-2021-0777).
- Hurmerinta, L., Nummela, N. and Paavilainen-Mäntymäki, E. (2015), "Opening and closing doors: the role of language in international opportunity recognition and exploitation", *International Business Review*, Vol. 24 No. 6, pp. 1082-1094, doi: [10.1016/j.ibusrev.2015.04.010](https://doi.org/10.1016/j.ibusrev.2015.04.010).
- Iacobucci, D. (2008), "Mediation analysis", *Series: Quantitative Applications in the Social Sciences*, Sage, London.
- Ilhan-Nas, T., Okan, T., Tatoglu, E., Demirbag, M., Wood, G. and Glaister, K.W. (2018), "Board composition, family ownership, institutional distance and the foreign equity ownership strategies of Turkish MNEs", *Journal of World Business*, Vol. 53 No. 6, pp. 862-879, doi: [10.1016/j.jwb.2018.07.006](https://doi.org/10.1016/j.jwb.2018.07.006).
- Jantunen, A., Tuppuru, A. and Pätäri, S. (2022), "Dominant logic – cognitive and practiced facets and their relationships to strategic renewal and performance", *European Management Journal*, Vol. 42 No. 1, doi: [10.1016/j.emj.2022.07.004](https://doi.org/10.1016/j.emj.2022.07.004).
- Jeong, S.W. and Chung, J.-E. (2022), "Enhancing competitive advantage and financial performance of consumer-goods SMEs in export markets: How do social capital and marketing innovation matter?", *Asia Pacific Journal of Marketing and Logistics*, Vol. 35 No. 1, pp. 74-89, doi: [10.1108/apjml-05-2021-0301](https://doi.org/10.1108/apjml-05-2021-0301).

- Jordan, P.J. and Troth, A.C. (2020), "Common method bias in applied settings: the dilemma of researching in organizations", *Australian Journal of Management*, Vol. 45 No. 1, pp. 3-14, doi: [10.1177/0312896219871976](https://doi.org/10.1177/0312896219871976).
- Kahneman, D. (2003), "A perspective on judgment and choice: mapping bounded rationality", *American Psychologist*, Vol. 58 No. 9, pp. 697-720, doi: [10.1037/0003-066X.58.9.697](https://doi.org/10.1037/0003-066X.58.9.697).
- Kahneman, D. (2011), *Thinking, Fast and Slow*, Macmillan, New York, NY.
- Kalinic, I. and Brouthers, K.D. (2021), "Entrepreneurial orientation, export channel selection, and export performance of SMEs", *International Business Review*, Vol. 31 No. 1, p. 101901, doi: [10.1016/j.ibusrev.2021.101901](https://doi.org/10.1016/j.ibusrev.2021.101901).
- Karhu, C.E. and Martin, J.A. (2015), "Dynamic managerial capabilities", *Journal of Management*, Vol. 41 No. 5, pp. 1281-1312, doi: [10.1177/0149206314561301](https://doi.org/10.1177/0149206314561301).
- Karhu, P. and Ritala, P. (2020), "The multiple faces of tension: dualities in decision-making", *Review of Managerial Science*, Vol. 14 No. 3, pp. 485-518, doi: [10.1007/s11846-018-0298-8](https://doi.org/10.1007/s11846-018-0298-8).
- Karra, N., Phillips, N. and Tracey, P. (2008), "Building the born global firm", *Long Range Planning*, Vol. 41 No. 4, pp. 440-458, doi: [10.1016/j.lrp.2008.05.002](https://doi.org/10.1016/j.lrp.2008.05.002).
- Khan, O., Daddi, T. and Iraldo, F. (2020), "The role of dynamic capabilities in circular economy implementation and performance of companies", *Corporate Social Responsibility and Environmental Management*, Vol. 27 No. 6, pp. 3018-3033, doi: [10.1002/csr.2020](https://doi.org/10.1002/csr.2020).
- Khatri, N. and Ng, H.A. (2000), "The role of intuition in strategic decision making", *Human Relations*, Vol. 53 No. 1, pp. 57-86, doi: [10.1177/0018726700531004](https://doi.org/10.1177/0018726700531004).
- Kiss, A.N., Danis, W.M. and Cavusgil, S.T. (2012), "International entrepreneurship research in emerging economies: a critical review and research agenda", *Journal of Business Venturing*, Vol. 27 No. 2, pp. 266-290, doi: [10.1016/j.jbusvent.2011.09.004](https://doi.org/10.1016/j.jbusvent.2011.09.004).
- Kock, N. (2015), "Common method bias in PLS-SEM: a full collinearity assessment approach", *International Journal of e-Collaboration*, Vol. 11 No. 4, pp. 1-10, doi: [10.4018/ijec.2015100101](https://doi.org/10.4018/ijec.2015100101).
- Korhonen, S. and Leppäaho, T. (2019), "Well-trodden highways and roads less traveled: entrepreneurial-oriented behavior and identity construction in international entrepreneurship narratives", *Journal of International Entrepreneurship*, Vol. 17 No. 3, pp. 355-388, doi: [10.1007/s10843-019-00246-3](https://doi.org/10.1007/s10843-019-00246-3).
- Kor, Y.Y. and Leblebici, H. (2005), "How do interdependencies among human-capital deployment, development, and diversification strategies affect firms' financial performance?", *Strategic Management Journal*, Vol. 26 No. 10, pp. 967-985, available at: www.jstor.org/stable/20142283
- Kor, Y.Y. and Mesko, A. (2013), "Dynamic managerial capabilities: configuration and orchestration of top executives' capabilities and the firm's dominant logic", *Strategic Management Journal*, Vol. 34 No. 2, pp. 233-244, doi: [10.1002/smj.2000](https://doi.org/10.1002/smj.2000).
- Krupskiy, O.P. and Grynko, T. (2018), "Role of cognitive style of a manager in the development of tourism companies' dynamic capabilities", *Tourism and Hospitality Management*, Vol. 24 No. 1, pp. 1-21, doi: [10.20867/thm.24.1.5](https://doi.org/10.20867/thm.24.1.5).
- Kryeziu, L., Kurutkan, M.N., Krasniqi, B.A., Ramadani, V., Hajrullahu, V. and Haziri, A. (2024), "Cognitive styles and dynamic managerial capabilities: implications for SMEs in a transition economy", *International Journal of Entrepreneurial Behavior and Research*, Vol. 30 No. 1, doi: [10.1108/IJEBR-04-2023-0406](https://doi.org/10.1108/IJEBR-04-2023-0406).
- Lampel, J. and Shamsie, J. (2000), "Critical push: strategies for creating momentum in the motion picture industry", *Journal of Management*, Vol. 26 No. 2, pp. 233-257, doi: [10.1177/01492063000260020](https://doi.org/10.1177/01492063000260020).
- Lang, T. and Ramirez, R. (2017), "Building new social capital with scenario planning", *Technological Forecasting and Social Change*, Vol. 124, pp. 51-65, doi: [10.1016/j.techfore.2017.06.011](https://doi.org/10.1016/j.techfore.2017.06.011).
- Lara, F.J. and Salas-Vallina, A. (2017), "Managerial competencies, innovation and engagement in SMEs: the mediating role of organisational learning", *Journal of Business Research*, Vol. 79, pp. 152-160, doi: [10.1016/j.jbusres.2017.06.002](https://doi.org/10.1016/j.jbusres.2017.06.002).

- Lee, R. and Jones, O. (2008), "Networks, communication and learning during business start-up: the creation of cognitive social capital", *International Small Business Journal: Researching Entrepreneurship*, Vol. 26 No. 5, pp. 559-594, doi: [10.1177/0266242608094030](https://doi.org/10.1177/0266242608094030).
- Lee-Ross, D. (2014), "Entrepreneurial thinking: a study of cognitive styles in small businesses", *The International Journal of Design Management and Professional Practice*, Vol. 8 No. 2, pp. 1-16, doi: [10.18848/2325-162X/CGP/v08i02/38620](https://doi.org/10.18848/2325-162X/CGP/v08i02/38620).
- Leite, Y.V., de Moraes, W.F. and Salazar, V.S. (2016), "Expressions of relationship networking in international entrepreneurship", *Journal of International Entrepreneurship*, Vol. 14 No. 2, pp. 213-238, doi: [10.1007/s10843-016-0166-z](https://doi.org/10.1007/s10843-016-0166-z).
- Lindell, M.K. and Whitney, D.J. (2001), "Accounting for common method variance in cross-sectional research designs", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 114-121, doi: [10.1037/0021-9010.86.1.114](https://doi.org/10.1037/0021-9010.86.1.114).
- Lindstrand, A. and Hånell, S.M. (2017), "International and market-specific social capital effects on international opportunity exploitation in the internationalization process", *Journal of World Business*, Vol. 52 No. 5, pp. 653-663, doi: [10.1016/j.jwb.2017.05.002](https://doi.org/10.1016/j.jwb.2017.05.002).
- McIntyre, R.P., Claxton, R.P., Anselmi, K. and Wheatley, E.W. (2000), "Cognitive style as an antecedent to adaptiveness, customer orientation, and self-perceived selling performance", *Journal of Business and Psychology*, Vol. 15 No. 2, pp. 179-196, doi: [10.1023/A:1007775208983](https://doi.org/10.1023/A:1007775208983).
- Mackey, A. and Gass, S. (2012), *The Routledge Handbook of Second Language Acquisition*, Routledge, Taylor and Francis Group, London, doi: [10.4324/9780203808184](https://doi.org/10.4324/9780203808184).
- Maitland, E. and Sammartino, A. (2015a), "Managerial cognition and internationalization", *Journal of International Business Studies*, Vol. 46 No. 7, pp. 733-760, doi: [10.1057/jibs.2015.9](https://doi.org/10.1057/jibs.2015.9).
- Maitland, E. and Sammartino, A. (2015b), "Decision making and uncertainty: the role of heuristics and experience in assessing a politically hazardous environment", *Strategic Management Journal*, Vol. 36 No. 10, pp. 1554-1578, doi: [10.1002/smj.2297](https://doi.org/10.1002/smj.2297).
- Majhi, S.G., Mukherjee, A. and Anand, A. (2023), "Role of information technology in enabling managerial dynamic capabilities", *VINE Journal of Information and Knowledge Management Systems*, Vol. 53 No. 1, pp. 187-204, doi: [10.1108/vjikms-09-2020-0168](https://doi.org/10.1108/vjikms-09-2020-0168).
- Makkonen, H., Pohjola, M., Olkkonen, R. and Koponen, A. (2014), "Dynamic capabilities and firm performance in a financial crisis", *Journal of Business Research*, Vol. 67 No. 1, pp. 2707-2719, doi: [10.1016/j.jbusres.2013.03.020](https://doi.org/10.1016/j.jbusres.2013.03.020).
- March, J.G. (2008), "Rationality, foolishness, and adaptive intelligence", *Explorations in Organizations*, pp. 167-190, doi: [10.1515/9781503627147-012](https://doi.org/10.1515/9781503627147-012).
- Marques, C.S., Lopes, C., Braga, V., Ratten, V. and Santos, G. (2022), "Intuition and rationality in intrapreneurship and innovation outputs: the case of health professionals in primary health care", *International Entrepreneurship and Management Journal*, Vol. 18 No. 2, pp. 579-602, doi: [10.1007/s11365-021-00761-7](https://doi.org/10.1007/s11365-021-00761-7).
- Martins, A. (2023), "Dynamic capabilities and SME performance in the covid-19 ERA: the moderating effect of digitalization", *Asia-Pacific Journal of Business Administration*, Vol. 15 No. 2, pp. 188-202, doi: [10.1108/APJBA-08-2021-0370](https://doi.org/10.1108/APJBA-08-2021-0370).
- Mat Isa, R. and Ameer, R. (2007), "Hedge fund performance and managerial social capital", *The Journal of Risk Finance*, Vol. 8 No. 3, pp. 246-259, doi: [10.1108/15265940710750495](https://doi.org/10.1108/15265940710750495).
- Messick, S. (1984), "The nature of cognitive styles: problems and promise in educational practice", *Educational Psychologist*, Vol. 19 No. 2, pp. 59-74, doi: [10.1080/00461528409529283](https://doi.org/10.1080/00461528409529283).
- Messick, S. (1996), "Bridging cognition and personality in education: the role of style in performance and development", *European Journal of Personality*, Vol. 10 No. 5, pp. 353-376, doi: [10.1002/\(sici\)1099-0984\(199612\)10:53.0.co;2-g](https://doi.org/10.1002/(sici)1099-0984(199612)10:53.0.co;2-g).
- Mitchell, R.K., Busenitz, L., Lant, T., McDougall, P.P., Morse, E.A. and Smith, J.B. (2002), "Toward a theory of entrepreneurial cognition: rethinking the people side of entrepreneurship research", *Entrepreneurship Theory and Practice*, Vol. 27 No. 2, pp. 93-104, doi: [10.1111/1540-8520.00001](https://doi.org/10.1111/1540-8520.00001).

-
- Mostafiz, M.I., Ahmed, F.U. and Hughes, P. (2022), "Open innovation pathway to firm performance: the role of dynamic marketing capability in Malaysian entrepreneurial firms", *International Journal of Entrepreneurial Behavior and Research*, doi: [10.1108/ijebr-02-2022-0206](https://doi.org/10.1108/ijebr-02-2022-0206).
- Mostafiz, M.I., Sambasivan, M. and Goh, S.K. (2019a), "Impacts of dynamic managerial capability and international opportunity identification on firm performance", *Multinational Business Review*, Vol. 27 No. 4, pp. 339-363, doi: [10.1108/mbr-09-2018-0061](https://doi.org/10.1108/mbr-09-2018-0061).
- Mostafiz, M.I., Sambasivan, M. and Goh, S.K. (2019b), "The antecedents and the outcomes of foreign market knowledge accumulation – the dynamic managerial capability perspective", *Journal of Business and Industrial Marketing*, Vol. 34 No. 4, pp. 902-920, doi: [10.1108/jbim-09-2018-0263](https://doi.org/10.1108/jbim-09-2018-0263).
- Mostafiz, M.I., Sambasivan, M. and Goh, S.K. (2019c), "Psychometric evaluation of dynamic managerial capability scale in the context of early internationalizing firms from an emerging economy", *Asia-Pacific Journal of Business Administration*, Vol. 11 No. 4, pp. 371-386, doi: [10.1108/apjba-06-2019-0140](https://doi.org/10.1108/apjba-06-2019-0140).
- Mostafiz, M.I., Sambasivan, M., Goh, S.-K. and Shakil, M.H. (2021), "The mediating role of innovation capabilities in the relationship between dynamic managerial capability and performance of export-manufacturing firms", *International Review of Entrepreneurship*, Vol. 19 No. 2, pp. 169-200.
- Mueller, G.C., Mone, M.A. and Barker, V.L. (2000), "Strategic decision making and performance: decision processes and environmental effects", *Academy of Management Proceeding*, Academy of Management, Briarcliff Manor, New York, NY.
- Musteen, M., Francis, J. and Datta, D.K. (2010), "The influence of international networks on internationalization speed and performance: a study of Czech SMEs", *Journal of World Business*, Vol. 45 No. 3, pp. 197-205, doi: [10.1016/j.jwb.2009.12.003](https://doi.org/10.1016/j.jwb.2009.12.003).
- Muzychenko, O. and Liesch, P.W. (2015), "International opportunity identification in the internationalisation of the firm", *Journal of World Business*, Vol. 50 No. 4, pp. 704-717, doi: [10.1016/j.jwb.2014.12.001](https://doi.org/10.1016/j.jwb.2014.12.001).
- Narayanan, V.K., Colwell, K. and Douglas, F.L. (2009), "Building organizational and scientific platforms in the pharmaceutical industry: a process perspective on the development of dynamic capabilities", *British Journal of Management*, Vol. 20 No. s1, pp. S25-S40, doi: [10.1111/j.1467-8551.2008.00611.x](https://doi.org/10.1111/j.1467-8551.2008.00611.x).
- Nedzinskas, Š., Pundzienė, A., Buožiūtė-Rafanavičienė, S. and Pilkienė, M. (2013), "The impact of dynamic capabilities on SME performance in a volatile environment as moderated by organizational inertia", *Baltic Journal of Management*, Vol. 8 No. 4, pp. 376-396, doi: [10.1108/bjm-01-2013-0003](https://doi.org/10.1108/bjm-01-2013-0003).
- Netemeyer, R.G., Bearden, W.O. and Sharma, S. (2003), *Scaling Procedures: Issues and Applications*, SAGE Publications, London.
- Niittymies, A. and Pajunen, K. (2020), "Cognitive foundations of firm internationalization: a systematic review and agenda for future research", *International Business Review*, Vol. 29 No. 4, p. 101654, doi: [10.1016/j.ibusrev.2019.101654](https://doi.org/10.1016/j.ibusrev.2019.101654).
- Nitzl, C., Roldan, J.L. and Cepeda, G. (2016), "Mediation analysis in partial least squares path modeling", *Industrial Management and Data Systems*, Vol. 116 No. 9, doi: [10.1108/IMDS-07-2015-0302](https://doi.org/10.1108/IMDS-07-2015-0302).
- North, D.C. (1990), "A transaction cost theory of politics", *Journal of Theoretical Politics*, Vol. 2 No. 4, pp. 355-367, doi: [10.1177/0951692890002004001](https://doi.org/10.1177/0951692890002004001).
- Nowiński, W. and Rialp, A. (2015), "The impact of social networks on perceptions of international opportunities", *Journal of Small Business Management*, Vol. 54 No. 2, pp. 445-461, doi: [10.1111/jsbm.12149](https://doi.org/10.1111/jsbm.12149).
- Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY.
- Ornstein, R.E. (1977), *The Psychology of Consciousness*, Harcourt Brace Jovanovich, New York, NY.
- Pedhazur, E.J. and Schmelkin, L.P. (1991), *Measurement, Design, and Analysis: An Integrated Approach*, Lawrence Erlbaum Associates, NJ.

- Peng, M.W. and Luo, Y. (2000), "Managerial ties and firm performance in a transition economy: the nature of a micro-macro link", *Academy of Management Journal*, Vol. 43 No. 3, pp. 486-501, doi: [10.2307/1556406](https://doi.org/10.2307/1556406).
- Pinho, L.M. (2011), "Creative business entrepreneurship: the Portuguese creative business incubators", *International Journal of Transitions and Innovation Systems*, Vol. 1 No. 4, p. 367, doi: [10.1504/ijtis.2011.044891](https://doi.org/10.1504/ijtis.2011.044891).
- Pitelis, C.N. and Wagner, J.D. (2018), "Strategic shared leadership and organizational dynamic capabilities", *The Leadership Quarterly*, Vol. 30 No. 2, pp. 233-242, doi: [10.1016/j.leaqua.2018.08.002](https://doi.org/10.1016/j.leaqua.2018.08.002).
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: [10.1037/0021-9010.88.5.879](https://doi.org/10.1037/0021-9010.88.5.879).
- Poon, J.P., Thai, D.T. and Naybor, D. (2012), "Social capital and female entrepreneurship in rural regions: evidence from Vietnam", *Applied Geography*, Vol. 35 NoS 1/2, pp. 308-315, doi: [10.1016/j.apgeog.2012.08.002](https://doi.org/10.1016/j.apgeog.2012.08.002).
- Powell, T.C., Lovallo, D. and Fox, C.R. (2011), "Behavioral strategy", *Strategic Management Journal*, Vol. 32 No. 13, pp. 1369-1386, doi: [10.1002/smj.968](https://doi.org/10.1002/smj.968).
- Prahalad, C.K. and Bettis, R.A. (1986), "The dominant logic: a new linkage between diversity and performance", *Strategic Management Journal*, Vol. 7 No. 6, pp. 485-501, doi: [10.1002/smj.4250070602](https://doi.org/10.1002/smj.4250070602).
- Protopogou, A., Caloghirou, Y. and Lioukas, S. (2011), "Dynamic capabilities and their indirect impact on firm performance", *Industrial and Corporate Change*, Vol. 21 No. 3, pp. 615-647, doi: [10.1093/icc/dtr049](https://doi.org/10.1093/icc/dtr049).
- Randerson, K., Degeorge, J.M. and Fayolle, A. (2016), "Entrepreneurial opportunities: how do cognitive styles and logics of action fit in?", *International Journal of Entrepreneurship and Small Business*, Vol. 27 No. 1, p. 19, doi: [10.1504/ijesb.2016.073353](https://doi.org/10.1504/ijesb.2016.073353).
- Rasmussen, T. and Ulrich, D. (2015), "Learning from practice: how HR analytics avoids being a management fad", *Organizational Dynamics*, Vol. 44 No. 3, pp. 236-242, doi: [10.1016/j.orgdyn.2015.05.008](https://doi.org/10.1016/j.orgdyn.2015.05.008).
- Republic of Türkiye – Ministry of Trade (2023), "Foreign trade statistics", available at: <https://ticaret.gov.tr/> (accessed 21 October 2023).
- Rodríguez-Serrano, M.Á. and Martín-Armario, E. (2017), "Born-global SMEs, performance, and dynamic absorptive capacity: evidence from Spanish firms", *Journal of Small Business Management*, Vol. 57 No. 2, pp. 298-326, doi: [10.1111/jsbm.12319](https://doi.org/10.1111/jsbm.12319).
- Rothaermel, F.T. and Deeds, D.L. (2004), "Exploration and exploitation alliances in biotechnology: a system of new product development", *Strategic Management Journal*, Vol. 25 No. 3, pp. 201-221, doi: [10.1002/smj.376](https://doi.org/10.1002/smj.376).
- Sadler-Smith, E. and Shefy, E. (2004), "The intuitive executive: understanding and applying 'gut feel' in decision-making", *Academy of Management Perspectives*, Vol. 18 No. 4, pp. 76-91, doi: [10.5465/ame.2004.15268692](https://doi.org/10.5465/ame.2004.15268692).
- Santhosh, C. and Bala Subrahmanya, M.H. (2020), "The speed and the degree of SME internationalisation in Bangalore: an analysis of its determining factors", *Journal of Entrepreneurship and Innovation in Emerging Economies*, Vol. 6 No. 2, pp. 315-328, doi: [10.1177/2393957520913762](https://doi.org/10.1177/2393957520913762).
- Sapienza, H.J., Autio, E., George, G. and Zahra, S.A. (2006), "A capabilities perspective on the effects of early internationalization on firm survival and growth", *Academy of Management Review*, Vol. 31 No. 4, pp. 914-933, doi: [10.5465/amr.2006.22527465](https://doi.org/10.5465/amr.2006.22527465).
- Schumacker, R.E. and Lomax, R.G. (2010), *A Beginner's Guide to Structural Equation Modeling*, Routledge, New York, NY.
- Shmueli, G., Sarstedt, M., Hair, J.F., Cheah, J.H., Ting, H., Vaithilingam, S. and Ringle, C.M. (2019), "Predictive model assessment in PLS-SEM: guidelines for using PLSpredict", *European Journal of Marketing*, Vol. 53 No. 11, pp. 2322-2347, doi: [10.1108/EJM-02-2019-0189](https://doi.org/10.1108/EJM-02-2019-0189).

- Simon, H.A. (1947), *Administrative Behavior*, Free Press, New York, NY.
- Small Business Regulation (2023), "Turkish republic", *Official Newspaper* (32201, 2023).
- Solano Acosta, A., Herrero Crespo, Á. and Collado Agudo, J. (2018), "Effect of market orientation, network capability and entrepreneurial orientation on international performance of small and medium enterprises (SMEs)", *International Business Review*, Vol. 27 No. 6, pp. 1128-1140, doi: [10.1016/j.ibusrev.2018.04.004](https://doi.org/10.1016/j.ibusrev.2018.04.004).
- Spector, P.E., Rosen, C.C., Richardson, H.A., Williams, L.J. and Johnson, R.E. (2019), "A new perspective on method variance: a measure-centric approach", *Journal of Management*, Vol. 45 No. 3, pp. 855-880, doi: [10.1177/0149206316687295](https://doi.org/10.1177/0149206316687295).
- Tabares, A., Alvarez, C. and Urbano, D. (2015), "Born globals from the resource-based theory: a case study in Colombia", *Journal of Technology Management and Innovation*, Vol. 10 No. 2, pp. 155-165, doi: [10.4067/s0718-27242015000200011](https://doi.org/10.4067/s0718-27242015000200011).
- Tabares, A., Chandra, Y., Alvarez, C. and Escobar-Sierra, M. (2020), "Opportunity-related behaviors in international entrepreneurship research: a multilevel analysis of antecedents, processes, and outcomes", *International Entrepreneurship and Management Journal*, Vol. 17 No. 1, pp. 1-48, doi: [10.1007/s11365-020-00636-3](https://doi.org/10.1007/s11365-020-00636-3).
- Tabares, A., Chandra, Y., Alvarez, C. and Escobar-Sierra, M. (2021), "Opportunity-related behaviors in international entrepreneurship research: a multilevel analysis of antecedents, processes, and outcomes", *International Entrepreneurship and Management Journal*, Vol. 17 No. 1, pp. 321-368, available at: <https://link.springer.com/article/10.1007/s11365-020-00636-3>
- Tabares, A., Tavera, J.-F., Álvarez Barrera, C.P. and Escobar-Sierra, M. (2023), "Impacts of managerial capabilities on perceived international performance: mediating role of international opportunity-driven behavior", *European Business Review*, Vol. 35 No. 1, pp. 23-38, doi: [10.1108/eb-03-2021-0077](https://doi.org/10.1108/eb-03-2021-0077).
- Tajeddin, M., Farashahi, M., Moghaddam, K., Simba, A. and Edwards, G. (2023), "Internationalization of emerging economy SMEs: a tripod approach", *Journal of International Management*, Vol. 29 No. 1, p. 100991, doi: [10.1016/j.intman.2022.100991](https://doi.org/10.1016/j.intman.2022.100991).
- Tasheva, S. and Nielsen, B.B. (2020), "The role of global dynamic managerial capability in the pursuit of international strategy and superior performance", *Journal of International Business Studies*, Vol. 53 No. 4, pp. 689-708, doi: [10.1057/s41267-020-00336-8](https://doi.org/10.1057/s41267-020-00336-8).
- Tatoglu, E., Bayraktar, E. and Arda, O.A. (2015), "Adoption of corporate environmental policies in Turkey", *Journal of Cleaner Production*, Vol. 91, pp. 313-326, doi: [10.1016/j.jclepro.2014.12.039](https://doi.org/10.1016/j.jclepro.2014.12.039).
- Teece, D.J. (2007), "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance", *Strategic Management Journal*, Vol. 28 No. 13, pp. 1319-1350, doi: [10.1002/smj.640](https://doi.org/10.1002/smj.640).
- Teece, D.J. (2012), "Dynamic capabilities: routines versus entrepreneurial action", *Journal of Management Studies*, Vol. 49 No. 8, pp. 1395-1401, doi: [10.1111/j.1467-6486.2012.01080.x](https://doi.org/10.1111/j.1467-6486.2012.01080.x).
- Teece, D.J. (2014), "The foundations of enterprise performance: dynamic and ordinary capabilities in an (Economic) theory of firms", *Academy of Management Perspectives*, Vol. 28 No. 4, pp. 328-352, doi: [10.5465/amp.2013.0116](https://doi.org/10.5465/amp.2013.0116).
- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533, doi: [10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z).
- Thaler, R.H. and Sunstein, C.R. (2009), *Nudge: Improving Decisions about Health, Wealth, and Happiness*, Penguin, London.
- Torkkeli, L., Nummela, N. and Saarenketo, S. (2018), "A global mindset – still a prerequisite for successful SME internationalisation?", *International Business and Management*, No. 34, pp. 7-24, doi: [10.1108/s1876-066x2018000034001](https://doi.org/10.1108/s1876-066x2018000034001).
- Turkish Statistical Institute (2021), "Mid-size-entrepreneurship-statistics", available at: <https://data.tuik.gov.tr/Bulten/Index?p=Kucuk-ve-Orta-Buyuklukteki-Girisim-Istatistikleri-2021-45685> (accessed 26 January 2023).

- Tyler, B.B. and Gnyawali, D.R. (2002), "Mapping managers' market orientations regarding new product success", *Journal of Product Innovation Management*, Vol. 19 No. 4, pp. 259-276, doi: [10.1111/1540-5885.1940259](https://doi.org/10.1111/1540-5885.1940259).
- Ullman, J.B. (2001), *Structural Equation Modeling Using Multivariate Statistics*, in Tabachnick, B.G. and Fidell, L.S. (Eds), Allyn and Bacon, MA.
- Vuorio, A. and Torkkeli, L. (2023), "Dynamic managerial capability portfolios in early internationalising firms", *International Business Review*, Vol. 32 No. 1, p. 102049, doi: [10.1016/j.ibusrev.2022.102049](https://doi.org/10.1016/j.ibusrev.2022.102049).
- Walsh, J.P. (1995), "Managerial and organizational cognition: notes from a trip down memory lane", *Organization Science*, Vol. 6 No. 3, pp. 280-321, doi: [10.1287/orsc.6.3.280](https://doi.org/10.1287/orsc.6.3.280).
- Wang, Y., Yi, Y. and Wei, Z. (2023), "Top management team internal social capital, market dynamics and business model design: a dynamic managerial capability perspective", *Management Decision*, Vol. 61 No. 1, pp. 97-119, doi: [10.1108/MD-08-2021-1057](https://doi.org/10.1108/MD-08-2021-1057).
- Woolcock, M. (1998), "Social capital and economic development: toward a theoretical synthesis and policy framework", *Theory and Society*, Vol. 27 No. 2, pp. 151-208, doi: [10.1023/A:1006884930135](https://doi.org/10.1023/A:1006884930135).
- Zacca, R., Dayan, M. and Elbanna, S. (2017), "The influence of conflict and intuition on explorative new products and performance in SMEs", *Journal of Small Business and Enterprise Development*, Vol. 24 No. 4, pp. 950-970, doi: [10.1108/JSBED-02-2017-0034](https://doi.org/10.1108/JSBED-02-2017-0034).
- Zahara, Z., Ikhsan, Santi, I.N. and Farid. (2023), "Entrepreneurial marketing and marketing performance through digital marketing capabilities of SMEs in post-pandemic recovery", *Cogent Business and Management*, Vol. 10 No. 2, p. 2204592, doi: [10.1080/23311975.2023.2204592](https://doi.org/10.1080/23311975.2023.2204592).
- Zhe, S., Ling, Y. and Lee, S.H. (2022), "Dynamic capabilities and entrepreneurial performance of Chinese start-ups: the mediating roles of managerial attitude towards risk and entrepreneurial behavior", *Asia Pacific Business Review*, Vol. 28 No. 3, pp. 354-379, doi: [10.1080/13602381.2020.1854983](https://doi.org/10.1080/13602381.2020.1854983).
- Zollo, L., Rialti, R., Tron, A. and Ciappei, C. (2021), "Entrepreneurial passion, orientation and behavior: the moderating role of linear and nonlinear thinking styles", *Management Decision*, Vol. 59 No. 5, pp. 973-994, doi: [10.1108/MD-10-2019-1500](https://doi.org/10.1108/MD-10-2019-1500).

Demographic questions about firms	
1. What is the number of employees in your company?	
a) 1-10 b) 11-49 c) 50-249	
2. How old is your company?	
a) 1-5 b) 6-10 c) 11-15 d) 16-20 e) 20 and up	
3. What is the ownership type of your company?	
a) Family firm b) Non family-firm	
4. In which industry do you continue your activities?	
a) Manufacturing b) Service c) Retail d) Other	
Rational Cognitive Styles	
RCS1	I ponder things carefully
RCS2	I perform tasks systematically
RCS3	I work things out logically
RCS4	I approach tasks analytically
RCS5	I focus a lot on the steps involved in accomplishing the task
RCS6	I apply precise rules to deduce answers
RCS7	I focus a lot on what I am doing to get the results
RCS8	I am aware of my thought process
RCS9	I arrived at my answers by carefully evaluating the information I had access to
RCS10	I use clear rules
Intuitive Cognitive Styles	
ICS1	I use my intuition
ICS2	I follow what I feel is best for me
ICS3	I trust my hunches
ICS4	I trust my intuition
ICS5	I trust my first impressions
ICS6	I use my instincts
ICS7	I use my heart as a guide to action
ICS8	I have flashes of insight that I use to make my decisions
ICS9	Ideas pop into my head
ICS10	I use free association, where one idea leads to the next
Managerial Human Capital	
MHC1	Prior entrepreneurial experiences: number of years you had spent working for start-up firms
MHC2	Prior managerial experiences: years spent managing others business as a manager prior to starting the current company
MHC3	Prior academic education: level of educational qualification achieved by your own prior to starting the current company
MHC4	Training experiences: number of training activities obtained by your own: (such as legal, marketing, sales, strategy, etc.) which is related with your current company, prior to starting and during the position as CEO of your company
Managerial Social Capital	
MSC1	Top manager at buyer firms
MSC2	Top manager at supplier firms
MSC3	Top manager at competitor firms
MSC4	Political leader in various levels of the government
MSC5	Officials in industry bureaus
MSC6	Officials in regulatory and supporting organizations such as tax bureaus, state banks, commercial administration bureaus, and the like
MSC7	I assumed that he or she would always look out my interest
MSC8	I assumed that he or she would go out of his or her way to make sure I was not adversely affected
	Rational and Intuitive Cognitive Styles
	Managerial Human Capital, Managerial Social Capital and Managerial Cognition

Table A1.
Measures (scales)

(continued)

Rational
versus
intuitive
cognition

MSC9 I felt like he or she cared what happened to me	
MSC10 I believed that this person approached his or her job with professionalism and dedication	
MSC11 Members of my business network believe that the needs of the whole network should take priority over personal needs	
MSC12 Members of your business network accept decisions taken within the network even when they have different opinions	
MSC13 Problem-solving by many members of a business network give better results than those by individuals	
Managerial Cognition	
MC1 It is important for our company to internationalize rapidly	
MC2 Internationalization is the only way to achieve our growth objective	
MC3 We will have to internationalize in order to succeed in the future	
MC4 The growth we are aiming at can be achieved mainly through internationalization	
MC5 The entrepreneur of the company is willing to take the company to the international markets	
MC6 The company's management uses a lot of time in planning international operations	
MC7 The company's management sees the whole world as a one big marketplace	
Perceived International Performance	Perceived International Performance
PIP1 The managers of our company support the marketing of products or services	
PIP2 Our company's managers invest strongly in technology and innovation	
PIP3 Our company responds to the entrepreneurial behaviour of competitors	
PIP4 Our company is successful in introducing new products/services, administrative techniques, information technologies to the market	
PIP5 Our company is highly competitive and aims to leave other companies behind	
PIP6 Our company is willing to invest in high-risk projects	

Table A1.

Source: Created by authors

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