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# Behavioral strategy in evolution: A review and conceptual framework

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## ABSTRACT

Behavioral strategy integrates psychology with strategic management theory and practice, offering realistic insights into human cognition, emotions, and social behavior in strategic management. Yet behavioral strategy's antecedents, mechanisms, consequences, and moderators and their interconnectedness and future directions remain unclear. We explore this field's development and current state based on a systematic literature review of 241 articles. We develop a conceptual framework using a coevolutionary perspective and a socially situated cognition approach, which captures essential behavioral strategy elements and dynamics. We advance the field by emphasizing multilevel coevolving dynamics and the interplay of cognition and emotions in shaping strategic behavior. Furthermore, our framework situates cognition within social contexts. We propose an expanded research agenda for the field that highlights artificial intelligence's potential role in enhancing behavioral strategy and the connection between heuristics and nudge frameworks.

## 1. Introduction

A behavioral approach to strategy – what's the alternative? —Levinthal, 2011, p. 1517

Based on the foundational Carnegie School/behavioral organization studies and behavioral decision theory approaches (Augier & Dew, 2018; Augier & March, 2011; Augier, Fang, & Rindova, 2018; Cyert & March 1963; Gavetti, 2012; Kahneman & Lovallo, 1993; Levinthal, 2011; March, 2018; March & Simon, 1958; Powell et al., 2011; Sibony et al., 2017; Simon, 1947), *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" (Powell et al., 2011, p. 1371). A part of the "microfoundations movement," behavioral strategy has dealt with the dynamics of individual-level actions and interactions, elucidating their consequential impact on organizational-level outcomes. It is centered on individuals (March, 2018; Powell, 2014). Integrating these processes with behavioral dimensions requires a deeper understanding of how individuals and groups make, interpret, and respond to strategic choices.

Management and organization studies have increasingly focused on behavioral strategy in the last decade (see Fig. 1), also in the pages of the European Management Journal (Adinolfi, 2021; Augier, 2013; Cristofaro, 2020; Robinson et al., 2022). Literature reviews have grappled with behavioral strategy's complex nature (e.g., Hesselbarth et al., 2023). For example, Gavetti et al.'s (2012) review of the behavioral theory of the firm<sup>1</sup> offers a broader focus than our study, but is complementary in nature (see also Argote & Greve, 2007). While Gavetti et al. (2012) provide foundational insights, they only partially integrate this nascent subfield's vision. Another important and recent review is Greve and Zhang (2022). However, the authors focus exclusively on the relationship between the behavioral theory of the firm and strategy, and thus, have limited scope. Despite its importance and growing popularity within strategic management (Urío et al., 2022), behavioral strategy's antecedents, mechanisms, consequences, and moderators of behavioral strategy and their interconnectedness are not clearly articulated (Cristofaro, Butler, et al., 2022), with its future directions also underexplored.

To address this gap, we conducted a systematic literature review

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<sup>&</sup>lt;sup>1</sup> Behavioral theory of the firm (Cyert & March 1963; Gavetti et al., 2012; Levinthal, 2011) focuses on organizational routines and cognitive biases in decision making within organizations, taking a long-term, macro view of decision making and organizational functioning. Meanwhile, behavioral strategy applies these insights to strategic management, analyzing how biases, emotions, and social dynamics influence executives' immediate decisions.

(SLR) of 241 behavioral strategy articles to describe the field's conceptual framework and suggest ways forward. Our framework adopts a coevolutionary perspective (Abatecola, 2014; Abatecola et al., 2020) and a socially situated cognition approach (Smith & Semin, 2004). Drawing on them, it emphasizes how strategic behavior emerges from the ongoing dialogue among executives, their social environments, and the evolving institutional landscapes they navigate. This approach enriches our understanding of strategic behavior and suggests new empirical research and practical intervention avenues for enhancing organizational adaptability in dynamic environments.

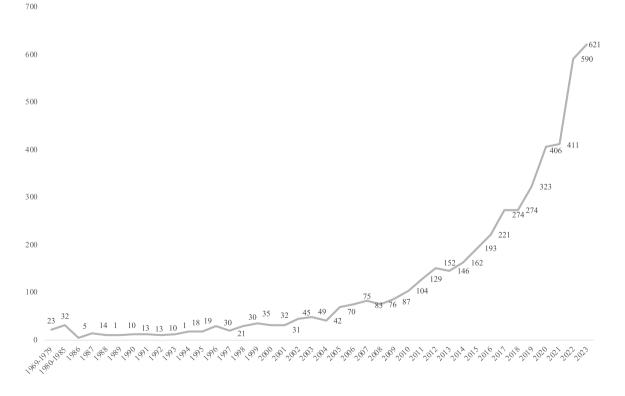
We advance behavioral strategy research in two ways. First, we synthesize diverse influences on strategic behavior into a coherent framework, enhancing our understanding of the interplay between individual, collective, and contextual factors. This provides a deeper analysis of how behavioral strategies evolve. It addresses critiques by scholars such as Westphal (2018), who notes a predominant focus on intrapersonal dynamics and cognitive theories and topics (e.g., prospect theory and cognitive schema) within behavioral strategy. Thus, the framework integrates sociological issues into strategic behavior research, broadening the scope beyond traditional cognitive perspectives toward a more interdisciplinary one in behavioral strategy (Augier & Dew, 2018). We also answer Ashkanasy et al.'s (2017) call to integrate emotions in management theories and fields. Second, the proposed integration enriches behavioral strategy's theoretical foundation and helps propose a research agenda for the field that goes beyond the three core trajectories outlined by Powell et al. (2011). For example, we emphasize artificial intelligence's (AI) potential role in enhancing behavioral strategy and the connection between heuristics and nudge frameworks.

The article proceeds as follows. Section 2 covers behavioral strategy's history. Section 3 outlines the methodology and introduces the coevolutionary perspective and socially situated cognition approach. Section 4 presents behavioral strategy's conceptual framework and reviews its current state. Section 5 proposes a research agenda and maps the theoretical developments. Finally, Section 6 concludes with new insights, future research directions, and practical implications.

#### 2. Behavioral strategy: historical foundations

Behavioral strategy originates from the interdisciplinary theories and empirical insights that have shaped its development. Rooted in organizational sociology (e.g., Barnard, 1938), decision-making studies (Simon, 1947), and behavioral decision theory (Kahneman & Tversky, 1979), it also draws from the behavioral theory of the firm (Cyert & March 1963; see Gavetti et al., 2012; March & Simon, 1958). These foundational influences highlight the field's inherent focus on behavioral and organizational dynamics since its inception (Augier & March, 2011; Levinthal, 2011).

Simon's (1947) work laid a crucial foundation by challenging the perfect rationality prevalent in decision theory and classical economics. He argued against the idea that individuals always maximize utility with infinite cognitive abilities (Augier & March 2002; Cristofaro, 2017). Simon (1947) highlighted the biological and cognitive limitations that lead to deviations from the rational behavior described in classical economics, exploring these limitations' impact on decision making and organizational behavior. His later collaborations in cognitive science, computer science, and early AI extended his interest in decision making (Augier & March, 2002), offering potential future pathways for integrating AI into behavioral strategy. Simon's work explored foundational concepts relevant to modern behavioral strategy, including the interplay of cognition, affect, and cognitive processes from a neurological perspective (Simon, 1983). His insights into individual dynamics and organizational institutions have shaped the field's evolution. Behavioral economics, supported by institutions such as the Russell Sage Foundation and the Sloan Foundation, further enriched strategic decision-making studies.



#### Fig. 1. Behavioral strategy articles 1969-2023.

Notes: Scopus and Web of Science were used (duplicates were eliminated after merging them) to search for "Behavioral Strateg\*" in the title, abstract, and keywords. Inclusion criteria: (1) articles published in English, (2) articles or reviews, (3) "Business" and "Management" as subject areas.

Kahneman and Tversky's (1979) prospect theory also played a role in shaping behavioral strategy. This theory and the related heuristics and biases research program focused on uncovering systematic cognitive biases and heuristics that influence human decision-making processes. Behavioral strategy research incorporated these findings, revealing how these biases are manifested in organizational choices, and firmly established the intersection of cognitive psychology with strategic decision making (Abatecola, Caputo, & Cristofaro, 2018). This synthesis emphasizes the idea that leaders' cognitive limitations and biases constitute essential dimensions within behavioral strategy research.

Moreover, the upper echelons theory (Hambrick & Mason, 1984) has emerged by drawing inspiration from the dominant coalition concept (Cyert & March 1963). It emphasizes top management team members' cognitive processes, often reflected in socio-demographic characteristics such as age and tenure, significantly influencing organizational strategies and decisions. Concurrently, negotiation research has flourished, emphasizing the necessity for parties with differing preferences to reach agreements that maximize mutual interests but often leave untapped value (Lax & Sebenius, 1986). Negotiation theory (Lax & Sebenius, 1986) acknowledges bounded rationality, contrary to game theory's assumptions of full rationality. Neale and Bazerman (1985) demonstrate how cognitive abilities and mindsets affect negotiation outcomes, illustrating practical applications of behavioral insights.

Building on these foundations, motivational psychology (Gottschalg & Zollo, 2007) and the psychology of goals (Lindenberg & Foss, 2011) have expanded our understanding of how motivation and goal-setting drive strategic action. This underscores the importance of aligning individual and organizational objectives within a behavioral strategy.

The first mention of "behavioral strategy" was in Lovallo and Sibony (2010). Their article shows how subconscious biases influence corporate decision making. They argue that executives should mitigate biases, highlighting the unique strategic decision-making challenges. Their research emphasizes the financial benefits of "debiasing" strategies, promoting a behavioral approach that integrates psychological insights and emphasizes human cognition in organizational strategy. Lovallo, together with Powell and Fox, precipitated a turn in the field by outlining the behavioral strategy domain in 2011, introducing realistic assumptions about human cognition and social behavior into organizational strategic management, a shift also reflected in the scientific production shown in Fig. 1. They identified three paradigms: reductionism, focusing on quantitative testing; pluralism, drawing from diverse theoretical traditions; and contextualism, emphasizing situational factors. This interdisciplinary approach aims to unify research on three core problems: 1) scaling individual cognition to top management team behavior, 2) explaining executive judgments, and 3) improving the firm's choice architecture. This approach positions behavioral strategy as a field at the intersection of strategy and psychology, highlighting methodological pluralism and community integration.

Additionally, behavioral strategy's application in practical settings has been instrumental in its evolution, solidifying its role as an applied discipline (e.g., Lovallo & Sibony, 2010, 2018). Yet the field requires greater methodological and theoretical integration (Powell et al., 2011), emphasizing the need for a unified framework to advance its impact in strategic management.

### 3. Methodology

#### 3.1. Literature search, selection, and evaluation

When a topic has been thoroughly investigated, demonstrated by articles reconnecting behavioral approaches in the theory of the firm (Gavetti et al., 2012; Greve & Zhang, 2022) following years of increasing studies (see Fig. 1 and Urío et al., 2022), researchers can use prior literature to identify key variables and mechanisms underlying the phenomenon (Edmondson & McManus, 2007, p. 1159). A systematic literature review is useful for aggregating and synthesizing academic

studies (Cristofaro, 2019; Schilke et al., 2018). Unlike traditional reviews, systematic literature reviews use rigorous and reproducible methods to connect future research to past questions (Tranfield et al., 2003). We adhered to an established systematic literature review process (see the flowchart in Fig. 2):

- We used the following databases to search for studies: Business Source Complete (EBSCO), Econlit, ISI Web of Science, Scopus, and ProQuest's ABI/Inform.
- 2) Only peer-reviewed journal articles published in English from 2011 to December 2023 were included.
- 3) We selected articles from journals listed in the Financial Times Top 50 in management or UK Association of Business Schools Academic Journal Guide as a 4 or 4\*, and articles published in the *European Management Journal*. This ensures appropriate academic rigor in publications and contributes to the journal's conversation on behavioral strategy.
- 4) We selected strategy articles following Rabetino et al. (2021)<sup>2</sup> and looked for *key psychological concepts* and *processes* studied in behavioral strategy research. We employed a mixed inductive–deductive approach initially guided by the concepts and processes outlined by Powell et al. (2011, p. 1372), but which allowed others to emerge (see also Cristofaro et al., 2024 for a similar application). This yielded 10,234 articles.
- 5) We eliminated duplicates and irrelevant articles, resulting in 9221.
- 6) After reading titles and abstracts for relevance, we had 1126 articles.
- 7) Full readings ensured alignment with our research objective (e.g., not including marketing articles), leaving 225 articles.
- 8) We assessed the 225 articles for theoretical and methodological robustness (see Poggesi et al., 2016 for details), retaining all.

In steps (6)–(8), the two authors read and evaluated the articles independently and resolved discrepancies through discussion. The interrater reliability was validated with a Cronbach's  $\alpha$  of 0.86.

9) Snowballing added 16 articles, bringing the final sample to 241.<sup>3</sup> This also allowed refining the coding scheme.

Next, we performed a comprehensive thematic analysis of the sample articles.

### 3.2. Analysis and synthesis

Following Schilke et al. (2018), we recorded how the sampled articles contributed to the current state of behavioral strategy knowledge. For each article, we collected (a) author(s); (b) journal; (c) publication year; (d) article type; (e) study setting; (f) data collection method; (g) data analysis method; (h) main results; (i) main investigated behavioral variable(s); (j) units of analysis (e.g., individual, group, firm); (k) focal target of the behavioral influence; (l) relationship between units of analysis and the focal target (e.g., individual-to-firm impact of an executive trait on firm performance); (m) investigated strategic

<sup>&</sup>lt;sup>2</sup> Following Rabetino et al. (2021), we select strategy articles if they include at least one of the following keywords: Strateg\* OR Competit\* OR Resource\* OR RBV OR Industrial Organization OR Competitive Advantage OR Governance OR Capabilit\* OR Competit\* Dynamic\* OR Business Model\* OR Absorptive Capacit\* OR Capacit\* OR Search\* OR Option generation OR Analys\* OR Competit\* Intelligence OR Upper Echelon\* OR UET OR Decision\* OR Knowledge\*based Theory. The asterisk at the end of a search word allows for different suffixes, such as "Strategic Planning" or "Strategy Implementation."

<sup>&</sup>lt;sup>3</sup> Snowballing, or citation chaining, is used in SLRs to find additional relevant studies. It involves examining the references of relevant articles ("backward" snowballing) and reviewing articles that have cited the relevant ones ("forward" snowballing).

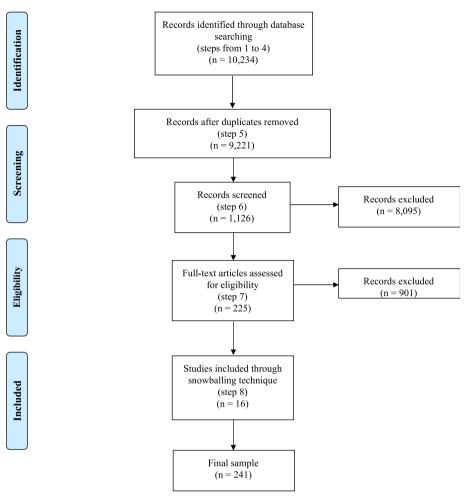


Fig. 2. Data collection.

management outcome(s); and (n) contextual elements influenced by the strategic management activities and interacting with the behavioral variable(s). The data collection for features (j), (k), (l), and (n) was functional for adopting the coevolutionary lens, which was later introduced. Table 1 presents a sub-sample of the analyzed articles.

For the data analysis of behavioral variables (i), we followed Gioia et al.'s (2013) method, which synthesizes qualitative data through a three-order process. Two expert researchers coded the data as follows:

- (1) First-order codes were used to describe and summarize the data following a reflexive thematic approach with deductive and inductive elements (Braun & Clarke, 2019). We derived initial codes from key psychological concepts and processes in behavioral strategy (Powell et al., 2011), while additional codes emerged inductively.<sup>4</sup>
- (2) Second-order themes grouped similar codes into potential themes, organized to show patterns in the semantic content.
- (3) Third-order analysis consolidated the second-order themes into "aggregate dimensions" (Gioia et al., 2013), such as antecedents, mechanisms, outcomes, and moderators (see Schilke et al., 2018).

On the second coding sheet, we recorded future research avenues and limitations from the sample articles, following the same procedure as on the first. Two authors reviewed the discussion and limitations of each article. We coded conceptually and theoretically relevant items, including methodological suggestions, and synthesized existing future research recommendations.

To ensure reliability, two additional researchers rigorously reviewed the coding, which was iteratively refined (Cronbach's  $\alpha = 0.88$ ).

Table 2 provides an overview of the thematic analysis outcomes, including the codes, themes, and aggregate dimensions. We integrated these dimensions into our conceptual framework using a coevolutionary perspective and a socially situated cognition approach. The coevolutionary perspective, already applied in strategic management (Tan & Tan, 2005; Volberda & Lewin, 2003), is essential for understanding the interplay between firm strategies and socio-environmental contexts (Cristofaro, Butler, et al., 2022). Rooted in systems theory (Katz & Kahn, 1966) and contemporary Darwinism, coevolution views the firm–environment relationship as dynamic and reciprocal. It involves *mutual interaction and reality construction* (i.e., thinking in circles; Abatecola et al., 2020; Weick, 1969), *interdependence and feedback* through output exchange, and a *multi-level view* (Abatecola et al., 2020) spanning macro (organization–environment), meso (industry–firm), and micro (internal) relationships and influences.

The socially situated cognition approach emphasizes four principles: (i) cognition is action-oriented (reflecting evaluations and motivations toward objects); (ii) embodied (shaped by the physical brain and body); (iii) situated (influenced by conversational context, relationships, and social group membership); and (iv) distributed (across social agents and

<sup>&</sup>lt;sup>4</sup> Following Braun and Clarke (2019), we choose codes for their relation to the implicitly addressed research question—which key antecedents, mechanisms, consequences, and moderators shape behavioral strategy, and how they interconnect to enrich the understanding of the field—and representation of "some levels of patterned response or meaning within the dataset" (p. 88).

Table 1A sub-sample of analyzed articles.

#	Author(s) (a)	Journal (b)	Year (c)	Type of article (d)	Study setting (e)	Data collection (f)	Data analysis (g)	Main results (h)	Main behavioral variable(s) (i)	Unit(s) of analysis (j)	Focal target (k)	Relationship (1 or 2- way) (l)	Strategic management outcome(s) (m)	Moderators (n)
1	Vuori, T.O.; Huy, Q.N.	AMJ	2022	Empirical quantitative	Nokia case study	Interviews and secondary data	Thematic analysis	Develop a process model of socially distributed emotion regulation	Positive emotions; negative emotions	Executive; Group	Group; Firm	2 ways (executive–group); 1 way (executive–firm)	Strategy implementation	Governance structures, Advisory structures, Boundary- spanning structures
2	Gottfredson, R.K.; Reina, C. S.	LQ	2020	Review	-	Situation-trait approach and situation- encoding schemas articles	Integrative review	Develop a cognitive affective processing system framework to explain executives' decision making and behavior	Mental models/ cognitive maps/ schemas	Executive	Firm	2 ways (executive–firm)	Situational analysis	Features of the situation
3	Elia, S.; Larsen, M.M.; Piscitello, L.	JIBS	2019	Conceptual	-	-	-	Due to a representativeness bias, underperforming (overperforming) past ventures influence the decision to change (continue using) the previous entry mode choice	Trap (representativeness bias)	Executive; Firm	Firm	2 ways (executive–firm)	Strategy formulation	-
4	Raffaelli, R.; Glynn, M.A.; Tushman, M.	SMJ	2019	Conceptual	-	-	-	Authors advance a theoretical model that assumes cognitive frames can become flexible via categorical positioning, and introduce a role for emotional frames that appeal to organizational members' sentiments and aspirations in innovation adoption	· · · · · ·	Executive	Firm	1 way (executive-firm)	Strategy implementation	Organizational identity; competitive boundaries
5	Laureiro- Martinez, D.; Brusoni, S.	SMJ	2018	Empirical qualitative	49 strategic decision makers	Laboratory experiment	iterated re- weighted	Cognitive flexibility, or when to explore new courses of action, allows managers to switch from a fast decision mode to a slow, more deliberate decision one that facilitates the exploration of new courses of action	Mental models/ cognitive maps/ schemas	Executive	Firm	1 way (executive–firm)	Adaptive decision making	Task environment

#### M. Cristofaro et al.

#### Table 2

Codes, themes, and aggregate dimensions of variables within the behavioral strategy conceptual framework.

and percentage of appearances) Individual characteristics (150; 100%)	Antecedents
characteristics (150; 100%) Cognitive system	Antecedents
(192, 100%)	
Affective system (22; 100%)	
Contagion and	Mechanisms
power exertion (24; 100%)	weenamonis
Outcomes (254; 100%)	Outcomes
	(22; 100%) Contagion and power exertion (24; 100%) Outcomes (254;

#### Table 2 (continued)

1st-order concepts (Number and percentage of appearances)	2nd-order themes (Number and percentage of appearances)	Aggregate dimension (Number and percentage of appearances)	Framework label
Strategic deliberations (46; 41%) Resource	Strategy formulation (40; 18%)		
allocation (33; 30%)			
Generating strategic options (14; 13%)			
Others* (18; 16%)			
M&As (12; 35%)	Strategy		
Business model development (8; 20%)	implementation (53; 23%)		
Strategic group (or alliance) formation (6; 15%)			
Others* (14; 30%)			
Performance appraisal (55; 42%)	Strategy evaluation (106; 45%)		
Decision-making quality (35; 33%)			
Others* (16; 15%)			
Size (10; 24%)	Focal organization	Moderators (93;	Moderators
Structure (9; 22%) Culture (7; 17%) Others* (15; 36%)	(41; 44%)	100%)	
Industry dynamism (15; 47%)	Task environment (32; 34%)		
Competitive intensity (7; 22%)			
Others* (10; 31%)			
Legal framework (7; 35%)	General environment (20; 22%)		
Country culture (6; 30%)			
Others* (7; 35%)			

*Notes*: Others\* substantiates codes not included in the table because of space constraints. The percentage of appearances of first-order concepts is calculated with respect to the specific second-order theme to which they belong. For instance, "Age" (2; 2%) indicates that "Age" was coded twice, making up 2% of the total occurrences of first-order concepts within the same second-order theme category, specifically "Socio-demographic features," which has 84 occurrences in total (2 out of 84 = 2%). Similarly, the percentage of appearances for second-order themes is calculated in relation to the specific aggregate dimension to which they belong. For example, "Socio-demographic features" (84; 56%) signifies that this theme appeared 84 times in coding, accounting for 56% of the total occurrences within the aggregate dimension "Individual characteristics," which has a total of 150 occurrences (84 out of 150 = 56%).

environments, including cognitive tools). The socially situated cognition approach suggests that social contexts shape strategizing. It integrates social contagion theory (Christakis & Fowler, 2013), which explains how behavior and ideas spread via social interactions, and social influence theory (Turner, 1991), which explores how social factors shape beliefs and behavior. Essentially, socially situated cognition offers a view of cognition as emerging from social interaction.

#### 4. Behavioral strategy: a conceptual framework

Building on the analysis of the articles, we propose a conceptual framework for behavioral strategy (see Fig. 3). It delineates antecedents, including individual characteristics, cognitive systems, and affective

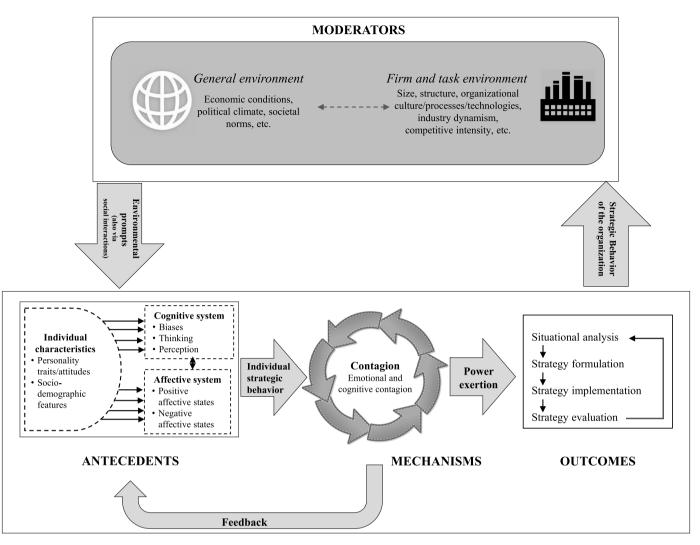


Fig. 3. Behavioral strategy: A conceptual framework.

systems, as well as the mechanisms of contagion and power, outcomes, and moderators. We interpret their interconnectedness from a coevolutionary perspective (Abatecola et al., 2020) and a socially situated cognition approach (Smith & Semin, 2004).

Here, executives are embedded in an environment influenced by factors at societal, industrial ("general" and "task" environment), and organizational ("firm") levels, as discussed in strategic management research (Benner & Tripsas, 2012; Bu et al., 2022; Keller et al., 2022). *Environmental prompts*, such as economic conditions, technological advancements, industry dynamism, and social interactions (Pieper & Astrachan, 2017). For instance, economic conditions can affect the financial resources available to individuals and firms, thereby influencing their decision-making processes.

Following the socially situated cognition approach (Smith & Semin, 2004), the aforementioned environmental prompts impact executives' *individual characteristics*, including personality traits and attitudes. These characteristics influence *executives' cognitive and affective systems*. This is supported by recent theoretical developments in the sense-making framework (Cristofaro, 2022) and Hambrick and Mason's (1984) upper echelons theory (see also Abatecola & Cristofaro, 2020), which asserts that managers' individual characteristics influence organizational actions (Hambrick, 2007).

As executives process information, analyze options, and make decisions, their cognitive and affective systems interact (Hodgkinson &

Healey, 2011), going beyond the concept of cold cognition (Hodgkinson & Healey, 2018; Hodgkinson & Sadler-Smith, 2018) as advanced by recent insights from affect-cognitive theories of management decisions (Cristofaro, 2020) and neuroscience insights (Panksepp, 2000). Therefore, the affective system covers a primus inter pares role (following the affect infusion model of Forgas, 1995, and the affect events theory of Weiss & Cropanzano, 1996) among the influences occurring in executives' minds. According to the sense-making framework (Weick et al., 2005), based on a socially situated cognition approach, the difference between the state of the world and the expected one triggers a discrepancy that elicits diverse emotional responses. Their valence depends on the material and non-material contexts in which the discrepancy occurs (see also Neumann, 2017). Thus, organizational and environmental events act as the initial drivers of emotional reactions. Then these affective states within top management team members significantly shape cognition and subsequent sense-making processes (Liu & Maitlis, 2014; Vuori & Huy, 2022). In conjunction with the sense maker's identity, the emotional response shapes the mental models' perception and application. Previous influences are either discounted or incorporated during sense making, reflecting the dynamic interplay between emotions and cognition (Cristofaro, 2022). This gives rise to individual strategic behavior.

Furthermore, following the principles of social contagion theory (Christakis & Fowler, 2013), individual strategic behavior can rise to the top management team level through *contagion* at the cognitive and

emotional levels. Interactions, discussions, and shared experiences within the team shape CEOs' and the team's cognitive and affective systems, which affect individual characteristics (Ou et al., 2014). This interpretation aligns with social influence theory (Turner, 1991) and recent neuroscience insights (see neuroplasticity; Davidson & McEwen, 2012). Additionally, according to social contagion theory, contagion shapes individual characteristics and cognitive and affective systems by influencing an organization's collective norms and behaviors. As collective strategic behavior is formed through cognitive and emotional contagion, it alters how individuals perceive and engage with strategic challenges (Huy, 2011; Vuori & Huy, 2016). This exemplifies the coevolutionary perspective (Abatecola et al., 2020), in which behavior and contexts shape each other (Smith & Semin, 2004). Strategic behavior at the collective level is steered by powerful executives, who influence collective decisions, according to the behavioral theory of the firm (Cyert & March 1963) and theories of power (Pfeffer, 2013). These decisions affect various levels of analysis, including the firm, the industry, and the general environment. Successful (unsuccessful) outcomes reinforce (reduce) behavior and power positions, creating a feedback loop that promotes (inhibits) this behavior (Pfeffer, 2013).

Next, we investigate the state of the art of the behavioral strategy literature for each element discussed above, which comprises the proposed conceptual framework.

#### 4.1. Antecedents

### 4.1.1. Individual characteristics

Highlighting individual characteristics' pivotal role, we assert that decoding strategic behavior necessitates examining personality traits, attitudes, and sociodemographic features. Factors such as the "big five" personality traits and less explored "dark side" traits, such as narcissism, significantly influence strategic decision making. According to upper echelons theory (Hambrick & Mason, 1984), organizational outcomes reflect top executives' values and characteristics, emphasizing the importance of understanding these traits in shaping strategies.

Individual characteristics encompass personality traits, attitudes, and sociodemographic features central to strategic behavior.<sup>5</sup> The "big five" traits—openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism—have been researched extensively in strategic management. Harrison et al. (2020) find that CEOs' conscientiousness reduces stock risk variance, while neuroticism and extroversion increase it. Higher conscientiousness and lower neuroticism are positively correlated with shareholder returns. Recent reviews, such as Blake et al. (2022), highlight how agreeableness can enhance leadership effectiveness.

As unveiled by recent updates in upper echelons theory (Abatecola & Cristofaro, 2020), scholars also examine "dark side traits." These are personality characteristics generally viewed as negative or destructive to both individuals who possess them and those surrounding them. Among these, narcissism is the most investigated, especially concerning the connected risk-taking attitude. A review and meta-analysis of CEOs' narcissism by Cragun et al. (2020) reports that, while extant findings have common themes, the results remain mixed and potentially dependent on the methods. Considering studies that underline negative effects, Chatterjee and Hambrick (2011) show how highly narcissistic CEOs are relatively less responsive to objective performance indicators (e.g., return on assets) but highly responsive to subjective performance indicators (e.g., social praise), with inevitable consequences for a firm's strategy, such as paying higher acquisition premiums for M&As. Moreover, narcissism's influences are usually associated with other

personality traits, such as extraversion and hubris. Picone et al. (2014) make a strong connection between narcissism and hubris, affirming that "hubris is a pathological personality change generated by a combination of personal narcissistic disposition and external stimuli" (p. 450). Their study demonstrates how the narcissism–hubris nexus is linked to high-risk-propensity behavior and a natural tendency toward ambition. By determining CEO judgment and organizational performance, this nexus has similar effects on strategy formulation and implementation. However, recent empirical studies report contradictory results. Investigating a large sample of US listed firms, Tang et al. (2018) show that narcissistic CEOs care more about corporate social responsibility than hubristic ones. Hubris and narcissism sometimes overlap and their interrelationship with power can differentiate their influence (Asad & Sadler-Smith, 2020).

Risk-taking is crucial for strategic management and enhancing firms' competitive advantage and performance. Benischke et al. (2019) find that CEOs are less risk-averse if they are highly extraverted and open, but more-risk averse if conscientious. CEO risk-taking is also influenced by firm type and cultural context. Gomez-Mejia et al. (2019) show that extreme CEO risk behavior is better controlled in family firms than in non-family firms. Socio-demographic features also shape individual characteristics. Sex and tenure are the most frequently investigated. Kirsch (2018) reviews research showing mixed evidence on women's impact on boards, noting that they may positively affect innovation and acquisition decisions; however, firm conclusions are limited. Similarly, studies on tenure provide mixed evidence regarding its impact on firm strategy (Brenner, 2015).

#### 4.1.2. Cognitive system

Positioning cognition as central to strategic decision making, we contend that how top decision makers cognitively model their environments significantly influences individual and group strategic behavior. Involving processes such as acquiring and using information, human cognition is a key antecedent of behavior and has been central to behavioral decision theory, leading to prospect theory (Kahneman & Tversky, 1979).

In strategic management, cognition examines how decision makers model their environment and its impact on behavior (Narayanan et al., 2011). This research often builds on bounded rationality (Simon, 1947), the behavioral theory of the firm (Cyert & March 1963), and the attention-based view of the firm (Ocasio, 1997). Studies focus on executive decision making, *perception, thinking*, and *biases*.

Studies mainly investigate perception regarding "how" it influences risk-based strategy formulation (Kahneman & Lovallo, 1993). Bouquet and Birkinshaw (2011) study how executives create a global strategy, finding that international *attention* (a subcategory within perception) to global markets is a strong predictor. Analyzing a random sample of S&P 500 companies, Eklund and Mannor (2021) focus on executive attention. They demonstrate that broader strategic attention leads to superior firm performance in environments with fewer opportunities. However, narrower strategic attention is more appropriate when the environment provides more opportunities. As these studies suggest, the attention structure—specialized attention within a particular unit and integrated attention between units—is the key to understanding firms' growth processes.

Mental models (a subcategory of "thinking"), simplified representations of a firm's environment (Menon, 2018), are vital in executive thinking. These studies cover a heterogeneous mix of strategic management outcomes associated with situational analysis, strategy formulation, implementation, and evaluation. Following this tradition, Kannan-Narasimhan and Lawrence (2018) emphasize that corporate innovation approval and adoption depend on how lower-level innovators reframe current firm resources, and thus on their ideas' potential. Csaszar and Levinthal (2016) also focus on opportunity recognition. They use computer simulations to conceptualize how executives' mental representations to generate predictions about reality

<sup>&</sup>lt;sup>5</sup> Notably, personality traits and attitudes do not have the same meaning but are commonly considered together because the former provide information about the latter. Thus, attitudes can be viewed as a consequence of specific personality traits.

affect their search for profitable strategies (cf. Garbuio et al., 2018 for the connection between design thinking and opportunity recognition). Interestingly, their results show that time plays a key role in determining the type of search preferred for firm performance. Balancing the search between alternative policies and dimensions of the representation is beneficial if ample search time is available. Conversely, highly accurate representations can be detrimental when considerable dispersion exists in the relevance of different dimensions (supporting why heuristics are common in business settings).

Among executive *biases*, CEO overconfidence is the most investigated, especially its effect on firm performance (see Camerer & Lovallo, 1999). Burkhard et al.'s (2023) meta-analysis finds that, contrary to general wisdom, overconfidence can benefit firm performance via enhanced CEO strategic risk taking. These benefits increase when CEOs have greater managerial discretion. For example, Galasso and Simcoe (2011) use CEO stock-option exercise to investigate CEO overconfidence's influence on corporate innovation. Analyzing a sample of large publicly traded firms (1980–1994), the authors find a robust association between CEO overconfidence and new technological directions. Thus, overconfidence can be beneficial to firm performance.

### 4.1.3. Affective system

Affirming emotion's integral role in human rationality, our analysis aligns with Simon's (1983; 1967; 1987) view that understanding the emotional dimension is essential for a complete theory of rationality. This perspective resonates with socially situated cognition principles, where cognition is influenced by both brain and bodily experiences, thus affecting mental functions (Smith & Semin, 2004). Forgas (1995) identifies "affect" as encompassing moods, emotions, and temperament. The interplay between affect and cognition in management decisions (Cristofaro, 2020; see also Simon, 1987) reveals six functions of affect in strategic decision making (Cristofaro, 2019): (i) affect shapes decisions by thought's content (e.g., fearful people see more significant risk in an option than less fearful individuals); (ii) affect impacts thought's depth (e.g., a positive mood lets individuals rely on cognitive heuristics); (iii) affective states shape decision making by goal activation (e.g., being angry pushes individuals to change a situation); (iv) affect influences interpersonal decision making (e.g., showing anger requires adjustments in bargaining); (v) affective contagion influences decision-making group dynamics (e.g., leaders who display happiness or self-enhancing humor enhance subordinates' creative performance); and (vi) cognitive and emotional self-regulation reduce biased decision making (e.g., decision makers instructed by their leaders to take an outside view<sup>6</sup> for their own decisions attain higher decisional performance; Kahneman & Lovallo, 1993). While the last two functions will be discussed in the "contagion," "power exertion," and "outcomes and moderators" sections, here we synthesize the behavioral strategy research that informs the first four functions.

Zolotoy et al. (2019) examine affective states and influences on the content of thought. Using 8432 firm–year observations on CEO stock-option incentives, the authors find that positive mood amplifies the extent to which executives reduce (increase) strategic risk-taking in response to risk-bearing (compensation incentives). Hodgkinson and

Healey (2011) find that positive (negative) emotions are linked to risk-taking strategies (avoidance).

Furthermore, affective states are dynamic and investigating the transition from one state to another can provide new insights. Focusing on CEOs, Atanasiu et al. (2023) investigate the emergence of managerial heuristics using a grounded theory approach. Through a four-step model encompassing dissonancing, realizing, crystallizing, and organizing, the authors reveal the process from flawed assumptions to mature heuristics. Unexpected problems trigger dissonance, causing a triple insight process: CEOs identify and unlearn flawed assumptions, learn new principles transformed into conceptual heuristics, and create operative heuristics for enactment. Proverbialization (i.e., simplifying heuristics into short catchphrases), testing, and refining result in mature heuristics, some of which are institutionalized. The authors emphasizes the emotional journey from negative pressure to validation, and explore the environmental impact on heuristic development, aligning with ecological rationality principles. A more nuanced view of affective systems considers mixed emotions of varying valences and intensities. Rothman and Melwani (2017) find that combining positive and negative emotions can enhance cognitive flexibility, yielding more adaptive strategic decisions. However, this emotional complexity may sometimes cause harmful personality clashes.

## 4.2. Mechanisms

### 4.2.1. Contagion

According to Powell et al. (2011, p. 1374), "the perceived gap between individual cognition and collective strategy has done more to impede behavioral strategy than any other problem." Analyzing the literature requires two steps: (i) emotional and cognitive contagion and (ii) politics and/or power to direct behavior. These dynamics align with the socially situated cognition approach (Smith & Semin, 2004). This emphasizes how cognition is influenced by social interactions and environmental factors. Moreover, social contagion (Christakis & Fowler, 2013) and social influence theories (Turner, 1991), already included in the socially situated cognition approach, highlight how interpersonal dynamics, including emotional and cognitive contagion, shapes decision-making processes within executive teams.

Emotional and cognitive contagion can be described as the contamination of cognitive and affective systems among executive team members—that is, the processes by which an individual "catches" the affective states/cognitive approaches (e.g., mental models) of others, sometimes unconsciously, which can be activated by executives' demographic similarities (Heyden et al., 2018).

Emotional contagion can be triggered by facial expressions, indirect human interactions, and observing other people's behavior in direct and indirect interactions. Liu and Maitlis (2014) investigate the discursive processes through which strategy is constructed. The authors find that for positive emotional dynamics (usually featuring non-urgent issues), top management team members express emotions that draw them closer together (facilitated by the creation of a positive emotional tone) during a conversation. This simultaneously enables a collaborative approach to the issues under discussion, such as encouraging team members to express their disagreement. For polarized emotions, the strategies are narrow, shallow, and unreconciled. Additionally, Gylfe et al. (2016) study managers' strategic change efforts using a video-based method at the individual level, concluding that shared understanding is more appropriately viewed as emotional contagion. Strategy content measures the success of management's efforts to change by analyzing whether organizational members invest in them emotionally. This view of contagion is based on interactions between and among human bodies through verbal discourse. Stemming from this, emotional and cognitive contagion occur contemporarily, consistent with emotional frames or emotional schemata (Raffaelli et al., 2019). For this, cognitive frames, schemas, and mental maps are mainly shaped by elicited affective states (see also Vuori, 2023).

<sup>&</sup>lt;sup>6</sup> The outside view is a concept related to how people make predictions and decisions. It contrasts with the "inside view," which involves looking at a particular situation or project's specific details and unique aspects. Conversely, the outside view encourages individuals to consider more general and base-rate information when making predictions about the future. In making decisions, people often rely heavily on the inside view, focusing on a situation's specifics and neglecting broader, more general information that could provide a more accurate prediction. The outside view encourages decision makers to look at similar past situations or comparable cases to gain a more objective and realistic perspective. (Kahneman, 2011; Kahneman & Lovallo, 1993; Kahneman & Tversky, 1979; Lovallo et al., 2012, 2023; Lovallo & Kahneman, 2003).

Building on dual-process theories (e.g., Chaiken & Trope, 1999),<sup>7</sup> whose studies inform prospect theory and form the basis of neuroscience research, Healey et al. (2015) propose that cognitive contagion operates on two levels: Systems 1 (reflexive, nonconscious) and 2 (reflective, conscious; see also Kahneman, 2011). Effective contagion, where conflicts are minimized, occurs when individuals' implicit mental models align with their explicit ones. Shared System 1 representations rather than explicit models are crucial for this alignment. Team members may disengage when System 1 representations do not match the shared cognitive understanding. Carrington et al. (2019) support this idea, showing that leaders' mental models shift during a crisis to become more like their followers, not vice versa.

#### 4.2.2. Power exertion

Once cognitive and emotional influences among members have been formed, among diverse possibilities, why do actors choose a specific collective behavior to pursue a goal (Simon, 1947)? According to the behavioral theory of the firm, conflicting goals (mainly driven by self/agency interests), resources, and time horizons of team members (or different subunits) develop a strategy as a political process (Cyert & March, 1963). This process mainly occurs through the distribution of incentives, such as money, personal treatment, lighter workloads, reduced supervision, prestige, or a promise of future payoffs. In turn, this distribution helps mediate conflict and allows the desired behavior's selection (Mithani & O'Brien, 2021). However, other tactics are employed when politics is impossible, such as avoiding conflict or changing team members. These are mainly related to the *main* lever of top management team behavior selection: power (e.g., Pfeffer, 1981).

Daily and Johnson (1997) rigorously explore the intricate relationship between CEO power and firms' financial performance. Through a longitudinal approach spanning four years, the authors examine diverse CEO power dimensions, including structure, ownership, prestige, and expert power. Contrary to common assumptions, the authors investigate the possibility that heightened firm performance increases CEO power. This nuanced analysis contributes significantly to the understanding of the complex dynamics between CEO influence and organizational outcomes. Firms with high performance levels may be characterized by CEOs with increasing levels of discretion and power. However, CEO power (board vigilance) can exacerbate (mitigate) CEO hubris' negative effect on corporate financial performance (Park et al., 2018).

Thus, considering how an executive team's members with more (formal or informal) power can influence team dynamics is crucial. Schildt et al. (2020) study it using four sense-giving practices: suppression, authority, inspiration, and expansion. These practices vary according to the aim of the sense-giver, who has the power to drive cognitive contagion: reducing doubt (from which the first two practices are derived) or inducing doubt (from which the last two practices are derived). However, the authors argue that if leaders exert constraining power over others, sense-making processes will be automatic or algorithmic (mental models and logic are already provided to interpret situations). Conversely, if others are empowered, sense-making processes will be improvisational or reflective (tacit evaluation criteria and rationalities are equipped to interpret situations).

Integrating and synthesizing these diverse perspectives' key ideas shows that besides being a static attribute, power is a dynamic force that permeates all levels of organizational life. From the boardroom to the frontlines, power's distribution and exercise shape organizations' culture, structure, and direction, highlighting its paramount importance in understanding and managing organizational dynamics.

## 4.3. Outcomes and moderators

According to Powell et al. (2011, p. 1377), "the decision context of strategic management involves organizationally situated [emphasis added] managers, widespread uncertainty, and poorly defined problems with unknowable social and economic consequences." Westphal and Zajac (2013) emphasize that corporate leaders often adopt policies reflecting dominant institutional logics, cultural values, and goals extending beyond individual organizations, promoting a sociological and multilevel perspective in behavioral strategy. Thus, understanding executive decision making involves considering executive characteristics and the broader context, including the organizational, sectorial, and macro levels. The organizational environment shapes leadership dynamics and incentive systems, guiding strategic decision making through formal planning systems. This enhances communication and transparency (Hodgkinson et al., 2023; Wolf & Floyd, 2017). Organizational control types, such as state-owned and private, influence decision processes differently. State-owned enterprises may prioritize strategic decisions consistent with political agendas or national interests. Private companies may focus more on market demand and shareholder interests (Bruton et al., 2015).

Recently, studies have often shown that various factors, including organizational structures, influence executives' perceptions of their firms' environments. CEOs in divisional structures perceive their environments more accurately than those in functional structures, which helps reduce (improve) perception gaps (decision making; Junge et al., 2023). Moreover, following a coevolutionary perspective (Abatecola et al., 2020), adapting executive behavior in response to environmental cues emphasizes the importance of considering the environment's influence on executive decision making. Executives often strategically adjust their behavior, such as risk-taking, resource allocation, and non-conformity, based on environmental factors, such as industry concentration, dynamism, and munificence (Resick et al., 2023).

By considering sector-specific dynamics' influence on executive behavior within firms, Zhong et al. (2021) illustrate that heightened customer concentration affects executives' approach to search behavior. They emphasize that executives delve deeper into existing relationships, while their exploration across a broader spectrum becomes more limited. Additionally, performance feedback's amplifying effects exceed social aspiration levels and heighten product market competition, further shaping executives' responses. Meanwhile, Hsieh et al. (2015) underscore competitive market conditions' significance in driving the escalation of commitment within firms. They argue that references to specific rivals in the competitive landscape influence executives' decisions to continue investing in underperforming initiatives. Specifically, larger competitors' high action volumes and smaller competitors' positive performance contribute to a firm's inclination toward escalation. Conversely, larger rivals' negative performance acts as a deterrent, mitigating a firm's escalation behavior. Collectively, these findings (see also Blettner et al., 2015) demonstrate that both internal (e.g., customer concentration) and external factors (e.g., competitive dynamics) influence executive decision making intricately.

Regarding the larger, macro environment, during times of disruption and unexpected events such as COVID-19 or 9/11, decision makers often confront unprecedented complexities, including crisis dynamics, economic impacts, or policy outcomes. This leads to iterative decisionmaking processes under uncertainty. Here, sudden shifts in attention toward emergent issues prompt rapid decision making, often guided by precautionary principles and worst-case scenario projections. This highlights the situational dependency of decision makers' preferences, as they prioritize immediate threats over other considerations (Foss, 2020). Political incentives and perceived risks further influence decision

<sup>&</sup>lt;sup>7</sup> Dual process theories, which do not escape criticism (Evans & Stanovich, 2013) and for which alternatives of a unified mind or three systems are proposed (LeDoux, 2023), argue that human cognition involves two distinct systems: System 1, which operates automatically and intuitively based on heuristics and past experiences; and System 2, which engages in deliberate, analytical processing requiring conscious effort and logical reasoning. These theories help explain how people make decisions ranging from quick, instinctive judgments to deliberate, reasoned choices.

making, sometimes diverging from expert recommendations and yielding strained coalitions between policymakers and experts. Political incentives and risks can lead to decisions diverging from expert recommendations and affect corporate political capital, which diminishes more quickly than expected (Hawk et al., 2023). Beyond crises, executives must recognize the limits of models and forecasts by relying on intuition and soft data for ill-structured problems.

The executive characteristics-context interaction's outcome can be extrapolated to mean that managers who act to improve firm performance choose behavior (among those possible) to *try* to attain company or personal goals. Traditionally, strategic management, shaped by the environment and executive behavior, comprises four phases: (i) situational analysis (e.g., strategic problem-solving), (ii) strategy formulation (e.g., generating strategic options), (iii) strategy implementation (e.g., building alliances), and (iv) strategy evaluation (e.g., appraising performance). The last phase forms the basis for situational analysis (Grant, 2021).<sup>8</sup>

The sampled articles suggest a broader role for executives. As emphasized in the aforementioned studies, executives' roles resonate with the concept of contagion in organizational contexts. Executives, particularly CEOs, serve as entrepreneurs of meaning and social architects, shaping narrative and sense-making processes within and outside the organization (Bowman, 2016; Weick, 1969). Communication strategies such as storytelling and scenario planning are powerful tools for knowledge transfer and organizational legitimacy, especially during crises (Beelitz & Merkl-Davies, 2012). This enhanced role positions executives as influential drivers of organizational evolution, synthesized as the *spatiotemporal driver of organizational evolution*. This contagious nature emphasizes executives' pivotal role in shaping the organizational mindset and guiding strategic decisions, as research at the CEO effect (Keller et al., 2022) emphasizes CEOs' significant influence at both the firm and industry levels.

Traditionally, executives' actions directly impact their environments at different levels: micro (i.e., firm), meso (i.e., task environment), and macro (i.e., general environment; Porter, 2011). This is the case for the relationship between executive risk-bearing and strategic risk-taking, which changes from negative to positive for high extraversion, greater openness to experience, and low conscientiousness (Benischke et al., 2019), or more broadly for cognition's influence on firm performance via cognitive managerial capabilities (Helfat & Peteraf, 2015). However, the sampled articles reveal that the environment is not a static recipient of executive actions: Different environmental levels produce reciprocal influences that moderate and shape executive actions.

Benner and Tripsas (2012) study a nascent sector-digital cameras-in the 1990s. Here, executives' prior industry experience shapes shared beliefs, resulting in similar and concurrent firm behavior. However, firms entering the market notice and imitate their industry counterparts' behaviors (e.g., photography, computing, and consumer electronics; cf. Bu et al., 2022). The interrelation among all different levels can vary and produce different influences according to the focal context. Thus, one may find it challenging to state which level has the stronger impact. Some studies investigating firm-, strategic group-, and industry-level influences on firm performance find that the firm effect is the most significant; meanwhile, the strategic group effect rivals and even outweighs the industry effect for some measures (Wernicke et al., 2022). Additionally, Schilke (2018) demonstrates that strong organizational identification increases resistance to environmental pressures through two mechanisms: (1) bolstering the decision maker's certainty and (2) deflecting their attention from the environment. Moreover,

networking relationships with community leaders can play a role. Acquaah (2012) finds that compared with family-owned firms, nonfamily firms can better use their firm-specific managerial experience to manage the resources and capabilities obtained from networking relationships with community leaders to create value.

#### 5. A research agenda

Our research agenda for behavioral strategy research is grounded in a comprehensive content analysis of the limitations and potential future research areas highlighted in the sample articles (Schilke et al., 2018). We emphasize issues that warrant greater attention, identify significant yet overlooked topics, and address unresolved conflicts within the literature. To facilitate an understanding of past and prospective theoretical connections valuable for the field's future, we create a timeline mapping its theoretical evolution (Fig. 4). We outline future directions for developing a conceptual framework and include reflections on the epistemology of behavioral strategy. Table 3 summarizes the proposed research agenda.

## 5.1. Antecedents

Regarding *individual characteristics*, traditional studies of strategic behavior have emphasized gender and tenure. However, diverse sociodemographic variables such as geography, religion, race, and social class remain underexplored. Campbell et al. (2019) examined CEO birth order and risk orientation, but other sociodemographic influences on decision making are also needed. Collecting data on them and using methods such as regression analysis can uncover new insights into how they influence strategic outcomes.

Regarding personality traits influencing strategic direction, trait activation theory (Tett et al., 2021) represents a significant advancement. Aligned with socially situated cognition, it suggests that individuals possess various traits (e.g., assertiveness, risk-taking) that can be activated or suppressed, depending on the context. Trait activation theory can elucidate how different leadership styles emerge based on the activation of traits, such as assertiveness or empathy, in varying situational contexts (e.g., different organizational cultures). This and other applications emphasize trait activation theory's relevance in exploring the dynamic interactions between individual traits, situational contexts, and strategic decision-making processes across diverse organizational settings.

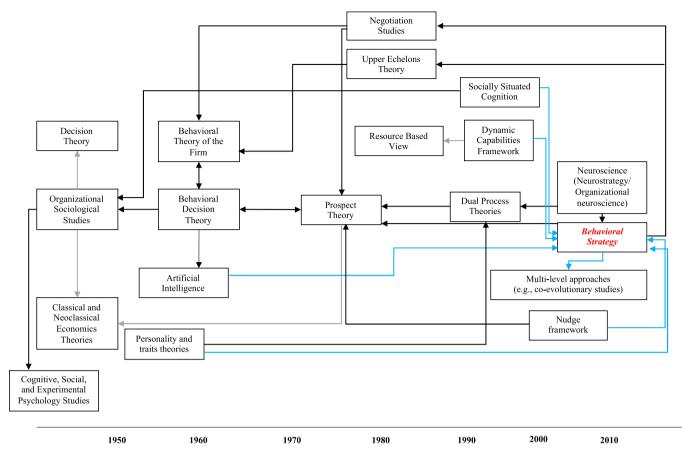
Among the studied traits, narcissism attracts significant academic curiosity. Traditionally grouped under the "dark triad" with Machiavellianism and psychopathy, narcissism is often associated with negative organizational outcomes. However, recent research challenges this view by examining when narcissistic traits may provide strategic advantages or positively influence organizational outcomes. For example, Zhang et al. (2017) explore the interplay between narcissism and humility in strategic leadership, showing how these traits can synergistically enhance a firm's innovative culture and performance. Thus, understanding the cultural context is crucial.

As strategic management research evolves, expanding and refining our frameworks is crucial to ensure that they encapsulate the complex mosaics of factors influencing strategic trajectories.

Regarding the *cognitive system*, strategic decision making often rests on the bedrock of models, cognitive schemata, and mental maps. These cognitive tools fundamentally dictate how stimuli are interpreted both individually and collectively, playing a pivotal role in strategy formulation and execution. Insights into when and why managers adjust these representations can help decode strategic shifts. For instance, Csaszar and Levinthal (2016) suggest that some leaders may be more adept at crafting or adapting strategic representations. Such inquiries can bridge the theoretical and practitioner divisions in strategic management.

Recent decision-making research increasingly emphasizes heuristics and biases, highlighting their adaptive potential beyond their negative

<sup>&</sup>lt;sup>8</sup> We use the four phases of strategic management defined by Grant (2021) as the initial codebook to analyze articles' strategic management focus. This initial codebook did not restrict our analysis, since we left other phases to emerge; however, these four phases saturated all the strategic management foci of the sampled articles.





*Notes*: Theories/frameworks/study fields are ordered chronologically by their contributions to behavioral strategy. Black ties between two theories/frameworks/ study fields are used when one partly or mainly descends from another and/or formally accepts its assumptions; bidirectional black ties are used when the influence is reciprocal. Gray ties are used when one partially accepts or completely rejects the assumptions of another. Blue ties indicate theories/frameworks/study fields that can inform behavioral strategy in the future. This transitive property is used to connect theories/frameworks/studies. (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

consequences (Hodgkinson et al., 2023). This perspective emphasizes the importance of considering context, particularly in complex and uncertain environments. Some also call for researchers to uncover new heuristics and biases relevant to contemporary challenges, such as digitalization and AI in decision making, a theme rooted in Simon's work (Newell & Simon, 1976). Exploring how heuristics operate under different uncertainties offers insight into decision making across diverse organizational contexts, emphasizing the need for a multifaceted approach that integrates individual and contextual factors. Here, employing a design science approach, including real-time data collection and observation, rather than relying solely on traditional experimental methods can deepen our understanding of how environmental factors shape decision processes.

Regarding the *affective system*, as recent psychological and neuroscience findings suggest, the interplay between emotion and cognition is crucial for understanding strategic decision making. Okon-Singer et al. (2015) reveal a sophisticated network of interactions between the emotional and cognitive brain regions that contribute to effective and ineffective behavior. This has important implications for behavioral strategy. For instance, some studies implicitly embrace this unified perspective, characterizing executive sense-making activities as intrinsically tied to emotions. This standpoint emphasizes that strategy scholars should consider both affective and cognitive elements simultaneously, rather than in isolation. Researchers can cultivate a richer understanding of strategic thought processes and behavior by transcending traditional dual-process models (LeDoux, 2023). An integrated approach spanning Systems 1 and 2 of the human mind fosters a more comprehensive understanding of how affective and cognitive elements interact to drive strategic outcomes. This can provide more effective strategies for organizational leadership and management. Integrating these dimensions offers opportunities to uncover nuances in pivotal strategic concepts such as sense making (Cristofaro, 2022; Weick, 1969). Furthermore, building on the attention-based view of the firm (Ocasio, 1997), the role of attention in strategic decision making can be understood better by considering how emotions and cognition interact, influencing where and how executives focus their energies during critical strategic junctures. For a more comprehensive understanding of strategic behavior and outcomes, behavioral strategy research should explore the intricate relationship between emotion and cognition.

## 5.2. Mechanisms

Scholars should examine scaling up from relevant executives (usually CEO) to top management team behavior and then the organizational level (Powell et al., 2011). Dynamic capabilities research offers strategic insights into this (Teece et al., 1997), particularly regarding dynamic managerial capabilities. Built on the cognition and human and social capital of individuals, dynamic managerial capabilities highlight managers' strategic acumen in orchestrating organizational resources and competencies (Cristofaro & Lovallo, 2022; Helfat & Peteraf, 2015). Studies can further examine the competing demands of opportunity discovery by considering the necessity for trustworthy information and rapid responses in uncertain contexts. Ecologically rational heuristic reasoning may offer a solution, enabling firms to make sufficiently

#### Table 3

			Table 3 (continued)		
Research agenda for beha Research Area	vioral strategy research Research topic(s)	Examples of research	Research Area	Research topic(s)	Examples of research objective(s)
Antecedents—individual characteristics	New or under- investigated socio- demographic factors	<ul> <li>objective(s)</li> <li>Examine how spirituality affects strategic vision, values, and ethical competitiveness.</li> <li>Assess spirituality's role in strategic decision making during ethical dilemmas.</li> <li>Explore racial diversity's impact on broadening strategic insights and global outreach.</li> </ul>		Triggers for representation change Influence of strategic representation tools	<ul> <li>Investigate the circumstances that prompt managers to change their representations and assess whether certain managers excel at selecting representations.</li> <li>Examine strategic representation tools' impact on the decision- making process and analyze different depic-</li> </ul>
		<ul> <li>Evaluate challenges and strengths in consensus building and problem solving within diverse teams.</li> <li>Investigate the link between leaders' social class and their strategic choices on issues like mergers and innovation.</li> <li>Study the balance of risk strategies influenced by diverse social backgrounds.</li> <li>Examine the relationship between narcissistic traits and innovative thinking, focusing on how narcissism may drive/hinder creative problemsolving approaches.</li> <li>Investigate how diverse socio-demographic back-grounds, including religion, race, and social class, impact creative problem-solving strategies within teams and organizations.</li> </ul>		Emotional and cognitive schemata	<ul> <li>tion methods' influence.</li> <li>Examine schemata's evolution and its significance in strategic leaders' cognitive development.</li> <li>Explore how this development influences strategic foresight and adaptability in changing market dynamics.</li> <li>Investigate how schemata impact executives' social and political orientations.</li> <li>Determine its influence on their strategic perceptions, particularly concerning corporate roles, responsibilities, and stakeholder obligations.</li> <li>Investigate how schemata impact executives' social and political orientations.</li> <li>Determine their influence on their strategic perceptions, particularly concerning corporate roles, responsibilities, and stakeholder obligations.</li> </ul>
	Trait activation theory, dark traits, and positive trait interplay	<ul> <li>Investigate how situational cues activate specific leadership traits (e.g., assertiveness and empathy) and their impact on leadership styles and effectiveness in strategic decision making.</li> <li>Study how organizational contexts activate traits such as innovation, risk- taking, and collaboration among employees, influ- encing strategic behavior and organizational outcomes.</li> </ul>		Heuristics and biases	<ul> <li>Examine situations where executive biases may enhance strategic management and boost organizational performance, challenging the conventional view of biases as detrimental.</li> <li>Investigate the specific contexts in which biases lead to favorable strategic outcomes, helping companies adjust their strategic planning processes according to different scenarios.</li> </ul>
Antecedents—cognitive system	Role of models and mental maps	<ul> <li>Compare how dark traits (e.g., narcissism, psychopathy, and Machiavellianism) interact with positive traits (e.g., humility, empathy, and resilience) in shaping strategic outcomes.</li> <li>Explore models, cognitive schemata, and mental maps' role in both CEOs and top management teams in interpreting market signals, competitive threats, and innovation opportunities.</li> </ul>	Antecedents—affective system	Affective states and thinking Emotions in sense making	<ul> <li>Investigate the relationship between affective states and strategic cognition, assessing how emotions interplay with analytical thinking in strategic decision making.</li> <li>Develop models that integrate both emotion and cognition, aiming to provide a holistic understanding of their combined impact on strategic planning and execution.</li> <li>Investigate how emotions influence strategic</li> </ul>

Table 3 (continued)

• Investigate how emotions influence strategic

## (continued on next page)

## M. Cristofaro et al.

## Table 3 (continued)

Research Area	Research topic(s)	Examples of research	Research Area	Research topic(s)	bic(s) Examples of research		
		objective(s)			objective(s)		
		decision making's initial stages among executives. Assess how these emotional factors shape their interpretations, perceptions, and			<ul> <li>resources and</li> <li>competencies, considering</li> <li>the reciprocal relationship</li> <li>between cognition, affect,</li> <li>and CEOs' characteristics.</li> <li>Understand AI's impact on</li> </ul>		
	Attention and strategic decision making	<ul> <li>consequent strategic</li> <li>actions, potentially</li> <li>leading to unique</li> <li>competitive advantages or</li> <li>vulnerabilities.</li> <li>Examine how attentional</li> <li>dynamics in BS influence</li> <li>strategic decisions'</li> </ul>	Moderators	Multi-level influences on strategic management	<ul> <li>strategic problem solving.</li> <li>Explore the varying weights of multi-level in- fluences on strategic man- agement, revealing top managers' influence and identifying key factors shaping CEOs' behavior.</li> </ul>		
	·	precision, timeliness, and outcomes. Assess whether focused or dispersed attention contributes to more informed choices, and how it impacts an organization's competitive positioning and risk profile		Organizational groups and emotional regulation	<ul> <li>Investigate how organizational groups contribute to emotional regulation in executives and boards, examining the dynamics of emotional contagion and top management team emotional regulation.</li> </ul>		
	Feelings and cognitive biases	• Examine how different types of feelings influence cognitive biases that emerge in strategic decision-making pro- cesses, revealing the af- fective influences on biases and their implica- tions for decision		Reverse causality and executive characteristics	Consider executive characteristics as consequences rather than causes, exploring how organizational factors and hiring processes shape these characteristics and their implications for organizational outcomes.		
Mechanisms	Embracing socially situated cognition	<ul> <li>outcomes.</li> <li>Explore the socially situated cognition approach to understand how cognition, action, and social influences interact in shaping strategic behavior.</li> </ul>		Organizational adaptation and power struggles	<ul> <li>Gain insights into the coevolutionary dynamics between executive characteristics and organizational outcomes, understanding how changes in executive trait influence organizational</li> </ul>		
	Uncovering interaction mechanisms	<ul> <li>Investigate how CEOs influence their strategic social environments through actions, including the use of symbols, metaphors, linguistic framing, and social cues. Assess the implications of these influences on organizational culture, stakeholder relations, and strategic communication, potentially altering competitive dynamics and strategic pathways.</li> </ul>		Impact of heuristics and nudges on strategic decision making	<ul> <li>adaptation and power struggles.</li> <li>Identify the reciprocal influences of heuristics and biases in AI and machine learning, and their implications for strategic behavior.</li> <li>Examine how different types of nudges affect strategic decision making at various organizational levels, and explore the conditions under which nudges successfully</li> </ul>		
	Understanding contagion mechanisms	<ul> <li>Examine specific affective states or cognitive mechanisms that guide contagion processes, and their impact on strategic behavior.</li> </ul>	Epistemological issues	Methodological pluralism and multimethod	<ul> <li>mitigate biases and activate beneficial heuristics.</li> <li>Embrace diverse research methods and approaches to promote disciplinary</li> </ul>		
	Exploring socially distributed emotion regulation	<ul> <li>Investigate how different organizational groups contribute to regulating top managers' emotional reactions toward strategic situations and options within the framework of socially situated cognition.</li> </ul>		research Neuroscience and behavioral strategy Contextualist methods for micro-	<ul> <li>unity in BS.</li> <li>Explore neuroscience's potential in behavioral strategy research to validate constructs, test theories, and measure variables.</li> <li>Utilize interpretive histories, ethnography,</li> </ul>		
	Dynamic managerial capabilities	<ul> <li>Explore DMCs at the individual level to understand how managers build, integrate, and reconfigure organizational</li> </ul>		foundational insights	and other contextualist methods to uncover valuable insights into the micro-foundations of stra tegic behavior. (continued on next page		

М.	Cristofaro	et	al
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#### Table 3 (continued)

Research Area	Research topic(s)	Examples of research objective(s)
	Longitudinal case studies	<ul> <li>Conduct longitudinal case studies using qualitative and quantitative data to examine the dynamic relationship between executives' attributes and firm performance.</li> </ul>
	Innovative methods for data collection	<ul> <li>Employ linguistic tools, sentiment analysis, social media profiling, and other innovative methods to gather primary data on executives' attributes.</li> </ul>
	Ecological momentary assessment methods	<ul> <li>Utilize EMA methods such as once-a-day diaries and event-contingent recording to collect self- reported information closer to its occurrence, capturing the interplay between affect and cognition.</li> </ul>

trustworthy estimations of future outcomes while responding swiftly to environmental changes and opportunities (Maghzi et al., 2023). As a direct output of the interplay between cognitive and affective systems, dynamic managerial capabilities become a pivotal framework for deciphering the scaling from the individual's strategic behavior to the organizational level. Key strategic inquiries might involve understanding the balance between individual, organizational, and external factors in shaping dynamic managerial capabilities, exploring different dynamic managerial capabilities' interactions, and further examining individual dynamic managerial capabilities components' varying weights. Evolving capabilities, such as emotional regulation and self-leadership, within the dynamic managerial capabilities' framework can provide richer nuances to strategic behavior and decision making.

Research on emotional and cognitive contagion in dominant coalitions underlines the socially situated cognition approach's potential advantages (Semin & Smith, 2013) in understanding organizational strategic dynamics. By emphasizing the interplay between cognition, emotion, and the environment, socially situated cognition offers a framework where besides being internal processes, strategic thinking and decision making are intertwined with the broader social context. Scholars should explore executives' emotional regulation. Vuori and Huy (2022) touch upon socially distributed emotion regulation. Here, the strategic lens can be used to investigate how various organizational factions influence top managerial emotions during strategic choices. Neely et al. (2020) suggest a more granular look at leadership interfaces, including examining strategic interactions and dynamics between top executives and stakeholders directly.

#### 5.3. Moderators

Research on the moderators of strategic behavior is conducted along three directions. *First*, understanding multi-level influences on strategic decisions and outcomes can reveal top managers' impact on organizations and guide strategic leadership and decision making. Tools such as multi-level modeling or "CEO in context" technique (Keller et al., 2022) are crucial here. A comprehensive strategic understanding also requires a deeper exploration of the actors or forces shaping individual behavior in strategic contexts, including organizational groups' role in influencing top decision makers' emotional landscapes. Embracing reverse causality (Hambrick, 2007) from a coevolutionary perspective encourages reimagining executive traits as drivers of actions and outcomes shaped by organizational needs. Furthermore, viewing executive traits as outcomes can provide insights into the coevolution of strategic adaptation and predictive models that link traits to strategic outcomes, enhancing talent strategies and hiring practices.

Second, insights from the nudge framework can be integrated into behavioral strategy research. Nudges, described as initiatives guiding decisions while allowing autonomy (Sunstein, 2018; Thaler & Sunstein, 2021), shape strategic decision making in organizations significantly. Leadership nudges designed by Tawse et al. (2019) facilitated effective strategic planning to implement transitions by enhancing willpower and establishing clear intentions. Nudges can leverage biases and heuristics in decision making and shape the information context to guide more effective strategic behavior. For example, a company may use the availability heuristic by showcasing successful case studies or examples of innovation within the organization. Nudges can also leverage or purposefully activate certain heuristics to steer behavior toward desired outcomes. Despite growing interest and practical applications (see the Nudge for Innovation by PwC, 2023), the consistent effectiveness of nudges in overcoming biases and leveraging heuristics in business settings requires further empirical validation, including exploring their multi-level impact on individuals and organizations.

Third, AI can serve as both a moderator and a mediator in behavioral strategy, bridging two contrasting views on heuristics. As a moderator, AI influences the relationship between strategic decisions and outcomes by providing critical insights and risk assessments, refining marketing approaches based on current market trends. As a mediator, AI transforms data into actionable insights, connecting strategic intent with execution through personalized marketing campaigns driven by customer data analysis. This heuristic-driven approach, grounded in Simon's pioneering work on AI (Newell & Simon, 1976), parallels human decision making under uncertainty, enhancing efficiency in dynamic environments (Lucci & Kopec, 2013). Examining these roles can help reconcile Kahneman's (2011) notion of heuristics as second-best solutions with Gigerenzer's view of heuristics as superior tools (Luan et al., 2019). Furthermore, AI's ability to automate aspects of heuristic processes introduces a novel dimension to the behavioral strategy literature, allowing for the development of sophisticated models that provide actionable insights and help organizations anticipate future scenarios. By leveraging AI-driven foresight, companies can mitigate the influence of cognitive biases and make data-informed decisions aligned with long-term strategic goals (Brynjolfsson & McAfee, 2017). Scholars should explore AI's role in refining heuristic decision-making approaches across diverse organizational contexts and develop hybrid models that integrate AI capabilities with human cognition. Addressing AI algorithm biases and researching their limitations is vital for ensuring equitable and accurate strategic outcomes. Ultimately, advancing studies on AI will be crucial for enhancing behavioral strategy, providing new insights and frameworks that can drive organizational effectiveness in an increasingly complex decision-making landscape.

#### 5.4. Epistemological issues

Understanding and quantifying behavioral strategy dynamics presents a significant research challenge (Hodgkinson & Healey, 2008), requiring methods for gathering and analyzing data on decision makers' behaviors and thought processes. However, as identifying and interpreting such data is difficult, methodological pluralism and multi-method research are recommended. This aligns with Simon's (1954) advocacy of a pluralistic approach in behavioral and social science research. However, few articles (3%) adopt this perspective. Simulation, mathematical, computational, and experimental modeling, and neural approaches (considered reductionist methods) are rarely used. Despite Powell's (2011) calls, neuroscience and strategy research exhibit limited cross-fertilization. Introducing neuroscience into strategy and organizational research can validate constructs, test theories, measure variables, generate ideas, and, especially, elucidate more on the affective–cognitive interplay of strategists' minds. However, studies using neuroscience methods for strategic issues face significant challenges in building interdisciplinary teams, recruiting top managers for experiments, and producing practical results (Cristofaro, et al., 2022).

AI offers new opportunities for data collection and analysis in behavioral strategy research. AI can gather large datasets and conduct sophisticated analyses that were previously unfeasible. Tools such as natural language processing, machine learning, and predictive analytics provide deeper insights into decision-making processes and cognitive behavior, thereby enhancing research precision and scope. AI can simulate decision-making environments, assisting in examining interactions between decision makers and AI systems that are critical for understanding human–machine intelligence coevolution in organizations.

Interpretive methods such as ethnography, hermeneutics, and semiotics, which are contextualist approaches, may yield significant insights into strategic behavior's micro-foundations. Gylfe et al. (2016) and Suddaby et al. (2020) have utilized these methods effectively. To address multi-level influences on behavioral strategy, longitudinal case studies using qualitative and quantitative data can offer unique insights into the dynamics between executive attributes and firm performance. For example, scholars can explore how executive attributes influence strategic management across firm lifecycles and economic fluctuations.

Some methodological warnings have also emerged. Behavioral strategy research is an ideal domain for investigating top managers' psychology and decision making in organizational contexts, and should rely on primary data. However, recruiting and engaging top managers in qualitative research is challenging. Hambrick and Mason (1984) initially raised this problem and used some sociodemographic features to proxy for top managers' cognition. However, we highlight the limits of using secondary data as a proxy for psychological mechanisms (e.g., Harrison et al., 2020), such as the use of CEOs' pictures in company reports to measure narcissism (Chatterjee & Hambrick, 2011), without triangulating with other sources. For high-quality research, new expectations and standards for measurement must be established by shifting the focus toward gaining a better understanding of how much a proxy or unobtrusive variable is distant from the focal variable, and justifying measures conceptually and empirically. Meanwhile, other reports' use and creation of a repository of validated measures to promote consistency across studies is crucial.

New methods, such as linguistic tools, sentiment analysis, social media profiling, and facial/body expression analysis, can enrich behavioral strategy research. Embracing ecological momentary assessment methods, developed in personality/social psychology, for primary data collection (e.g., once-a-day diaries and signal-/event-contingent recording) minimizes the recall bias in self-administered questionnaires and enhances their accuracy (Shiffman et al., 2008). This enables real-time investigations of affective–cognitive interactions, helping examine mood lability or behavioral variability across multiple time points. More participatory observation data in daily strategic life is crucial for advancing behavioral strategy research.

#### 6. Conclusions

We have reviewed the behavioral strategy literature and outlined a conceptual framework for investigating the field, synthesizing diverse influences on strategic behavior into a coherent view. This allows a deeper understanding of the interplay between individual and contextual factors, providing a basis for analyzing and developing behavioral strategy.

We introduce three significant theoretical advancements. *First*, by adopting a coevolutionary perspective and socially situated cognition approach, we extend Powell et al.'s (2011) foundational framework by emphasizing the role of contextual dynamics, multi-level influences, and the interplay between emotions and cognition. Thus, we address criticisms that behavioral strategy has been overly focused on intrapersonal cognitive mechanisms while neglecting emotions and sociological

dimensions (e.g., Westphal, 2018). We provide a more nuanced understanding of strategic behaviors in organizational settings, especially by integrating emotions in management theories and fields, as Ashkanasy et al. (2017) noted. We also propose a broader research agenda that expands on Powell et al.'s (2011) three core research problems. *Second*, we propose potential advances that can be implemented. We emphasize AI's role in augmenting behavioral strategy by providing context-specific insights and transforming data into actionable knowledge, bridging Kahneman's and Gigerenzer's perspectives on heuristics. Additionally, the nudges and heuristics literature can be integrated to cultivate decision-making capabilities at both the individual and organizational levels, enhancing decision making and adaptability to sustain competitive advantage.

This work has some managerial implications. First, executives can actively reflect on their cognitive representations and biases to improve strategic management outcomes by engaging in regular cognitive mapping exercises and reflection sessions. This can help in identifying and updating mental models, fostering more informed decision making. To enhance strategic decision-making quality, managers can implement proactive measures like encouraging diverse perspectives and testing alternative hypotheses. Kahneman et al. (2011) developed a checklist to identify strategic decision-making biases by asking 12 questions, each linked to specific cognitive or procedural distortions. By connecting questions to biases, the third party can easily identify and help minimize distortions. Since the checklist is based on Kahneman's (2011) concept of two cognitive systems in the human mind, the third party becomes crucial in decision-making quality control by helping individuals recognize and mitigate biases in their System 1. Other techniques, such as reframing and role reversal, foster creative problem solving. Meanwhile, addressing uncertainties through scenario planning ensures more informed choices (see Lovallo & Sibony, 2010). Cultivating a culture of openness and trust, where dissent is valued, depersonalizes debates and reduces social biases. Embedded in formal corporate processes and identified through AI-powered analysis, these practices can ensure sustained decision quality improvement. Integrating AI technology helps in recognizing and combating biases and offers invaluable insights through pattern recognition and alternative viewpoints. Advanced predictive analytics and machine-learning models can simulate scenarios, allowing comprehensive assessment of potential outcomes. This collaboration between human expertise and AI capabilities, as Newell and Simon (1976) envisioned, may ensure a more objective and reliable decision-making process. This can enhance the effectiveness and fairness of strategic decisions within complex business environments. However, AI's (over) use may also have its pitfalls.

Second, organizations should prioritize different perspectives' presence within top management teams to promote more well-rounded deand innovation. Moreover, recognizing cisions individual characteristics' influence (e.g., religious beliefs and social class) can provide valuable insights into understanding and predicting behavior. Creating a continuous learning and experimentation culture is also crucial (e.g., Eisenbart et al., 2023). This involves embracing failure as a learning opportunity, encouraging risk taking, and nurturing psychological safety. Additionally, developing managers' emotional intelligence and self-awareness helps them regulate their emotions effectively and make balanced decisions. Collaboration and social interaction should be emphasized to promote cross-functional collaboration, knowledge sharing, and open communication. By implementing these (not exhaustive) practices, organizations can understand, shape, and improve the firm's "psychological architecture" (Powell et al., 2011). By understanding this architecture, organizations can gain insights into how individuals' thoughts, emotions, and social dynamics shape their behavior, decision making, and ultimately the organization's performance.

Regarding limitations, the adopted article exclusion/inclusion criteria, especially the time horizon and journal filters, may have undermined the studies' selection. Further, the thematic analysis may have been inherently biased by the researchers' subjective views. Still, our conceptual framework is sufficiently general and flexible to include new topics that may not have been considered.

#### CRediT authorship contribution statement

Matteo Cristofaro: Writing – original draft, Visualization, Supervision, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. Mie Augier: Writing – original draft, Formal analysis, Conceptualization. Dan Lovallo: Writing – original draft. Gianpaolo Abatecola: Writing – original draft. Luna Leoni: Writing – original draft, Formal analysis.

#### References

- Abatecola, G. (2014). Research in organizational evolution. What comes next? European Management Journal, 32(3), 434–443. https://doi.org/10.1016/j.emj.2013.07.008
- Abatecola, G., Breslin, D., & Kask, J. (2020). Do organizations really co-evolve? Problematizing co-evolutionary change in management and organization studies. *Technological Forecasting and Social Change, 155*, Article 119964. https://doi.org/ 10.1016/j.techfore.2020.119964
- Abatecola, G., Caputo, A., & Cristofaro, M. (2018). Reviewing cognitive distortions in managerial decision making. Toward an integrative co-evolutionary framework. *Journal of Management Development*, 37(5), 409–424.
- Abatecola, G., & Cristofaro, M. (2020). Hambrick and Mason's "upper echelons theory": Evolution and open avenues. *Journal of Management History*, 26(1), 116–136. https://doi.org/10.1108/JMH-02-2018-0016
- Acquaah, M. (2012). Social networking relationships, firm-specific managerial experience and firm performance in a transition economy: A comparative analysis of family owned and nonfamily firms. *Strategic Management Journal*, 33(10), 1215–1228. https://doi.org/10.1002/smj.1973
- Adinolfi, P. (2021). A journey around decision-making: Searching for the "big picture" across disciplines. *European Management Journal*, 39(1), 9–21. https://doi.org/ 10.1016/j.emj.2020.06.003
- Argote, L., & Greve, H. R. (2007). A behavioral theory of the firm—40 years and counting: Introduction and impact. Organization Science, 18(3), 337–349. https:// doi.org/10.1287/orsc.1070.0280
- Asad, S., & Sadler-Smith, E. (2020). Differentiating leader hubris and narcissism on the basis of power. *Leadership*, 16(1), 39–61. https://doi.org/10.1177/ 1742715019885763
- Ashkanasy, N. M., Humphrey, R. H., & Huy, Q. N. (2017). Integrating emotions and affect in theories of management. Academy of Management Review, 42(2), 175–189. https:// doi.org/10.5465/amr.2016.0474
- Atanasiu, R., Ruotsalainen, R., & Khapova, S. (2023). A simple rule is born: How CEOs distill heuristics. *Journal of Management Studies*, 60(5), 1064–1104. https://doi.org/ 10.1111/joms.12808
- Augier, M. (2013). The early evolution of the foundations for behavioral organization theory and strategy. European Management Journal, 31(1), 72–81. https://doi.org/ 10.1016/j.emj.2012.11.005
- Augier, M., & Dew, N. (2018). A behavioral (Simonian) perspective on behavioral strategy. In M. Augier, C. Fang, & V. Rindova (Eds.), *Behavioral strategy in perspective* (pp. 51–67). Emerald Publishing Limited.
- Augier, M., Fang, C., & Rindova, V. P. (2018). Behavioral strategy in perspective. Bingley, UK: Emerald Publishing Limited.
- Augier, M., & March, J. (2002). Remembering Herbert A. Simon. Public Administration Review, 61(4), 396–402.
- Augier, M., & March, J. (2011). The roots, rituals, and rhetorics of change: North American business schools after the Second World War. Stanford University Press.
- Augier, M., & Teece, D. (2007). Competencies, capabilities, and the neo-Schumpeterian tradition. Edward Elgar Publishing.

Barnard, C. I. (1938). The functions of the executive. Harvard University Press.

- Beelitz, A., & Merkl-Davies, D. M. (2012). Using discourse to restore organisational legitimacy: "CEO-speak"after an incident in a German nuclear power plant. *Journal* of Business Ethics, 108(1), 101–120. https://doi.org/10.1007/s10551-011-1065-9
- Benischke, M. H., Martin, G. P., & Glaser, L. (2019). CEO equity risk bearing and strategic risk taking: The moderating effect of CEO personality. *Strategic Management Journal*, 40(1), 153–177. https://doi.org/10.1002/smj.2974
- Benner, M. J., & Tripsas, M. (2012). The influence of prior industry affiliation on framing in nascent industries: The evolution of digital cameras. *Strategic Management Journal*, 33(3), 277–302. https://doi.org/10.1002/smj.950
- Blake, A. B., Luu, V. H., Petrenko, O. V., Gardner, W. L., Moergen, K. J. N., & Ezerins, M. E. (2022). Let's agree about nice leaders: A literature review and metaanalysis of agreeableness and its relationship with leadership outcomes. *The Leadership Quarterly*, 33(1), Article 101593. https://doi.org/10.1016/j. leaqua.2021.101593
- Blettner, D. P., He, Z. L., Hu, S., & Bettis, R. A. (2015). Adaptive aspirations and performance heterogeneity: Attention allocation among multiple reference points. *Strategic Management Journal*, 36(7), 987–1005. https://doi.org/10.1002/smj.2260 Bouquet, C., & Birkinshaw, J. (2011). How global strategies emerge: An attention
- bouquet, C., & Birkinshaw, J. (2011). How global strategies emerge: An attention perspective. Global Strategy Journal, 1(3–4), 243–262. https://doi.org/10.1002/ gsj.22

- Bowman, G. (2016). The practice of scenario planning: An analysis of inter- and intraorganizational strategizing. British Journal of Management, 27(1), 77–96. https://doi. org/10.1111/1467-8551.12098
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589–597. https://doi.org/10.1080/ 2159676X.2019.1628806
- Brenner, S. (2015). The risk preferences of US executives. Management Science, 61(6), 1344–1361. https://doi.org/10.1287/mnsc.2013.1882
- Bruton, G. D., Peng, M. W., Ahlstrom, D., Stan, C., & Xu, K. (2015). State-owned enterprises around the world as hybrid organizations. Academy of Management Perspectives, 29(1), 92–114. https://doi.org/10.5465/amp.2013.0069
- Brynjolfsson, E., & McAfee, A. (2017). Artificial intelligence, for real. Harvard Business Review, 1, 1–31.
- Bu, J., Zhao, E. Y., Li, K. J., & Li, J. M. (2022). Multilevel optimal distinctiveness: Examining the impact of within- and between-organization distinctiveness of product design on market performance. *Strategic Management Journal*, 43(9), 1793–1822. https://doi.org/10.1002/smj.3377
- Burkhard, B., Sirèn, C., van Essen, M., Grichnik, D., & Shepherd, D. A. (2023). Nothing ventured, nothing gained: A meta-analysis of CEO overconfidence, strategic risk taking, and performance. *Journal of Management*, 49(8), 2629–2666. https://doi.org/ 10.1177/01492063221110203
- Camerer, C., & Lovallo, D. (1999). Overconfidence and excess entry: An experimental approach. *The American Economic Review*, 89(1), 306–318. https://doi.org/10.1257/ aer.89.1.306
- Campbell, R. J., Jeong, S. H., & Graffin, S. D. (2019). Born to take risk? The effect of CEO birth order on strategic risk taking. Academy of Management Journal, 62(4), 1278–1306. https://doi.org/10.5465/amj.2017.0790
- Carrington, D. J., Combe, I. A., & Mumford, M. D. (2019). Cognitive shifts within leader and follower teams: Where consensus develops in mental models during an organizational crisis. *The Leadership Quarterly*, 30(3), 335–350. https://doi.org/ 10.1016/j.leaqua.2018.12.002

Chaiken, S., & Trope, Y. (Eds.). (1999). Dual-process theories in social psychology. Guilford Press.

- Chatterjee, A., & Hambrick, D. C. (2011). Executive personality, capability cues, and risk taking: How narcissistic CEOs react to their successes and stumbles. Administrative Science Quarterly, 56(2), 202–237. https://doi.org/10.1177/0001839211427534
- Christakis, N. A., & Fowler, J. H. (2013). Social contagion theory: Examining dynamic social networks and human behavior. *Statistics in Medicine*, 32(4), 556–577. https:// doi.org/10.1002/sim.5408
- Cragun, O. R., Olsen, K. J., & Wright, P. M. (2020). Making CEO narcissism research great: A review and meta-analysis of CEO narcissism. *Journal of Management*, 46(6), 908–936. https://doi.org/10.1177/0149206319892678
- Cristofaro, M. (2017). Herbert Simon's bounded rationality: Its evolution in management and cross-fertilizing contribution. *Journal of Management History*, 23(2), 170–190. https://doi.org/10.1108/JMH-11-2016-0060
- Cristofaro, M. (2019). The role of affect in management decisions: A systematic review. European Management Journal, 37(1), 6–17. https://doi.org/10.1016/j. emi 2018 12 002
- Cristofaro, M. (2020). 'I feel and think, therefore I am': An affect-cognitive theory of management decisions. European Management Journal, 38(2), 344–355. https://doi. org/10.1016/j.emj.2019.09.003
- Cristofaro, M. (2022). Organizational sensemaking: A systematic review and a coevolutionary model. European Management Journal, 40(3), 393–405. https://doi.org/ 10.1016/j.emj.2021.07.003
- Cristofaro, M., Butler, F., Neck, C., Parayitam, S., & Tangpong, C. (2022). Guest editorial: Behavioral strategy: (re-) affirming foundations. *Management Research Review*, 45(9), 1101–1109. https://doi.org/10.1108/MRR-09-2022-877
- Cristofaro, M., Giardino, P. L., Camilli, R., & Hristov, I. (2024). Understanding behavioral strategy: A historical evolutionary perspective in "management decision". *Management Decision*, 62(13), 426–455. https://doi.org/10.1108/MD-01-2023-0072
- Cristofaro, M., Giardino, P. L., Malizia, A. P., & Mastrogiorgio, A. (2022). Affect and cognition in managerial decision making: A systematic literature review of neuroscience evidence. *Frontiers in Psychology*, 13, Article 762993. https://doi.org/ 10.3389/fpsyg.2022.762993
- Cristofaro, M., & Lovallo, D. (2022). From framework to theory: An evolutionary view of dynamic capabilities and their microfoundations. *Journal of Management and Organization*, 28(3), 429–450. https://doi.org/10.1017/jmo.2022.46
- Csaszar, F. A., & Levinthal, D. A. (2016). Mental representation and the discovery of new strategies. Strategic Management Journal, 37(10), 2031–2049. https://doi.org/ 10.1002/smj.2440
- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. Prentice Hall/Pearson Education.
- Daily, C. M., & Johnson, J. L. (1997). Sources of CEO power and firm financial performance: A longitudinal assessment. *Journal of Management*, 23(2), 97–117.
- Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689–695. https:// doi.org/10.1038/nn.3093
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. Academy of Management Review, 32(4), 1246–1264. https://doi.org/ 10.5465/amr.2007.26586086
- Eisenbart, B., Lovallo, D., Garbuio, M., Cristofaro, M., & Dong, A. (2023). Future thinking and managers' innovative behavior: An experimental study. *Journal of Knowledge Management*, 27(6), 1660–1679. https://doi.org/10.1108/JKM-02-2022-0102
- Eklund, J. C., & Mannor, M. J. (2021). Keep your eye on the ball or on the field? Exploring the performance implications of executive strategic attention. Academy of Management Journal, 64(6), 1685–1713. https://doi.org/10.5465/amj.2019.0156

Evans, J. S. B. T., & Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. Perspectives on Psychological Science, 8(3), 223–241. https:// doi.org/10.1177/1745691612460685

Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). Psychological Bulletin, 117(1), 39–66. https://doi.org/10.1037/0033-2909.117.1.39

Foss, N. J. (2020). Behavioral strategy and the COVID-19 disruption. Journal of Management, 46(8), 1322–1329. https://doi.org/10.1177/0149206320945015

Galasso, A., & Simcoe, T. S. (2011). CEO overconfidence and innovation. Management Science, 57(8), 1469–1484. https://doi.org/10.1287/mnsc.1110.1374

Garbuio, M., Dong, A., Lin, N., Tschang, T., & Lovallo, D. (2018). Demystifying the genius of entrepreneurship: How design cognition can help create the next generation of entrepreneurs. *The Academy of Management Learning and Education*, 17(1), 41–61. https://doi.org/10.5465/amle.2016.0040

Gavetti, G. (2012). PERSPECTIVE—toward a behavioral theory of strategy. Organization Science, 23(1), 267–285. https://doi.org/10.1287/orsc.1110.0644

Gavetti, G., Greve, H. R., Levinthal, D. A., & Ocasio, W. (2012). The behavioral theory of the firm: Assessment and prospects. *The Academy of Management Annals*, 6(1), 1–40. https://doi.org/10.5465/19416520.2012.656841

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31. https://doi.org/10.1177/1094428112452151

Gomez-Mejia, L. R., Neacsu, I., & Martin, G. (2019). CEO risk-taking and socioemotional wealth: The behavioral agency model, family control, and CEO option wealth. *Journal of Management*, 45(4), 1713–1738. https://doi.org/10.1177/ 0149206312723711

Gottschalg, O., & Zollo, M. (2007). Interest alignment and competitive advantage. Academy of Management Review, 32(2), 418–437. https://doi.org/10.5465/ amr.2007.24351356

Grant, R. M. (2021). Contemporary strategy analysis. John Wiley & Sons.

Greve, H. R., & Zhang, C. M. (2022). Is there a strategic organization in the behavioral theory of the firm? Looking back and looking forward. *Strategic Organization*, 20(4), 698–708. https://doi.org/10.1177/14761270221115032

Gylfe, P., Franck, H., Lebaron, C., & Mantere, S. (2016). Video methods in strategy research: Focusing on embodied cognition. *Strategic Management Journal*, 37(1), 133–148. https://doi.org/10.1002/smj.2456

Hambrick, D. C. (2007). Upper echelons theory: An update. Academy of Management Review, 32(2), 334–343. https://doi.org/10.5465/amr.2007.24345254

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. Academy of Management Review, 9(2), 193–206. https://doi.org/ 10.2307/258434

Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2020). Perception is reality: How CEOs' observed personality influences market perceptions of firm risk and shareholder returns. Academy of Management Journal, 63(4), 1166–1195. https://doi. org/10.5465/amj.2018.0626

Hawk, A., Lahiri, D., & Pacheco-de-Almeida, G. (2023). The half-life of political capital: An examination of the temporal effects of board political connections. *Strategic Management Journal*, 44(13), 3252–3288. https://doi.org/10.1002/smj.3536

Healey, M. P., Vuori, T., & Hodgkinson, G. P. (2015). When teams agree while disagreeing: Reflexion and reflection in shared cognition. Academy of Management Review, 40(3), 399–422. https://doi.org/10.5465/amr.2013.0154

Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of teece. *Strategic Management Journal*, 36(6), 831–850. https:// doi.org/10.1002/smj.2247

Hesselbarth, I., Alnoor, A., & Tiberius, V. (2023). Behavioral strategy: A systematic literature review and research framework. *Management Decision*, 61(9), 2740–2756. https://doi.org/10.1108/MD-09-2021-1274

Heyden, M. L. M., Sidhu, J. S., & Volberda, H. W. (2018). The conjoint influence of top and middle management characteristics on management innovation. *Journal of Management*, 44(4), 1505–1529. https://doi.org/10.1177/0149206315614373

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. https://doi.org/10.1111/ joms.12937

Hodgkinson, G. P., & Healey, M. P. (2008). Cognition in organizations. Annual Review of Psychology, 59, 387–417. https://doi.org/10.1146/annurev. psych 59, 103006 093612

Hodgkinson, G. P., & Healey, M. P. (2011). Psychological foundations of dynamic capabilities: Reflexion and reflection in strategic management. *Strategic Management Journal*, 32(13), 1500–1516. https://doi.org/10.1002/smj.964

Hodgkinson, G. P., & Healey, M. P. (2018). The psychological foundations of strategic management: Beyond cold cognition. The Sage handbook of industrial, work, and organizational psychology: Managerial psychology and organizational approaches. https://doi.org/10.4135/9781473914964

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. https://doi.org/10.5465/amp.2016.0140

Hsieh, K. Y., Tsai, W., & Chen, M. J. (2015). If they can do it, why not us? Competitors as reference points for justifying escalation of commitment. Academy of Management Journal, 58(1), 38–58. https://doi.org/10.5465/amj.2011.0869

Huy, Q. N. (2011). How middle managers' group-focus emotions and social identities influence strategy implementation. *Strategic Management Journal*, 32(13), 1387–1410. https://doi.org/10.1002/smj.961

Junge, S., Luger, J., & Mammen, J. (2023). The role of organizational structure in senior managers' selective information processing. *Journal of Management Studies*, 60(5), 1178–1204. https://doi.org/10.1111/joms.12918

Kahneman, D. (2011). Think, fast and slow. Farrar, Straus & Giroux.

Kahneman, D., & Lovallo, D. (1993). Timid choices and bold forecasts: A cognitive perspective on risk taking. *Management Science*, 39(1), 17–31. https://doi.org/ 10.1287/mnsc.39.1.17

Kahneman, D., Lovallo, D., & Sibony, O. (2011). The big idea: Before you make that big decision. *Harvard Business Review*, 89(6), 50–60.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*, 47(2), 263–291. https://doi.org/10.2307/1914185

Kannan-Narasimhan, R., & Lawrence, B. S. (2018). How innovators reframe resources in the strategy-making process to gain innovation adoption. *Strategic Management Journal*, 39(3), 720–758. https://doi.org/10.1002/smj.2748

Katz, D., & Kahn, R. L. (1966). The social psychology of organizations. Wiley.

Keller, T., Glaum, M., Bausch, A., & Bunz, T. (2022). The "CEO in context" technique revisited: A replication and extension of Hambrick and quigley (2014). *Strategic Management Journal*. https://doi.org/10.1002/smj3453

Kirsch, A. (2018). The gender composition of corporate boards: A review and research agenda. *The Leadership Quarterly*, 29(2), 346–364. https://doi.org/10.1016/j. leaqua.2017.06.001

Lax, D. A., & Sebenius, J. K. (1986). The manager as negotiator: Bargaining for cooperation and competitive gain. MacMillan.

LeDoux, J. E. (2023). The four realms of existence: A new theory of being human. The Belknap Press of Harvard University Press.

Levinthal, D. A. (2011). A behavioral approach to strategy – what's the alternative? Strategic Management Journal, 32(13), 1517–1523. https://doi.org/10.1002/smj.963

Lindenberg, S., & Foss, N. J. (2011). Managing joint production motivation: The role of goal framing and governance mechanisms. Academy of Management Review, 36(3), 500–525. https://doi.org/10.5465/amr.2010.0021

Liu, F., & Maitlis, S. (2014). Emotional dynamics and strategizing processes: A study of strategic conversations in top team meetings. *Journal of Management Studies*, 51(2), 202–234. https://doi.org/10.1111/j.1467-6486.2012.01087.x

Lovallo, D., Clarke, C., & Camerer, C. (2012). Robust analogizing and the outside view: Two empirical tests of case-based decision making. *Strategic Management Journal*, 33 (5), 496–512. https://doi.org/10.1002/smj.962

Lovallo, D., Cristofaro, M., & Flyvbjerg, B. (2023). Governing large projects: A threestage process to get it right. Academy of Management Perspectives, 37(2), 138–156. https://doi.org/10.5465/amp.2021.0129

Lovallo, D., & Kahneman, D. (2003). Delusions of success. Harvard Business Review, 81(7), 56–63.

Lovallo, D., & Sibony, O. (2010). The case for behavioral strategy. McKinsey Quarterly, 2, 30–40.

Lovallo, D., & Sibony, O. (2018). Broadening the frame: How behavioral strategy redefines strategic decisions. *Strategy Science*, 3(4), 658–667. https://doi.org/ 10.1287/stsc.2018.0071

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. https://doi.org/10.5465/amj.2018.0172

Lucci, S., & Kopec, D. (2013). Artificial intelligence in the 21st century. Mercury learning and information.

Maghzi, A., Lin, N., Pfarrer, M. D., Gudergan, S., & Wilden, R. (2023). Creating opportunities: Heuristic reasoning in proactive dynamic capability deployment. Academy of Management Review. https://doi.org/10.5465/amr.2018.0265

March, J. G. (2018). Some thoughts on the development of disciplines, with particular attention to behavioral strategy. Advances in Strategic Management, 39, 13–21. https://doi.org/10.1108/S0742-332220180000039001

March, J. G., & Simon, H. A. (1958). Organizations. Wiley.

Menon, A. (2018). Bringing cognition into strategic interactions: Strategic mental models and open questions. Strategic Management Journal, 39(1), 168–192. https://doi.org/ 10.1002/smj.2700

Mithani, M. A., & O'Brien, J. P. (2021). So what exactly is a "coalition" within an organization? A review and organizing framework. *Journal of Management*, 47(1), 171–206. https://doi.org/10.1177/0149206320950433

Narayanan, V. K., Zane, L. J., & Kemmerer, B. (2011). The cognitive perspective in strategy: An integrative review. *Journal of Management*, 37(1), 305–351. https://doi. org/10.1177/0149206310383986

Neale, M. A., & Bazerman, M. H. (1985). The effects of framing and negotiator overconfidence on bargaining behaviors and outcomes. Academy of Management Journal, 28(1), 34–49. https://doi.org/10.2307/256060

Neely, B. H., Jr., Lovelace, J. B., Cowen, A. P., & Hiller, N. J. (2020). Metacritiques of upper echelons theory: Verdicts and recommendations for future research. *Journal of Management*, 46(6), 1029–1062. https://doi.org/10.1177/0149206320908640

Neumann, F. (2017). Antecedents and effects of emotions in strategic decision-making: A literature review and conceptual model. *Management Review Quarterly*, 67(3), 175–200. https://doi.org/10.1007/s11301-017-0127-1

Newell, A., & Simon, H. A. (1976). Computer science as empirical enquiry: Symbols and search. Communications of the ACM, 19(3), 113–126. https://doi.org/10.1145/ 360018.360022

Ocasio, W. (1997). Toward an attention-based view of the firm. Strategic Management Journal, 18(Suppl. 1), 187–206.

Okon-Singer, H., Hendler, T., Pessoa, L., & Shackman, A. J. (2015). The neurobiology of emotion–cognition interactions: Fundamental questions and strategies for future research. Frontiers in Human Neuroscience, 9, 58. https://doi.org/10.3389/ fnhum.2015.00058

Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Xiao, Z., & Song, L. J. (2014). Humble chief executive officers' connections to top management team integration and middle managers' responses. *Administrative Science Quarterly*, 59(1), 34–72. https://doi.org/10.1177/0001839213520131

#### M. Cristofaro et al.

Panksepp, J. (2000). The neuro-evolutionary cusp between emotions and cognitions: Implications for understanding consciousness and the emergence of a unified mind science. Consciousness & Emotion, 1(1), 15–54. https://doi.org/10.1075/ ce.1.1.04pan

- Park, J. H., Kim, C., Chang, Y. K., Lee, D. H., & Sung, Y. D. (2018). CEO hubris and firm performance: Exploring the moderating roles of CEO power and board vigilance. *Journal of Business Ethics*, 147(4), 919–933. https://doi.org/10.1007/s10551-015-2997-2
- Pfeffer, J. (1981). Power in organizations. Pitman Publishing Corporation.
- Pfeffer, J. (2013). You're still the same: Why theories of power hold over time and across contexts. Academy of Management Perspectives, 27(4), 269–280. https://doi.org/ 10.5465/amp.2013.0040
- Picone, P. M., Dagnino, G. B., & Minà, A. (2014). The origin of failure: A multidisciplinary appraisal of the hubris hypothesis and proposed research agenda. *Academy of Management Perspectives, 28*(4), 447–468. https://doi.org/10.5465/ amp.2012.0177
- Picone, P. M., De Massis, A., Tang, Y., & Piccolo, R. F. (2021). The psychological foundations of management in family firms: Values, biases, and heuristics. *Family Business Review*, 34(1), 12–32. https://doi.org/10.1177/0894486520985630
- Pieper, T. M., & Astrachan, J. H. (2017). Journal of Family Business Strategy, 8(2), 71–73. https://doi.org/10.1016/j.jfbs.2017.07.002. Editors' Note.
- Poggesi, S., Mari, M., & De Vita, L. (2016). What's new in female entrepreneurship research? Answers from the literature. *The International Entrepreneurship and Management Journal*, 12(3), 735–764. https://doi.org/10.1007/s11365-015-0364-5
- Porter, M. E. (2011). Competitive advantage of nations: Creating and sustaining superior performance. Simon & Schuster.
- Powell, T. C. (2011). Neurostrategy. Strategic Management Journal, 32(13), 1484–1499. https://doi.org/10.1002/smj.969
- Powell, T. C. (2014). Strategic management and the person. Strategic Organization, 12(3), 200–207. https://doi.org/10.1177/1476127014544093
- Powell, T. C., Lovallo, D., & Fox, C. R. (2011). Behavioral strategy. Strategic Management Journal, 32(13), 1369–1386. https://doi.org/10.1002/smj.968
- PwC. (2023). Nudge for innovation. https://store.pwc.it/en/products/nudge-for-innovati on.
- Rabetino, R., Kohtamäki, M., & Federico, J. S. (2021). A (re)view of the philosophical foundations of strategic management. *International Journal of Management Reviews*, 23(2), 151–190. https://doi.org/10.1111/jimr.12244
- Raffaelli, R., Glynn, M. A., & Tushman, M. (2019). Frame flexibility: The role of cognitive and emotional framing in innovation adoption by incumbent firms. *Strategic Management Journal*, 40(7), 1013–1039. https://doi.org/10.1002/smj.3011
- Resick, C. J., Nadkarni, S., Chu, J., Chen, J., Lien, W. C., Margolis, J. A., & Shao, P. (2023). I did it my way: CEO core self-evaluations and the environmental contingencies on firm risk-taking strategies. *Journal of Management Studies*, 60(5), 1236–1272. https://doi.org/10.1111/joms.12872
- Robinson, S., Muratbekova-Touron, M., Linder, C., Bouncken, R. B., Findikoglu, M. N., Garbuio, M., Hartner-Tiefenthaler, M., Thanos, I. C., Aharonson, B. S., Strobl, A., Zhang, H., Erz, A., von Wallpach, S., Karapinar, P. B., Diedrich, A., Saint-Germes, E., & Cole, R. (2022). 40th anniversary editorial: Looking backwards to move forward in management research. *European Management Journal*, 40(4), 459–466. https://doi. org/10.1016/j.emj.2022.07.002
- Rothman, N. B., & Melwani, S. (2017). Feeling mixed, ambivalent, and in flux: The social functions of emotional complexity for leaders. Academy of Management Review, 42 (2), 259–282. https://doi.org/10.5465/amr.2014.0355
- Schildt, H., Mantere, S., & Cornelissen, J. (2020). Power in sensemaking processes. Organization Studies, 41(2), 241–265. https://doi.org/10.1177/0170840619847718
- Schilke, O. (2018). A micro-institutional inquiry into resistance to environmental pressures. Academy of Management Journal, 61(4), 1431–1466. https://doi.org/ 10.5465/amj.2016.0762
- Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A contentanalytic review of the current state of knowledge and recommendations for future research. *The Academy of Management Annals*, 12(1), 390–439. https://doi.org/ 10.5465/annals.2016.0014
- Semin, G. R., & Smith, E. R. (2013). Socially situated cognition in perspective. Social Cognition, 31(2), 125–146. https://doi.org/10.1521/soco.2013.31.2.125
- Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological momentary assessment. Annual Review of Clinical Psychology, 4, 1–32. https://doi.org/10.1146/annurev. clinpsy.3.022806.091415
- Sibony, O., Lovallo, D., & Powell, T. C. (2017). Behavioral strategy and the strategic decision architecture of the firm. *California Management Review*, 59(3), 5–21. https:// doi.org/10.1177/0008125617712256
- Simon, H. A. (1947). Administrative behavior. Free Press.
- Simon, H. A. (1954). Some strategic considerations in the construction of social science models. In P. Lazarsfeld (Ed.), *Mathematical thinking in social sciences* (pp. 388–438). The Free Press.
- Simon, H. A. (1967). Motivational and emotional controls of cognition. *Psychological Review*, 74(1), 29–39. https://doi.org/10.1037/h0024127
- Simon, H. A. (1983). Reason in human affairs. Stanford University Press.

- Simon, H. A. (1987). Making Management Decisions: The role of intuition and emotion. Academy of Management Perspectives, 1(1), 57–64. https://doi.org/10.5465/ ame.1987.4275905
- Smith, E. R., & Semin, G. R. (2004). Socially situated cognition: Cognition in its social context. Advances in Experimental Social Psychology, 36, 53–117. https://doi.org/ 10.1016/S0065-2601(04)36002-8
- Suddaby, R., Coraiola, D., Harvey, C., & Foster, W. (2020). History and the microfoundations of dynamic capabilities. *Strategic Management Journal*, 41(3), 530–556. https://doi.org/10.1002/smj.3058
- Sunstein, C. R. (2018). Misconceptions about nudges. SSRN Electronic Journal, 2(1), 61–67. https://doi.org/10.2139/ssrn.3033101
- Tan, J., & Tan, D. (2005). Environment–strategy co-evolution and co-alignment: A staged model of Chinese SOEs under transition. *Strategic Management Journal*, 26(2), 141–157. https://doi.org/10.1002/smj.437
- Tang, Y., Mack, D. Z., & Chen, G. (2018). The differential effects of CEO narcissism and hubris on corporate social responsibility. *Strategic Management Journal*, 39(5), 1370–1387. https://doi.org/10.1002/smj.2761
- Tawse, A., Patrick, V. M., & Vera, D. (2019). Crossing the chasm: Leadership nudges to help transition from strategy formulation to strategy implementation. *Business Horizons*, 62(2), 249–257. https://doi.org/10.1016/j.bushor.2018.09.005
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533. https://doi.org/ 10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z
- Tett, R. P., Toich, M. J., & Ozkum, S. B. (2021). Trait activation theory: A review of the literature and applications to five lines of personality dynamics research. Annual Review of Organizational Psychology and Organizational Behavior, 8(1), 199–233. https://doi.org/10.1146/annurev-orgpsych-012420-062228
- Thaler, R. H., & Sunstein, C. R. (2021). *Nudge: the final edition*. Yale University Press. Tranfield, D., Denyer, D., & Smart, P. (2003). Toward a methodology for developing
- Frankett, D., Derlyer, D., & Shart, F. (2005). Foward a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. https://doi.org/10.1111/1467-8551.00375 Turner, J. C. (1991). *Social influence*. Brooks/Cole Publishing, Co.
- Urío, S., Redondo, R., & Gavilan, D. (2022). The intellectual structure of behavioral strategy: A bibliometric study. *Strategic Management*, 27(1), 4–21. https://doi.org/ 10.5937/StraMan2110005U
- Volberda, H. W., & Lewin, A. Y. (2003). Co-evolutionary dynamics within and between firms: From evolution to co-evolution. *Journal of Management Studies*, 40(8), 2111–2136. https://doi.org/10.1046/j.1467-6486.2003.00414.x
- Vuori, T. O. (2023). Emotions and attentional engagement in the attention-based view of the firm. Strategic Organization. https://doi.org/10.1177/14761270231165356: 14761270231165356
- Vuori, T. O., & Huy, Q. N. (2016). Distributed attention and shared emotions in the innovation process: How Nokia lost the smartphone battle. Administrative Science Quarterly, 61(1), 9–51. https://doi.org/10.1177/0001839215606951
- Vuori, T. O., & Huy, Q. N. (2022). Regulating top managers' emotions during strategy making: Nokia's socially distributed approach enabling radical change from mobile phones to networks in 2007–2013. Academy of Management Journal, 65(1), 331–361. https://doi.org/10.5465/amj.2019.0865
- Weick, K. E. (1969). The social psychology of organizing. Addison-Wesley.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. Organization Science, 16(4), 409–421. https://doi.org/10.1287/ orsc.1050.0133
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In S. M. Barry, & L. L. Cummings (Eds.), Research in organizational behavior: An annual series of analytical essays and critical reviews (pp. 1–74). JAI Press.
- Wernicke, G., Sajko, M., & Boone, C. (2022). How much influence do CEOs have on company actions and outcomes? The example of corporate social responsibility. *Academy of Management Discoveries*, 8(1), 36–55. https://doi.org/10.5465/ amd.2019.0074
- Westphal, J. D. (2018). Decoupling and intergroup dynamics in behavioral strategy, and a more integrative alternative. In *Behavioral strategy in perspective* (Vol. 39)Emerald Publishing Limited. https://doi.org/10.1108/S0742-332220180000039003.
- Westphal, J. D., & Zajac, E. J. (2013). A behavioral theory of corporate governance: Explicating the mechanisms of socially situated and socially constituted agency. *The Academy of Management Annals*, 7(1), 607–661. https://doi.org/10.5465/ 19416520.2013.783669
- Wolf, C., & Floyd, S. W. (2017). Strategic planning research: Toward a theory-driven agenda. Journal of Management, 43(6), 1754–1788. https://doi.org/10.1177/ 0149206313478185
- Zhang, H., Ou, A. Y., Tsui, A. S., & Wang, H. (2017). CEO humility, narcissism and firm innovation: A paradox perspective on CEO traits. *The Leadership Quarterly*, 28(5), 585–604. https://doi.org/10.1016/j.leaqua.2017.01.003
- Zhong, W., Ma, Z., Tong, T. W., Zhang, Y., & Xie, L. (2021). Customer concentration, executive attention, and firm search behavior. Academy of Management Journal, 64 (5), 1625–1647. https://doi.org/10.5465/amj.2017.0468
- Zolotoy, L., O'Sullivan, D., Martin, G. P., & Veeraraghavan, M. (2019). The role of affect in shaping the behavioral consequences of CEO option incentives. *Journal of Management*, 45(7), 2920–2951. https://doi.org/10.1177/0149206318771179