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The Psychological Foundations of Management in Family Firms: Values, Biases, and Heuristics

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Abstract

Considering the heterogeneity of family firm behaviors as reflecting the values, biases, and heuristics of individuals, we discuss the implications of the psychological foundations of management in family firms. We develop a conceptual framework for investigating how the values, biases, and heuristics of family and nonfamily members affect strategic decision-making and the outcomes of family firms. To advance the field, we put forward some relevant questions and offer a future research agenda at the intersection of the psychological foundations of management and family business.

Keywords

family business, heuristic, bias, psychological foundations, decision-making, values, cognition

Introduction

The effects of family-related characteristics on entrepreneurial initiatives (Goel & Jones, 2016), strategic choices and capabilities (Chrisman et al., 2015), strategy execution (Casprini et al., 2017), organizational change (De Massis et al., 2019), organizational leadership (Edwards & Meliou, 2015), and firm performance (Pindado & Requejo, 2015) have been extensively documented. For example, Erdogan et al. (2020) call attention to the role of the imprinting family's *values and beliefs* in shaping temporal symbiosis—a family firm's capacity to simultaneously promote retrospective and prospective approaches to resource orchestration for innovation. Debellis, De Massis, et al. (2020) consider family members' *emotional attachment* as a factor that can reduce strategic sensitivity in establishing an international joint venture. Debellis, Rondi, et al. (2020) find that the demographic characteristics and background of family members render their internationalization behavior unique. However, while the behavior of family firms is acknowledged to differ from non-family firms, recent research has also highlighted the heterogeneity of behavior across different family firms (Chua et al., 2012; Jaskiewicz & Dyer, 2017; Neubaum et al., 2019; Nicholson, 2008). For instance, Rau et al. (2019) identify differences across family firms based on their espoused values. As such, some questions remain unaddressed: Why do family firms perform differently than other firms? Why do family firms formulate and implement strategies differently? Why and how does family business heterogeneity persist across generations? (Powell et al., 2011).

One approach to understanding heterogeneous family firm behaviors is exploring the characteristics of the *actual judgment and decision processes* within these firms (De Bondt & Thaler, 1995). "Assumptions about human cognition, emotions, and social behavior" (Powell et al., 2011, p. 1371) can advance the family business literature, particularly on family business

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strategy formulation and implementation. We believe that these investigations can benefit from psychology research in terms of describing, predicting, explaining, and changing human and social behavior (Pastorino & Doyle-Portillo, 2013).

Here we leverage psychology research to advance family business studies. In the next section, we first trace the historical development of the psychological foundations of management at the core of management studies and discuss how and why integrating cognitive and social psychology research with management research can enrich the theoretical explanations of strategic management and entrepreneurship phenomena. We then reflect on the importance of examining the psychological foundations of management in family business. Our discussion highlights the opportunity to take advantage of psychology theories and empirical findings in family business research. Next, we present our conceptual framework to trace the psychological foundations of management of family firms and map the articles published in this special issue within this framework. Finally, we advance a research agenda that integrates the psychology constructs with the flourishing family business literature.

A Brief History of the Psychological Foundations of Management

Seminal management studies, such as those of Barnard (1938), Selznick (1957), and Andrews (1971), referred to the role of strategic and entrepreneurial leadership as a critical antecedent of strategy formulation and implementation, organizational culture, and firm performance (Mackey, 2008). However, and rather surprisingly, the emphasis on this antecedent faded almost immediately. Indeed, the interest swung from the role of individuals in strategic decision-making to the industry characteristics and firm resources that affect firm performance (Hoskisson et al., 1999).

Hambrick and Mason (1984) denounced that "even when strategic 'process' is studied, it typically is viewed as flows of information and decisions, detached from the people involved" (p. 193), deeming it incomprehensibly unconnected to the business reality. They further argued that firm strategies and performance are shaped by "the values and cognitive bases of powerful actors" (p. 193). This is consistent with the previous exploration of how individuals process information and make decisions (Tversky & Kahneman, 1974) as well as the interpersonal interactions in decision-making processes. Over time, research has moved forward in this direction.

Growing interest in the psychological foundations of management can be identified in two different literature streams. First, *strategic management* scholars have recognized that the psychological attributes of the CEO and/or top management team shape their cognitive structures, and as a result, strategy formulation and execution (Cannella et al., 2008; Hiller & Hambrick, 2005; Schwenk, 1988). Other scholars have considered how leaders' psychological attributes explain the ways they make use of "the symbolism and social construction of top executives" (Vera & Crossan, 2004, p. 223). For example, it has been extensively discussed how hubristic CEOs affect the decision-making process (Li & Tang, 2010; Picone et al., 2014), strategic choices regarding corporate social and environmental (ir)responsibility (Tang, Qian, et al., 2015; L. Zhang et al., 2020), and innovation (Tang, Li, & Yang, 2015). Furthermore, the field has investigated the role of narcissistic CEOs in information processing (Cragun et al., 2020; Tang et al., 2018; Zhu & Chen, 2015) and accounting fraud (Rijsenbilt & Commandeur, 2013), and how CEO humility affects firm outcomes (Ou et al., 2018). Some recent research has attempted to offer a paradoxical perspective on CEO traits, such as humility and narcissism (H. Zhang et al., 2017) or charisma and abusiveness (Lee et al., 2018). Drawing on Brown (1997), there is also growing interest in understanding the behaviors of group decision-makers and their dynamics based on legitimacy attributions within firms.

Second, and in parallel to strategic management studies, *strategic entrepreneurship* scholars have shown that psychological attributes shape the assumptions, evaluations, and judgments leading to firm formation or failure (Artinger & Powell, 2016; Kuratko, 2007; Simsek et al., 2010). Generally, psychology is one of the most important foci of entrepreneurship studies (Hitt et al., 2011). Begley and Boyd (1987) posited that psychological attributes, such as the need for achievement, locus of control, and risk-taking propensity, are typical traits of an entrepreneurial personality. In contributions to strategic entrepreneurship (Hitt et al., 2001; Ireland et al., 2001), scholars have fully recognized the role of psychology in understanding crucial aspects of business, such as entrepreneurial mind-sets and the strategic management of organizational resources. McMullen and Shepherd (2006) focus on beliefs as inputs to entrepreneurial action, while Shepherd et al. (2007) explain the process of how opportunity beliefs are formed. Shepherd et al. (2017) explore how decision makers allocate their attention to ascertaining potential business opportunities and the way the modes of attentional engagement influence their beliefs. While Chen et al. (2009) introduced the concept of entrepreneurial passion, Cardon et al. (2009) stress the role of entrepreneurial experience, and Cassar and Friedman (2009) underscore the importance of entrepreneurial self-efficacy. More recently, Martins et al. (2015) proposed a cognitive approach to business model innovation.

The psychological foundations of management are at the core of advancements in strategic management and entrepreneurship studies. These psychological foundations focus on the structure of factual statements about human heuristics, emotions, and social behaviors to systematically assess the drivers of firms' success or lack thereof (Gavetti, 2012; Levinthal, 2011; Powell et al., 2011). Studies on the psychological foundations of management have built on cognitive and social psychology research, specifically psychology studies that explore a wide array of behavioral traits, including individual cognitive processes (Groome, 2013), personality disorders (Tyrer et al., 2015), sensation and perception, attention, motivation, and attachment (Kalat, 2013). Scholars have expanded the spectrum of analysis to the level of group dynamics, considering, for example, power (Tarakci et al., 2016) and identity continuity (Smeekes & Verkuyten, 2015).

Arguably, exploring the psychological foundations of management calls attention to the importance of appropriately integrating the cognitive or social psychology domain with management research (Powell et al., 2011). Drawing on Zahra and Newey (2009), we recognize three ways of integration. The first approach is *borrowing and replicating* by importing psychological constructs to enrich and extend management theory (Zahra & Newey, 2009). For instance, Roll's (1986) pioneering contribution on hubris employed constructs affirmed in psychology to argue that hubristic CEOs usually overestimate the value of potential synergies in acquisition deals.

A second approach is *borrowing and extending* to intersect psychology and management research (Zahra & Newey, 2009). For example, psychological attributes have been used to describe a firm's superior performance, since the realization of cognitively distant opportunities requires managing the "mental processes that are fundamentally associative" (Gavetti, 2012, p. 278). Researchers have reconceptualized some key notions, such as dynamic managerial capabilities, by including the heterogeneity of cognition among managers (Helfat & Peteraf, 2015).

A third approach to integrate psychology and management research is *transforming the core* (Zahra & Newey, 2009), whereby a theory borrowed from one field "not only extends one or more of the intersecting theories but transforms the core of fields and disciplines of which [it is] a part" (p. 1060). Though this approach is still in its infancy, it offers the "most potential to exert significant impact across domains" (Zahra & Newey, 2009, p. 1060). Yet, while some studies in management and family business refer to psychology theories and constructs, insights from these studies are not fully conveyed back to this discipline.

The Psychological Foundations of Management in Family Firms

Psychology is commonly defined as the science of behavior. It is not merely a description of a phenomenon, but a discipline "interested in the unobservable mental processes underlying the behavior rather than the behavior itself" (Colman, 1999, p. 3). Therefore, psychology has the potential to align with the boundary-spanning nature of family business research (Holt et al., 2018; Jaskiewicz et al., 2020). Specifically, psychology research may allow family business scholars to extend and enrich current predictions about family firm behaviors (Gagné et al., 2014), and hence their heterogeneity vis-à-vis other firms and among family businesses.

Our central argument is that understanding family firm heterogeneity is linked to the unobservable mental processes of family and nonfamily members (individual and collective) who are deeply involved in the firm's social structures and processes that shape their strategic and entrepreneurial decisions (De Massis & Foss, 2018). While the behavioral approach has been adopted in strategic management and entrepreneurship research over the past decade or so (Levinthal, 2011; Powell et al., 2011), its applicability has not yet been fully extended to the family business literature. Drawing on Powell et al. (2011), we discuss how the reductionist, pluralist, and contextualist approaches to the psychological foundations of management assume some particularities in the context of family firms (Aldrich & Cliff, 2003; Jaskiewicz & Dyer, 2017; Olson et al., 2003).

The *reductionist approach* to the psychological foundations of management focuses on decision makers and their heuristics and biases to systematically assess the drivers of family firms' success (Gavetti, 2012; Powell et al., 2011). Family firms have some idiosyncrasies that affect family members' behaviors, and consequently, the firms' strategies and performance. First, the family provides financial resources to both the firm and the family, leading to an ownership identity effect and extensive wealth commitment (Arregle et al., 2007; Zahra, 2005). Exploring the escalation of commitment in family firms, Chirico et al. (2018) draw on emotional ownership and self-justification. Second, family firms frequently use the family surname as their brand name (or, more generally, their family identity in marketing strategies), which leads to a combination of two identities: the family identity and the business identity (Astrachan et al., 2019; Brinkerink et al., 2020; De Massis et al., 2018; Zellweger et al., 2010). Third, the nature of parental influence (especially that of father founders) may explain why sons and daughters employ specific heuristics (Lamb & Tamis-Lemonda, 2004). In particular, being a successor in a family firm affects the parental relationship and the emergence of the son or daughter's specific heuristics.

The *pluralist approach* to the psychological foundations of management considers reference groups, social cognition, social identity, and self-categorization (Powell et al., 2011). Whereas the reductionist approach focuses on individuals, the pluralist approach shifts attention to family members' identification and aspirations (Powell et al., 2011). This research stream emphasizes the family members' typically shared social background acquired during infancy and adolescence (Berger & Luckman, 1967; Berkowitz, 2011). The persistent influence of family boosts knowledge and the interiorization of family members' *values* (Arregle et al., 2007). Indeed, family members are usually cognizant of business even before they officially work in or with the business (Bertrand & Schoar, 2006). Therefore, family members approach values from both a rational and an emotional perspective. Indeed, sense and emotional experiences shape the formation of their values (Koiranen, 2002).

Finally, the *contextualist approach* to the psychological foundations of management considers cognitive schema, languages, action rationality, and culture (Powell et al., 2011). This approach acknowledges that managers act on behalf of socially constructed systems of beliefs and convictions. Managers describe, delimit, and classify firms' problems based on their evaluation and comparison standards (Powell et al., 2011). Family businesses are essentially owner-managed firms in which family members also constitute the firm's management and have the intention to transfer the firm across generations. This means that the progressive transfer of power from one generation to another is in parallel with the transfer of values and mental schema. An "owner-father-president can retreat into his role of father, and treat his son-subordinate like a child" (Tagiuri & Davis, 1996, p. 202). Successive founder–son relationships influence the firm. From a psychological point of view, these interrelationships create a unique context for the affirmation and transmission of values, beliefs, and convictions. In general, it is advisable to assume and consider a contextualist approach, a "family firm situation," in the discussion of the psychological foundations of family firms. Individuals might not immediately act in response to a family firm situation, but likely have "a continuous mental life" that comprises their ambitions, plans, and imagined scenarios (Shoda & Mischel, 2000, p. 411).

A Framework for the Psychological Foundations of Management in Family Business

This section builds a theoretical framework that links personal traits, heuristics, biases, and the family firm's decision-making processes. Next, we discuss the implications for performance and the feedback loop. The central focus of this framework is the concept of family business decision-makers' *heuristics*. Entrepreneurs and managers use mental shortcuts (i.e., heuristics) to make their decisions. Then, we recognize that genetics and the selection processes likely affect the affirmation of personal traits, which impinge on the emergence of specific heuristics and biases.

Our theoretical framework proposes that some stimuli affect the emergence of specific heuristics and biases. In this regard, we distinguish between personal background and family background as two important aspects affecting the translation of personal traits into heuristics and biases. We argue that the heuristics employed by entrepreneurs and managers involved in family firms may differ from those in nonfamily firms due to the family background. Therefore, it seems crucial to understand how psychological heuristics appear and develop, a preliminary step in considering family firms' heterogeneity in strategy formulation and implementation.

Finally, with a bird's eye view of the psychology literature on emotions, we argue that, over time, emotions play a key role in the emergence of new heuristics (this specific aspect of our framework is examined in Humphrey et al., 2021), whereas here we focus on the other parts of the model).[1]

Genetics and the Selection Process

We can interpret the links between genetics, the selection process, and leadership traits following three conceptual perspectives: (1) evolutionary theory and psychology, (2) behavioral genetics, and (3) socio-analytic theory (Judge et al., 2009). While referring to Judge et al. (2009) to thoroughly analyze each perspective, we emphasize genetics as an implicit antecedent of family leaders' personality traits. Indeed, as Matthews et al. (2003) assert, there is empirical evidence to believe that some personality traits may have a tractable hereditary background. Arguably, the structure of personality traits is consistent across different clusters of people in many cultures. Similarly, Olver and Mooradian (2003) report that personality traits are endogenous, fundamental, and stable predispositions fastened to physiological aspects (McCrae et al., 2000). Despite this, and even though genes mold the emergence of personality traits, from an evolutionary perspective, families, and more generally, firms and societies, will select traits that are "in" or "out" for leadership (Judge et al., 2009). This view is consistent with Calabrò et al. (2018) and Bennedsen et al. (2007). According to these studies, the firstborn's gender is a critical factor underlying the family firm succession decision.

Personality Traits

A certain set of characteristics is deemed crucial to defining an individual's capacity to influence others within organizations (Cavazotte et al., 2012; Judge et al., 2009) and assume the role of entrepreneurial and strategic leader. The most common taxonomy of these personality traits is the five-factor personality model that includes extraversion, agreeableness, conscientiousness, openness to experiences, and neuroticism (Costa & McCrae, 1992). In this regard, extant research shows that the five personality factors are associated with performance motivation (Judge & Ilies, 2002); specifically, neuroticism and extraversion are linked to job satisfaction (Judge, Bono, Erez, et al., 2002). Notably, Staw et al. (1986) maintain that personal attributions shape how leaders perceive social and business dynamics, influencing their jobs. In their recent literature review, Abatecola et al. (2013) conclude that strategic leaders' emotional stability is positively associated with strategic proactivity and firm performance, while strategic leaders' conscientiousness is linked to organizational bureaucratization. Similarly, extraversion, or one's inclination to be outspoken, outgoing, and gregarious, is associated with one's emergence as a leader (Judge, Bono, Ilies, & Gerhardt, 2002) and inclination to seek ambitious goals (Bono & Judge, 2004). We argue that personality traits influence individuals' heuristics and biases.

Heuristics and Biases

Heuristics represent an aspect of experimental psychology (Gilovich et al., 2002) that is connected with making decisions in uncertain conditions (Guercini & Milanesi, 2020). It is not surprising that this is one of the most used psychology constructs in strategy and entrepreneurship (Bettis, 2017), since strategic and entrepreneurial decisions are always made under uncertain conditions, especially in the age of temporary competitive advantage (Dagnino et al., 2020).

The heuristics literature on strategy and entrepreneurship assumes that when decision-makers make choices, their rationality is imperfect (Kelman, 2011), mainly because multiple alternatives may co-occur (Augier & March, 2008; Guercini & Milanesi, 2020). Heuristics are shortcuts that decision makers employ when they face incomplete information, time, and processing capacity constraints (Bingham & Eisenhardt, 2011; Newell & Simon, 1972). They consider a reasoning structure of analogous choices but differing from routines in that they do not enable specific and immediate responses to a decision (Bingham & Eisenhardt, 2011; Cohen et al., 1996). Accordingly, executives and entrepreneurs use heuristics as straightforward decision rules focused on a segment of existing information (Bingham & Eisenhardt, 2011; Guercini & Milanesi, 2020). Heuristics may lead to good decisions or bad decisions. In the latter case, we label them as cognitive biases to underscore the systematic deviations from rational criteria (Haselton et al., 2005). As such, "biases are in substantial parts unconscious and often result from the use of heuristics" (Schirrmeister et al., 2020, p. 1).

Initially, the pioneering contributions of Kahneman et al. (1982) and Tversky and Kahneman (1983) appeared to focus only on the distortions that mental shortcuts might provoke. However, the authors assert that "heuristics are very useful" (Tversky & Kahneman, 1974, p. 1129). Indeed, under (technological and demand) uncertainty, and an accelerated pace of competitive intensity, wide-ranging and careful strategic and entrepreneurial decisions are not imaginable, nor are they technically or economically realizable (Haley & Stumpf, 1989; Tversky & Kahneman, 1974). Thus, heuristics are a way to make quick decisions and implement solutions (Pitz & Sachs, 1984), and might help make appropriate decisions (Busenitz & Barney, 1997; Guercini & Milanesi, 2020).

Following Hutchinson and Gigerenzer's (2005) metaphor, "heuristics consist of building blocks, and building blocks exploit evolved or learned abilities such as recognition memory; it is the complexity of these abilities that allows the heuristics to be simple," (p. 97) we argue that heuristics as building blocks serve to "reduce the complex tasks of assessing likelihoods and predicting values to simpler judgmental operations" (Tversky & Kahneman, 1974, p. 1124). For example, Eisenhardt and Sull (2001) find that some rational heuristics recognize the opportunities underlying certain strategic and entrepreneurial processes. Furthermore, Barnes (1984) affirms the following essential characteristics of heuristics in management: (1) availability, (2) hindsight, (3) representativeness, (4) judgments of correlation and causality, and (5) misunderstanding the sampling process. Barnes (1984) also observed that people are frequently overconfident about their judgment and do not have a perception of the limited information they have or how much additional information they should consider to make a well-informed decision. With a distinct focus on family firms, some studies specifically explore family firm bias. For instance, Lude and Prügl (2019) find that "processing the family firm information seems to moderate risk aversion as risk avoidance is decreased in the gain domain" (p. 386). Instead, Fang et al. (2019) consider four cognitive factors (i.e., anchoring, representativeness, stereotype heuristic, and information availability) to understand family firms' investment decisions.

Family and Personal Background as Stimuli

Dispositional traits are the primary source of heuristics that delineate how decision-makers make choices based on their self-evaluations and rapport with the task environment (Hiller & Hambrick, 2005; Judge, Bono, Ilies, et al., 2002). Along with dispositional factors, background stimuli are deemed moderators of the emergence of specific heuristics.

We distinguish between personal background and family background. *Personal background* may concern the family member's education and status, as well as his or her social interactions external to the family. For instance, a firm's recent success and status (measured in terms of retribution) are two focal antecedents of hubris identifying a cognitive bias in a narcissistic personality (Picone et al., 2014). *Family background* includes parental career, family social interactions, family identity, and family involvement. As De Massis et al. (2018) note, the "family involvement" construct has an honorable place in the family business literature (Zahra, 2003) and is a multidimensional concept. The degree of ownership is one common type of individual members' involvement in a family business (e.g., Chrisman et al., 2015; D'Allura, 2019). However, while drawing on recent studies on family involvement, we consider management and governance in addition to ownership background in the family involvement construct.

Finally, our framework (see Figure 1) calls attention to *values* and memories as common elements of personal and family background. The constant stimuli from family dynamics interiorize the family's values (Arregle et al., 2007) and metaphors (Tognazzo & Neubaum, 2020), and the longevity of family firms is likely related to their "capacity to successfully manage the creation, maintenance, and intergenerational transmission of traditions" (Suddaby & Jaskiewicz, 2020, p. 234). Additionally, family memories, along with personal memories, affect how family members construe reality and build ideas, motivations, and reasoning (Zellweger et al., 2013).

As Figure 1 shows, heuristics and biases result from a complex system of interactions among personality traits and background stimuli, combining the personal and family backgrounds.

Emotions

When people consider that a given event (real or imagined) will affect their security, the well-being of loved ones, or the achievement of target goals, they experience emotions (Huy, 2012). Both their personal and family backgrounds induce a variety of emotions over time

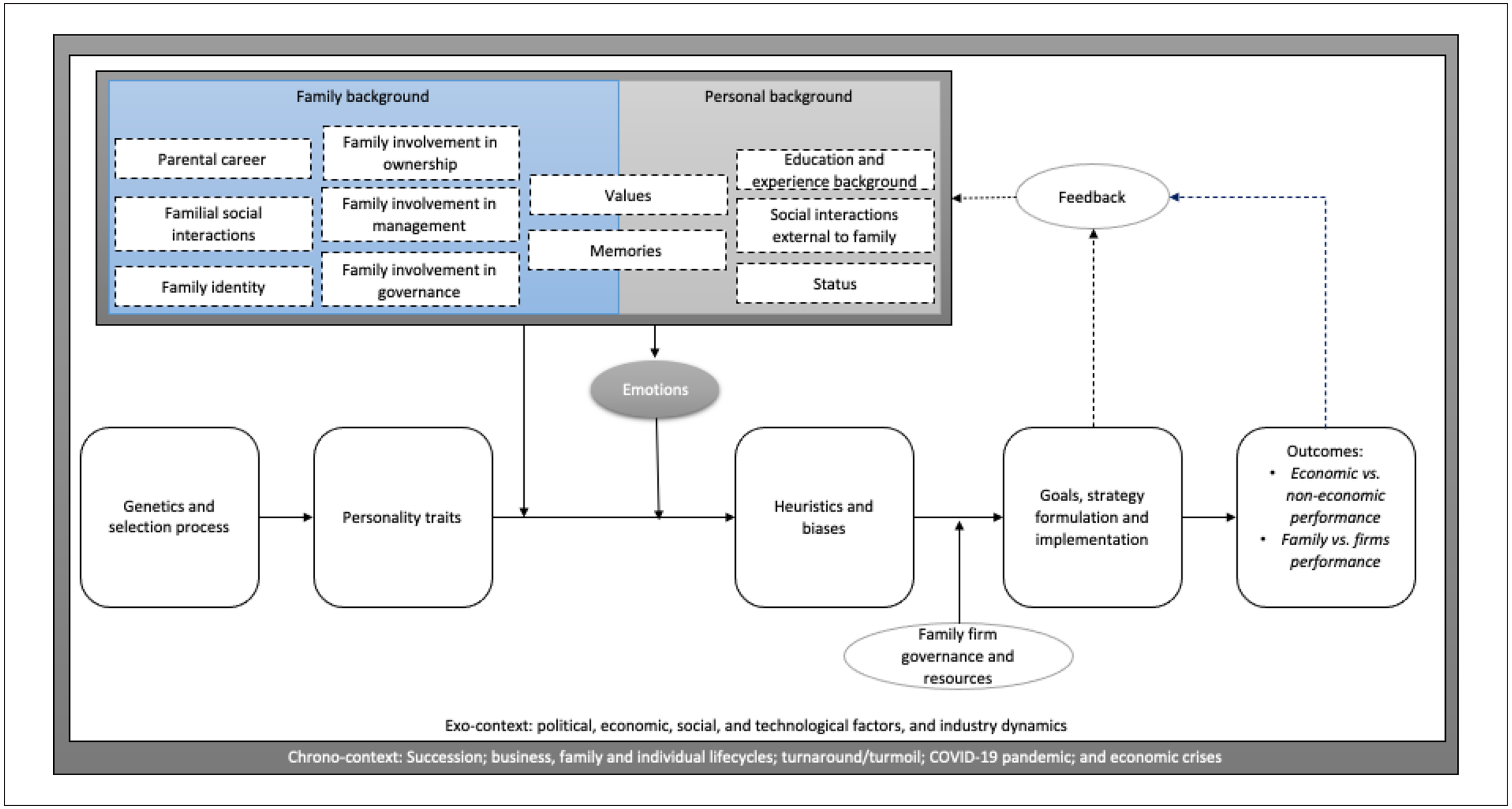

Figure 1. A framework for the psychological foundations of management in family business.

(Stanley, 2010). This mixture of emotions may affect how leaders construe reality (Ellsworth & Smith, 1988; Huy, 2012; Lazarus, 1991), hence influencing the transformation of personal traits into heuristics and biases. Consequently, both the personal and family backgrounds are the context in which emotions are expected to develop. Naturally, we do not refer to every emotion that family members experience, but call attention to the events that, at least potentially, have weighty (positive or negative) consequences on the family's and the firm's (economic and socioemotional) wealth.

Goals, Strategy Formulation, and Implementation

Goals, strategy formulation, and implementation can emerge from the heuristics and biases employed to make entrepreneurial and strategic decisions. Of course, as we discuss in the next section, the family firm's governance and resources are important contingencies that influence this relationship. First, family firm goals are both economic and noneconomic (Becerra et al., 2020; Chrisman et al., 2012; Chua et al., 2018; Kotlar & De Massis, 2013) and are informed by the heuristics and biases of the family firm decision-makers. Such goals are the starting point of the strategy formulation process (Hitt et al., 2019), which includes (1) establishing, launching, and communicating a healthy vision; (2) taking advantage of core capabilities and boosting them; (3) modeling and endowing human capital; (4) backing up the firm culture and ethical practices; and (5) exercising control of the firm (Hitt et al., 2010; Ireland & Hitt, 1999). Additionally, heuristics and biases affect how firms implement their strategic initiatives (O'Reilly et al., 2010). For instance, the overlap between the family and the business may produce biases that reinforce family members' commitment to family-centered noneconomic goals, and this might constrain the way a formulated strategy is executed. Or family firm leaders might face fierce resistance when implementing initiatives aimed at changing the strategic direction, since some family members may be emotionally attached to the current direction.

In sum, the characteristics of the family firm's goals, strategy formulation, and implementation are a result of the heuristics and biases deriving from the personality traits and their interaction with the background stimuli that include both the family and the personal backgrounds. In fact, the family firm's governance and resources play a role in determining how the heuristics and biases are translated into goals, strategy formulation, and implementation. This interplay and chain of causality lead to formulating and implementing strategies that will likely produce particularistic outcomes.

Family Firm Governance and Resources

Heuristics and biases lead to goal definition, strategy formulation, and implementation. Nonetheless, as Kotlar et al. (2018) note, different social psychology mechanisms explain family members' capacity to define the family firm goals (Pearce & DeNisi, 1983). It is also worth considering the moderating role of managerial discretion (Li & Tang, 2010). In other words, when family members have a high level of discretion, the impact of their heuristics and biases in defining the strategy goals and their formulation and execution is high. The same is true when considering ability as resources instead of ability as discretion (De Massis et al., 2015). Drawing on this line of reasoning, we argue that a family firm's governance and resources might shape the extent to which managerial ability influences strategic decisions, and thus the impact of heuristics and biases on the goals, strategy formulation, and implementation. Focusing on family firm governance, Chrisman et al. (2016) argue that managerial discretion is shaped by "prevailing cultural, political, regulatory, competitive, and capital market conditions" (p. 722). Additionally, the family members' ability to impose specific heuristics in making strategic decisions depends on factors including the composition of the board of directors (Bettinelli, 2011), the heterogeneity among the largest blockholders (Russino et al., 2019), the implementation of mechanisms to disconnect cash flow and control rights, such as pyramids or loyalty shares. Focusing on family firm resources, the available cash flow and level of indebtedness appear to be respectively a key source and limitation of managerial discretion (Dagnino et al., 2019). While the role of family business governance in changing the intensity of the relationship between heuristics, goals, and strategy would seem well-defined, the role of resources is not, even if it is reasonable to expect that the family firm's available resources—not only financial but also human and social capital—will influence how the heuristics and biases determine the goals and the strategy. Indeed, specific biases (e.g., hubris) often lead to a misapprehension of the resource endowment potential.

Outcomes

Strategy formulation and implementation in a family firm is likely to result in outcomes that can be economic and/or noneconomic, as well as centered on the family and/or the business system, depending on the family business goals and those of the family owning the business (Chua et al., 2018; Kotlar et al., 2018). Worth noting is that both the family firm's and the family's performance should be assessed in terms of the convergence of the outcomes and the goals as performance reflects the achievement of goals and cannot be measured if not against goals.

Feedback Loop

Under- or overperformance in the outcome level with regard to the goal aspiration or target level may then lead to reviewing the family and personal background, in turn affecting the goals through the moderating effect on the heuristics and biases. For instance, underperformance may affect a family member's status, family social interactions, and family involvement, at least in management and governance, thereby altering the effect of personal traits on the heuristics and biases. Thus, misalignment between the goals and the outcomes will indirectly influence the heuristics and biases that inform the family firm's decision-making processes, ultimately leading to changes in the goals, strategy formulation, and implementation (the feedback loop and dashed arrows in Figure 1).

Chrono- and Exo-Contexts

Following recent developments in the family business literature (e.g., Debellis, Rondi, et al., 2020), we incorporate the context in our framework. Specifically, we refer to the chrono-context and exo-context. The chrono-context includes succession, business, family, individual life cycles, turnaround/turmoil, the COVID-19 (coronavirus disease 2019) pandemic, and economic crises. The exo-context includes political, economic, social, and technological factors, as well as industry dynamics. Both the exo-context and the chrono-context affect the heuristics and biases that inform strategy formulation and implementation, and in turn, the outcomes of the process.

Furthermore, the exo- and chrono-contexts can impinge on the individual and family background as well as on the personal traits and emotions of family firm members. For instance, the COVID-19 pandemic is an unprecedented event causing "worry" and fear about the future of family businesses (De Massis & Rondi, 2020), and can indirectly affect strategy formulation and implementation, and hence family business outcomes.

The Articles in This Special Issue

The articles in this Special Issue of *Family Business Review* clearly illustrate the benefits of considering the psychological foundations of management to understand family firm behavior. This Special Issue received 25 submissions, demonstrating the growing interest of scholars from different disciplines in research at the intersection of the psychological foundations of management and family firms. Nine of these articles have been accepted for publication, four of which are introduced here under the *values, biases, and heuristics* theme, and the remainder in a second article that will be published in the next issue focused on *emotions, experiences, and memories*. While the first special issue mainly focuses on behavioral and cognitive aspects in family firms, the second issue will explore the strategic contexts in which emotions are likely to produce an effect (Huy, 2012) and why in family firms more than other firms, emotions, experiences, and memories mold the strategic choices and governance dynamics (Bee & Neubaum, 2014).

We next summarize the four articles in this issue. Assuming a reductionist approach to the psychological foundations of management, Carr et al. (2020) enrich the literature on the psychological antecedents of *decision comprehensiveness* by focusing mainly on the heuristics and biases square in our proposed framework. The authors argue that the propensity to take risks and the desire to have time to think acutely about problems are two bases on which executives start making strategic decisions. The authors contend that the family members' decision processes reflect the family members' psychological attributes, shaping family business heterogeneity, and in turn, the decision processes. Ruf et al. (2020) complement the debate by focusing on the values rectangle in the family and personal background section of our framework, considering the predominant basic human values of owner-managers as key drivers of family firm behavior.

Both of the other articles in this Special Issue focus on two dark psychological attributes of decision-makers: overconfidence and Machiavellianism, referring again to the heuristics and biases square in our framework. Overconfidence is a common heuristic among executives (Hiller & Hambrick, 2005), even if receiving scant attention in the family business literature. Tsai et al. (2018) show that the effect of generational diversity in family business decision-making may be contingent on the overconfidence of executives. Dick et al. (2020) join the debate by exploring how overconfidence in founder-controlled family firms affects corporate social responsibility activities. They demonstrate that founder-controlled family firms are likely to launch corporate social responsibility initiatives that boost their reputation.

Chandler et al. (2020) explore how Machiavellianism as a prevalent bias guides family firm CEOs' decisions and affects their firms' involvement in strategic alliances, and how family ownership impinges on this relationship when firm ownership is in the hands of a family. Their article contributes to the psychological foundations of management by showing the bright and the dark side of Machiavellianism. The authors highlight that Machiavellian CEOs are more likely to participate in strategic alliances, considering such alliances as rapid organizational mechanisms that allow them to manipulate and exploit others to support their own firm's competitiveness. However, these alliances are not stable over the time.

Insights for Future Research

Research investigating the psychological foundations of management in family firms is far from reaching maturity. Drawing on the proposed framework (Figure 1) and the articles published in this issue, we isolate some research gaps regarding the psychological roots of family firm management, which also provide promising opportunities for future research. We organize our research agenda by considering the three approaches to the psychological foundations of management (reductionist, pluralist, and contextualist) and the different elements of our framework as summarized in Table 1 providing some examples of future research questions.

A Reductionist Approach to the Psychological Foundations of Management in Family Firms

The family business literature has focused on family members (and especially on the founders or their direct successors), assuming a de facto reductionist approach to the psychological foundations of management. However, some connections between individual heuristics and family firm strategic choices remain a gray area. We first posit that the overlap between family and work in a family-owned business provides a unique context for specific psychological heuristics to emerge. Our framework reports a dynamic model that considers both emotions and heuristics (more stable over time) in response to changes in the internal and external environment. By exploring the dynamic evolution of emotions (Labaki, 2020) and their effect on family members' heuristics, we hint at a fruitful research area that can advance the family business literature. On a deeper level, we also suggest evaluating whether the relationships between heuristics and strategic and entrepreneurial decisions are influenced by the generational cohort (e.g., founders, first-generation, other generations) and its characteristics. This area of investigation has the potential to clarify the role of generations in interpreting and reacting to changes in the internal and external environment, including a focus on the chrono-context (as per our theoretical framework), by investigating how factors in the family's and the family firm's life cycle affect the emergence of specific heuristics (Jiang et al., 2018).

Second, we call for studies that explore how the idiosyncrasies of family businesses (vis-à-vis other firms) strengthen (or weaken) the impact of some psychological attributes on firm performance. For instance, discussing the Parmalat accounting scandal, Dagnino et al. (2013) argue that a very patriarchal and unbalanced governance system made it possible for Calisto Tanzi (the founder and CEO) to formulate irrationally grandiose strategies. Following this line of reasoning, ownership concentration in a family's hands may shape family members' core self-evaluation, and accordingly, make strategic decisions inspired by specific biases (e.g., hubris). This effect may occur because family ownership affects family members' strategic decision-making power and subsequently their self-evaluation.

Third, linking Dick et al. (2020) and Chandler et al. (2020), another fertile research line is the role of psychological heuristics and biases, disentangling the effects in the short and long term, and comparing family firms and nonfamily firms (Neubaum et al., 2019). Dick et al. (2020) state that overconfidence stimulates corporate social responsibility activities that increase the decision-maker's reputation. In this circumstance, we can expect a positive effect only in the short term. Similarly, Chandler et al. (2020) find that Machiavellianism

Table 1. Opportunities for Future Research on the Psychological Foundations of Management in Family Firms.

Approach to psychological foundations	Positioning in the framework	Examples of research questions
Reductionist	The role of the chrono-context and exo-context in molding the family business leader's heuristics and biases	What heuristics, strategic, and entrepreneurial decisions are shaped by the generational cohort? Do family firm heuristics and biases vary across family members from different generations? What are the typical heuristics that emerge among family members? How do family member's heuristics change depending on family, business, and individual life cycles? What is the effect of family business succession on family member's heuristics and biases? Is there any difference between intra-family and external succession? How do family members' heuristics change as a function of changes in the political, social, and economic environment? Does the industry where a family business operates influence the heuristics and biases of its actors?
	The role of family background in molding the family business leader's heuristics and biases and family firm governance	How do the idiosyncrasies of family businesses strengthen (or weaken) the impact of some psychological attributes on firm performance? What is the role of values in determining the family business goals through heuristics and biases? How do the values of family members ultimately shape the goals of the family firm and its strategic behavior? Do nonfamily members share the same values as family members? What are the differences between family and nonfamily members' values in determining family firm goals and behavior? How do family firm governance mechanisms reinforce the effects of some biases (e.g., hubris) on performance?
	The effect of the family business leader's heuristics and biases on firm strategy formulation and performance	What are the effects of the psychological heuristics emerging in family firms in the short and long terms? What are the effects of psychological heuristics emerging in family firms on the achievement of economic and noneconomic goals? What are the connections among family members' heuristics, international strategies, and performance? What are the links among family members' heuristics, diversification strategies, and performance?
	The role of personal background in molding the family business leader's heuristics and biases	What role do business school teachings play in the emergence of specific heuristics in family firm strategic and entrepreneurial leadership? How do personal experiences (also within the family system) shape the emergence of specific heuristics?
	Family business leader's heuristics, biases, and firm performance	What are the main drivers connecting the dark and bright side of psychological attributes regarding succeeding the firm's founder?
Pluralist	Family background	How does name transmission affect grandson or granddaughter involvement in family firms?
	Family business leader's heuristics, biases, goals, strategy formulation and implementation, and outcomes	What are family members' traits that shape the relationship between learning capabilities, innovativeness, and firm performance?
	Family background	How do specific behaviors at the individual level affect the emerging interactions among owner family members, other family members, and their collaborators? How do family members' emotions regarding past performance affect individual biases? How do group-level emotions affect such biases? How do family members' group conflicts shape strategy formulation?
Contextualist	Family background, leader's heuristics and biases, and firm performance	How does the founder's imprinting shape the family firm's awareness of the need to have an entrepreneurial mind-set to support the firm's competitiveness over time?
	Family background	What are the typical consequences of nondeclared rivalry among relatives? How do the family's language and signs play a role in construing the reality and hence affect strategy formulation?
	Family background and leader's heuristics and biases, and firm performance	To what extent do cultural differences among family businesses affect the emergence of specific heuristics and biases?

stimulates alliances that do not survive in the long term. More generally, researchers should consider how decision-makers respond to performance changes due to V.U.C.A. (volatility, uncertainty, complexity, and ambiguity), and the impact of these uncertainties on the effectiveness of some heuristics. Such studies would enhance our knowledge of sources of competitive advantage by clarifying if and why a sequence of temporary competitive advantages emerges over time (Dagnino et al., 2020), shedding new light on family firm performance heterogeneity.

Fourth, family business scholars generally argue that family business strategies include noneconomic goals. Our theoretical framework includes the role of power or social interactions external to the family in shaping family members' heuristics and their goals. Ghoshal (2005) has stressed the importance of business schools in defining professionally accepted behaviors and unhelpful obsessions with shareholder value. Key questions include how business school teachings can play a role in the emergence of specific heuristics, and whether family members with a solid management background have a higher proclivity to impose economic goals than other family members with a different educational background.

Fifth, while the entrepreneurial leadership literature considers psychological attributes and family members' attitudes regarding succeeding the firm's founder, the main drivers linking the dark and bright sides of psychological attributes remain underexamined. Therefore, we propose that comparative research studying narcissistic leadership may counter alternative theories of successful succession in family business (e.g., servant leadership). Such research might benefit from Ahrens et al.'s (2019) suggestion to consider multiple data sources, such as direct interviews, bibliographical information on CEOs, family members' statements in newspapers, and linguistic software to analyze them.

A Pluralist Approach to the Psychological Foundations of Management in Family Firms

There is an appealing debate on the overlap between family life and work life (Rothausen, 2009) with regard to how and to what extent group identification, aspirations, and maladaptive learning lead to the psychological foundations of management (Powell et al., 2011). We recommend research areas that can contribute to this debate. First, our theoretical framework considers family and personal backgrounds separately. Other drivers include education and resource dependency. For example, from an emotional perspective, over generations, one or more family firm heirs often share the same name and surname as the founder. How does this name transmission affect grandson or granddaughter involvement in family firms? Research "less concerned with individual decision making than with the overall decision environment of the firm" (Powell et al., 2011, p. 1373) might also enrich the debate on primogeniture and leadership succession in family firms (Calabrò et al., 2018).

Second, the longevity of family businesses is frequently ascribed to their capacity to link past, present, and future knowledge and combine and recombine asynchronous knowledge to obtain new products (e.g., De Massis et al., 2016; Erdogan et al., 2020). Nonetheless, "incoming family owners are likely to have a shorter history of interaction with the firm than their predecessors, and are thus less emotionally attached to the existing knowledge bases" (Kotlar et al., 2020, p. 16). In this context, the role of family members' personality traits (particularly, the founder's) in the relationship between learning capabilities, innovativeness, and firm performance is not fully understood. Recently, scholars have unveiled the relative emphasis that family generations place on the past, present, and future, namely, their temporal orientation, as a major factor unleashing intergenerational tensions—states of psychological stress, lack of engaged dialogue, and emotional detachment—that need to be mediated by third parties in order to avoid negative influence on succession (Magrelli et al., 2020). Following this line of thought, we call for studies addressing the psychological foundations of temporality in family business and their role in organizational decision making.

Finally, a pluralist approach to the psychological foundations of management in family firms could consider shifting the analysis from individuals to the setting in which individuals work (Powell et al., 2011). However, the motivations from one to successive generations may be very different (Kunreuther, 2003). Based on Williams et al. (2018), we suggest that owner families may develop reference points that over time lead to the definition of other family members' desires and aspirations. This research line highlights the idea that the owning family shapes group identification and aspirations, that is, the "founder's legacy centrality" (Kelly et al., 2000). We call for studies focusing on specific behaviors taking place at the individual level, which inevitably affect the emerging interactions among owner family members, other family members, and their collaborators. By adopting a multilevel approach, studies might benefit from the idiosyncratic and exponential contributions of some owning-family members.

A Contextualist Approach to the Psychological Foundations of Management in Family Firms

According to contextualist research, the context and the multiple groups within which an individual is nested (Bronfenbrenner & Ceci, 1994) affect the management perceptions, cognitive schema, language, and more (Powell et al., 2011).

The first focus is on family stimuli that might influence behavior. For example, a family member may keep in mind an encouraging father when he or she is facing an arduous strategic decision, and thus intensify his or her risk-taking efforts. From this point of view, we call for longitudinal studies that explore the imprinting of family business founders on firm strategy over time. Specifically, we suggest considering how the imprinting of a family business founder (Pieper et al., 2015) shapes the family firm's awareness of the need to have an entrepreneurial mind-set to support competitiveness over time.

Second, anecdotal evidence on family firm succession shows that relatives, moved by their relational perceptions of other relatives, engender some rivalry and cooperation. These relational perceptions (linked to relatives' cognitions) might entail no overlap in their personal competencies or degree of ownership, yet this type of implicit rivalry can inspire relatives to instigate competing and disruptive actions. The idea of relational perception suggests that some elements of a family firm's succession are socially constructed. Accordingly, we call for conceptual and empirical studies that focus on the typical consequences of nondeclared rivalry among relatives (Hoffmann et al., 2018).

Finally, psychology studies show that national cultures affect how family members interact. In general, national cultures (a crucial aspect of the exo-context in our theoretical framework) affect the emotional atmosphere within the family and particularly the relationship between parents and their children (Rosenthal et al., 1989). National culture also affects strategy formulation and family member reactions. Despite these important influences, the role of national culture in family member heuristics and biases is not understood. We call for cross-country empirical analyses that test the extent to which cultural differences among family businesses may affect the emergence of specific heuristics and biases.

Conclusion

We believe that research on the psychological foundations of management in family firms will have a threefold impact. The first relates to *theory advancement*. Research on the psychological foundations of management unveils a pivotal "input" in the organization (Barney & Felin, 2013). Indeed, the firm's strategy formulation and implementation "mirrors" its executives' values and heuristics (Hambrick & Mason, 1984). We have discussed why family firm traits enhance this mirroring effect and then developed a relevant research agenda. We believe that a deeper understanding of the psychological foundations of management in family firms will not only advance the current debate but will also pose new challenges to the investigation of the entrepreneurial and strategic behaviors and performance of family firms (Stewart & Miner, 2011; Zahra & Sharma, 2004). Furthermore, we relaunch Pieper's idea (2010) that "a better understanding of the family dynamics that permeate the organization and spur its growth, stagnation, or demise beyond the founder stage will provide valuable insights and help advance psychological theorizing at the organizational, group and individual levels" (p. 28).

The second impact relates to *managerial implications*. We believe that recognizing and categorizing perilous traps (e.g., the escalation of risky investments; Staw, 1981) initiated by some leaders' strategic and entrepreneurship values and heuristics is a relevant and necessary step to propose practices to avoid these traps. For example, Ruf et al. (2020) invite practitioners to pay attention to the interrelation between the values and behaviors of family businesses, and then consider implementing organizational practices that facilitate objective decisions (e.g., introducing a "devil's advocate" in the decision process). Additionally, since we have yet to understand how family businesses allocate, organize, and reconfigure their resources to generate value for family members and other shareholders, exploring the psychological foundations of management in family business will contribute to the literature by comparing family business research with other disciplinary traditions. This would allow extracting practical insights that might inspire managers in orchestrating resources and developing capabilities based on successful family businesses.

The third and final impact relates to *teaching*. We believe that introducing courses on the psychological foundations of management in family business is necessary and urgent. Knowing that unobservable mental processes underlie the behavior of family firms (Colman, 1999) will help make students more effective at managing family firms in the future. Business students would benefit from a course on the psychological foundations of management in family business, gaining greater awareness of the limitations of some managerial tools and practices in family firms. Often, students are impervious to the different characteristics of firms for which such tools and practices were formulated, and how they work in motivational planning and managing change especially in family firms. Knowledge on how family member core heuristics and biases affect "the intentional and unintentional ways in which organizations become meaningful" (Glynn, 2016), and "why good leaders make bad decisions" (Campbell et al., 2009, p. 60) would prove valuable. Students might then consider the psychological foundations of management in family firms (values, heuristics, and biases, but also emotions, experiences, and memories) as a springboard for understanding family firm decisions. For example, future family firm leaders should be aware that their own risk-taking propensity and thoughtfulness will affect the quality of the strategic decision processes, and in turn, firm performance (Carr et al., 2020).

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Note

1. For parsimony, our framework does not include the internal structure and advice mechanisms, however, the reader might like to refer to Strike et al. (2018).

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