



Contents lists available at ScienceDirect

International Business Review

journal homepage: www.elsevier.com/locate/ibusrev

Heuristics and decision rationality in entry mode choice: Implications for decision effectiveness and international performance

Anisur R. Faroque^{a,*}, Arafat Rahman^b, Mohammad Osman Gani^{c,e}, Imranul Hoque^d

^a School of Marketing and Communication, University of Vaasa, Wolffintie 32, B318, Vaasa, Tervahovi 65200, Finland

^b Department of Marketing, Hanken School of Economics, P.O. Box 479 (Arkadiankatu 22), Helsinki FI-00101, Finland

^c The University of British Columbia, Okanagan, 3333 University Way, Kelowna, BC V1V 1V7, Canada

^d Department of Marketing, Jagannath University, Dhaka, Bangladesh

^e ACSS Department, University Canada West (UCW), 1461 Granville St, Vancouver, BC V6Z 0E5, Canada

ARTICLE INFO

Keywords:

Heuristics
Decision rationality
Dual process theory
Decision effectiveness
Entry mode
Performance

ABSTRACT

This study explores how heuristics (availability and representativeness) and analytic rational decision-making influence the selection of international business entry modes and their subsequent impact on decision effectiveness and international performance. Grounded in dual-process theories, the research develops hypotheses linking heuristics, analytic rationality, decision effectiveness, and international outcomes. Utilizing a quantitative survey approach, the findings reveal that integrating the availability heuristic with analytic rational decision-making enhances the quality of internationalization decisions, whereas combining analytic decision-making with the representativeness heuristic can diminish decision effectiveness. These results emphasize the critical role of balancing heuristic and analytical approaches in managerial decision-making for international entry, contributing to dual-process theories within the international business context and providing valuable insights into the cognitive strategies shaping entry mode selection and organizational performance.

1. Introduction

Entry mode choice is a key strategic decision in a firm's internationalization process (Brouthers, 2013; Lu, 2002). Owing to the existence of complex environmental factors (Shen et al., 2017) and idiosyncrasies of the host markets (Moschieri & Campa, 2014; Taussig, 2017) in the decisions concerning entry mode choice, managers rarely rely on either cognitive shortcuts (known as 'heuristics') alone, or on purely information-intensive rational approaches (Guercini & Milanese, 2020). Rather, such a key decision is shaped by the combined use of cognitive shortcuts (i.e., heuristics) and analytic approaches (i.e., decision rationality). To illustrate, the key decision makers of a UK-based secure data management startup company, Valarian, decided to expand into the US defense industry based on their prior industry exposure and intuition and the growing need of such secured data platforms in the US (Business Insider, 2025). In this context, the decision maker's past industry exposure and intuition worked as the cognitive shortcuts or heuristics, whereas the knowledge of the growing need for the platforms reflects the use of rational or information-intensive

decision-making related to the international expansion. The question remains how this combined use of heuristics and analytic rational approaches contributes to decision effectiveness and subsequent international performance. This present study answers this question. Addressing this question is crucial as it advances our understanding of how the cognitive processes of decision-makers contribute to key strategic decisions in complex and uncertain international environments.

Yet, an unresolved theoretical puzzle persists: why do some heuristics complement rational decision-making, while others appear to conflict with it? Our study addresses this puzzle by focusing on two widely recognized heuristics- availability and representativeness- and examining how each interacts with analytic rationality in shaping entry mode effectiveness. Availability heuristic, grounded in memory recall, may enhance rational analysis by providing experiential anchors under uncertainty. In contrast, representativeness heuristic, which relies on similarity-based judgments, may introduce redundancy or even distortions when combined with rational evaluation. By bringing this tension to the forefront, we extend dual-process theories and highlight that heuristic-analytic rational interactions are not uniform but heuristic-

* Corresponding author.

E-mail addresses: anisur.faroque@uwasa.fi (A.R. Faroque), arafat.rahman@hanken.fi (A. Rahman), osman.gani@ucanwest.ca, osman.gani@ubc.ca (M.O. Gani), imranul@mkt.jnu.ac.bd (I. Hoque).

<https://doi.org/10.1016/j.ibusrev.2025.102521>

Received 4 January 2025; Received in revised form 6 September 2025; Accepted 12 September 2025

Available online 4 October 2025

0969-5931/© 2025 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

specific.

Despite their importance in a firm's internationalization decisions (Guercini & Freeman, 2023; Niittymies, 2020), heuristics have received surprisingly little systematic attention in international business (IB) research on entry mode decisions (Guercini & Milanesi, 2022). Prior studies have largely emphasized organizational or environmental factors, leaving the cognitive strategies of individual decision-makers underexplored (Aharoni et al., 2011). This gap is striking given that small and medium-sized enterprises (SMEs), in particular, rely heavily on heuristics due to their limited resources and decision-making bandwidth (Knight & Liesch, 2016; Niittymies, 2020). Drawing on dual-process theory, our study addresses this gap by developing and validating new scales for availability and representativeness heuristics, testing their interplay with rational decision-making, and examining their implications for decision effectiveness and international performance. While heuristics may themselves be considered rational under perspectives such as bounded or ecological rationality (Gigerenzer & Gaissmaier, 2011), in this study the term 'rational' refers specifically to analytic, information-intensive processing, consistent with dual-process theory and the heuristics-and-biases tradition.

The present study makes several contributions. First, advancing the existing knowledge of dual-process theories in the domain of IB, our study demonstrates the differential effects of availability and representativeness heuristics on decision effectiveness when combined with a rational decision-making approach. Second, while it substantiates the importance of using both heuristic-based and rational approaches together, it also suggests that such integration depends on the nature of the heuristics that managers use and the context in which a decision is made. Third, rather than relying on the institutional or macro-level perspectives dominant in the IB domain, our study explores micro-level cognition-based perspectives of decision-makers in crafting key strategic decisions as part of firms' internationalization process. Along this line, the study brings fore the nuanced issues related to managerial cognition that can eventually contribute to decision effectiveness and firm performance. In other words, the study emphasizes the role of cognition-driven decision quality in achieving competitive outcomes in foreign markets. Finally, ours is the first study to develop and validate scales measuring availability and representativeness heuristics in the context of entry mode choice. Although these two heuristics were originally postulated by Amos Tversky and Daniel Kahneman (see, e.g., Tversky & Kahneman, 1974) and later studied in various domains including IB, the present study offers new measurement items, enabling future research to further explore their application in diverse IB contexts.

The next section outlines the theoretical framework related to dual-process theories and heuristics. The following section delineates the hypothesized relationships and the conceptual model of the study. The subsequent section provides an explanation of the study's methods and data analysis procedures. Thereafter, the empirical findings of the study are presented and discussed. In the concluding section, we discuss the theoretical and managerial implications, limitations, and future research directions.

2. Theoretical background

2.1. Dual-process theories

The limits of a manager's cognitive capacity in processing information and making decisions have drawn management researchers to explain cognition from the perspective of dual-process theories (Baldacchino et al., 2022; Hodgkinson et al., 2023). These theories suggest that the human mind deals with information and makes decisions by applying two distinct processes (Basel & Brühl, 2013). The Type 1 process is autonomous in the sense that it does not require working memory; rather, it is fast, automatic, and independent of cognitive ability (Evans & Stanovich, 2013). It involves

experience-based decision-making that enables managers to cut through large volumes of information while applying minimal cognitive effort (Hodgkinson et al., 2023).

The Type 2 process is reflective and requires working memory and mental simulation (Evans & Stanovich, 2013). The Type 2 process is controlled, deliberate, and further characterized by the serial processing of information. On the one hand, this process involves a detailed analysis of information (Hodgkinson et al., 2023). On the other hand, it requires conscious cognitive efforts on the part of the decision maker. These requirements make the Type 2 process rational and slow rather than intuitive and fast (Baldacchino et al., 2022; Evans & Curtis-Holmes, 2005).

However, dual-process theories assume an oversimplified dichotomy between Type 1 and Type 2 processes, which restricts the possibility of nuanced combinations between the processes (Keren & Schul, 2009). In other words, rather than having a decision fully based on an information-intensive or rational approach, it is likely that the decision is based on a combination of rational and autonomous approaches. It is particularly relevant for key strategic decisions such as entry mode choice in which the boundaries between rational and autonomous approaches often become fuzzy, as managers' use of autonomous or heuristic-driven decisions are shaped by their deliberate explicit learning and practice (Dane & Pratt, 2007). Thus, blending the two processes has practical relevance even though it challenges the dichotomy espoused in the dual-process theories. Another assumption of the theories argues for a sequential processing of reasoning and decision in which Type 1 process produces the default responses, which is then intervened by Type 2 process with deeper information to bring accuracy of decisions (Evans & Stanovich, 2013). Although the sequential processing brings the question of time or 'when Type 2 intervenes Type 1', it essentially involves both processes rather than relies on just one of the processes.

Thus, it adds up to the fact that Type 1 and Type 2 processes work concurrently in decision making (Basel & Brühl, 2013; Chaiken & Ledgerwood, 2012), thereby helping to compensate for the limitations inherent in each process on its own. For instance, biases or errors emerging from the Type 1 process can be compensated for using rational analysis in Type 2. The simultaneous use of these processes not only enables a manager to navigate through vast amounts of information but also allows using the needed information in detail (Hodgkinson & Sadler-Smith, 2018). Likewise, the parallel-competitive perspective (e.g., Barbey & Sloman, 2007; Smith & DeCoster, 2000) of dual-process theories supports the view that Type 1 and Type 2 processes work in parallel. Building on this perspective, Baldacchino et al. (2022) posited that experienced entrepreneurs extensively use both intuitive and analytical processes during new venture ideation.

We adopt the central tenet of the parallel-competitive perspective in our study and propose that combining both Type 1 (representing a heuristics-based decision) and Type 2 (representing an analytic rational decision model) processes will lead to decision effectiveness for managers as they make their entry mode decisions. Based on the forms of heuristics advocated in the "Heuristics and Biases Program" (see e.g., Tversky & Kahneman, 1974, and explained in the following section), we contend that availability and representativeness heuristics interact with analytic rational decision process in shaping decision effectiveness and subsequent international performance. The cognitive mechanism underlying availability and representativeness heuristics permits their integration in explaining the dual-process theories. Specifically, under the condition of uncertainty (e.g., entry mode decision), these two internal cognitive shortcuts are central to intuitive judgements and aid decision-makers for making rapid decisions based on readily accessible information from memory (availability) or perceived similarity to prior events or phenomenon (representativeness).

None of availability and representativeness heuristics require extensive reasoning nor do they need to rely on any initial numeric cues as needed for 'anchoring and adjustment' heuristics, the other heuristics

advocated by [Tversky and Kahneman \(1974\)](#). Although ‘anchoring and adjustment’ heuristics reflect intuitive processes, they operate in a passive or stimulus-driven manner causing upward or downward adjustments of the initial numerical cues ([Keren & Teigen, 2004](#); [Tversky & Kahneman, 1974](#)). In the case of entry mode decisions, drawing initial numeric cues or anchors can be less challenging and may require less adjustments for some issues (e.g., number of competitors, number of customers), while it can be highly challenging and require extensive adjustments for other issues (e.g., volume of sales, a certain percentage of market share). Likewise, even if a manager involved with entry mode decisions uses self-generated initial cues, adjustments from these values can be insufficient ([Epley & Gilovich, 2006](#)). Thus, while anchoring and adjustment is a useful heuristics, availability and representativeness provide a stronger foundation for modeling dual-process interactions for understanding their effects on decision effectiveness and international performance.

2.2. Heuristics in decision making

In essence, the Type 1 process insinuates the use of heuristics in decision making. Heuristics are “cognitive shortcuts that emerge when information, time and process capabilities are limited” ([Guercini & Milanesi, 2022](#), p. 1231). A lack of information and time, together with limited cognitive or information-processing capacity, enhances uncertainty in managers’ decision making. Consequently, to steer through the complex decision-making situations characterized by a high level of uncertainty, managers apply heuristics or rules of thumb to make fast decisions and judgments ([Basel & Brühl, 2013](#)), and this use of simple heuristics can produce successful outcomes in complex and uncertain environments ([Artinger et al., 2015](#)). In heuristic decision-making, rather than focusing on all available information, managers rely on a particular aspect of that information ([Hodgkinson et al., 2023](#)). Thus, moving away from the unbounded rationality that indicates an unlimited cognitive capacity of individuals for achieving an optimal or ideal outcome, a bounded rationality now sets the basis of heuristics by accepting the limitations of human cognition that can produce satisfactory outcomes from a decision or judgment ([Basel & Brühl, 2013](#); [Keren & Teigen, 2004](#)).

Building on this notion of constrained optimization espoused by bounded rationality ([Chase et al., 1998](#)), studies on the role and mechanisms of heuristics have taken two main approaches. In an earlier approach, named the “Heuristics and Biases Program,” Daniel Kahneman and Amos Tversky argued that while heuristics are useful for decision making, the departure from a rational or information-intensive process can bring about biased and erroneous decisions and judgments ([Kahneman & Tversky, 1973](#); [Tversky & Kahneman, 1974](#)). They theorized that under the condition of uncertainty, individuals employ the availability heuristic, the representativeness heuristic, and the adjustment and anchoring heuristic ([Tversky & Kahneman, 1974](#)). Availability heuristic indicates the ease with which past instances and associations can be retrieved from memory or brought to mind ([Keren & Teigen, 2004](#); [Schwarz et al., 1991](#); [Tversky & Kahneman, 1974](#)). Because of limited cognitive capacity to process information, individuals focus on information that is available in memory and can be retrieved for decision-making purposes ([Kahneman, 2017](#)). For instance, decision makers can assess the likely failure of a foreign market entry by recalling a past instance of entry failure. By contrast, when using representativeness heuristic, individuals make decisions by finding and comparing resemblance between events ([Kahneman & Tversky, 1972](#); [Keren & Teigen, 2004](#); [Tversky & Kahneman, 1974](#)). In other words, an event A is judged to belong to class B by assessing the extent to which A is similar to B. For instance, a market entry may be judged as highly risky if it has features resembling other high-risk foreign market entry decisions.

Although both availability and representativeness heuristics can lead to biases, gaining an understanding of these heuristics and biases can aid decisions and judgments made in uncertain environments ([Tversky & Kahneman, 1974](#)).

A recent approach, named “Fast and Frugal Heuristics Approach” by Gerd Gigerenzer and colleagues (e.g., [Gigerenzer, 1996](#); [Gigerenzer & Brighton, 2009](#); [Gigerenzer & Gaissmaier, 2011](#)), holds that heuristics are strategies that avoid part of the information clutter and focus on making quick and frugal decisions ([Gigerenzer & Gaissmaier, 2011](#)). Capturing the essence of bounded rationality ([Basel & Brühl, 2013](#)), the fast and frugal approach conveys heuristics as an “ecologically rational” (e.g., [Luan et al., 2019](#); [Todd & Gigerenzer, 2012](#)) form of decision making in which environmental regularities, together with the adaptive capacity of individuals, guide decisions based on recognized cues or information in the environment ([Chase et al., 1998](#)). In other words, heuristics solve problems by disregarding a significant portion of the available information, thereby leading to more efficient and prompt decision making.

Our theoretical stance builds primarily on the heuristics-and-biases tradition ([Tversky & Kahneman, 1974](#)), which conceptualizes heuristics as simplifying mechanisms that can lead to systematic biases when contrasted with information-intensive rational analysis. At the same time, alternative perspectives such as the fast-and-frugal heuristics approach ([Gigerenzer & Brighton, 2009](#); [Gigerenzer & Gaissmaier, 2011](#)) and the simple rules perspective ([Bingham & Eisenhardt, 2011](#)) view heuristics as ecologically rational tools that can enhance decision quality by leveraging environmental regularities. While our study does not adopt these latter frameworks directly, acknowledging them highlights that heuristics can be understood through multiple paradigms. By positioning our work within the heuristics-and-biases tradition, we clarify that our focus is on how specific heuristics interact with analytic rationality under dual-process theory, while encouraging future IB research to compare alternative heuristic logics in internationalization contexts.

2.3. Heuristics in entry mode decisions

Entry mode decisions are influenced by a variety of internal and external factors ([Brouthers, 2002](#)) that create complexity in decision making and offer uncertainties in terms of achieving the planned success in foreign markets. Even when the decision makers and managers can gather or access a plethora of information for assessing entry mode choices, their cognitive limits for processing a large volume of information, accompanied by time constraints, propel them to rely on using decision shortcuts—i.e., heuristics. The extant IB literature on entry mode decisions corroborates this by showing the imitative behavior of firms in their cross-border acquisitions ([Malhotra & Zhu, 2013](#)), choice of entry modes ([Kumar & Subramanian, 1997](#)), and inter-firm alliances ([Uzuegbunam, 2016](#)), among others. [Guercini and Milanesi \(2020\)](#), in their comprehensive review, posited that heuristic approaches are prevalent in firms’ internationalization decisions, including their entry mode decisions. The use of heuristics can take either an open or closed approach, reflecting whether the internationalizing firm focuses on adaptive and dynamic learning to deal with a high level of uncertainty or on static and already completed learning to address conditions with higher risk ([Guercini & Freeman, 2023](#)). However, while the existing literature underscores the value of different approaches to heuristics in entry mode decisions, the relationships between the types of heuristics in the presence of rationality (in line with the dual-process theories) and the effectiveness of a decision, leading to a firm’s international performance remain unexplored.

The conceptual framework of the present study is depicted in [Fig. 1](#).

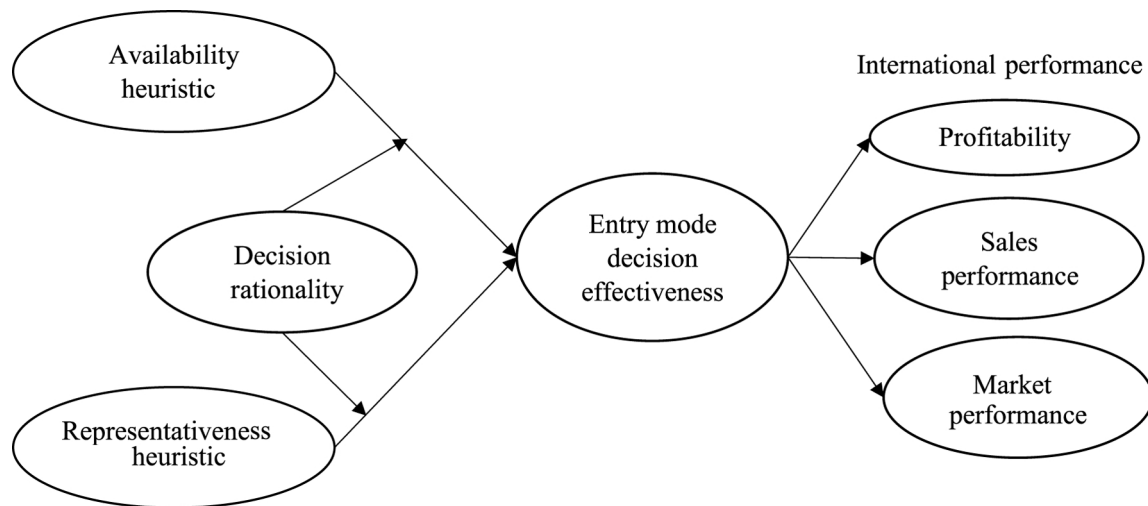


Fig. 1. Conceptual framework.

3. Development of hypotheses

3.1. Heuristics and entry mode decision effectiveness

Decision effectiveness reflects the extent to which a decision achieves the objectives set forth by managers (Dean & Sharfman, 1996). Thus, decision effectiveness is closely tied to the strategic choices made by managers who guide firms toward fulfilling their goals (Harrison & Pelletier, 1998). Similarly, entry mode decision effectiveness captures the satisfaction of managers in relation to achieving the overarching objectives associated with selecting specific entry modes (Ji & Dimitratos, 2013). However, the effectiveness of entry mode decisions in achieving objectives extends beyond initial outcomes, encompassing aspects such as building linkages with local partners, developing a competitive position, and acquiring critical skills and capabilities (Ji & Dimitratos, 2013).

For example, Peloton Interactive, a US-based fitness equipment manufacturer, sought international expansion in Europe by forming strategic partnerships with e-commerce platforms and specialized retailers. In 2022, Peloton expanded its relationship with Amazon in the UK and Germany, enhancing its distribution channels (Peloton, 2022). Similarly, Peloton collaborated with Fitshop, Europe's largest fitness equipment retailer (Peloton, 2023) to strengthen its competitive position in Germany and Austria. Achieving entry mode objectives therefore hinges on what internal and external information sources are available and the experience of the decision makers or managers (Van Riel et al., 2011).

In the information-intensive and uncertain landscape of international markets, managers rely on available information that aligns with their past experiences (Benito et al., 2009). On one hand, prior international market entry experiences can enhance a firm's ability to handle uncertainties (Ahsan & Musteen, 2011; Anderson & Gatignon, 1986). For instance, Oatly, a Swedish producer of plant-based drinks, faced significant uncertainty in its early expansion due to consumers' established preferences for traditional dairy products (Dalsace & Challagalla, 2024; Koch, 2020). However, by repositioning itself as a lifestyle- and sustainability-oriented brand, Oatly successfully entered foreign markets such as the UK and Germany. These markets provided valuable learning opportunities, allowing the company to adapt to uncertainties. Today, Oatly is recognized as a changemaker in shaping consumers' preferences, having successfully expanded into various European, North American, and Asia-Pacific countries based on its early experiences in the UK and Germany.

On the other hand, information derived from these prominent past experiences is more easily recalled when making future entry decisions

(Elia et al., 2019). In the case of Oatly, managers likely drew on their experiences in the UK and Germany to inform subsequent entries in European markets. For example, a successful collaboration with a local partner during an initial market entry may be readily recalled and applied to future decisions. This reliance on familiar information may lead to a sense of satisfaction, as managers anticipate positive outcomes based on past successes.

Thus, in entry mode decisions, information that is easily retrieved from memory—known as the availability heuristic—can increase managerial confidence. This heuristic allows managers to base their decisions on familiar experiences, reducing the need to process large amounts of information. In this way, the availability heuristic serves as a reference point that aids in achieving entry mode objectives. We argue that the use of the availability heuristic enhances the effectiveness of entry mode decisions by increasing managers' contentment with their ability to achieve these objectives. Therefore, we hypothesize:

H1. Availability heuristic increases entry mode decision effectiveness.

Similar past events and managers' experiences serve as sources of information that play a critical role in entry mode decisions (Benito et al., 2009; Niittymies, 2020). For instance, previous entry mode decisions and the environmental conditions encountered in earlier market entries allow managers to make comparisons and draw parallels with current decisions. Albertoni et al. (2019) argued that entry-specific experiences, such as using the same type of entry mode across different contexts, enable the development of capabilities that can be applied to various geographic regions. In such situations, similar past events lead managers to apply cognitive shortcuts, particularly the representativeness heuristic (Elia et al., 2019).

Take BrewDog, a Scottish craft beer company, as an example. BrewDog expanded internationally by entering markets with similar consumer profiles—regions with a passion for beer and an established craft beer culture. After opening its first bar in Aberdeen in 2010, the company gradually expanded within the UK, selecting locations with comparable enthusiasm for craft beer (BrewDog, 2022). Leveraging this strategy, BrewDog expanded further into international markets, establishing more than 20 bars outside the UK in European cities such as Berlin, Paris, and Rotterdam (BrewDog, 2024; BrewDog, n.d.). These entry modes, achieved either directly by the company or through franchise partners, allowed BrewDog to transfer its entry experience to markets with similar characteristics. For instance, by entering markets through franchises in distant locations like Mumbai (India) and Penrith (Australia), BrewDog successfully replicated its strategies from earlier market entries, capitalizing on comparable market conditions.

This use of the representativeness heuristic, where managers rely on

familiar patterns from past market entries, has clear benefits. It allows them to bypass exhaustive analytical processes and conserve resources, while still making informed entry mode decisions. We contend that when managers use the representativeness heuristic in evaluating factors such as foreign market macro-environments, consumer needs, and competitor strategies, it facilitates the firm's ability to form linkages with local partners in foreign markets (Vissak et al., 2020). Likewise, the repeated use of a particular entry mode can build on past experiences, leading to the further development of critical skills and capabilities. Thus, by applying specific information from previous similar events, managers are able to make more effective decisions regarding entry modes that are most likely to meet strategic objectives. Therefore, we hypothesize:

H2. Representativeness heuristic increases entry mode decision effectiveness.

3.2. Entry mode decision effectiveness and international performance

A firm's international performance comprises both strategic and financial or accounting-based dimensions (Bobillo et al., 2010; Zou & Cavusgil, 2002). Strategic performance refers to a firm's market share and competitive position compared to competitors, while financial performance involves metrics such as cost position, sales growth, and profitability (Zou & Cavusgil, 2002). Sales growth is also a key operational performance indicator (Bobillo et al., 2010), and financial metrics like return on investment (ROI) and return on assets (ROA) further reflect the firm's financial health. In addition to these dimensions, a firm's international performance can be evaluated through its marketing performance, which highlights the firm's ability to attract new customers and perform effectively in strategically important foreign markets (Faroque et al., 2022).

In the presence of uncertainty in foreign markets, a firm's international performance is influenced not only by its resource commitments and capabilities, but also by the effectiveness of its decisions in achieving objectives (Aharoni et al., 2011). For example, in the highly competitive skincare industry, the Australian brand – Frank Body – took advantage of social media platforms to market its unique coffee ground-based body scrubs aimed at beauty-conscious women (Forbes, 2017). Frank Body aimed for rapid brand expansion, surpassing its local market and shipping to over 149 countries, which generated \$20 million in sales (Forbes, 2017). Frank Body's expansion into Europe, the UK, the US, and other regions demonstrates how effective foreign market entry decisions contribute to international performance (Frank Body, 2024). Here, the effectiveness of Frank Body's entry strategy can be seen not only in achieving its objectives but also in its ability to form a solid customer base in these foreign markets.

Effectiveness in entry mode decisions is also characterized by establishing linkages with local partners, which help firms access resources and develop critical capabilities. Collaborations with local partners not only aid in building knowledge but also provide access to resources that would be costly to acquire independently (Shrader, 2001). These partnerships extend a firm's competitive advantage in foreign markets (Chetty & Wilson, 2003; Doh, 2000; Li & Fleury, 2020), which ultimately improves performance outcomes (Sheng et al., 2011; Shrader, 2001). For instance, establishing local partnerships was key to Frank Body's international success, allowing the company to tap into local expertise and consumer insights in new markets. In a prior study on joint ventures, Demirbag and Mirza (2000) proposed that collaborations or relationships with local partners not only influence the performance of a joint venture, but also impact the satisfaction of the parent firms. Similarly, a recent study argued that collaborations with overseas partners can improve export performance (Brache et al., 2022). Thus, establishing and expanding networks with local partners enables firms to deepen their presence in foreign markets, leading to higher profitability, sales, and market share. In the process, the firm will be able to

enhance its marketing performance by attracting new customers and performing well in strategically crucial markets.

Likewise, the effectiveness of a firm's foreign market entry decision can be assessed by how well it develops the firm's competitive position relative to its competitors operating in the same market. For instance, in an export-based market entry, some firms may establish a stronger foothold by implementing competitive strategies like differentiation or cost leadership, which can lead to superior performance (Li et al., 2009). Achieving a competitive position implies that the firm better satisfies its customers than its competitors (Efrat et al., 2018), contributing to higher customer loyalty and sales growth (Kaleka & Morgan, 2017). An illustrative case is Fritz Hansen, a Danish furniture company, which focuses on long-lasting, environmentally responsible products. With over 2000 points of sale in more than 85 countries, Fritz Hansen's strategic expansion and flagship stores reflect how customer satisfaction translates into higher sales and profits (Fritz Hansen, 2020; Fritz Hansen, 2024). By developing a strong market position through these entry decisions, Fritz Hansen successfully increased its international sales, profitability, and market share. Thus, we argue that when a firm's entry mode decision enables it to build a strong competitive position in foreign markets, this results in increased sales growth, higher ROI and ROA, and improved market share.

A firm also acquires critical skills and capabilities through linkages with local partners during foreign market entry (Brache et al., 2022; Sheng et al., 2011), and these capabilities have significant implications for performance outcomes, such as increased profitability and market share (Blesa & Ripolles, 2008). For instance, by collaborating with local distributors and partners, Fritz Hansen was able to adapt its strategies to different market conditions and successfully scale its operations in diverse regions. Therefore, we posit that achieving the objectives of an entry mode decision, in terms of acquiring critical skills and capabilities, contributes to sales growth, profitability, and market share in the current market, while also serving as valuable input for future market entries. The acquired skills can help firms attract new customers or better target strategically important markets. Based on these discussions, we propose:

H3. Entry mode decision effectiveness enhances a firm's profitability.

H4. Entry mode decision effectiveness increases a firm's sales performance.

H5. Entry mode decision effectiveness increases a firm's market performance.

3.3. Moderating role of decision rationality

In decision-making processes, rationality refers to the extent to which managers attempt to make the best possible decision by objectively evaluating a large amount of relevant information (Dean & Sharfman, 1996; Walter et al., 2008). Rationality is further characterized by a manager's clear understanding of the problem and the related objectives needed to address it (Heracleous, 1994). For instance, in the context of entry mode decisions, rationality involves how thoroughly managers collect, analyze, and base their decisions on the information gathered (Ji & Dimitratos, 2013).

While analytic decision rationality adheres to the information-intensive path to managerial decision-making, it relies heavily on various contextual factors. These factors not just include aspects of top management and decision-specific characteristics, but also external environmental issues and firm-specific characteristics (Elbanna & Child, 2007; Papadakis et al., 1998; Shepherd & Rudd, 2014). For example, managers' education, cognitive diversity, and personality can shape strategic decision-making processes involving information-intensive decision points (Shepherd & Rudd, 2014). Likewise, a decision's importance, motive, and level of decision uncertainty can considerably explain decision rationality (Elbanna & Child, 2007). High level of

decision uncertainty may result in less use of formalized or standardized rules, instead more use of intuitive processes (Papadakis et al., 1998). In other words, the use of analytic rational or information-intensive processes can be impaired by the presence of high decision uncertainty.

In addition to decision uncertainty, decision rationality suffers from uncertainty, dynamism, and hostility of the external environment (Elbanna & Child, 2007; Shepherd & Rudd, 2014). Environmental uncertainty can emerge not just from international markets' political and macroeconomic conditions, but also from sector-specific issues such as demand conditions and competitors (Elbanna & Child, 2007). For example, managers apply less rational decision processes if a high level of competitive threat is observed (Dean & Sharfman, 1993). However, internally at the firm level, issues such as having better performance or surplus resources can help managers follow rational analytic decision processes in stable environmental conditions. Apart from performance, prior studies showed mixed results in the case of firm size as some studies suggested more use of rational and comprehensive decision processes with the increase of firm size (Elbanna & Child, 2007; Papadakis et al., 1998), while others suggested no relationship between firm size and rationality (Dean & Sharfman, 1993). Considering these contextual factors shaping decision rationality, managers exhibit rationality that is also constrained by their own cognitive and informational limits.

Decision rationality explains crucial aspects of cognitive processing while acting upon information related to certain decision(s). It has close ties to the part of an individual's cognitive processing that is less information-intensive (e.g., heuristics) and forms the basis of the dual processing of human cognition and decision-making. This implies that decision rationality is inherently suited to interact with the heuristics-based cognitive processes and subsequently affect specific outcomes. As rationality in decision-making is generally believed to have a positive impact on strategic decision effectiveness (Dean & Sharfman, 1996), we argue that decision rationality can have some bearing on entry mode decision effectiveness. However, the limited cognitive capacity of individuals in processing information means that managers cannot collect or process an unlimited set of information at any stage of decision-making. This limitation becomes more pronounced in the early stages of strategic decisions, such as entry mode choices, where not all relevant information may be available or immediately accessible (Parida et al., 2018).

For instance, consider Pran, one of the largest food and beverage companies in Bangladesh. Initially, Pran began exporting its products to France and later expanded its exports globally. Although the company initially relied on exporting as its primary entry mode, Pran gradually developed its own sales and distribution networks with fully operational offices, warehouses, and distribution channels in North America, the Asia-Pacific, and Africa (Pran, 2024). In the early days of internationalization, it would have been difficult for Pran's managers to establish such extensive networks due to a lack of relevant information. This indicates that Pran's entry mode decisions were based on the limited information available at the time.

To address this challenge, managers often resort to using available information based on past experience (Kunc & Morecroft, 2010). For example, in the context of an entry mode choice, a manager may look at immediately available information on the firm's previous entry mode decisions. While this reliance on memory-based information (i.e., availability heuristic) can lead to quicker decisions, it may also result in incomplete information. A more rational approach, characterized by thorough information acquisition and analysis, can fill in the gaps left by heuristics. We propose that managers can complement the information retrieved from memory by actively collecting and analyzing new, relevant data to make well-informed entry mode decisions. This approach not only helps firms meet the objectives of foreign market entry but also enhances their competitive position. For example, Pran's gradual shift from exporting to establishing full-fledged distribution networks reflects how the firm used analytic rational decision-making to build on initial

heuristic-based choices. In this way, the use of rational information processing can strengthen the effectiveness of decisions that are initially influenced by availability heuristic. Thus, we hypothesize:

H6. Decision rationality strengthens the relationship between availability heuristic and entry mode decision effectiveness.

The limitation of managers' cognitive capacity further calls for the use of representativeness heuristic. Managers try to make sense of a current event by identifying its representativeness to a past similar event (Elia et al., 2019). Although this decision-making approach does not incorporate the whole range of information or a subsequent intensive analytic procedure, the use of representativeness heuristic helps in making quick decisions based on the similarities between past and current events. Similarly, managers employ heuristics to identify past entry mode instances that resemble a current entry mode decision (Guercini & Milanese, 2020).

While the dual-process theories argue for the parallel use of heuristics and rational approach (e.g., Baldacchino et al., 2022), combining representativeness heuristic with rational approach, such as analytic decision rationality, can bring redundant information into the process of entry mode decisions. Managers may already have identified relevant information while making sense of the similarities between past and current entry modes, as they may already have representative information about customer needs and wants from past similar instances. Thus, collecting the same information through a rational decision process can only make the information redundant and the cognitive process more cumbersome. We argue that this redundancy and the extra burden of time, cost, and cognitive effort due to analytic decision rationality can weaken the impact of representativeness heuristic on entry mode decision effectiveness. Thus, we propose:

H7. Decision rationality weakens the relationship between representativeness heuristic and entry mode decision effectiveness.

We did not consider other possible moderators such as managerial experience as an alternative to analytic decision rationality. Managerial experience partially overlaps with analytic decision rationality as the former can generate or contribute to analytical reasoning, which is an inherent trait of the latter. Furthermore, managerial experience is not a cognitive mechanism in itself. Thus, rather than considering managerial experience as a moderator, we controlled for it in theorizing our research model. Likewise, even though not strictly necessary, environmental uncertainty is strongly associated with or works as a triggering condition for heuristics-based decision approach. In other words, it works as an antecedent to the activation of heuristics rather than a moderator between heuristics and their outcomes. As international entry mode decisions involve uncertain environmental conditions, thus we excluded environmental uncertainty as a moderator as it is inherently involved in the formation of heuristics-based decision approach. We also excluded possible organizational level moderators such as organizational culture even though it has implications for managerial decisions and firm performance (Warrick, 2017). We contend that while the features of an organization's culture (e.g., risk taking or aversion) could shape decisions and their outcomes, they are hard to isolate to be used as a moderator at the cognition level of individual decision makers or managers.

4. Research design and method

4.1. Study 1

4.1.1. Scale validation study: method and results

The first objective of this section is to develop two constructs: an availability heuristic and a representativeness heuristic. The second is to conduct an initial test of the proposed constructs alongside some related and unrelated constructs. Since no established scales exist for availability and representativeness heuristics, particularly in the context of IB

and entry mode choice, we have tried to address this gap in the literature. Based on the propositions presented by [Kahneman \(2017\)](#), we have formulated a list of four items for the availability heuristic, with responses on a seven-point Likert scale. Similarly, drawing on the propositions of [Tversky and Kahneman \(1974\)](#), we have developed six items for the representativeness heuristic, using a seven-point Likert scale (see Appendix A). We employed the single-factor method, following [Pidduck et al. \(2022\)](#), to create parcels for both the availability heuristic and representativeness heuristic. To ensure face validity, five academic experts and five industry experts were engaged to review the scales representing the heuristics.

Subsequently, we collected data on the availability and representativeness heuristics, along with a theoretically related construct (vividness effect) and a theoretically distinct construct (self-efficacy), to perform an exploratory factor analysis (EFA) and evaluate convergent and discriminant validity. Convergent validity is characterized by robust correlations observed between newly developed scales and either existing scales or scales associated with conceptually similar constructs ([Astakhova et al., 2022](#)). Conversely, discriminant validity signifies that a construct is conceptually separate from and exhibits lower correlations with constructs that are conceptually dissimilar ([Astakhova et al., 2022](#)).

We propose that individuals' past experiences, as reflected in availability heuristic, should positively correlate with vivid or emotionally charged events (the vividness effect) that aid in decision making ([Frey & Eagly, 1993](#)). By contrast, making judgments about the probability of an event based on its similarity to a prototype or representative example can also positively correlate with vivid or emotionally charged events ([Dumm et al., 2020](#)). Contrary to that, we argue that self-efficacy that refers to an individual's belief in their own ability to accomplish tasks and achieve goals is completely unrelated to and distinct from availability and representativeness heuristics. The inclusion of vividness effect and self-efficacy allowed us to conduct a confirmatory factor analysis (CFA) with the same sample. Although the use of same sample can bring the issue of overfitting, the approach is used in the past studies in various domains of management ([Howard, 2023](#)).

4.1.2. Sample and procedure

We gathered data for the validation sample from the U.S. working population (managerial positions) using Amazon's Mechanical Turk (Mturk), an online crowdsourcing data collection platform that facilitates researchers' access to a diverse range of individuals for survey participation. Initially, we gathered data from 982 working individuals. The removal of some incomplete responses left us with a final tally of 504 responses. In this sample, 61 percent were male, and the average age was 35.06 years ($SD = 6.02$). The respondents represented diverse ethnicities, with 17 percent being American Indian, 18 percent Asian, 12.5 percent Black or African American, 14.5 percent Hispanic or Latino, 16 percent Native Hawaiian, and 22 percent White. Among the respondents, 42.8 percent had an undergraduate degree or above.

4.1.3. Measures

For the availability heuristic, four items exceeded the threshold of standard loadings ($>.70$), and for the representativeness heuristic, six items met the standard loading criterion ($>.70$) (Appendix B). The Cronbach's alpha values were 0.75 and 0.76, respectively. Subsequently, four items for the vividness effect were adopted from [Van Kerrebroeck et al. \(2017\)](#) and [Jang et al. \(2019\)](#), and four items for self-efficacy were adopted from [Weber et al. \(2004\)](#). Cronbach's alpha was 0.86 for the vividness effect and 0.89 for self-efficacy. The list of the measurement items is included in Appendix A.

4.2. Analysis and results

4.2.1. Exploratory factor analysis (EFA)

We followed an exploratory factor analysis (EFA) based on a single factor method to create a parcel for availability and representativeness heuristics. In the present study, exploratory factor analysis (EFA) and principal component analysis with varimax orthogonal rotation were conducted. The results of the EFA revealed eigenvalues greater than one for all four items ([Kaiser, 1960](#)), with a total variance of 56.44 percent. The recommended acceptable value of the Kaiser-Meyer-Olkin (KMO) statistic (sampling adequacy) should be 0.60 or more ([Tabachnick & Fidell, 1996](#)). In this study, the KMO statistic measure's sampling adequacy was 0.76. The result of the Bartlett test, which showed $\chi^2 = 546.197$, $p = 0.000$, also indicated sufficient inter-correlations. Using the same procedure, we found that the eigenvalues of 6 items of the representativeness heuristic were greater than one, with a total variance of 61.24 percent. The KMO statistic measuring sampling adequacy was 0.86, and the Bartlett test result, indicating $\chi^2 = 1856.883$, $p = 0.000$, also suggested sufficient inter-correlations. The EFA factor loading for each item is provided in Appendix B.

4.2.2. Confirmatory factor analysis (CFA)

To further evaluate the construct validity of the measurement model, we conducted a CFA for the two primary constructs: *availability heuristic* and *representativeness heuristic*. As shown in Appendix C, all standardized factor loadings for the two constructs exceeded the commonly accepted threshold of 0.70, with coefficients ranging from 0.733 to 0.832 for availability heuristic and from 0.700 to 0.878 for representativeness heuristic. These results support the convergent validity of both constructs.

Reliability and validity indicators are reported in Appendix D. Cronbach's alpha values were above the recommended cutoff of 0.70, indicating satisfactory internal consistency reliability ($\alpha = 0.799$ for availability heuristic; $\alpha = 0.760$ for representativeness heuristic). Composite Reliability (CR) values were 0.869 and 0.892, while Average Variance Extracted (AVE) values were 0.624 and 0.582, respectively- all exceeding the recommended thresholds of 0.70 for CR and 0.50 for AVE ([Hair et al., 2019](#)). Thus, both constructs demonstrated acceptable reliability and convergent validity. As our central focus was on the availability and representativeness heuristics, we only reported the results for these two heuristics in Appendix C and Appendix D.

4.2.3. Validity assessment

The construct validity of the entire model was assessed through convergent validity and discriminant validity. We tested convergent validity by initially examining the correlation between availability heuristic and representativeness heuristic, and the relationship was not statistically significant ($r = -0.03$, $p > 0.05$). As expected, the availability heuristic was positively correlated with the vividness effect ($r = 0.52$, $p < 0.05$) and the representativeness heuristic was also positively associated with the vividness effect ($r = 0.493$, $p < 0.05$). Conversely, both the availability heuristic ($r = -0.02$, $p > 0.05$) and the representativeness heuristic ($r = -0.03$, $p > 0.05$) were unrelated to self-efficacy.

We ran a series of CFAs to determine whether the availability heuristic and representativeness heuristic were distinct from the other two constructs (vividness effect and self-efficacy) to establish the discriminant validity. We examined the fit indices of the two models, following the guidelines of [Little et al. \(2013\)](#) and [Shaffer et al. \(2016\)](#): (a) the unconstrained model, in which two latent constructs covary freely with each other, and (b) the constrained model, in which the covariance of the two constructs was set to 1. The results of all comparisons supported

a better fit for the unconstrained model than for the constrained model: vividness effect, $\Delta\chi^2(\Delta df = 1) = 100.87$, $p < .01$, and self-efficacy, $\Delta\chi^2(\Delta df = 1) = 89.949$, $p < .01$. These results suggest that both heuristics had adequate convergent and discriminant validity. Thus, the CFA results showed evidence of construct validity of the proposed theoretical variables.

4.3. Study 2

4.3.1. Research context

For this study, data were collected from internationalizing firms within Bangladesh's apparel export industry. Bangladesh, a burgeoning economic powerhouse in South Asia, is the world's second-largest exporter of textile and apparel products, with garment exports reaching a total of \$42.613 billion in 2021–2022 (Export Promotion Bureau, 2023; Faroque et al., 2021a).

The adoption of export as an entry mode for SMEs typically falls into two primary categories: direct export, involving direct engagement with customers, and indirect export, in which SMEs rely on intermediary relationships to facilitate entry into foreign markets (Hessels & Terjesen, 2010). Within business-to-business markets, and particularly evident in the textile industry, SMEs employ both forms of export; nevertheless, direct interaction with foreign clients is widely acknowledged as a prevalent and favored strategy (Guercini & Runfola, 2021). Hence, variation is minimal among these SMEs in terms of their selection of entry modes, and their prior experience with entry modes renders them suitable for studying the utilization of heuristics (and analytic approaches) in decision making. This suitability arises from the fact that the effectiveness of heuristics in decision making relies on prior experience in related contexts (Jones & Casulli, 2014; Maitland & Sammartino, 2015). The Bangladeshi apparel export industry, with its global exposure, high-stakes buyer interactions, and rapid decision-making cycles, offers an ideal setting for studying the cognitive shortcuts managers rely upon when making international entry decisions. These conditions align with those identified in the heuristics literature as conducive to the emergence of bounded rationality (Gigerenzer & Gaissmaier, 2011), supporting the theoretical relevance of this context.

The success of Bangladesh's apparel industry is notably attributed to the entrepreneurial and managerial decision-making capabilities displayed in diverse circumstances. Since 1978, Bangladesh has remarkably dominated apparel exports among South Asian countries. However, no empirical studies have explored entrepreneurial decision-making, specifically investigating heuristics and analytic decision models, and whether such decision-making approaches influence the effectiveness of entry mode decisions and the performance of internationalizing SMEs.

4.3.2. Data collection process

Following the suggestions of Steenkamp and Baumgartner (1998), the questionnaire was first translated into Bengali to ensure clarity and comprehensibility for the local respondents, and then back-translated into English to verify consistency. Recognizing the importance of cultural adaptation, we also took steps to ensure cross-cultural instrument validity. As noted by Knight (1997) and Steenkamp and Baumgartner (1998), using measurement scales developed in one cultural context (e.g., the U.S.) without proper validation in another context may lead to invalid inferences. To mitigate this risk, we addressed the cultural equivalence issue for the scale items of the heuristic constructs through expert reviews from the same reviewers and confirmed the items' validity using confirmatory factor analysis (CFA) within the Bangladeshi context. These procedures reflect established best practices for ensuring cross-cultural reliability and validity (Knight, 1997; Steenkamp & Baumgartner, 1998).

In June 2023, face-to-face surveys were conducted to gather data,

primarily due to the low response rate for mail surveys in developing nations (Faroque et al., 2021a). First, 500 internationalizing firms were randomly selected from the directory of the Bangladesh Garment Manufacturers and Exporters Association (BGMEA). We then pre-tested the questionnaire with 25 firms. Based on the observations and comments received from the respondents, we made some adjustments to the questionnaire before the final survey. These 25 initial respondents were not included in the final survey and data set. Later, the listed firms were contacted by email and telephone to make appointments for the face-to-face interviews. After receiving confirmation from the firms' authorities, interviewers were sent to collect the data, using a structured questionnaire, from the persons who were directly related to decision-making processes (i.e., export managers, procurement managers, financial managers, and operations managers). On average, the interviews took 25 min. A total of 285 valid responses were ultimately retained for the analysis.

4.3.3. Measures

For the respondents, each component of the instrument is explained in simple, understandable English. In this research, three constructs (decision rationality, entry mode decision effectiveness, and international performance [with three dimensions of profitability, sales, and market performance]) were adapted from earlier studies. The measures for the availability and representativeness heuristics in entry mode decisions were developed from the accepted definition of the concept and the specific context of this study. The study adopted four items for availability heuristic to reflect the elements of this specific heuristic: decisions in entry mode made based on top management team's previous experience, other firms' entry mode decisions in the industry, the company's own previous entry mode choice decisions, and an automatic process in which managers rely on their accumulated experience rather than the intensive use of information and analysis. For the representativeness heuristic, six items were developed to reflect its properties, based on the accepted definition of the concept and the specific context of this study: decisions on the entry mode made in line with the similarity of a previously entered market (environment, buyers' requirements, and competitors' strategies [one item for each]), frequency of using a specific entry mode in the past, decisions made by other firms, and the familiarity with the decision-making context. All items met the required threshold, except for one item related to representativeness heuristic: '...based on the decisions made by other firms we personally know about.' A seven-point Likert scale was used to estimate all measures (1 = strongly disagree, 7 = strongly agree). The newly developed scales were validated in the earlier section of the study. A list of the measurement scales, together with their sources, is presented in Appendix A.

4.3.4. Control variables

Factors such as firm age and managerial experience can influence international performance. The age of the firm was controlled because it can affect firms' international performance (Elmagrhi et al., 2019; Hsu et al., 2015). Conversely, some studies have found that managerial experience has an influence on international performance (Helfat & Martin, 2015; Post & Byron, 2015). The firms' age and managerial experience were used as control variables in the present study.

4.3.5. Test of endogeneity

We applied the following methods to address potential endogeneity issues. First, to mitigate simultaneity, we collected temporally lagged data for international performance (the dependent variable) across several sections of the questionnaire (Zaefarian et al., 2017). Second, we used the Durbin-Wu-Hausman test, as recommended by Dong et al. (2016), to empirically assess the likelihood of endogeneity. Specifically,

Table 1
Demographic Information (n = 285).

Characteristics	Categories	Frequencies	Percentage (%)
Number of employees	≤ 100	47	16.49
	101–250	104	36.49
	251–500	134	47
Number of export markets	1–3	48	16.84
	4–6	67	23.50
	7–9	88	30.87
	10 and over	82	28.77
	Age of firms	1–5	79
	6–10	90	31.57
	11–20	83	29.12
	20 +	33	11.57
Job position	Export manager	109	38.24
	Procurement manager	81	28.42
	Financial manager	66	23.15
	Operations manager	29	10.17

we regressed decision rationality, entry mode decision effectiveness, availability heuristic, and representativeness heuristic on the control variables, then included the residuals from this regression as an additional regressor in our hypothesized model. The estimate for the residuals in the proposed model was not statistically significant, indicating that potential endogeneity among the study variables was not a concern (Gani et al., 2024).

4.3.6. Common method bias (CMB)

We exercised special caution regarding the matter of common method bias (CMB) both prior to and after the data collection. To prevent CMB and evaluate its impact on the final data set, we used both procedural and statistical preparations (Podsakoff, 2003).

Initially, the measurement items were refined by eliminating ambiguity to ensure that the questions were straightforward and specific. Subsequently, all scale items were individually presented without labeling the variables based on the reported constructs, thereby avoiding

Table 2
Psychometric properties.

Variables	Items	Standard loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	VIF
Availability heuristic	AH1	0.795	0.772	0.798	0.856	0.597	1.342
	AH2	0.778					1.455
	AH3	0.726					1.341
	AH4	0.790					1.469
Decision rationality	DR1	0.712	0.730	0.786	0.852	0.535	1.415
	DR2	0.731					1.454
	DR3	0.737					1.420
	DR4	0.701					1.528
	DR5	0.773					1.681
Decision effectiveness	DE1	0.825	0.863	0.866	0.901	0.646	2.194
	DE2	0.828					2.242
	DE3	0.821					2.006
	DE4	0.770					1.898
	DE5	0.773					1.872
Market performance	Mkt1	0.834	0.810	0.701	0.852	0.657	1.623
	Mkt2	0.821					1.583
	Mkt3	0.775					1.137
Profitability	Profit1	0.767	0.781	0.733	0.825	0.611	1.175
	Profit2	0.778					1.345
	Profit3	0.800					1.233
Sales performance	Sales1	0.761	0.787	0.697	0.831	0.621	1.286
	Sales2	0.849					1.620
	Sales3	0.751					1.388
Representativeness heuristic	RH1	0.761	0.749	0.788	0.865	0.562	1.449
	RH2	0.741					1.361
	RH3	0.785					1.402
	RH 4	0.728					1.464
	RH 5	0.733					1.449

the grouping of items by constructs and minimizing the likelihood of respondents consciously associating the study with themselves. Furthermore, at the onset of the questionnaire's cover letter, the respondents were informed that their demographic data and personal information would be treated as anonymous and kept confidential (Rahman et al., 2022).

During the second phase, we employed a statistical evaluation approach recommended by Harman (1967) to examine any potential CMB that may have influenced the data collected during the study. The statistical control employed Harman's single-component test (Harman, 1967) through EFA; the results showed an explained variance of 21.20 %, which was under the 50 % criterion. In the third phase, the study used the partial correlation test suggested by Lindell and Whitney (2001). For this process, we used a marker variable. The test's findings revealed that the study correlations had not changed much, indicating that CMB was not a significant problem in the data set gathered in this study.

4.3.7. Data analysis method

For analytical purposes, we utilized structural equation modeling (SEM) with PLS-4. Scholars specializing in IB and marketing have advocated for the use of structural modeling to assess the simultaneous relationships between independent and dependent variables (Hult et al., 2018; Richter et al., 2022). The relevance of the path coefficient and factor loading was then tested using bootstrapping (resampling = 5000) (Weedige et al., 2019). The employment of SEM in this study successfully achieved two key objectives: (a) It assessed the psychometric properties of the measures, thereby validating their validity, and condensed the observed variables into a smaller number of latent components; and (b) it evaluated the path results through the structural model, thus identifying the causal relationships among the variables.

4.4. Data analysis and results

4.4.1. Demographic information

The data for this study were gathered from SMEs that are engaged in internationalization. Descriptive statistics of the data are provided in

Table 3
Fornell-Larcker criterion.

	1	2	3	4	5	6	7
1) Availability heuristic	0.772						
2) Decision rationality	0.613	0.731					
3) Decision effectiveness	0.714	0.620	0.803				
4) Market performance	0.521	0.513	0.523	0.810			
5) Profitability	0.556	0.668	0.562	0.567	0.781		
6) Representativeness heuristic	0.736	0.593	0.716	0.571	0.562	0.749	
7) Sales performance	0.583	0.618	0.554	0.599	0.580	0.568	0.788

Table 4
Heterotrait-Monotrait ratio (HTMT) - Matrix.

	1	2	3	4	5	6	7
1) Availability heuristic	-						
2) Decision rationality	0.800						
3) Decision effectiveness	0.788	0.743					
4) Market performance	0.737	0.706	0.686				
5) Profitability	0.821	0.729	0.756	0.819			
6) Representativeness heuristic	0.813	0.716	0.786	0.806	0.827		
7) Sales performance	0.811	0.843	0.711	0.801	0.876	0.783	

Table 1. In a labor-intensive industry, organizations with fewer than 500 employees are referred to as SMEs, while those with more than 500 employees can be classified as large organizations (Faroque et al., 2021b). In the present study, we have categorized SMEs into three distinct ranges: firms with fewer than 100 employees account for 16.5 %, firms with 101–250 employees represent 36.5 %, and those with 251–500 employees constitute 47 %. Among these firms, approximately 30.8 % engage in exporting activities in 7–9 countries, 28.7 % export to 10 or more countries, 23.5 % export to 4–6 countries, and 16.8 % export to 1–3 countries. Regarding the age distribution of the firms, 31.5 % fall within the 6- to 10-year range, 29.1 % are in the 11- to 20-year range, and 27.7 % are within 1–5 years of establishment. Of the respondents, 38.2 % occupied the position of export managers, 28.4 % were procurement managers, 23.15 % served as financial managers, and 10.17 % held the position of operations manager.

4.4.2. Measurement model

Table 2 presents the results of the psychometric properties analysis, which assessed reliability, convergent validity, and discriminant validity. The findings from the measurement model indicate that the standard loadings of each item exhibit satisfactory values, surpassing the threshold of 0.70 (Hair et al., 2011; Rahman et al., 2023). Furthermore, all constructs meet the recommended thresholds for Cronbach's alpha and composite reliability, as both exceed the value of 0.70, as suggested by Legate et al. (2023). The average variance extracted (AVE), an indicator of convergent validity, exceeds the required threshold level, as each variable surpasses 0.50 (Hair et al., 2019). Additionally, the values of the variance inflation factor (VIF) range from 1.23 to 2.24, which satisfies the criterion of ≤ 3 , indicating the absence of significant multicollinearity among the multiple regression variables (Hair et al., 2017).

Discriminant validity was assessed using two approaches: the Fornell and Larcker criterion and the Heterotrait-Monotrait (HTMT) correlations. In line with Fornell and Larcker (1981), the square root of the average variance extracted (AVE) was calculated and represented

Table 5
R² and Q².

	R ²	Q ²
Entry mode decision effectiveness	0.622	0.610
Market performance	0.274	0.329
Profitability	0.316	0.384
Sales performance	0.307	0.379

diagonally to evaluate the correlation between a construct and other constructs (Table 3). The correlation between a construct and any other construct should be lower than the square root of the AVE associated with the construct. We further examined discriminant validity using the HTMT correlations, as suggested by Henseler et al. (2015). Henseler et al. (2015) recommended that the HTMT ratio should be less than 1.00. The HTMT ratios were obtained and are presented in Table 4. Based on both the Fornell and Larcker criterion and the HTMT correlations, the study demonstrates satisfactory discriminant validity.

4.4.3. Assessing the structural model

Once the measurement model has been evaluated, as advised by Hair et al. (2019), assessing the structural model becomes crucial for further analysis of the results. At this stage, the recommended approach is to examine the predictive quality (R²), effect size of the relationship (f²), and predictive relevance through blindfolding using Q², as suggested by Ringle et al. (2020). The outcomes of the coefficients of determination (R²) for the endogenous latent variables are presented in Table 5. The R² for entry mode decision effectiveness is 0.622, indicating that the availability and representativeness heuristics, as the endogenous latent variables, account for 62 % of the variance in entry mode decision effectiveness. Similarly, market performance explains 27 % of the variance, profitability explains 31 % of the variance, and sales explain 30 % of the variance when the entry mode decision effectiveness functions as the latent endogenous variable. R² values greater than 0.50 are considered to have a moderate explanatory power over the variance (see Table 5).

We assessed the predictive relevance (Q²) by employing the blindfolding procedure, as recommended by Hair et al. (2019). The results presented in Table 5 indicate that the model exhibits satisfactory predictive capability, as all Q² values are greater than zero. Specifically, our findings show that entry mode decision effectiveness has a Q² value of 0.610, indicating a high level of predictive relevance (Q² > 0.50). Additionally, market performance, profitability, and sales performance have Q² values of 0.329, 0.384, and 0.379, respectively, indicating a medium level of predictive relevance (Q² > 0.25) in our case (Hair et al., 2019) (see Table 5).

The PLS-SEM results, presented in Table 6, highlight the relationships between different variables. The findings reveal significant associations between the availability heuristic and decision effectiveness ($t = 8.159$, $\beta = 0.335$, $p < 0.001$), as well as between the representativeness heuristic and decision effectiveness ($t = 7.951$, $\beta = 0.347$,

Table 6
Results of the path analysis.

Relationships	β	Sample mean (M)	SD	t-stat	P values	f^2	Decision	BC-CI 5.0 %	95.0 %
H1 Availability heuristic -> Decision effectiveness	0.335	0.335	0.041	8.159	0.000	0.121	Supported	0.254	0.414
H2 Representativeness heuristic -> Decision effectiveness	0.347	0.348	0.044	7.951	0.000	0.134	Supported	0.259	0.430
H3 Decision effectiveness -> Profitability	0.562	0.563	0.026	21.698	0.000	0.461	Supported	0.506	0.608
H4 Decision effectiveness -> Sales performance	0.554	0.555	0.029	19.184	0.000	0.442	Supported	0.493	0.606
H5 Decision effectiveness -> Market performance	0.523	0.525	0.031	17.016	0.000	0.377	Supported	0.459	0.579
H6 Availability heuristic x Decision rationality -> Decision effectiveness	0.401	0.401	0.041	13.462	0.002	0.313	Supported	0.024	0.185
H7 Representativeness heuristic x Decision rationality -> Decision effectiveness	-0.052	-0.054	0.040	1.290	0.004	0.014	Supported	0.130	0.226

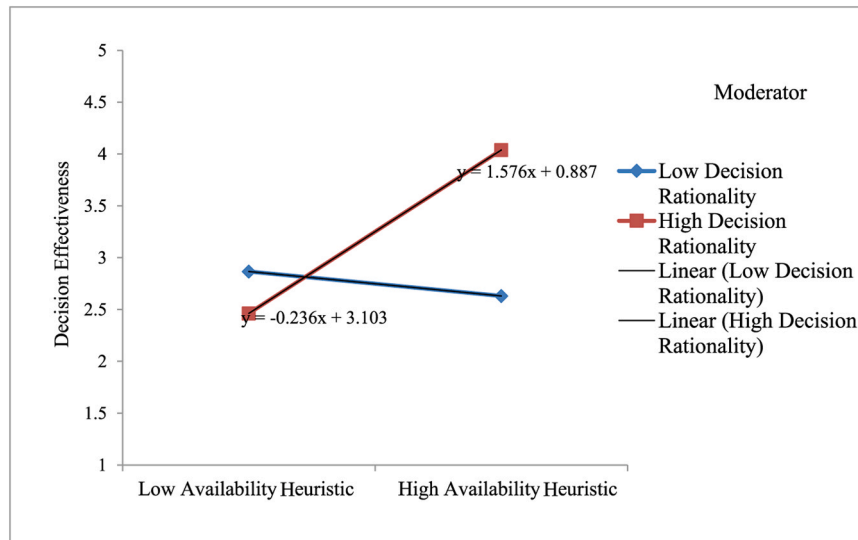


Fig. 2. Decision rationality strengthens the positive relationship between availability heuristic and decision effectiveness.

$p < 0.001$), thus supporting H1 and H2. Moreover, a significant relationship is observed between decision effectiveness and profitability ($t = 21.698, \beta = 0.562, p < 0.001$), decision effectiveness and sales performance ($t = 19.184, \beta = 0.554, p < 0.001$), and decision effectiveness and market performance ($t = 17.016, \beta = 0.523, p < 0.001$), thereby confirming support for hypotheses H3, H4, and H5.

We also examined the moderating effect of decision rationality on

the relationship between two distinct types of heuristics and entry mode decision effectiveness. The findings indicate that decision rationality positively moderates the association between availability heuristic and entry mode decision effectiveness ($t = 13.462, \beta = 0.401, p < 0.005$), as depicted in Fig. 2, thus supporting H6. This suggests that decision rationality enhances the positive relationship between availability heuristics and entry mode decision effectiveness.

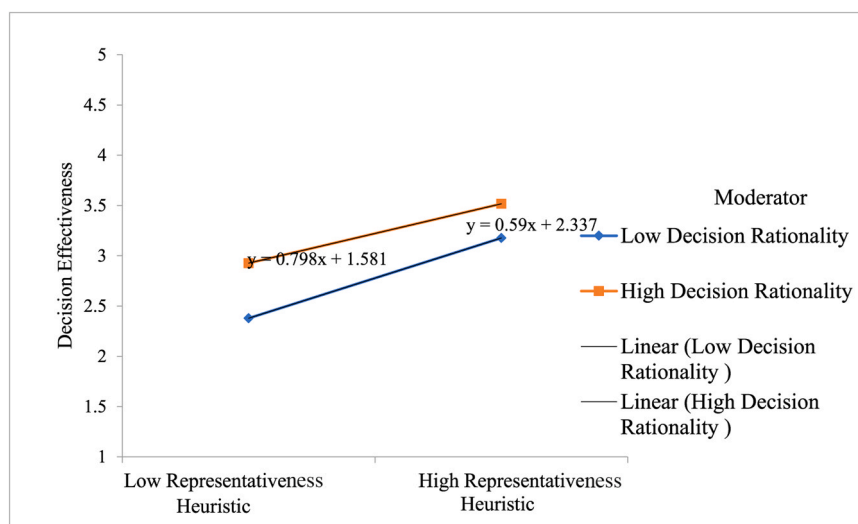


Fig. 3. Decision rationality dampens the positive relationship between representativeness heuristic and decision effectiveness.

By contrast, the results reveal that decision rationality, although it has a weak effect, negatively moderates the relationship between representativeness heuristic and entry mode decision effectiveness ($t = 1.290$, $\beta = -0.052$, $p < 0.005$), as illustrated in Fig. 3, thus supporting H7. This suggests that although decision rationality has a significant influence, it reduces the positive relationship between the representativeness heuristic and entry mode decision effectiveness. As depicted in Fig. 3, the negative effect on decision effectiveness is higher in situations in which a high level of decision rationality is paired with a high level of representativeness heuristic. Conversely, pairing of low decision rationality with a low representativeness heuristic produces a lower negative effect on entry mode decision effectiveness.

The study findings for the f^2 value indicate that the impact size is relatively redundant given the size of the path coefficient for each link (Hair et al., 2019). As shown in Table 6, f^2 indicates the change in R^2 when an exogenous variable is removed from the model. In this table, all f^2 values for the factors exceed 0.02, indicating a small effect size. A value greater than 0.15 signifies a medium effect size, while a value greater than 0.35 indicates a larger effect size for the relationships. This study controlled for firms' age and managerial experience. However, the results from the study revealed that none of the control variables had a significant effect on international performance.

5. Discussion, Implications, and Limitations

The decision-making process regarding the mode of entry into foreign markets is multifaceted and demanding. It reflects how managers must navigate uncertainty, time pressure, and cognitive constraints—often blending intuitive shortcuts with deliberate analysis. The findings of this study deepen our understanding of this process by showing how managers combine heuristics with analytical methods to enhance the effectiveness of entry mode decisions and, ultimately, international performance.

This study extends dual-process theory by showing that heuristic-analytic interactions are not universally beneficial. Availability and representativeness heuristics, while both effective in entry mode decision in isolation, diverge when combined with rational analysis: the former enhances decision quality, while the latter may impair it. The availability heuristic, rooted in memory retrieval and experiential recall, complements rational analysis by providing quick anchors when information is limited or time is short. In contrast, representativeness heuristic, based on pattern recognition and similarity judgments, can conflict with rational evaluation by introducing redundancy or misleading analogies.

This divergence challenges the simplified view in many dual-process models that intuitive (Type 1) and analytical (Type 2) thinking always either compete or harmonize (Evans, 2007; Kaufmann et al., 2017). Our results suggest instead that the outcome of such interaction depends heavily on the type of heuristic in use. By highlighting this asymmetry, we propose a more fine-grained understanding of bounded rationality—one that encourages scholars to disaggregate Type 1 reasoning into distinct cognitive tools rather than treat it as a single, uniform mode of thinking.

Importantly, these findings loop back meaningfully to our hypotheses. H1 and H2 confirm the positive standalone effects of both heuristics on decision effectiveness. But it is in H6 and H7 where the theoretical story deepens. The supportive role of rationality in amplifying the effectiveness of availability heuristic (H6) underscores its value in reinforcing experience-based decisions. Conversely, the weakening effect of rationality on representativeness heuristic (H7) points to potential cognitive overload when managers attempt to validate pattern-based reasoning with exhaustive analysis. This highlights a crucial insight: integrating rationality does not always improve decision quality—it depends on the cognitive shortcut being used.

The distinct cognitive mechanisms behind these outcomes further explain the divergence. Availability heuristic operates through memory

retrieval, providing managers with vivid experiential cues that rational analysis can refine to improve effectiveness. By contrast, representativeness heuristic relies on similarity judgments that already embed implicit assumptions about market conditions or competitive dynamics. When rational analysis is applied on top of these judgements, it risks duplicating or over-validating them, resulting in redundancy, cognitive overload, or confirmation bias. This asymmetry underscores that heuristic-analytic rational interactions cannot be generalized but must be understood at the level of specific heuristics, an insight that invites further empirical testing of alternative heuristic pairings in international decision-making contexts.

5.1. Implications for research

This study offers several important implications for theory and research. First, it refines dual-process theory in the context of IB by highlighting that the benefits of heuristic-analytic interactions are not universally applicable but instead depend on the type of heuristic involved. Specifically, we demonstrate that the combination of availability heuristic and rational analysis enhances the effectiveness of entry mode decisions, while the integration of representativeness heuristic with rationality may impair effectiveness. This contrast underscores that not all intuitive (Type 1) processes interact similarly with analytic (Type 2) reasoning, advancing a more differentiated and context-sensitive understanding of cognitive mechanisms in IB decision-making. More broadly, this study reinforces the importance of considering both heuristic-based and rational decision-making logics in IB theory development. While many dual-process models emphasize conflict or competition between intuitive and analytical processes, our findings support a more nuanced interpretation: heuristic and rational systems may function complementarily, depending on the heuristic in question and the decision context (Evans, 2007; Kaufmann et al., 2017). This insight not only refines dual-process theory but also emphasizes cognitive adaptability over rigid dualism.

Second, research on entry mode choice in IB has become increasingly saturated, and some scholars have argued that additional studies in this area may offer limited value due to an overreliance on organizational and macro-level explanations, leaving the cognitive attributes of individual decision-makers largely unexplored (Aharoni et al., 2011). This study contributes meaningfully to that debate by reintroducing a micro-level, cognition-based perspective to a field historically dominated by structural and environmental theories. Foundational research has typically explained entry mode decisions through lenses such as transaction cost economics (Anderson & Gatignon, 1986; Brouthers, 2002) and institutional theory, which emphasize legitimacy, institutional distance, and regulatory constraints (Meyer et al., 2009). In contrast, our study contributes to the development of micro-level cognitive foundations in IB by examining how specific heuristics-availability and representativeness—shape managerial reasoning and interact with analytical processes in real-world entry mode decisions. This cognitive lens recenters the role of the individual manager and encourages more fine-grained inquiry into how strategic decisions are made under uncertainty and bounded rationality. In doing so, our study not only complements but also extends the literature by showing that heuristic-analytic interactions are heuristic-specific, rather than generalizable across all types of intuitive reasoning, and by helping to move beyond the predominantly macro-level focus on institutions and transaction cost logic that has historically shaped entry mode research.

While heuristics have long been recognized as important tools for decision-making under uncertainty, their role in shaping strategic internationalization choices, especially among SMEs, has received limited empirical attention. Our findings show that such cognitive mechanisms are not only relevant for decision effectiveness but are also significantly associated with international performance—an area that remains under-researched in the IB literature (Forbes, 2005). By demonstrating that both heuristic and rational logics affect firms' ability

to make and adapt entry decisions, this study enriches our understanding of how decision quality can translate into competitive outcomes in foreign markets. This aligns with previous research suggesting that the strategic logic applied to entry decisions influences firms' post-entry adaptability and long-term success (Ahi et al., 2017), and underscores the value of integrating behavioral and cognitive perspectives into performance-oriented internationalization research.

Finally, this research makes a methodological contribution by developing and validating novel, context-sensitive measurement scales for availability and representativeness heuristics. To our knowledge, these are the first empirically tested heuristic scales in the entry mode context. These scales offer researchers a new set of tools for studying cognitive shortcuts across diverse IB contexts, enabling more fine-grained operationalization of decision-making logic.

5.2. Implications for managers

Our findings offer several practical takeaways for managers navigating international market entry, particularly those operating in resource-constrained, export-driven sectors such as Bangladesh's apparel industry. A central insight is that not all decision shortcuts (heuristics) function the same way when combined with rational analysis. For managers under pressure to make timely decisions with incomplete information, this distinction is critical. The availability heuristic, based on easily retrievable past experiences, can be highly effective, especially when paired with minimal analytic checks. For example, export managers deciding on an entry mode for a new regional market may benefit from recalling their firm's earlier expansion into culturally or structurally similar markets, and then validating that decision with some structured evaluation (e.g., updated customer data, basic cost comparisons). In such cases, intuition and analysis can complement each other productively.

By contrast, the representativeness heuristic, which relies on perceived similarity between contexts, may lead to overconfidence or flawed assumptions when combined with rational analysis. For instance, assuming a new market will behave like a previous one, based on surface similarities, could lead managers to overlook critical differences (e.g., regulatory complexity, buyer behavior). If they also attempt to verify this assumption through analytic means, the result may be cognitive overload or misplaced confidence. Managers should be aware of this risk and consider separating quick judgment from in-depth analysis when using similarity-based reasoning.

While these findings are most directly relevant to Bangladeshi apparel exporters, they may also apply to firms in other low- and middle-income countries where export experience is often concentrated in a few core markets and decision-making relies heavily on experiential learning. However, we caution against applying these insights wholesale to sectors with high product novelty or volatile demand, where heuristics may operate differently. To put this into practice, managers can: (a) use past successes as starting points, but validate them with minimal, targeted analysis (e.g., reassess key assumptions about partners, logistics, or regulations); (b) avoid equating similar-looking markets with identical ones, especially when formal rational analysis is also applied; and (c) train decision-makers to recognize which heuristic they are relying on, and to anticipate when it is likely to help or hinder decision quality, depending on its interaction with analytic reasoning. Overall, the key takeaway is not to abandon heuristics, but to use them mindfully and selectively, recognizing when they enhance decision-making and when they need to be balanced, or even bracketed, by deliberate analysis.

5.3. Limitations and future research avenues

Like any research, our study has limitations that offer opportunities for future exploration. First, our empirical focus on Bangladesh's export-

oriented apparel sector provides a rich context, given its institutional informality and collectivist cultural backdrop. However, these same features may shape how managers rely on heuristics in ways that do not translate directly to other industries or national settings. Future research could examine whether similar patterns hold in technology-driven sectors, knowledge-intensive services, or in countries with different cultural profiles, particularly those varying in uncertainty avoidance or individualism.

Second, our cross-sectional design provides only a snapshot in time and does not capture how decision-making evolves. Longitudinal or experimental designs could reveal how heuristics and rational strategies shift as managers gain experience, receive market feedback, or adapt to changing environments. This would clarify whether heuristics are refined, reinforced, or abandoned over time, and under what conditions those changes occur.

Third, while we focused on availability and representativeness heuristics, many other cognitive shortcuts may influence managerial thinking, including anchoring, overconfidence, confirmation bias, or sunk cost fallacy. Future studies could examine how these heuristics interact with rational decision-making. For instance: Are some heuristics more resistant to analytic correction than others? Do certain shortcuts actually improve decisions when used deliberately? These are compelling questions for advancing dual-process theory in IB contexts.

In line with our theoretical framing, we recognize that our use of availability and representativeness heuristics within dual-process theory reflects a heuristics-and-biases approach (Tversky & Kahneman, 1974). While this tradition has shaped understanding of cognitive limitations, alternative paradigms such as fast-and-frugal heuristics (Gigerenzer & Gaissmaier, 2011) or simple rules (Bingham & Eisenhardt, 2011) offer different perspectives on bounded rationality. Comparative studies could reveal how these approaches perform across contexts and decision types in IB.

Fourth, future research should also look beyond entry mode decisions. Strategic choices—such as recognizing international opportunities, selecting foreign markets, forming international partnerships, setting prices, or adapting post-entry operations—are all made under uncertainty and bounded rationality. Studying these decision points could reveal different dynamics in how heuristics and analysis complement or clash. Identifying boundary conditions is particularly promising: when does rational analysis enhance intuitive judgment, and when does it overwhelm or contradict it?

Likewise, the combination of heuristics and decision rationality is exposed to many micro (e.g., decision-maker), meso (e.g., firm), and macro (e.g., external environment) factors contributing to the complexity of the decision-making process related to entry-mode choices. This complexity calls for integration of these factors in our studied model to further expand the model's strength in explaining the phenomena studied. As part of this integration, future studies could explore the simultaneous impact of two or more factors operating at different levels on heuristics and rational decision-making approaches. For example, how might a manager's cognitive diversity (Olson et al., 2007) interact with high versus low environmental dynamism to shape the effects of heuristics and rationality? Taken together, these directions invite a deeper, more theory-informed understanding of how managers actually think and decide as they navigate the risks and complexities of internationalization.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the author(s) used ChatGPT in order to improve the readability and clarity of the paper. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

Appendix-A. Measurement items

Variables	Items	Sources
Availability heuristic	Our entry mode choice decision is made based on... ...our top management team's previous experience in the industry. (AH1) ...other firms' entry mode decisions in the industry. (AH2) ...our previous entry mode decisions we made. (AH3) ...an automatic process in which we rely more on our accumulated experience than the intensive use of information and analysis. (AH4)	Own development based on Kahneman (2017)
Representativeness heuristic	Our entry mode choice decision is made... ... in line with the similarity of the market (political, legal environment, etc.) we have entered previously. (RH1) ... in line with the similarity of the market (buyers' needs and requirements) we have entered previously. (RH2) ... in line with the similarity of the market (competitors' strategy) we have entered previously. (RH3) ... based on the frequency of using a particular entry mode (e.g. exporting) in the past. (RH4) ...based on our familiarity with decision making context we have been involved in the past. (RH5) ...based on the decisions made by other firms we personally know about.* (RH6)	Own development based on Tversky and Kahneman (1974)
Decision rationality	To what extent do you follow the items below in the internationalization decision-making (e.g. entry mode choice, market selection, etc)? 1. We look for information extensively in making decisions. 2. We analyze relevant information before making decisions. 3. Quantitative analytic techniques are important in making decisions. 4. We focus attention on crucial information and ignore irrelevant information. 5. Overall, we evaluate analytic intensiveness regarding our decision-making process.	Adapted from Ji and Dimitratos (2013) , originally from Dean and Sharfman (1993, 96) , Elbanna and Child (2007)
Entry mode decision effectiveness	To what extent are you satisfied on the following: 1. The overall objectives of the decision 2. The linkages achieved with local partners 3. The enhancement of the firm's competitive position 4. The success in learning critical skills or capabilities 5. The overall decision-making effectiveness	Kale et al. (2002) ; Walter et al. (2008) ; used in Ji and Dimitratos (2013)
International performance	How would you rate the international performance of your firm during the past three years in terms of the following indicators, compared to your main competitors?	
Profitability	1. overall profitability during the past 3 years 2. return on investment during the past 3 years 3. return on asset during the past 3 years	Li and Atuahene-Gima (2001) ; Menguc and Auh (2008)
Sales	1. overall market share relative to target market objective during the past 3 years 2. sales volumes relative to target market objective during the past 3 years 3. sales growth relative to target market objective during the past 3 years	Cadogan et al. (2002) ; Menguc and Auh (2008)
Market performance	1. satisfaction with attracting new export customers during the past 3 years 2. satisfaction with new export market entry during the past 3 years 3. satisfaction with performance in strategically important target markets during the past 3 years	Faroque et al. (2022)
For checking scale validity		
Vividness effect	I can clearly imagine the situation. I can clearly relate the situation. I can clearly picture the situation. The situation is very concrete to me.	Van Kerrebroeck et al. (2017) ; Jang et al. (2019)
Self-efficacy	I can have a positive impact on social problems. I can help people with handicaps. I have confidence in my ability to help others. I can make a difference in my community. Each of us can make a difference in the lives of the less fortunate.	Weber et al. (2004)

*Removed in the second study due to low factor loadings

- Cadogan, J. W., Diamantopoulos, A., & Siguaw, J. A. (2002). Export market-oriented activities: Their antecedents and performance consequences. *Journal of International Business Studies*, 33, 615–626.
- Chaiken, S., & Ledgerwood, A. (2012). A theory of heuristic and systematic information processing. In P. A. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 246–266). London, England: Sage Publications.
- Chase, V. M., Hertwig, R., & Gigerenzer, G. (1998). Visions of rationality. *Trends in Cognitive Sciences*, 2(6), 206–214.
- Chetty, S. K., & Wilson, H. I. (2003). Collaborating with competitors to acquire resources. *International Business Review*, 12(1), 61–81.
- Dalsace, F. and Challagalla, G. (2024). How to Market Sustainable Products: Three paths to success. *Harvard Business Review*. Accessed from: (<https://hbr.org/2024/03/how-to-market-sustainable-products>).
- Dane, E., & Pratt, M. G. (2007). Exploring intuition and its role in managerial decision making. *Academy of Management Review*, 32(1), 33–54.
- Dean, J. W., Jr., & Sharfman, M. P. (1996). Does decision process matter? A study of strategic decision-making effectiveness. *Academy of Management Journal*, 39(2), 368–392.
- Dean, J. W., Jr., & Sharfman, M. P. (1993). Procedural rationality in the strategic decision-making process. *Journal of Management Studies*, 30(4), 587–610.
- Demirbag, M., & Mirza, H. (2000). Factors affecting international joint venture success: An empirical analysis of foreign-local partner relationships and performance in joint ventures in Turkey. *International Business Review*, 9(1), 1–35.
- Doh, J. P. (2000). Entrepreneurial privatization strategies: Order of entry and local partner collaboration as sources of competitive advantage. *Academy of Management Review*, 25(3), 551–571.
- Dong, M. C., Ju, M., & Fang, Y. (2016). Role hazard between supply chain partners in an institutionally fragmented market. *Journal of Operations Management*, 46(1), 5–18.
- Dumm, R. E., Eckles, D. L., Nyce, C., & Volkman-Wise, J. (2020). The representative heuristic and catastrophe-related risk behaviors. *Journal of Risk and Uncertainty*, 60, 157–185.
- Efrat, K., Hughes, P., Nemkova, E., Souchon, A. L., & Sy-Changco, J. (2018). Leveraging of dynamic export capabilities for competitive advantage and performance consequences: Evidence from China. *Journal of Business Research*, 84, 114–124.
- Elia, S., Larsen, M. M., & Piscitello, L. (2019). Entry mode deviation: A behavioral approach to internalization theory. *Journal of International Business Studies*, 50, 1359–1371.
- Elmagrhi, M. H., Ntim, C. G., Elamer, A. A., & Zhang, Q. (2019). A study of environmental policies and regulations, governance structures, and environmental performance: The role of female directors. *Business Strategy and the Environment*, 28(1), 206–220.
- Elbanna, S., & Child, J. (2007). The influence of decision, environmental and firm characteristics on the rationality of strategic decision-making. *Journal of Management Studies*, 44(4), 561–591.
- Epley, N., & Gilovich, T. (2006). The anchoring-and-adjustment heuristic: Why the adjustments are insufficient. *Psychological Science*, 17(4), 311–318.
- Evans, J. S. B. (2007). On the resolution of conflict in dual process theories of reasoning. *Thinking Reasoning*, 13(4), 321–339.
- Evans, J., & Stanovich, K. (2013). Dual-process theories of higher cognition: Advancing the debate. *Perspectives on Psychological Science*, 8(3), 223–241.
- Evans, J. S. B., & Curtis-Holmes, J. (2005). Rapid responding increases belief bias: Evidence for the dual-process theory of reasoning. *Thinking Reasoning*, 11(4), 382–389.
- Export Promotion Bureau (EPB) (2023). Accessed from: (<http://www.epb.gov.bd/>), Accessed on July 6, 2023.
- Faroque, A. R., Kuivalainen, O., Ahmed, J. U., Rahman, M., Roy, H., Ali, M. Y., & Mostafiz, M. I. (2021a). Performance implications of export assistance: The mediating role of export entrepreneurship. *International Marketing Review*, 38(6), 1370–1399.
- Faroque, A. R., Morrish, S. C., Kuivalainen, O., Sundqvist, S., & Torkkeli, L. (2021b). Microfoundations of network exploration and exploitation capabilities in international opportunity recognition. *International Business Review*, 30(1), Article 101767.
- Faroque, A. R., Torkkeli, L., Sultana, H., & Rahman, M. (2022). Network exploration and exploitation capabilities and foreign market knowledge: The enabling and disabling boundary conditions for international performance. *Industrial Marketing Management*, 101, 258–271.
- Forbes (2017). How Australia's frank body built a \$20 million global beauty brand on social media. Accessed from: (<https://www.forbes.com/sites/vivienneecker/2017/02/22/how-australias-frank-body-built-a-20m-global-beauty-brand-on-social-media/>), Accessed on October 8, 2024.
- Forbes, D. P. (2005). Are some entrepreneurs more overconfident than others? *Journal of Business Venturing*, 20(5), 623–640.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Frank Body (2024). About. Accessed from: (<https://www.frankbody.com/au/about/>), Accessed on October 8, 2024.
- Frey, K. P., & Eagly, A. H. (1993). Vividness can undermine the persuasiveness of messages. *Journal of Personality and Social Psychology*, 65(1), 32–44.
- Fritz Hansen. (2024). Company information. Accessed from: (<https://www.fritzansen.com/en/corporate-profile>).
- Fritz Hansen. (2020). Annual report 2020. Accessed from: (<https://cloudinary.fritzansen.com/-/media/files/report/fritz-hansen-annual-report-2020-pdf.pdf>).
- Gani, M. O., Rahman, M. S., Bag, S., & Mia, M. P. (2024). Examining behavioural intention of using smart health care technology among females: Dynamics of social influence and perceived usefulness. *Benchmarking: An International Journal*, 31(2), 330–352.
- Gigerenzer, G. (1996). On narrow norms and vague heuristics: A reply to Kahneman and Tversky. *Psychological Review*, 103(3), 592–596.
- Gigerenzer, G., & Brighton, H. (2009). Homo heuristicus: Why biased minds make better inferences. *Topics in Cognitive Science*, 1(1), 107–143.
- Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual Review of Psychology*, 62(1), 451–482.
- Guercini, S., & Freeman, S. M. (2023). How international marketers make decisions: exploring approaches to learning and using heuristics. *International Marketing Review*, 40(3), 429–451.
- Guercini, S., & Milanese, M. (2022). Foreign market entry decision-making and heuristics: A mapping of the literature and future avenues. *Management Research Review*, 45(9), 1229–1246.
- Guercini, S., & Milanese, M. (2020). Heuristics in international business: A systematic literature review and directions for future research. *Journal of International Management*, 26(4), Article 100782.
- Guercini, S., & Runfola, A. (2021). Heuristics in decision-making by exporting textiles SMEs. *Journal of Global Fashion Marketing*, 12(1), 1–15.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Hair, J. F., Jr, Babin, B. J., & Krey, N. (2017). Covariance-based structural equation modeling in the journal of advertising: Review and recommendations. *Journal of Advertising*, 46(1), 163–177.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Harman, H. H. (1967). *Modern factor analysis*. Chicago, IL: University of Chicago Press.
- Harrison, E. F., & Pelletier, M. A. (1998). Foundations of strategic decision effectiveness. *Management Decision*, 36(3), 147–159.
- Helfat, C. E., & Martin, J. A. (2015). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of Management*, 41(5), 1281–1312.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Heracleous, L. T. (1994). Rational decision making: Myth or reality? *Management Development Review*, 7(4), 16–23.
- Hessels, J., & Terjesen, S. (2010). Resource dependency and institutional theory perspectives on direct and indirect export choices. *Small Business Economics*, 34, 203–220.
- Hodgkinson, G. P., & Sadler-Smith, E. (2018). The dynamics of intuition and analysis in managerial and organizational decision making. *Academy of Management Perspectives*, 32(4), 473–492.
- Hodgkinson, G. P., Burkhard, B., Foss, N. J., Grichnik, D., Sarala, R. M., Tang, Y., & Van Essen, M. (2023). The heuristics and biases of top managers: Past, present, and future. *Journal of Management Studies*, 60(5), 1033–1063.
- Howard, M. C. (2023). A systematic literature review of exploratory factor analyses in management. *Journal of Business Research*, 164, Article 113969.
- Hsu, C. W., Lien, Y. C., & Chen, H. (2015). R&D internationalization and innovation performance. *International Business Review*, 24(2), 187–195.
- Hult, G. T. M., Hair, J. F., Jr, Proksch, D., Sarstedt, M., Pinkwart, A., & Ringle, C. M. (2018). Addressing endogeneity in international marketing applications of partial least squares structural equation modelling. *Journal of International Marketing*, 26(3), 1–21.
- Jang, J. Y., Hur, H. J., & Choo, H. J. (2019). How to evoke consumer approach intention toward VR stores? Sequential mediation through telepresence and experiential value. *Fashion and Textiles*, 6(1), 1–16.
- Ji, J., & Dimitratos, P. (2013). An empirical investigation into international entry mode decision-making effectiveness. *International Business Review*, 22(6), 994–1007.
- Jones, M. V., & Casullis, L. (2014). International entrepreneurship: Exploring the logic and utility of individual experience through comparative reasoning approaches. *Entrepreneurship Theory and Practice*, 38(1), 45–69.
- Kahneman, D. (2017). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.
- Kahneman, D., & Tversky, A. (1972). Subjective probability: A judgment of representativeness. *Cognitive Psychology*, 3(3), 430–454.
- Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. *Psychological Review*, 80(4), 237–251.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20(1), 141–151.
- Kale, P., Dyer, J. H., & Singh, H. (2002). Alliance capability, stock market response, and long-term alliance success: The role of the alliance function. *Strategic Management Journal*, 23(8), 747–767.
- Kaleka, A., & Morgan, N. A. (2017). Which competitive advantage (s)? Competitive advantage-market performance relationships in international markets. *Journal of International Marketing*, 25(4), 25–49.
- Kaufmann, L., Wagner, C. M., & Carter, C. R. (2017). Individual modes and patterns of rational and intuitive decision-making by purchasing managers. *Journal of Purchasing and Supply Management*, 23(2), 82–93.
- Knight, G. A. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing*, 12(3), 213–225.
- Knight, G. A., & Liesch, P. W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51(1), 93–102.
- Koch, C. H. (2020). Brands as activists: The oatly case. *Journal of Brand Management*, 27(5), 593–606.

- Keren, G., & Teigen, K. H. (2004). Yet another look at the heuristics and biases approach. In D. J. Koehler, & N. Harvey (Eds.), *Blackwell handbook of judgment and decision making*, 2004 pp. 89–109. Malden, MA: Blackwell.
- Keren, G., & Schul, Y. (2009). Two is not always better than one: A critical evaluation of dual-system theories. *Perspectives on Psychological Science*, 4(6), 533–550.
- Kunc, M. H., & Morecroft, J. D. (2010). Managerial decision making and firm performance under a resource-based paradigm. *Strategic Management Journal*, 31(11), 1164–1182.
- Kumar, V., & Subramanian, V. (1997). A contingency framework for the mode of entry decision. *Journal of World Business*, 32(1), 53–72.
- Legate, A. E., Hair, J. F., Jr, Chretien, J. L., & Risher, J. J. (2023). PLS-SEM: Prediction-oriented solutions for HRD researchers. *Human Resource Development Quarterly*, 34(1), 91–109.
- Li, J. J., Zhou, K. Z., & Shao, A. T. (2009). Competitive position, managerial ties, and profitability of foreign firms in China: An interactive perspective. *Journal of International Business Studies*, 40, 339–352.
- Li, H., & Atuahene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal*, 44(6), 1123–1134.
- Li, J., & Fleury, M. T. L. (2020). Overcoming the liability of outsidership for emerging market MNEs: A capability-building perspective. *Journal of International Business Studies*, 51, 23–37.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121.
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods*, 18(3), 285–300.
- Lu, J. W. (2002). Intra- and inter-organizational imitative behavior: Institutional influences on Japanese firms' entry mode choice. *Journal of International Business Studies*, 33(1), 19–37.
- Luan, S., Reb, J., & Gigerenzer, G. (2019). Ecological rationality: Fast-and-frugal heuristics for managerial decision making under uncertainty. *Academy of Management Journal*, 62(6), 1735–1759.
- Maitland, E., & Sammartino, A. (2015). Managerial cognition and internationalization. *Journal of International Business Studies*, 46(7), 733–760.
- Malhotra, S., & Zhu, P. (2013). Paying for cross-border acquisitions: The impact of prior acquirers' decisions. *Journal of World Business*, 48(2), 271–281.
- Menguc, B., & Auh, S. (2008). The asymmetric moderating role of market orientation on the ambidexterity–firm performance relationship for prospectors and defenders. *Industrial Marketing Management*, 37(4), 455–470.
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1), 61–80.
- Moschieri, C., & Campa, J. M. (2014). New trends in mergers and acquisitions: Idiosyncrasies of the European market. *Journal of Business Research*, 67(7), 1478–1485.
- Niittymies, A. (2020). Heuristic decision-making in firm internationalization: The influence of context-specific experience. *International Business Review*, 29(6), Article 101752.
- Olson, B. J., Parayitam, S., & Bao, Y. (2007). Strategic decision making: The effects of cognitive diversity, conflict, and trust on decision outcomes. *Journal of Management*, 33(2), 196–222.
- Papadakis, V. M., Lioukas, S., & Chambers, D. (1998). Strategic decision-making processes: The role of management and context. *Strategic Management Journal*, 19(2), 115–147.
- Parida, V., George, N. M., & Wincent, J. (2018). Strategic diagnosis of information processing structures and commercialization in new ventures. *Journal of Business Research*, 85, 83–90.
- Peloton. (2023). Peloton strengthens relationships to bring accessibility and convenience across Germany and Austria. Accessed from: (<https://www.onepeloton.com/press/articles/3p-model-shift-germany>), Accessed on: October 8, 2024.
- Peloton. (2022). Peloton expands relationship with Amazon in the UK and Germany. Accessed from: (<https://investor.onepeloton.com/news-releases/news-release-details/peloton-expands-relationship-amazon-uk-and-germany>), Accessed on: October 8, 2024.
- Pidduck, R. J., Shaffer, M. A., Zhang, Y., & Clark, D. R. (2022). Unpacking the emergence of born global founders: A careers perspective. *Journal of Small Business Management*, 60(6), 1247–1287.
- Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of Management Journal*, 58(5), 1546–1571.
- Pran. (2024). Global reach. Accessed from: (<https://www.pranfoods.net/global-reach>), Accessed on: October 8, 2024.
- Rahman, M. S., Bag, S., Hossain, M. A., Fattah, F. A. M. A., Gani, M. O., & Rana, N. P. (2023). The new wave of AI-powered luxury brands online shopping experience: The role of digital multisensory cues and customers' engagement. *Journal of Retailing and Consumer Services*, 72, Article 103273.
- Rahman, M. S., Abdel Fattah, F. A., Bag, S., & Gani, M. O. (2022). Survival strategies of SMEs amidst the COVID-19 pandemic: Application of SEM and fsQCA. *Journal of Business Industrial Marketing*, 37(10), 1990–2009.
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617–1643.
- Richter, N. F., Hauff, S., Ringle, C. M., & Gudergan, S. P. (2022). The use of partial least squares structural equation modeling and complementary methods in international management research. *Management International Review*, 62(4), 449–470.
- Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. *Journal of Personality and Social Psychology*, 61(2), 195.
- Shaffer, J. A., DeGeest, D., & Li, A. (2016). Tackling the problem of construct proliferation: a guide to assessing the discriminant validity of conceptually related constructs. *Organizational Research Methods*, 19(1), 80–110.
- Shen, Z., Puig, F., & Paul, J. (2017). Foreign market entry mode research: A review and research agenda. *The International Trade Journal*, 31(5), 429–456.
- Sheng, S., Zhou, K. Z., & Li, J. J. (2011). The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing*, 75(1), 1–15.
- Shrader, R. C. (2001). Collaboration and performance in foreign markets: The case of young high-technology manufacturing firms. *Academy of Management Journal*, 44(1), 45–60.
- Shepherd, N. G., & Rudd, J. M. (2014). The influence of context on the strategic decision-making process: A review of the literature. *International Journal of Management Reviews*, 16(3), 340–364.
- Smith, E. R., & DeCoster, J. (2000). Dual-process models in social and cognitive psychology: Conceptual integration and links to underlying memory systems. *Personality and Social Psychology Review*, 4, 108–131.
- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25(1), 78–90.
- Tabachnick, B. G., & Fidell, L. S. (1996). *SPSS for Windows workbook to accompany large sample examples of using multivariate statistics*. HarperCollins College Publishers.
- Taussig, M. (2017). Foreignness as both a global asset and a local liability: How host country idiosyncrasies and business activities matter. *Journal of International Business Studies*, 48(4), 498–522.
- Todd, P. M., & Gigerenzer, G. (2012). *Ecological rationality: Intelligence in the world*. USA: Oxford University Press.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases: biases in judgments reveal some heuristics of thinking under uncertainty. *Science*, 185(4157), 1124–1131.
- Uzuegbunam, I. (2016). Identity and initial structure in inter-firm alliances: A social identity perspective. *Management Decision*, 54(4), 929–945.
- Van Riel, A. C., Semeijn, J., Hammedi, W., & Henseler, J. (2011). Technology-based service proposal screening and decision-making effectiveness. *Management Decision*, 49(5), 762–783.
- Van Kerrebroeck, H., Brengman, M., & Willems, K. (2017). When brands come to life: Experimental research on the vividness effect of virtual reality in transformational marketing communications. *Virtual Reality*, 21, 177–191.
- Vissak, T., Francioni, B., & Freeman, S. (2020). Foreign market entries, exits and re-entries: The role of knowledge, network relationships and decision-making logic. *International Business Review*, 29(1), Article 101592.
- Walter, J., Lechner, C., & Kellermanns, F. W. (2008). Disentangling alliance management processes: Decision making, politicality, and alliance performance. *Journal of Management Studies*, 45(3), 530–560.
- Warrick, D. D. (2017). What leaders need to know about organizational culture. *Business Horizons*, 60(3), 395–404.
- Weber, P. S., Weber, J. E., Sleeper, B. R., & Schneider, K. L. (2004). Self-efficacy toward service, civic participation and the business student: Scale development and validation. *Journal of Business Ethics*, 49, 359–369.
- Weedige, S. S., Ouyang, H., Gao, Y., & Liu, Y. (2019). Decision making in personal insurance: Impact of insurance literacy. *Sustainability*, 11(23), 67–95.
- Zaefarian, G., Kadile, V., Henneberg, S. C., & Leischnig, A. (2017). Endogeneity bias in marketing research: Problem, causes and remedies. *Industrial Marketing Management*, 65, 39–46.
- Zou, S., & Cavusgil, S. T. (2002). The GMS: A broad conceptualization of global marketing strategy and its effect on firm performance. *Journal of Marketing*, 66(4), 40–56.