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Understanding behavioral strategy: a historical evolutionary perspective in "Management Decision"

Matteo Cristofaro
Department of Management and Law, University of Rome Tor Vergata, Rome, Italy
Pier Luigi Giardino
Doctoral School of Social Sciences, University of Trento, Trento, Italy, and
Riccardo Camilli and Ivo Hristov
Department of Management and Law, University of Rome Tor Vergata, Rome, Italy

Abstract

Purpose – This article aims to trace the historical development of the behavioral strategy (BS) field, which implements psychology in strategic management. Mainly, it provides a contextual understanding of how this stream of research has historically evolved and what relevant future trajectories are. This work is part of the "over half a century of Management Decision" celebrative and informal Journal section.

Design/methodology/approach – We consider BS literature produced in management decision (MD), the oldest and longest-running scholarly publication in management, as a proxy for the evolution of management thought. Through a Systematic Literature Review (SLR) process, we collected – via the MD website and Scopus – a sample of 97 BS articles published in MD from its foundation (1967) until today (2024). Regarding the analysis, we adopted a Reflexive Thematic Analysis approach to synthesize the main BS topics, then read from a historical perspective regarding three "eras" over which the literature developed. Selected international literature outside the Journal's boundaries was considered to complement this historical analysis.

Findings – Historically, within the BS field, the interest passed from the rules to rationally govern strategic decision-making processes, to studying what causes cognitive errors, to understanding how to avoid biases and to being prepared for dramatic changes. The article also identifies six future research trajectories, namely "positive heuristics," "context-embedded mental processes," "non-conventional thinking," "cognitive evolutionary triggers," "debiasing strategies" and "behavioral theories for new strategic challenges" that future research could investigate.

Research limitations/implications – The limitation of the study lies in its exclusive focus on MD for investigating the historical evolution of BS, thereby overlooking critical contributions from other journals. Therefore, MD's editorial preferences have influenced results. A comprehensive SLR on the BS field is still needed, requiring broader journal coverage to mitigate selection biases and enhance field appraisal.

Originality/value – This contribution is the first to offer a historical evolutionary view of the BS field, complementing the few other reviews on this stream of research. This fills a gap in the study of the evolution of management thought.

Keywords Behavioral strategy, Management history, Strategy, Decision-making, Biases, Rationality, Cognition

Paper type Literature review

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1. Introduction

Significant advancements regarding the psychology of humans in organizations – e.g. bounded rationality (Simon, 1947), dominant coalitions (Cyert and March 1963) and cognitive biases (Tversky and Kahneman, 1974) – have led to a *behavioral revolution* within and outside management and organizational studies (e.g. Kahneman and Tversky, 1979; Thaler, 1985). Building from them, Powell *et al.* (2011) strived to define the boundaries of a newly emerging field able to deepen behavioral assumptions (and consequences) in strategic management: Behavioral Strategy (BS) [1]. In particular, they stated that:

> Behavioral strategy merges cognitive and social psychology with strategic management theory and practice. The behavioral strategy aims to bring realistic assumptions about human cognition, emotions, and social behavior to the strategic management of organizations and, thereby, to enrich strategy theory, empirical research, and real-world practice (p. 1371).

Since its formalization in 2011 by Powel, Lovallo and Fox, the BS field has been increasingly advanced in studying firms' strategic practices (Lovallo and Sibony, 2018; Abatecola and Cristofaro, 2020; Foss, 2020). For example, some scholars investigated the concept of CEOs' hubris, illustrating how it can lead executives to overestimate their firms' capabilities and performance (Picone *et al.*, 2014). Others tried to unveil how investors and founders often cognitively anchor Unicorn companies' success expectations to the results of peer organizations, potentially generating overly optimistic expectations about future growth and profitability (Cristofaro *et al.*, 2023). These are just a glimpse of the vast body of literature that has embraced a behavioral approach to unravel the impact of executive psychology in strategic management.

Moreover, as the interest in a research area grows, mapping its literature becomes crucial to help identify trends and pinpoint aspects that still need comprehensive exploration (Tranfield *et al.*, 2003; Edmondson and McManus, 2007). Two bibliometric studies (Anwar *et al.*, 2021; Urío *et al.*, 2022) and a recent literature review (Hesselbarth *et al.*, 2023) have been conducted on the BS field. However, these studies do not provide a thorough historical overview of the field's evolution or utilize a comprehensive set of keywords for article selection (e.g. Anwar *et al.*, 2021). These limitations can result in neglecting certain key aspects that may have significantly impacted the evolution of the BS field, or they can impede the comprehension of its concepts, perspectives, theories, methodologies and findings. Consequently, the lack of a historical analysis of BS prevents scholars from comprehensively understanding the evolution of management thought (Wren and Bedeian, 2020). It inhibits their ability to forecast the future trajectories of BS research.

To address this gap, we examined the literature published in a Journal that reliably reflects the field's evolution (see also Gordon *et al.*, 2020). In particular, we performed it in *Management Decision* (MD), which is acknowledged as "the oldest and longest-running scholarly publication dedicated to the area of management" (Randolph-Seng, 2022, p. 2). Given its enduring legacy as well as its ever-since interest in publishing articles adopting a psychology lens in strategic management (e.g. Tyzack, 1967; Davidson and Cooper, 1987; Bolaños *et al.*, 2005; Elbanna *et al.*, 2017; Al-Shammari *et al.*, 2023), we believe that MD serves as a suitable proxy for analyzing the evolution of management thought regarding BS and its main themes. Therefore, this article addresses the following research questions: (1) *How has the field of BS historically evolved in MD?* and (2) *To what extent has MD influenced the BS debate?*

We conducted a Systematic Literature Review (SLR) to answer these research questions. We collected 97 BS articles published in MD along its 57-year history. Then, we analyzed articles through a Reflexive Thematic Analysis (RTA) approach to identify the main themes featuring BS's historical evolution. The future research agenda also considers other international literature (e.g. Borchardt *et al.*, 2022; Akinci and Sadler-Smith, 2012). In the

early stages of BS research (1967–1989), scholars focused on defining decision-making models and prescribing organizational methods to make optimal decisions (e.g. White, 1984). Researchers' interest expanded to collective executive decision-making in the second era (1990–2011). It explored executives' abilities, traits, attitudes, culture and biases in choosing decision-making models for improved decisions (e.g. Aspara *et al.*, 2011). Then, in the third era (2012–2024), scholars integrated various theoretical BS concepts to understand the individual level of strategic decision-making (e.g. Ridge *et al.*, 2014). Finally, we present six emerging themes that may drive the research agenda of the next era of BS research, especially in MD.

As a result, this article, while primarily focused on MD, makes three significant contributions to the BS literature. First, it addresses a gap in exploring the evolution of management thought concerning the BS field. Second, it celebrates the new "Over-half a century of *Management Decision*" section, emphasizing how the journal has actively laid the foundation of BS since the late 1960s. Third, it provides a research agenda for scholars based on state-of-the-art knowledge about BS past and present.

2. Theoretical roots of behavioral strategy

Until the first half of the 20th century, economics and management scholars made their assumptions depending on what was postulated by neoclassical economic theory. In particular, they emphasized the concept of *homo economicus,* who is expected to: act as a perfectly rational agent, gather and analyze all available information, weigh the costs and benefits of alternatives and make choices that would maximize his outcomes (Thaler, 2000). However, as researchers investigated decision-making processes more comprehensively, they discovered that this neoclassical perspective did not fully capture the complexities of real-world executives' decision-making (March and Simon, 1958). Indeed, it became evident that apical decision-makers face cognitive limitations, such as information overload and limited computational capacity, that prevent them from fully optimizing their choices, thus rendering the assumption of entirely rational decision-making unrealistic.

In this context, the most distinguished contribution was brought by Herbert Simon, who challenged the prevailing neoclassical perspective in 1947 by introducing the concept of bounded rationality. Specifically, Simon (1947) argued that individuals, to reduce cognitive load, use mental shortcuts and satisfying strategies aimed at simplifying decision-making tasks and arriving at satisfactory rather than optimal outcomes. However, these shortcuts are often based on past experiences, social norms and other contextual factors, leading to cognitive distortions (i.e. biases) and errors in decision-making.

Over the years, this concept of bounded rationality paved the way for many research streams to investigate how decisions realistically occur (e.g. Cristofaro, 2017), mainly based on three philosophical perspectives advanced in the positioning BS article (Powell *et al.*, 2011), i.e. reductionist, pluralist and contextualist. These, by combining elements from cognitive and social psychology with strategic management theory and practice, aim to incorporate practical knowledge about human cognition, emotions and social interactions into organizations' strategic management at different analysis levels (i.e. individual, collective and contextual) (Powell *et al.*, 2011). Thus, providing a more accurate and holistic representation of decision-making processes in real-world practice. Among produced advancements, it is worth mentioning the Behavioral Theory of the Firm (Cyert and March 1963), the prospect theory (Kahneman and Tversky, 1979), heuristic and biases (Kahneman, 2011), Hambrick and Mason's (1984) view of organizations as reflections of their top management teams, and Thaler's (2000) nudge theory and concept of mental accounting. Those formed the foundations of the BS field, allowing to shed light on many critical strategic processes like individual and intragroup decision-making, politics, conflict resolution,

organizational learning, resource allocation, sensemaking, perception, enactment and action generation (e.g. Picone *et al.*, 2014).

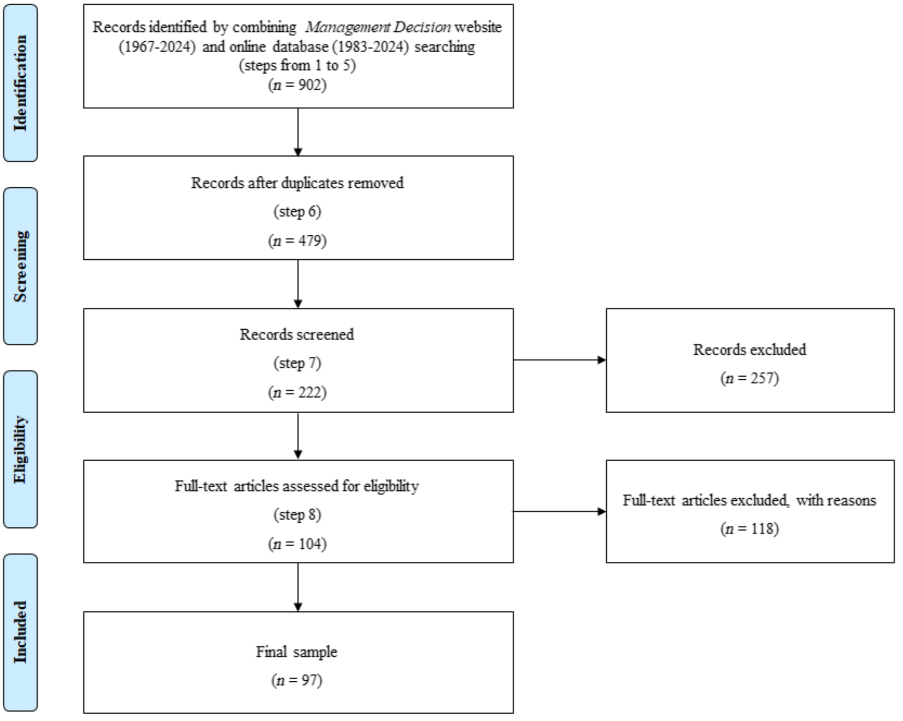
3. Methods

3.1 Article collection

An SLR has been considered the most appropriate research approach to consolidate and synthesize academic research. According to Tranfield *et al.* (2003), unlike traditional narrative reviews, an SLR links future research to the questions and concerns posed by past research and employs rigorous and reproducible evaluation methods. In line with those scholars, our review of the historical evolution of the BS field, considering MD literature, has been conducted in two main phases: (1) literature search and selection and (2) literature analysis. The first phase comprises five main steps, described as follows (see also Figure 1).

(1) MD literature search and selection occurred through (a) the MD's website and (b) an online database (i.e. Scopus). A Scopus search was needed since, on the MD website, conducting a proper Boolean search in the current state is not possible. Using a combination of keywords and Boolean operators (i.e. AND, OR) in Scopus allowed us to ensure that articles of interest were in the final sample.

(2) Following Rabetino *et al.* (2021), we selected strategy-related articles if they included at least one of the following keywords within their title or abstract: "Strateg*" OR "Competit*" OR "Resource*based View" OR "RBV" OR "Resource*based Theory"



Source(s): Own elaboration

Figure 1.
Flowchart of papers' collection strategy

OR "Industrial Organization" OR "Competitive Advantage" OR "Governance" OR "Capabilit*" OR "Competit*Dynamic*" OR "Business Model*" OR "Absorptive Capacit*" OR "Capacit*" OR "Resourc*" OR "Analys*" OR "Competitive Intelligence" OR "Upper Echelon*" OR "Decision*" OR "Business Strategies" OR "Knowledge*based Theory" OR "Strategy*as*practice". The asterisk at the end of a search word allows for different suffixes, such as "Strategic Planning," "Strategy Implementation," "Strategy Process," "Strategy Research," etc. 891 hits were produced.

(3) Due to the integration operated through a reference-manager software, duplicates from Scopus and manual search within the Journal's website were eliminated. Yet, we eliminated all articles dealing with entrepreneurial, employee, customer and finance behavior to avoid articles that did not fit (thus overlapping with entrepreneurial behavior, organizational behavior, customer behavior and financial behavior). A total of 468 hits were produced;

(4) The resulting articles were scanned by reading all the titles and abstracts to ensure their substantive context, mainly according to their coherence with the review's behavioral aim. In the absence of a comprehensive keywords string authoritatively used to trace behavioral themes, such a manual approach was necessary to ensure a faithful tracing of the field's historical development. Indeed, it required including all articles addressing the same behavioral themes, although the related terminology may have varied. For practically doing that, we were inspired by the *key psychological concepts* and *key psychological processes* studies in BS research initially identified by Powell *et al.* (2011). A total of 211 records remained within the sample.

(5) The remaining articles were fully read to ensure their alignment with the research objective, thus explicitly contributing to the development of strategic management and applying, in conceptual or empirical terms, social and cognitive psychology concepts in their research. A total of 97 results were produced. For steps (4) and (5), two authors individually read articles and compared their evaluations. When disagreeing, these authors assessed articles and decided whether to include or not articles within the sample. Inter-rater reliability, investigated through Cronbach's alpha, was high (0.86). Moreover, to avoid missing relevant contributions for this review, the two other authors read and evaluated all titles, abstracts and introductions of articles published on MD for potential inclusion, but no additional items emerged.

For each article in the sample, we extracted the following elements: (1) author(s), (2) year of publication, (3) type of article, (4) data collection method, (5) data analysis method, (6) main results, (7) scientific paradigm and (8) investigated key behavioral variables. See Table 1 for a selection of sample articles and Supplementary material for a richer sub-sample.

3.2 Reflexive Thematic Analysis

Investigated key behavioral variables were coded and grouped according to a RTA approach (Braun and Clarke, 2019). This is a valuable approach considered within the analytical step of the SLR process to synthesize and code an identified body of literature to develop insights and critiques (Massaro *et al.*, 2016; Tranfield *et al.*, 2003). When correctly carried out using codes and themes, RTA displays data and information in an excellent, unambiguous way, supporting scholars in defining the theoretical and practical links needed for a deeper comprehension of the mechanisms behind the topic under investigation. RTA usually requires deductive analysis (by which communication messages are thematized according to

Table 1.
Sub-sample of selected papers

#	Author(s) *a)*	Year *b)*	Type of paper *c)*	Data collection *d)*	Data analysis *e)*	Main results *f)*	Scientific paradigm *g)*	Code *h)*
1	Tyzack, JE.V.	1967	Conceptual	–	–	In this article, the author finds that directors' personal characteristics (e.g. demographic ones) are likely to alter the way in which they make strategic decisions within the organizations	Contextualist	Models of decision-making
2	Appelbaum, S.H., Gandell, J., Yortis, H., Proper, S., and Jobin, F.	2000	Conceptual	–	–	In this paper, it has been disclosed that organizational factors such as communications, corporate culture, change, and stress have a major role in influencing pre-merger, during the merger and post-merger stages	Contextualist	Memory
3	Bolaños, R., Fontela, E., Nenclares, A., and Pastor, P.	2005	Empirical qualitative	Simulation with a not specified sample of students	Interpretive structural modeling	The authors have found major differences in priority orderings of the different managerial roles which will make it more difficult to take a decision within organizations	Pluralist	Reference points

(*continued*)

Table 1.

#	Author(s) *a)*	Year *b)*	Type of paper *c)*	Data collection *d)*	Data analysis *e)*	Main results *f)*	Scientific paradigm *g)*	Code *h)*
4	Aspara, J., Lamberg, J.A., Laukia, A., and Tikkanen, H.	2011	Empirical qualitative	Archival material (i.e. board meeting protocols and memos, correspondence between corporate headquarters and business units, circular letters, strategic planning documents and market analyses) and 14 interviews among former Nokia executives and other experts from the telecommunication industry	Historical analysis	The authors have demonstrated the central role of business units in feeding strategic alternatives and capabilities to the corporate-level transformation process	Contextualist	Bundles of rules
5	Al-Shammari, M.A., Banerjee, S.N., Al-Shammari, H., and Doty, H.	2023	Empirical quantitative	9,348 firm-year observations from the Kinder, Lydenberg and Domini (KLD) CSR database	OLS regression	This study aims to investigate how the association between corporate social responsibility (CSR) and firm performance, documented in prior research, is affected by the joint effects of managerial ability and attributes of the firm's governance structure	Reductionist	Models of decision-making

Source(s): Own elaboration

an initial codebook) and inductive analysis (by which new themes are free to emerge), helping to overcome the limits of each. In particular, the following RTA six-step procedure by Braun and Clarke (2019) has been followed: (1) familiarizing yourself with your data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. In this case, initial codes have been derived from the key psychological concepts and key psychological processes investigated in BS (i.e. Powell *et al.*, 2011). Other codes were free to emerge. Then, themes were identified according to their "semantic" level (Boyatzis, 1998), i.e. themes were initially organized to show patterns in semantic content. Inter-rater reliability, investigated through Cronbach's alpha, was high (0.91). Results of the RTA related to the main explored themes are presented via BS's historical evolution, detailed in Section 4.

We also derived some future trajectories for the BS field. These have been derived by looking for (1) topics that received scarce consideration by MD scholars and may deserve further attention due to their exciting implications, and (2) brand-new topics that emerged, within and outside MD, in recent years (2017–2024).

3.3 Historical approach

We decided to complement the RTA carried out on the 97 articles by implementing a historical analysis. Particularly, this decision is motivated by the fact that incorporating a historical perspective allowed us to trace the development of concepts, methodologies and key findings that have shaped the BS field. In fact, by examining the context in which past research has been conducted, we have been able to identify seminal works and shifts in research interests that have influenced the trajectory of what we now call BS – thus bringing a step forward in exploring this field of research compared to existing reviews.

The historical analysis gives readers a better understanding of the topic under analysis over time. For instance, Akinci and Sadler-Smith (2012) provided a historical review of intuition in management research, pointing out how insights and advancements from related fields (i.e. behavioral, biological and brain sciences) have enriched the conceptual, theoretical and methodological resources available to management scholars as well as "how lessons from the history of intuition research in management may illuminate the way forward (p. 104)". Similarly, Linnenluecke (2017) studied resilience in business and management research, considering cultural contexts and organizational settings. In particular, the author suggests that the fragmentation of resilience research across various streams, as well as the future directions of this field of research, are linked to contextual events such as the financial crisis, concerns about climate change and many others (e.g. post-9/11 research shifted toward coping mechanisms and responses to external threats).

Following the examples mentioned above, we explored how MD shaped BS across three eras: (1) from the establishment of the journal until 1989. Indeed, it was around 1989 that strategic management gained recognition (Rabetino *et al.*, 2021); (2) from 1990 to 2011. In this latter year, Powell *et al.* (2011) formally described and positioned the BS field; and (3) from 2012 to the present day. Further information is given in the following sections.

4. Results

4.1 Descriptive statistics

Given the article's aim, this subsection supports readers' understanding of the Journal's contribution to the field of BS. Specifically, it helps readers become familiar with the main features of the BS articles published in MD and better comprehend the future trajectories we present later.

For example, the most prolific author in terms of contributions is George Panagiotou, who has three articles. Many authors have contributed, including two articles about BS published

in MD: Steven H. Appelbaum, Joy Gandell, Juha-Antti Lamberg and Marcus Selart. Moreover, by examining the countries of affiliation of the first authors who published the 97 sample articles, it is possible to observe a predominance of authors from U.S.-based institutions (28; 29%) – this finds an explanation in North American scholars' historical contribution to the rise of strategy research (Rabetino *et al.*, 2021) – followed by British (12; 12%) and Canadian ones (7; 7%). However, in the last years, the research has been chiefly promoted by authors affiliated with Dutch (6; 6%), Italian (5; 5%), Indian (3; 3%) and Chinese (3; 3%) institutions – this trend could be attributed to the growth of MD readership. This latter assumption is supported by Figure 2, which shows a positive trend in the number of produced BS contributions in MD.

Among these articles, the most cited ones [2] are those authored by Tikkanen *et al.* (2005), Bolaños *et al.* (2005), Appelbaum *et al.* (2000) and Aspara *et al.* (2011). Furthermore, we underline the work advanced by Acciarini *et al.* (2021), which has already received 64 citations in less than two years; consequently, we hypothesize that this will be a highly cited BS work within MD and deserves to be reported. Yet, within the Emerald Literati Awards 2022, this latter contribution received the "Outstanding Article" recognition from the MD editorial board.

Concerning the theoretical approach, we aggregated the selected contributions according to the three schools of thought (i.e. reductionist, pluralist and contextualist) [3] proposed by Powell *et al.* (2011). As a result, we found that the preponderance of articles has adopted the contextualist standpoint (56; 58%), followed by the reductionist paradigm (29; 30%), and lastly, the pluralist school (12; 12%); thus, it is evident that the existing research on BS in MD is unbalanced toward the BS contextual level of analysis.

While in the first 20 years of the Journal, when authors began focusing on how managers make strategic decisions through discussions around early management theories (e.g. Rice, 1980), articles have adopted mainly a conceptual research design (46; 47%), nowadays scholars are essentially employing empirical methods (47; 48% – out of which there are 61%

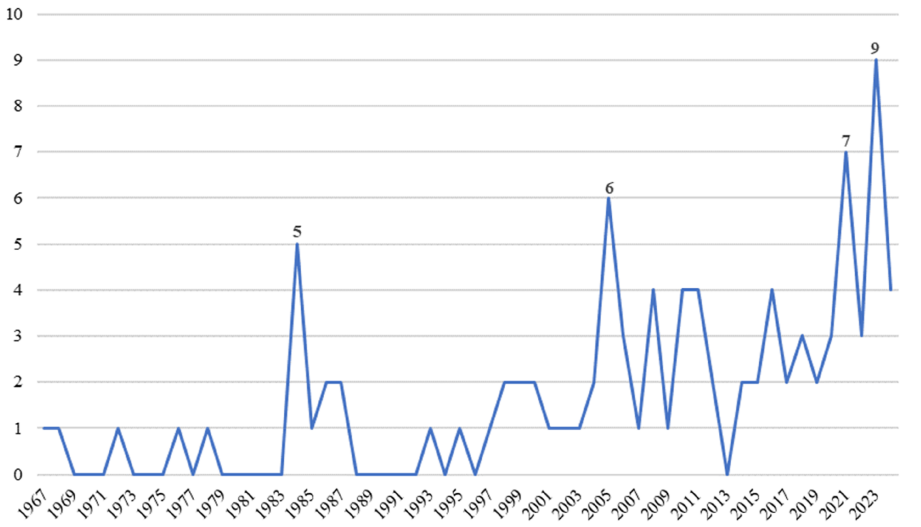


Figure 2.
Annual scientific production of BS articles in MD

Note(s): We considered articles published in Management Decision as of April 9th, 2024
Source(s): Own elaboration

quantitative, 36% qualitative and 3% mixed methods), while only a tiny share is represented by reviews (4; 4%). Among the empirical studies, most of them have collected data through questionnaires (11%), semi-structured interviews (9%) and panel data (5%), then analyzed using either regression analyses (13%) or content analyses (9%).

4.2 Reflexive Thematic Analysis

Following Braun and Clarke (2019), the 97 sample articles have been systematically analyzed to identify the core behavioral elements in MD strategy articles.

As shown in Table 2, among the 39 produced codes, the most recurring are "models of decision-making" ($N = 31$, % = 19), "traps" ($N = 12$, % = 7), "mental models/cognitive maps/schemas" ($N = 12$, % = 7), "reference points" ($N = 9$, % = 5), "heuristics" ($N = 9$, % = 5) and "beliefs/personal value" ($N = 8$, % = 4.9). Produced codes were then grouped under eight broader themes according to the authors' scientific knowledge and interpretation (researcher judgment is necessary to determine a theme; Braun and Clarke, 2019).

The eight themes that emerged are: "rationalization criteria," "biases," "thinking," "perception," "positive affective states," "negative affective states," "personality traits/attitudes" and "demographics." These have been created by following the distinctions/conceptualizations advanced by previous scholars and defined as reported in Table 3.

5. The historical evolution of behavioral strategy in *management decision*

To provide a historical narrative of the evolution of BS, we ideally divided sample articles into three historical eras, in line with milestone events in the literature: (1) the end of the 80s, when strategic management was widely accepted as a scientific field, (2) 2011, when BS was described and positioned by Powell *et al.* (2011) and (3) the present day (see Figure 3).

First, the cluster *Behavioral Strategy studies toward Strategic Management establishment (1967–1989)* include contributions (n. 17) conceptualizing strategic management – the timespan was selected according to Rabetino *et al.* (2021), who stated that: "originating in the early 1960s, strategic management was widely accepted as a scientific field by the 1980s." Second, *Behavioral Strategy before Behavioral Strategy (1990–2011)* contains studies (n. 37) well rooted in strategy (that we consider as "established" at the end of the 80s) with the integration of some behavioral aspects that were published before the positioning article of Powell *et al.* (2011). Third, *Behavioral Strategy after Behavioral Strategy Positioning (2012–2024)* considers contributions (n. 43) published after the cited theoretical positioning milestone (Powell *et al.*, 2011). Indeed, despite the work of Powell *et al.* (2011) not depicting BS as a new idea, it signs the formal rise of BS. Such attribution has already been accepted, and authoritative contributions on the field have been integrated (e.g. Augier *et al.*, 2018).

5.1 Behavioral strategy studies toward strategic management establishment (1967–1989)

BS contributions published in MD from 1967–1989 primarily focused on "models of decision-making" influenced by classical and neoclassical economic theories. According to Tyzack (1967), these models propose that executives should choose actions maximizing individual or collective utility to shape organizational behavior rationally. In this regard, Mueller (1968) argued for integrating management science findings to improve decision outcomes and advocated adopting a normative approach under specific conditions. Furthermore, Hertz (1972) discussed the discrepancy between good information input and low-quality decisions in corporate decision-making processes, highlighting the challenge of translating good information into effective decisions.

By the late "70s, the advent of Behavioral Decision Theory (BDT) – rooted in the concepts of bounded rationality (Simon, 1947) and cognitive limits (Tversky and Kahneman, 1974) –

Theme(s)	Code(s)	N	%
Rationalization criteria	Bundles of rules	4	11
	Models of decision-making	31	89
	Total	*35*	*100*
Biases	Heuristics	9	40
	Hubris	1	4
	Traps	12	55
	Total	*22*	*100*
Thinking	Creativity	2	7
	Intuition	6	21
	Mental models/cognitive maps/schemas	12	41
	Reference points	9	31
	Total	*29*	*100*
Perception	Attention	4	21
	Beliefs/personal values	8	42
	Memory	2	11
	Sensemaking	5	26
	Total	*19*	*100*
Positive affective states	Positive emotions	1	50
	Positive mood	1	50
	Total	*2*	*100*
Negative affective states	Negative emotions	6	75
	Negative mood	2	25
	Total	*8*	*100*
Personality traits/attitudes	Adaptability	1	4
	Autocratic	1	4
	Fanaticism	1	4
	Feeling-type	1	4
	Locus of control	1	4
	Narcissism	1	4
	Openness	1	4
	Participative	1	4
	People-oriented	1	4
	Personal identity	3	13
	Proactivity	1	4
	Risk-taking attitude	5	21
	Self-enhancement	1	4
	Self-transcendence	1	4
	Sensing-type	1	4
	Task-oriented	1	4
	Trusting	1	4
	Total	*23*	*100*
Demographics	Age	5	19
	Education	6	23
	Functional background	6	23
	Gender	3	11
	Tenure	6	23
	Total	*26*	*100*
	TOTAL	*164*	*100*

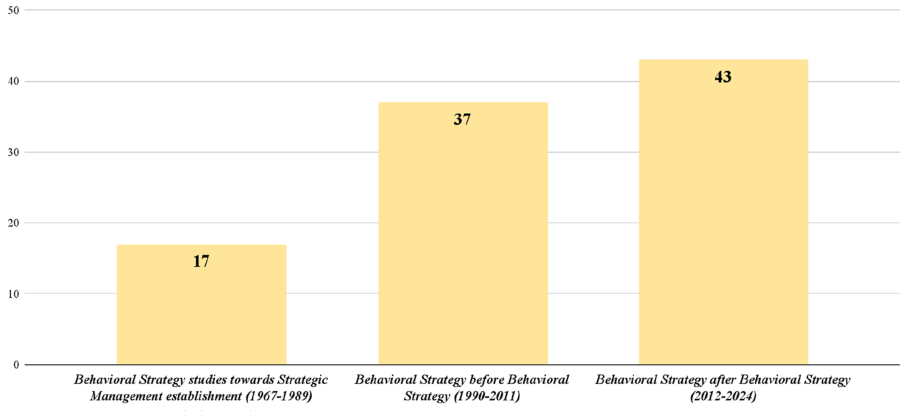
Table 2.
Number and frequency of BS codes and themes

Source(s): Own elaboration

prompted a reassessment of 'how executives make decisions.' Rice (1980) contended that the rational model of classical and neoclassical economists fell short in addressing non-repetitive corporate problems; he sought to reconcile diverse theoretical approaches to decision-making

Theme(s)	Definition(s)
Rationalization criteria	The practical boundaries within which decision-makers make tailored decisions for their organizations (e.g. Tyzack, 1967; Aspara *et al.*, 2011)
Biases	Cognitive distortions (i.e. traps and heuristics) that affect either negatively, positively, or alternately, the thinking mechanisms to make the best decision (e.g. Acciarini *et al.*, 2021)
Thinking	Mechanisms (e.g. Mental models/cognitive maps/schemas) used by decision-makers during the decision-making process (e.g. Bennett, 1998)
Perception	Elements that help decision-makers to translate stimuli into the antecedents of a cognitive process (e.g. sensemaking, beliefs and attention) (e.g. Ericson, 2010)
Positive affective states	Positive short-term (i.e. emotions) and long-term (moods) emotional states are expected to enhance the quality of decision-making processes (e.g. Pate, 1987)
Negative affective states	Negative short-term (i.e. emotions) and long-term (moods) emotional states are expected to lower the quality of decision-making processes (e.g. Kouamé *et al.*, 2015)
Personality traits/ attitudes	The relatively stable, consistent and enduring internal characteristics that are inferred from patterns of behaviors, attitudes, feelings and habits in the individuals (e.g. Abatecola, 2014)
Demographics	Socio-demographic variables (e.g. gender, age, level of education and tenure of office) likely to influence the decision-making process and thus its outputs (e.g. Midavaine *et al.*, 2016)

Table 3.
BS themes' definitions



Source(s): Own elaboration

Figure 3.
No. of papers on BS published in *Management Decision* between 1967 and 2024 according to their historical clusterization

with managerial practice. Drawing on BDT, emphasis was placed on recognizing executives" cognitive limitations as crucial for facilitating improved decision-making (Rice, 1980).

Expanding on the dominant coalition concept (Cyert and March, 1963), the focus shifted to collective models, aligning with contributions in decision-making models. Borwick (1978) identified five types of interaction strategies (i.e. acquiescence, defensive, compromise, conflict and problem-solving) among members, scrutinizing their human foundations and organizational outcomes (e.g. the acquiescence strategy relies on good relations, fostering social harmony and excellent firm performance, while the compromise strategy requires balancing interests for partial results).

Later, other studies explore decision-making models' intricate social and psychological dynamics, which require continuous consideration and evaluation to reach strategic

management objectives. In this regard, it is worthy to mention Gabor (1976), who affirmed that "decision-makers will not admit to the existence of emotional or intuitive factors in their decision calculus, preferring to justify their choice on narrow grounds associated with logic and science" (p. 280). Then, Parker (1980), studying group decision-making in business, emphasized that decision outcomes are shaped by a complex interplay of personal values, cognitive differences and group dynamics; thus, when group members harbor divergent values, conflicts may arise, priorities may clash, and consensus becomes challenging to achieve. In this regard, Ralston (1985) advocates the group participative decision-making model as the "management style of the future," emphasizing decentralized group dynamics, extensive managerial autonomy within participatory frameworks, and the crucial role of maintaining equilibrium among individual behaviors and organizational cultures for fostering positive corporate outcomes (see also Mageean, 2984).

In this vein, O'Shaughnessy (1984) and White (1984) expanded the debate by pointing out the role of the environment in influencing expectations and decision-making processes. For instance, cultural values and norms have been highlighted as influential in shaping managers' attitudes, perceptions and views on long-term planning. Similarly, managers' education has been highlighted as an important factor influencing how managers make decisions (O'Shaughnessy, 1984). Drawing from social psychological theories of human behavior, Pate (1987) analyzed situations and managers' decisions. Several sources of biases and perpetuating misunderstandings (i.e. traditions, opinions, rumors and advertising) were considered to prevent issues at a desirable corporate level. This last contribution represents an early approach toward building a multi-actor BS, leaving behind corporate decisions majorly based on apical figures' intuitions.

However, in the same years, Hambrick and Mason (1984) renewed the scholarly interest in investigating top managers' decision-making by forging the Upper Echelons Theory (UET). The UET, in a few words, considers organizations (and their performance) as "reflections of their top managers" (1984, p. 193; see Abatecola and Cristofaro, 2020 for an updated review). Namely, the board's *socio-demographic and psychological characteristics* directly impact corporate performance via strategic management (e.g. the aging of the board influences the innovation rate via the introduction [or not] of a new product). Accordingly, some research on MD's pages started developing this promising stream of study. For instance, Kiel and Blennerhasett (1984) focused on *age*. They examined the boards of 50 Australian companies, arguing that the existing presence of young board members was more able to face the complex challenges of a fast-developing environment.

5.2 Behavioral strategy before behavioral strategy (1990–2011)

In these thirty years, some scholars have focused on deepening the "rationalization criteria" theme; for instance, Feurer and Chaharbaghi (1995) broadened this discussion by moving toward a more human-centered approach, arguing that organizations' success is linked to quantity and quality of skills available within the organizations. In this regard, a broad pool of scholars (e.g. Aspara *et al.*, 2011) recognized the role played by the decision-maker's abilities in selecting and handling the proper models of decision-making to maximize decision quality.

This shift has been fostered by the UET, which, being firmly anchored to BDT and its central concept of bounded rationality (Abatecola and Cristofaro, 2020), served to speed up a new stream of research around the "demographics" likely to affect decision-making processes. This has also been supported by Goll *et al.* (2008), who found a relationship between top management characteristics and specific choices (e.g. top management teams composed of younger managers emphasize strategy differentiation while those with greater education levels were more prone to service differentiation).

Contiguous with the previous theme, other scholars have investigated the "personality traits/attitudes," which represent intangible dimensions but have a tremendous impact on decision-making. Precisely, Gallén (1997) linked personality traits with managers' strategic decisions, proposing that specific strategies (i.e. the defender/reactor or analyzer/prospector) are associated with the personality decision-makers have (i.e. sensing-thinking/feeling or intuitive-thinking/feeling). Similarly, de Waal (2003) emphasized the role of 18 behavioral factors in allowing managers to implement and use performance management systems with positive repercussions on the quality of the corporate strategy, while Selart (2005) investigated the nexus between individuals' increasing degrees of locus of control and the adoption specific strategic decision-making processes (i.e. participative, consultative and autocratic) finding a direct relationship among them.

Concerning attitudes, Mukherji and Hurtado (2001) found that decision-makers from different cultural contexts look at the environment differently; consequently, more is needed to consider how one organization looks at the environment and how their culturally diverse competitors do it. This converges with Shoham and Fiegenbaum (2002) about the strategic reference points – a construct used by organizations to evaluate all available strategic choices regarding risk – which vary according to exogenous factors (e.g. the cultural contexts).

Yet, another stream of scholars studied the role of thinking and perception factors in strategic conditioning decisions. Regarding the former, Bennett (1998) found that top managers could increase the quality of their choices by engaging in a synergistic exchange of knowledge to draw from a diversified set of insights. This is in line with Bolaños *et al.* (2005), who agreed that limiting individual and collective group information bias is crucial to increasing the awareness of strategic situations. About "perception," Appelbaum *et al.* (2000) explored the impact that individual and collective perceptions have on creating and implementing specific strategic choices, i.e. the reaction of internal stakeholders to the possibility of pursuing a corporate merger. This link has found strong support in recent contributions (i.e. Wright, 2005), which concluded that the perception variable is central in influencing decisions in turbulent business landscapes. According to Tikkanen *et al.* (2005) and Panagiotou (2005), the way through which organizations perceive, organize and handle their business models is a direct consequence of the interrelationship between organizational culture and the cognitive belief system of the decision-makers since it generates the structures, routines and hierarchies behind strategic choices.

Nevertheless, the so-called thinking and perception abilities are unquestionably intertwined with the temporary emotional states affecting decision-makers (e.g. Cristofaro, 2019). In this regard, essential contributions had the "positive affective states" and "negative affective states" themes as core objects of analysis. For instance, Ericson (2010) argued that an in-depth analysis of both affective states can increase the comprehension of specific strategic choices.

Furthermore, it is essential to recall another stream of scholars who have studied the impact of "biases." For instance, Tello *et al.* (2010) examined how both individual and collective heuristics seem to be equally spread among decision-makers from different institutions, while Chao (2011) investigated the most common traps emerging during the life cycle of organizations when engaged in strategic alliances and how they lead to dysfunctional behaviors.

5.3 Behavioral strategy after behavioral strategy positioning (2012–2024)

From 2012 to 2024, many scholars studied strategic decision-making processes by combining multiple perspectives (substantiated by our identified themes), informing the nascent BS field. For instance, by combining the "perception" and "rationalization criteria"

literatures, Ridge *et al.* (2014) claimed that executives are often affected by strategic myopia: due to bounded rationality and learning dysfunctions, decision-makers consider a narrowed set of alternatives when trying to solve a strategic problem. Yet, Ramya and Baral (2021), by merging concepts belonging to the "thinking," "perception" and "rationalization criteria" themes, proposed a framework aimed to enhance the accuracy of mental models via better sensemaking (i.e. by identifying the causes, constraints and predicting future outcomes related to specific events and actions) which, in turn, may be fostered by the introduction of nudging policies within the organization. As a direct consequence, decision-makers are pushed to search for relevant information that is likely to increase the strategic view of the company and, thus, the overall quality of the decisions made within the organizational boundaries.

Concerning the evolution of individuals' characteristics over time, Haider and Mariotti (2016), taking from "perception" and "thinking," have shown how the cognitive distortions about spatial and temporal cognition (i.e. the acquisition, organization and utilization of knowledge about the internal and external environments, and the set of cognitive functions that support the broad range of time experiences) vary across the stages of the decision-makers' career. Similar findings have been disclosed by Kolbe *et al.* (2020), who, drawing from the "thinking" theme, pointed out that decision-makers usually rely on intuition in their early stage and then move toward an increasingly more rational approach in later ones. In this light, Olson *et al.* (2023) contributed to shed light on how "negative affective states" influence "thinking"; specifically, by integrating affect-cognitive theory and organizational learning theory (Cristofaro, 2020; Levitt and March, 1988), these authors argued that CEOs' anger could drive error value recognition and learning.

Similarly, and by rooting the disclosed results on the premises stated in the UET, Midavaine *et al.* (2016), taking from the "demographics," found that tenure diversity leads firms to be more risk-averse (e.g. investing less in research and development) – in line with Biscotti *et al.* (2018) who pointed out that executives' turnover has a direct impact on their willingness to join open innovation projects, hence, sharing decision-making power among multiple parties. Moreover, Ali *et al.* (2023) and Kremer (2023) contributed to shed light on the role of "demographics." Specifically, Ali *et al.* (2023) discussed how board diversity – measured in terms of gender, age and nationality, and cognitive diversity through education, expertise and tenure – helps reduce the likelihood of firms' financial distress. Kremer (2023) showed how CEOs' values influence their intention to downsize; in particular, CEOs' conservation lowers the downsizing severity, while CEOs' openness to change values increases it.

Indeed, considering the literature discussed above, it is possible to state that the personal characteristics of decision-makers affect the type/magnitude of cognitive distortions to which they are subjects (Mueller-Saegebrecht, 2024; Picone *et al.*, 2024). In this regard, to achieve satisfactory levels of decision quality, decision-makers should aspire to have a less biased decision-making process possible; however, according to Coffeng *et al.* (2021), who took from the "thinking" dimension, executives are generally unaware of their biased strategic decision-making and thus unable to correct it. Relatedly, Abatecola (2014) theoretically advanced that CEOs/Top Management Teams (TMTs) initially adopt heuristics for solving business problems over the firm's life cycle and that, in the presence of continuous positive feedback, adopted heuristics become the object of an overall self-reinforcing effect that determine the path of the organization. In this vein, Acciarini *et al.* (2021) highlighted the importance of feedback mechanisms to counteract biases and evaluate and adjust the smoothness of the overall decision-making process. See also Greco *et al.* (2021) who proposed corporate debiasing policies, and Frisk and Bannister (2017), who stressed the importance of data analytics for debiasing.

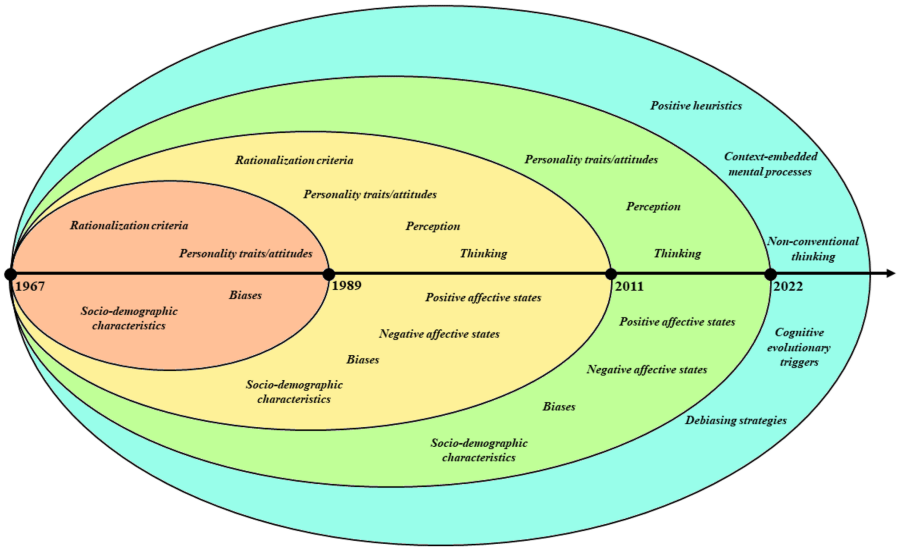
Lastly, the proximity and magnitude of recent global crises – i.e. the coronavirus disease 2019 (COVID-19) pandemic, the Russian invasion of Ukraine, and the related energy crisis –

have dramatically shocked the business environment, representing a unicum since the end of the Second World War. In this regard, on the MD pages, a series of authors took the occasion to reassess behavioral responses to unlucky strategic events. Tabesh and Vera (2020) advanced a conceptual model that links improvisational decision-making and decision quality in crisis. Although comprehensive and intuitive decision-making is rooted in distinct information processing approaches, using "paradoxical thinking" – in which "contradictory yet interrelated elements that seem logical in isolation but absurd and irrational when appearing simultaneously" (Lewis, 2000, p. 760) – can be combined in unique ways when senior executives improvise decisions in crises.

6. Looking back and moving forward: future trajectories for behavioral strategy research

Herbert Simon's (1947) groundbreaking concept of bounded rationality led to a significant shift in how scholars understand individual and group decision-making processes. This allowed the conceptualization, among others, of the Behavioral Theory of the Firm (Cyert and March 1963), the prospect theory (Kahneman and Tversky, 1979), heuristic and biases (Kahneman, 2011), the UET (Hambrick and Mason, 1984) and the nudge theory (Thaler, 2000). These milestone contributions have created fertile ground for BS, integrating cognitive and social psychology with strategic management to enrich theory and practice by considering realistic human behavior (Powell *et al.*, 2011). This produced a wealth of literature on BS, which MD has successfully captured throughout its over half a century of activities.

Accordingly, this section details the recent progressions and changes in the academic interests in BS research published in MD and connects them with external sources to delineate the way forward. In this regard, Figure 4 shows the main themes discussed in each historical era of BS research (Section 5). As readers may note, there has been an unstable presence of themes over the years, a clear testimony of the field's evolution from its



Source(s): Own elaboration

Figure 4.
The progression and changes in the academic interests toward BS research over time

embryonic stage to its current form. In fact, over time, a kind of "intellectual selection" has steered scholarly attention toward specific BS topics. Consequently, certain themes have waned (e.g. "rationalization criteria" between 1989 and 2011), while novel ones have ascended (e.g. "thinking," "perception," "positive/negative affective states" between 1989 and 2011), contributing to the evolution of the BS field.

Looking at what was produced from 1967 to 2024 in MD from a historical perspective, it is visible that BS research has been shaped by several significant changes, both in theoretical and methodological terms, thus co-evolving with the overall management thought. Similarly, by considering valuable BS research avenues that emerged from research inside and outside MD, we identified six emerging topics (see Table 4) that are likely to pave the way for the next era of BS research. These are: "positive heuristics," "context-embedded mental processes," "non-conventional thinking," "cognitive evolutionary triggers," "debiasing strategies" and "behavioral theories for new strategic challenges." For each theme, we provide researchers with specific research questions (emerging from MD and non-MD research – the latter signed with an asterisk), the scientific paradigm (according to Powell *et al.*, 2011) and the most fitting research methodologies.

Positive heuristics. Ecological rationality challenges the traditional notion of heuristics as suboptimal shortcuts (Kahneman and Tversky, 1979) and emphasizes their positive role in problem-solving and predictions (Todd and Gigerenzer, 2012). Recent research in MD explores the benefits of specific heuristics, under some conditions, in business. For example, Atanasiu (2021) presents a managerial heuristic model, while Cavarretta (2021) underscores the role of social calculations in developing heuristics for pragmatic action theories. However, caution is needed in generalizing these positive effects. For instance, business-specific scenarios, like individual heuristics based on organizational identities (Greco *et al.*, 2021), necessitate field studies and multivariate statistics for a comprehensive assessment of the effects of corporate strategy change (see also Luan *et al.*, 2019). In this vein, MD literature emphasizes the importance of investigating the self-confidence heuristic in overcoming a firm's status quo (Galavotti *et al.*, 2021). Thus, contextualist approaches, such as ethnographic methodologies (e.g. Elbanna and Newman, 2022), are crucial for evaluating the effect of top management self-confidence on corporate strategic decisions. In line with Guercini and Lechner (2021), future research should focus on integrating heuristics and AI algorithms for improved business decisions (see also Shrestha *et al.*, 2019). Moreover, decision-making simulations, incorporating technologies like eye-tracking (Wang *et al.*, 2014) or Electroencephalogram (EEG) experiments (Li *et al.*, 2022), can synergize human intuition and technology for higher strategic decision quality (see also Bader and Kaiser, 2019). All in all, this is also in line with the recent call for future research by Neely *et al.* (2020). Specifically, these authors, by commenting on the seminal work by Hambrick and Mason (1984), recommended integrating knowledge from diverse fields, utilizing recent methodological advancements, and cautiously employing biotechnologies such as EEGs and wearable trackers to enhance the understanding of the biological basis of executives' cognition.

Context-Embedded Mental Processes. Recently, scholars in MD have investigated the interplay between individuals' cognitive capabilities and their social, cultural and physical contexts in decision-making. Notably, Ahmadzadeh *et al.* (2022) explored collective stupidity's antecedents and consequences, emphasizing its impact on strategic decision-making outcomes (see also Alvesson and Spicer, 2012), while Yu *et al.* (2022) delved into how collective reputation cognition shapes innovation behavior, guiding firms toward high innovation performance. However, a gap persists in scaling the individual behavior to the collective behavior group level. Hence, we propose a multi-paradigmatic approach using field studies and multivariate statistics to explore how business context characteristics facilitate scaling cognitive capacities to collective behaviors and vice versa (Akinci and Sadler-Smith,

Theme(s)	Definition(s)	Future avenues	Potential research questions	Suggested methodologies
Positive heuristics	The view that simple rules can be more effective or the only feasible option in given situations for making appropriate decisions, considering their effectiveness beyond ideological prejudices	New cutting-edge theories, methodologies and tools may enhance the evaluation of heuristics' final effects on differentiated business contexts as well as offer new ways of integrating heuristics and disruptive solutions for achieving outstanding decision quality	Which common business context characteristics trigger positive heuristics acquisition?	Decision experiments with control groups
			What is the definitive effect of individual heuristics, generated by different organizational identities, on corporate strategy change?	Field studies, multivariate statistics
			Does managers' self-confidence help to overcome a firm's status quo and catch business opportunities in a changing environment?	Interpretive histories, ethnography, hermeneutics
			Which Artificial Intelligence tools enhance the positive effect on decision quality of positive heuristics?	Hypothesis testing, decision experiments, simulation, neural methods
Context-embedded mental processes	Individuals' cognitive capacities reflect the social, cultural and physical contexts in which they are asked to make decisions	Fostering the adoption of a multi-paradigmatic approach to comprehensively investigate the integration of both individual and collective psychology in organizations	Which business context characteristics favor scaling-up from certain individual cognitive capacities to collective behaviors and vice versa?	Field studies, multivariate statistics
			How to categorize cognitive and social influences on the strategy process?*	Interpretive histories, ethnography, grounded theorizing hermeneutics, textual analysis, discourse analysis, semiotics cases

(*continued*)

Table 4. BS trajectories – from MD and non-MD* research

Theme(s)	Definition(s)	Future avenues	Potential research questions	Suggested methodologies
Non-conventional thinking	The ability of decision-makers to imagine new possibilities and solve complex problems by combining ideas using both intuition and rationality and frame this interplay as a sustainable and virtuous tension	Adopting innovative tools that can allow BS scholars to untangle the executive's black box	Which are the cases where rational or intuitive-driven decision-making processes are employed?	Neural methods
			What are the cases where a rational or intuitive-driven decision-making process is more effective?	Hypothesis testing, decision experiments, simulation mathematical and computational modeling, neural methods
Cognitive evolutionary triggers	Series of external stimuli (e.g. dramatic and unpredictable business situations) that push the cognitive abilities of decision-makers to evolve as a direct consequence of such situations	Evaluating the impact of recent and unpredictable global challenges, working as exogenous triggers, on cognitive mechanisms of strategists	What are the impacts of the pandemic on managers' cognitive abilities in strategic decision-making processes?	Mathematical and computational modeling
			What are the impacts of climate change on managers' cognitive abilities in strategic decision-making processes?	Mathematical and computational modeling
			What are the commonalities among cognitive evolutionary triggers?	Mathematical and computational modeling
			How do categorize cognitive evolutionary triggers impacting the strategic decision-making process?*	Interpretive histories, ethnography, grounded theorizing hermeneutics, textual analysis, discourse analysis, semiotics cases

Table 4.

(*continued*)

Theme(s)	Definition(s)	Future avenues	Potential research questions	Suggested methodologies
Debiasing strategies	Corporate practices to reduce the negative effect of specific cognitive biases on corporate strategic decision-making process	Identifying debiasing strategies and evaluating their effectiveness	What are effective debiasing strategies to improve strategic decision-making quality?*	Hypothesis testing, decision experiments, simulation, mathematical and computational modeling, neural methods
			How to break organizational barriers toward an effective implementation of debiasing strategies?*	Field studies, event studies, multivariate statistics, cases, mixed methods
Behavioral theories for new strategic challenges	Theories explaining human behaviors in times of external changes that generate strategic challenges for firms	Exploiting and adapting behavioral theories to manage recent strategic challenges	Which are the behavioral theories most suitable for firms to address recent strategic challenges?*	Hypothesis testing, decision experiments, simulation, mathematical and computational modeling, neural methods
			How to adapt behavioral theories to help firms address recent strategic challenges?*	Hypothesis testing, decision experiments, simulation, mathematical and computational modeling, neural methods

Source(s): Own elaboration

Table 4.

2019; Joseph and Gaba, 2020). This future direction also finds support beyond MD. Bromiley and Rau (2016) advocate for future research in BS to effectively categorize context-embedded mental processes, stressing the importance of distinguishing between cognitive and social influences on the strategy process to prevent overlapping variables and enable investigation of their mutual effects. More recently, these scholars, stemming from the prospect theory (Kahneman and Tversky, 1979), emphasized the necessity of comprehending individual and organizational contexts to grasp decision-making intricacies affected by the curvature of the value function. Specifically, they highlight the necessity to bridge theoretical underpinnings with practical insights to predict and explicate real-world decisions within organizational settings (Bromiley and Rau, 2016).

Non-conventional thinking. In today's complex business environment, decision-makers need to imagine new possibilities and solve complex problems using a combination of intuition and rationality (Dane and Pratt, 2007; Hodgkinson and Healey, 2011; Helfat and Peteraf, 2015). In MD, scholars have dedicated efforts to enhance the combined understanding of these two. Okoli and Watt (2018) explored how experienced crisis managers employ intuitive and analytical strategies, called "non-conventional thinking," during complex incidents. However, future research should investigate the conditions under

which non-conventional thinking is beneficial or detrimental to strategic management (see also Miller and Ireland, 2005; Calabretta *et al.*, 2017). To address these questions, we encourage using technologies to explore the balance between decision-making processes requiring high cognitive effort and those dominated by intuition (Luoma and Martela, 2021; Yu *et al.*, 2023). Data collected through technological applications can be analyzed using quantitative models to determine when non-conventional thinking should be promoted or discouraged.

Cognitive evolutionary triggers. While research in strategic management has explored the cognitive abilities guiding managers' decision-making in various contexts, scant attention has been given to the impact of external determinants on managerial cognitive abilities in BS (Acciarini *et al.*, 2021). Contributions in MD, like Norris *et al.* (2020), examined the pandemic as a trigger for education administrators' cognitive shortcuts, emphasizing the influence of external events on decision-making. Similarly, Abatecola (2014) proposed a model discussing self-reinforcing processes in managerial decision-making, drawing from the biological philosophy of organizational change. In this regard, recent research opportunities arise from significant external changes (e.g. the pandemic and climate crisis) that impact human emotional and cognitive aspects (see also Combe and Carrington, 2015; Kim *et al.*, 2021; Miocevic, 2021). This assumption is also backed by scholars such as Argote and Greve (2007) and Gavetti *et al.* (2012), who, stemming from Cyert and March (1963), argued that managers' cognitive representations play a significant role in shaping how organizations search for opportunities, make decisions and adapt to changes in their environment. Thus, evaluating the effects of these events on managers' cognitive mechanisms through mathematical and computational modeling using data collected before and after triggers would be intriguing. Even outside MD, there is interest in understanding similarities among cognitive evolutionary triggers and categorizing them based on specific criteria (Hesselbarth *et al.*, 2023). This exploration could empower organizations to exert more control over cognitive evolutionary triggers, potentially enabling the conscious triggering of controlled shocks to enhance managers' cognitive abilities.

Debiasing strategies. Due to their dual significance, debiasing strategies have been thoroughly investigated in behavioral research (e.g. Cantarelli *et al.*, 2020; Hristov *et al.*, 2022; Lovallo *et al.*, 2023). Primarily, strategists are encouraged to apply debiasing strategies to bolster their cognitive processes for enhancing firm planning. Moreover, debiasing strategies can improve individuals' cognitive processes across various corporate departments when integrated into behavioral plans. Nevertheless, further research in this area is needed despite the attention received within the MD community (Anwar *et al.*, 2021; Yamini, 2021). Indeed, we recommend reconsidering methodologies, emphasizing empirical research to generate accurate primary data on human emotional, cognitive and social factors that can verify the effectiveness of debiasing strategies, also considering the massive presence of human–AI interaction for corporate strategic decision-making (see also Daugherty and Wilson, 2018; Raisch and Krakowski, 2021).

Behavioral theories for new strategic challenges. Behavioral theories offer valuable insights to firms for addressing new strategic challenges (e.g. diversity inclusion, digital transformation and sustainable development), as demonstrated by most recent research predominantly developed out of MD. For instance, Waldman and Sparr (2023), drawing on Positive Organizational Behavior theory, interpret the effects of different strategies (i.e. "woke" and "integrative") to face the matter of diversity inclusion within organizations successfully. Moreover, Virmani *et al.* (2023) employ Behavioral Reasoning Theory to analyze managers' behavioral patterns that push toward Industry 4.0 adoption, thus providing insights for various stakeholders and encouraging further exploration across different business settings. In this vein, we want to encourage future BS research, especially within MD, to move on a double track: using behavioral theories to manage upcoming

corporate strategic challenges and adapting such theories under the blows of the same recent changes.

7. Conclusions

This work mainly contributes to tracing the BS field's historical evolution and provides insight into the challenges and opportunities in the research field. In doing that, it fills a gap in the study of the evolution of management thought and celebrates the Journal's "Over-half a century of *Management Decision*" informal section. In particular, we offer a historical overview of consolidated (e.g. positive heuristics) and underexplored (i.e. debiasing strategies) areas, helping future BS researchers, especially in MD, avoid redundant research. Provided future research trajectories are built on sample articles and selected international literature outside MD, thus providing a research plan. This article also brings practical implications. Practitioners are suggested to invest in training programs that focus on understanding drivers influencing strategic decision-making processes, implementing regular behavioral audits, promoting a culture of self-awareness within their teams and leveraging decision-making tools designed to minimize biases (e.g. the 12-question checklist proposed by Kahneman *et al.*, 2011). These practical insights can mitigate biases, enhance team collaboration and lead to a more objective and effective strategic decision-making process.

In conclusion, this article is not exempt from limitations. The main focus is on management decisions to investigate BS's historical evolution. This overlooks key contributions published in other outlets and may be influenced by MD's editorial preferences. A greater understanding requires broader journal coverage to mitigate biases and enhance field appraisal; thus, a more comprehensive review of the BS field and a formal organizing framework of BS research are still needed. We believe that the future of strategic management research is in the study of executives' behavior. Otherwise, we will always be far from understanding how organizations act strategically.

Notes

1. This term was originally coined by Lovallo and Sibony (2010).
2. Articles that have at least 100 citations according to Scopus (as of July 15th, 2023).
3. The reductionist school is grounded on positivist, realist, and objectivist philosophies; its research favors quantitative hypothesis testing using mathematical modeling, simulation and laboratory decision experiments. The pluralist school believes in positivist, nominalist, pragmatist or evolutionary philosophies; its research is less concerned with individual decision-making than with the overall decision environment of the firm. The contextualist school relies on phenomenological, constructivist and critical philosophies, and its research emphasizes the primacy of context (Powell *et al.*, 2011).

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Supplementary material

The supplementary material for this article can be found online.

Corresponding author

Matteo Cristofaro can be contacted at: matteo.cristofaro@uniroma2.it