



IE UNIVERSIDAD

TESIS DOCTORAL / DOCTORAL
DISSERTATION

Entrepreneur Ambidexterity:

A Conceptual Framework and Empirical Investigation
Across Early Venture Contexts

Ambidestreza del Emprendedor:

Un Marco Conceptual y una Investigación Empírica
en Contextos de Nuevas Empresas en Etapas Tempranas

Bastian Gerhard

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Abstract

Entrepreneur ambidexterity (EA) refers to an entrepreneur's cognitive capability to balance exploration and exploitation in response to shifting venture demands. Unlike ambidexterity in firms or employees, EA centers on the founder's mental adaptability under high uncertainty and resource scarcity. This dissertation investigates EA as a critical, yet underexplored, capability that shapes venture success across early-stage contexts, aiming to advance theory, inform practice and address the cognitive demands entrepreneurs face when navigating parallel pressures to innovate and deliver.

In this dissertation, I offer three complementary essays that jointly address the question: *How do entrepreneurs develop and apply ambidextrous capabilities, and how are these capabilities perceived as contributing to venture success in different contexts?*

Essay 1 develops a conceptual model and research agenda for EA, grounded in social cognitive theory. It synthesizes fragmented insights on individual-level ambidexterity and organizes antecedents into personal, behavioral and environmental factors. The model frames EA as an emergent, context-sensitive capability that drives adaptability, opportunity recognition, investor appeal and personal resilience, while also identifying risks such as cognitive strain from sustained engagement across competing demands.

Essay 2 examines how specific self-regulatory traits enable entrepreneurs to align with the shifting demands of exploration and exploitation across venture stages. It shows that different traits matter at different times,

highlighting the contingent nature of EA and offering a trait-based view of adaptive entrepreneurial functioning.

Essay 3 investigates how early-stage investors interpret founder traits as signals of ambidextrous capability. It finds that the perceived value of traits such as work experience, motivational orientation and self-efficacy varies with venture maturity. EA emerges not only as a cognitive resource for entrepreneurs but also as a relational signal that shapes investor judgments under uncertainty.

In combination, the three essays offer a multi-level understanding of EA by integrating its theoretical foundations, cognitive antecedents and stakeholder evaluations.

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constant push to do better, none of this would have come together the way it did. Working with you often felt like scraping even the tiniest last bit of marmalade from the jar. You had a way of showing me where there was still more to refine, even when I thought the work was long finished. I wish you all the best for your academic career and hope our paths cross again in the future.

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Chapter 1: Introduction

Theoretical Foundations

The concept of entrepreneur ambidexterity (EA), introduced by Volery et al. (2015), captures entrepreneurs' capacity to balance exploration and exploitation over time. It extends a broader line of inquiry into how individuals and organizations navigate the inherent tension between discovering new opportunities and leveraging existing capabilities, a duality widely regarded as central to sustained success in dynamic environments. This research tradition originates in studies of organizational ambidexterity (OA), defined as a firm's ability to explore while simultaneously exploiting existing assets (March, 1991). Empirical work in this domain has demonstrated that firms capable of maintaining this balance are more adaptive and more likely to secure long-term competitive advantage (O'Reilly & Tushman, 2008; Raisch et al., 2009). In response, scholars have proposed structural and procedural solutions, such as establishing separate units for exploration and exploitation or cultivating organizational contexts that allow individuals to alternate between them (Birkinshaw & Gibson, 2004). OA research, however, remains primarily focused on firm-level architectures and processes. In response, a growing body of work has shifted attention to the individual level, giving rise to the concept of individual ambidexterity (IA) (Bledow et al., 2009; Mom et al., 2007). IA examines how employees and managers enact both exploratory and exploitative behaviors in their day-to-day activities, often under conditions of

role conflict, time pressure or structural ambiguity (Jasmand et al., 2012; Mom et al., 2009). This individual-level turn provides critical insights into the microfoundations of ambidexterity, but has only recently been extended to entrepreneurial settings, where formal structures are typically absent, and adaptive demands are intensified. Individuals might explore by generating new ideas or experimenting with different approaches, while also exploiting by refining existing skills or improving processes. Over time, this research has expanded to include specific forms of ambidextrous behavior, such as adaptive leadership styles that encourage innovation and efficiency (Kauppila & Tempelaar, 2016; Rosing et al., 2011; Zhang et al., 2022) or roles that require balancing sales and service tasks (Jasmand et al., 2012). Other studies have looked at how salespeople manage new customer acquisition alongside existing client relationships (Lam et al., 2019). While all of these studies highlight the cognitive and behavioral skills needed to handle conflicting tasks, they typically assume that individuals operate within stable organizations that provide support and resources for ambidextrous action.

In contrast, the study of EA focuses on a different context, one where individuals must manage exploration and exploitation without the backing of an established firm. EA refers to the entrepreneur's cognitive ability to handle these competing demands effectively, often in environments marked by high uncertainty, limited resources and direct responsibility for outcomes (Klonek et al., 2021; Volery et al., 2015). Unlike IA, which often looks at behavior, EA is concerned with the internal, mental capacities that enable entrepreneurs to

adapt, such as resilience, flexibility and strategic thinking (Baron & Ensley, 2006; Campagnolo et al., 2022; Haynie et al., 2009). Entrepreneurs must recognize opportunities for growth while also making sure their ventures remain efficient and sustainable. This shift in focus highlights three important differences between EA and IA. First, the subject of study in EA is the entrepreneur or founder, who acts as the main decision-maker and resource manager, rather than an employee working within a larger organization. Second, EA places emphasis on cognitive abilities, rather than just observable behavior. Third, EA takes place predominantly in early-stage ventures, where the lack of formal structures means that the entrepreneur's own abilities have a direct influence on whether the business can survive and grow (Guerrero, 2021; Klonek et al., 2021; Schnellbacher et al., 2019).

EA is best understood as a flexible potential rather than a fixed way of acting. It develops through the interaction between an entrepreneur's personal capabilities and the environment in which they operate (Volery et al., 2015). This ability allows entrepreneurs to shift between creating new opportunities and improving current operations, which is often necessary to keep the business viable. For example, an entrepreneur might develop a new product while also finding ways to cut costs, which helps the venture stay both innovative and financially stable (Blank & Eckhardt, 2024; Sok & O'Cass, 2015b; Zheng et al., 2020). Research suggests that EA is linked to positive outcomes at the venture level, including stronger innovation, steady growth and better reception from investors (Noguti et al., 2022; Volery et al., 2015; Yap et

al., 2020). Importantly, EA depends on the entrepreneur's ability to integrate these competing demands over time; by rapidly switching between them, holding both logics in mind and responding flexibly as contextual demands shift. This distinguishes EA from OA, where larger firms often possess the structural and temporal slack to separate exploration and exploitation into distinct business units, departments or phases of activity. In such settings, specialized teams can pursue long-term innovation independently from short-term efficiency goals. where firms might structure exploration and exploitation into different units or phases. Entrepreneurs rarely have this option. Instead, they must operate under acute resource constraints and time pressure, requiring them to integrate divergent activities within a single role and across compressed timeframes, making EA a critical skill for surviving and succeeding in fast-moving markets (Bryant, 2009; Poon et al., 2020; Wang & Rafiq, 2014). In a nutshell, EA brings a new perspective to ambidexterity research by linking it to entrepreneurial thinking and decision-making. It shows how individual capabilities support adaptability in situations where resources are scarce and uncertainty is high. This conceptual foundation invites a closer examination of EA's empirical contours, its developmental antecedents and its social interpretation, addressed in the following sections of this dissertation.

Motivation

EA not only adds depth to our understanding of IA but also connects cognitive and behavioral approaches in entrepreneurship, offering new

directions for both research and practice. EA research helps explain how entrepreneurs manage competing demands, and why this skill is essential for success, especially in early-stage contexts. To this effect, my dissertation is driven by three motivations: (1) the need to advance theory about EA so we better understand this phenomenon, (2) the desire to offer relevant guidance about EA for real-world entrepreneurs and (3) a drive to leverage personal experiences that highlight the importance of this topic.

First, from a theoretical point of view, EA is a new and promising area in the study of ambidexterity. Most research so far has focused on how organizations balance exploration (pursuing new opportunities) and exploitation (improving existing operations) to survive and succeed over time (March, 1991; O'Reilly & Tushman, 2008). Later, scholars began to look at individuals within firms, such as managers and employees, who contribute to this balance (Bledow et al., 2009; Mom et al., 2007). However, these studies mainly focus on people working in structured organizations with teams, systems and support. Entrepreneurs face different challenges. They often work alone or in small teams, without the resources or support found in larger firms. They have to think and act ambidextrously to survive. EA research aims to link ambidexterity with entrepreneurial cognition, i.e. the way entrepreneurs think, make decisions and adapt in fast-changing environments (Baron & Ensley, 2006; Mitchell, 2004). EA focuses on mental agility and adaptability, helping us understand what cognitive skills allow some entrepreneurs to thrive where others struggle. Studying EA adds to our knowledge of what makes entrepreneurs successful. It explores

capabilities like self-regulation, resilience and flexible thinking, which go beyond simply spotting opportunities. This work helps clarify how entrepreneurs manage competing demands, often under intense pressure and with limited resources.

Second, EA is not just a theoretical concept. It is a real-world skill that entrepreneurs need, especially in the early stages of a venture. Entrepreneurs must often balance exploring new ideas and exploiting existing ones, sometimes in the same day. Unlike managers in large firms, they cannot hand off tasks or rely on others to manage this tension. For solopreneurs or small founding teams, EA is often the difference between survival and failure. In these situations, EA becomes a survival tactic (Davis et al., 2009; Wang & Rafiq, 2014). Entrepreneurs need to switch quickly between creative thinking and practical problem-solving. They must adapt to changes in customer needs, market shifts and unexpected challenges. Research shows that ambidextrous entrepreneurs are more likely to get early funding, grow their businesses and build strong positions in competitive markets (Schnellbacher et al., 2019; Sok & O’Cass, 2015b; Volery et al., 2015; Yap et al., 2020). Beyond surviving, EA also helps entrepreneurs thrive. Those who can manage both short-term execution and long-term vision are more likely to succeed in uncertain and dynamic environments. This makes EA an important capability for anyone studying or practicing entrepreneurship and one where much guidance is needed. As such, we still know little about how EA develops, if and how it works in practice, and how it can be recognized and supported.

Third, this dissertation is also shaped by personal experience. I have worked in both startups and corporate innovation, leading ventures from the idea stage through to scaling and exit. Along the way, I experienced the constant need to juggle strategic planning with day-to-day execution. One moment required visionary thinking, the next demanded precise action. In my role managing multiple venture projects, I had to switch between startups at different stages, moving from early discovery tasks in the morning to solving growth challenges in the afternoon. This repeated mental switching revealed not only the practical difficulty of balancing competing demands, but also the cognitive complexity involved in adapting to dynamic and contradictory role expectations. These experiences made me realize how important it is to understand and improve ambidextrous thinking in entrepreneurship. Rather than merely illustrating a personal challenge, they suggested that EA may be a foundational, yet under-theorized capacity that enables entrepreneurs to navigate these tensions. This dissertation is therefore not just an academic study. It is also a personal effort to explore how entrepreneurs like myself can better manage these challenges. It aims to provide insights into how to handle transitions, use resources wisely and build entrepreneurial teams that can balance exploration and exploitation over time.

Research Gaps

The following gaps were initially formulated prior to empirical investigation. While they continue to guide the overall dissertation, subsequent

essays refine and operationalize them through distinct sub-questions. Several important gaps in EA remain that make it difficult for the field to progress, both in terms of theory and practical relevance. These gaps operate at two interrelated levels: (1) overarching theoretical fragmentation, which constrains the cumulative development of EA as a construct, and (2) agenda-level omissions, which hinder empirical specification and operational relevance. Together, they motivate the present dissertation's multi-perspectival investigation.

First, at the overarching level, there is no coherent and integrative framework that organizes the antecedents and outcomes of EA. Although several studies have proposed traits, behaviors or environmental conditions conducive to ambidextrous behavior in entrepreneurs (Noguti et al., 2022; Schnellbacher et al., 2019; Volery et al., 2015), the field remains fragmented and largely atheoretical. Prior work has tended to treat antecedents and outcomes in isolation, offering limited explanatory leverage on how EA emerges, develops and contributes to venture-level success. As a result, scholars have called for more cumulative conceptual work to clarify the boundaries and structure of the construct (Guerrero, 2021; Yap et al., 2017). Without such a framework, research on EA risks remaining descriptive and disconnected, rather than integrative and theory-building.

Second, at the agenda level, existing studies provide insufficient insight into how the antecedents of EA interact with contextual conditions, particularly across different stages of venture development. While prior work has explored

how traits like resilience, regulatory focus or behavioral complexity contribute to ambidextrous behavior (Baron & Tang, 2011; Bledow et al., 2009; Haynie et al., 2009), few studies have addressed whether these traits are equally adaptive across varying entrepreneurial contexts. Klonek et al. (2021) showed that entrepreneurs follow switching patterns between exploration and exploitation, and that these patterns shift with multitasking demands and across venture stages. Boz Semerci (2022) demonstrated that attribution styles interact with self-efficacy to shape ambidextrous behavior. However, little is known about how such individual-level traits interact with stage-specific demands to help or hinder EA. This limits our ability to understand EA as a stage-contingent capability evolving within entrepreneurial contexts.

Third, also at the agenda level, EA has rarely been examined as a socially constructed signal, i.e. as a latent quality that must be perceived and interpreted by others to influence outcomes such as funding or partnership decisions. Only few studies have explored whether and how EA-related traits—such as work experience, motivation or self-efficacy—serve as signals of cognitive adaptability (Butticè et al., 2022; Moss et al., 2015; Noguti et al., 2022). This omission is particularly important in early-stage investment contexts, where evaluation relies heavily on founder characteristics. Without better insight into how EA is inferred and valued by stakeholders, the construct's relevance for venture financing and support remains poorly understood and theoretically underdeveloped.

Structure and Objectives of this Dissertation

My dissertation follows a cumulative format comprising three stand-alone academic papers. Each paper addresses a distinct, yet interrelated facet of EA, each adding a new layer to the overall investigation. The aim is to theorize, specify and empirically investigate EA as a cognitively grounded, context-sensitive and socially constructed capability relevant to early-stage venture success.

At the heart of this inquiry lies the central research question: *How do entrepreneurs develop and apply ambidextrous capabilities, and how are these capabilities perceived as contributing to venture success in different contexts?* To address this question, the dissertation engages EA from three complementary perspectives: (1) its theoretical structure and definitional boundaries, (2) its psychological antecedents and contextual contingency, and (3) its external perception in evaluative settings such as early-stage investment. This sequencing reflects a deliberate progression from conceptual integration to empirical elaboration and ultimately to socio-cognitive theorization.

The first essay, chapter 2, contributes to the conceptual foundations of EA by synthesizing extant literature on its antecedents and outcomes. Drawing on the broader individual ambidexterity tradition, it develops a social cognitive model that maps how personal, behavioral and environmental factors interact to support ambidextrous thinking. It also identifies five outcome domains, ranging from individual adaptability to firm-level performance, through which EA may enhance entrepreneurial success. In doing so, the essay provides a structured

framework for understanding EA and sets the stage for empirical inquiry. It asks:

- *How is EA conceptualized and measured in the current literature?*
- *What factors enable or enhance EA in entrepreneurs?*
- *What outcomes are associated with EA, particularly in terms of entrepreneurial success?*
- *What gaps in knowledge need to be addressed to advance the field?*

This essay offers a theoretical architecture for EA, and identifies its potential antecedents as well as its associated outcomes across five domains of entrepreneurial success. It contributes a structured, social-cognitive framework that reconceptualizes EA as a latent, multi-level capability shaped by the interaction of personal, behavioral and environmental factors.

The second essay, chapter 3, empirically investigates EA and specifically analyzes how cognitive dispositions enable ambidextrous behavior across different venture stages. It contributes to the theorization of EA as a stage-contingent capability by exploring its psychological antecedents under varying venture demands. It examines how self-regulatory traits—locomotion and assessment (Kruglanski et al., 2000)—interact with resilience to support ambidextrous alignment between entrepreneurial cognition and contextual pressures. Rather than measuring EA directly, the study operationalizes it through these cognitive traits and demonstrates how their value fluctuates

across venture stages. In doing so, the essay advances our understanding of EA's internal dynamics and context sensitivity. It asks: *How do self-regulatory traits such as locomotion and assessment, along with resilience, shape the entrepreneur's ability to manage explorative and exploitative demands at different stages of the venture?* While this essay demonstrates how EA operates as a context-sensitive capability rooted in cognitive dispositions, it remains silent on how such capabilities are interpreted and valued by external stakeholders.

This omission is taken up in the third essay, chapter 4, which contributes to the understanding of EA as a socially constructed signal in early-stage funding contexts. As a latent capacity, EA must be inferred through entrepreneurial attributes such as experience, motivation or self-efficacy. This study investigates whether and how such attributes function as credible signals of ambidextrous thinking, and how investor perceptions vary depending on their evaluative criteria and risk profiles. By doing so, it sheds light on the external legibility and strategic valuation of EA. It asks: *When do entrepreneurs' signals of ambidextrous capabilities align with investor preferences, and how does this affect the likelihood of funding success?*

Together, these three papers offer a cumulative and multi-dimensional perspective on EA. On the one hand, EA develops through cognitive traits whose relevance shifts across different stages of venture development. On the other, it becomes visible and consequential through signals that shape how investors and other stakeholders evaluate the entrepreneur. My dissertation

positions EA as a dual-facing capability: it guides internal decision-making while also shaping how entrepreneurs are evaluated by external stakeholders.

Finally, the general discussion in chapter 5 serves as the integrative conclusion of this dissertation. Rather than restating prior findings, it brings together the insights from all three essays to build a more comprehensive understanding of EA. It develops a view of EA as a multi-level capability rooted in cognitive dispositions, enacted through behavioral strategies and interpreted through external evaluations. It adapts to context, signals underlying competence and becomes consequential through how investor audiences interpret and value these signals in light of their stage-specific expectations and evaluative heuristics. Chapter 5 also reflects critically on the boundaries of the construct, the design choices made in the empirical studies, and their implications for future research. In doing so, it completes the dissertation's theoretical arc and outlines how future work can further develop and apply the concept of EA.

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Chapter 2: Reconceptualizing Individual Ambidexterity in Entrepreneurial Contexts: A Social Cognitive Review and Research Agenda

Introduction

Organizational ambidexterity (OA) describes the firm-level capacity to pursue exploration and exploitation simultaneously, a capability long viewed as essential for enduring performance in dynamic environments (March, 1991; Tushman & O'Reilly, 1996). Extant research has largely approached OA through structural (e.g. unit separation) and contextual (e.g. shared vision, performance management) mechanisms (Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2013), or through temporal alternation between opposing strategic logics (Papachroni & Heracleous, 2020; Simsek et al., 2009). While such approaches have yielded rich insight into ambidexterity in established organizations, they are less applicable to early-stage ventures, where formal infrastructure is minimal, resources are constrained, and competing demands emerge rapidly and unpredictably. To address these limitations, a growing body of work has shifted attention to individual ambidexterity (IA), i.e. the ability of employees and managers to reconcile exploration and exploitation within their role sets (Bledow et al., 2009; Mom et al., 2007). Although IA has been examined across various domains, including customer service and leadership (Jasmand et al., 2012; Schnellbacher & Heidenreich, 2020), its assumptions—structured environments, clearly defined responsibilities and organizational support—do not map cleanly onto entrepreneurial contexts. Entrepreneurs, by contrast, operate under high uncertainty, with minimal

external support and full accountability for venture outcomes. In such conditions, the management of dual demands becomes not only individualized, but also dynamic, recursive and shaped by cognitive and emotional processes. Entrepreneur ambidexterity (EA), the focus of this review, refers to the entrepreneur's capacity to balance exploration and exploitation over time, as a function of cognitive orientation, trait-level dispositions and contextual interpretation (Volery et al., 2015). Rather than treating EA as a behavioral repertoire visible at the firm level, this review conceptualizes it as a latent cognitive-behavioral capacity expressed through ongoing decision-making and strategic use of limited resources in challenging situations. By situating EA firmly within the lived experience of early-stage entrepreneurship, the review places the entrepreneur at the center of analysis and examines how ambidextrous potential develops and is deployed over time.

Prior research highlights the central importance of individual behavior and interaction in balancing exploration and exploitation, especially in resource-constrained settings such as SMEs, where ambidextrous activity depends heavily on human, social and intellectual capital (Kang & Snell, 2009; Mu et al., 2022; Turner et al., 2013). Studies have identified several forms of IA—dueling, holistic and synergistic—each representing distinct cognitive and behavioral strategies for handling competing demands (Lindsey-Hall et al., 2024). These configurations are shaped by both personal traits and contextual enablers, including organizational design, social networks and work environments (Joseph et al., 2023). Ambidextrous behavior has been

associated with greater adaptability and venture-level performance, particularly in entrepreneurial settings marked by time-sensitive decision-making and shifting complexities (Akulava & Guerrero, 2023; Guerrero, 2021). However, framing ambidexterity as a static trade-off between exploration and exploitation may overlook the fluid nature of entrepreneurial practice, where demands frequently overlap, develop through ongoing iteration and unfold over changing time frames.

Despite substantial research on OA and a growing body of work on IA, the emergence and development of ambidextrous capabilities in entrepreneurial contexts remains under-theorized. Most IA studies have focused on employees or managers within structured firms, i.e. settings where formal roles, stable routines and institutional support help sustain ambidextrous behavior. Entrepreneurs, by contrast, face heightened uncertainty, limited resources and direct accountability, conditions that alter both the cognitive framing and behavioral execution of exploration–exploitation trade-offs (Guerrero, 2021; Volery et al., 2015). Treating EA merely as an extension of IA overlooks the absence of institutional support and the intensified demand for self-regulation, improvisation and adaptive coordination in early-stage entrepreneurship (Fisher, 2012). Although prior studies identify enablers of IA within firms, these are often not applicable to founder-led settings (Guerrero, 2021). As a result, current models struggle to explain how ambidextrous capabilities begin, evolve and are maintained over time in entrepreneurial practice: Guerrero (2021) suggests that EA is not just a mental asset but a survival tactic, especially during early stages

marked by shifting strategies and role plurality. Without reworking IA theory to reflect entrepreneurial realities, research on ambidexterity risks missing the core mechanisms behind venture-level adaptability and long-term survival. There is thus a clear need to conceptualize EA as a distinct, dynamic capability shaped by the interaction of individual traits, behavioral routines and external conditions. Advancing such a perspective can deepen ambidexterity theory and offer more grounded insight into how entrepreneurs adapt under constraint.

Addressing this conceptual gap is essential for laying a clearer foundation for future research on EA. Accordingly, this review synthesizes the literature on IA to clarify how its insights can inform a more context-sensitive theory of EA. Guided by social cognitive theory (SCT), which views human behavior as the result of ongoing interactions among personal traits, behavioral routines and environmental influences (Bandura, 1986; Wood & Bandura, 1989), the review synthesizes existing findings across varied domains and applies them to entrepreneurial settings.

This review makes three contributions. First, it recontextualizes empirically supported antecedents and behavioral patterns from the IA literature through a social cognitive lens, identifying how these mechanisms are likely to manifest and interact under entrepreneurial conditions. Second, it organizes the outcomes of EA into five broad dimensions of entrepreneurial success, encompassing both objective indicators (e.g. performance, growth) and subjective evaluations (e.g. satisfaction, relational embeddedness). Third, it proposes an integrative research agenda that consolidates fragmented insights

into a coherent trajectory for theorizing EA, positioning it as a distinct capability domain within entrepreneurship studies. Together, these contributions aim to advance conceptual clarity and catalyze future scholarship on how ambidexterity unfolds in founder-led, resource-constrained contexts.

The review unfolds in three steps. First, it applies a structured review methodology to identify and categorize antecedents of ambidexterity using SCT's triadic framework. Second, it synthesizes evidence on the outcomes of EA and organizes them across six dimensions of entrepreneurial success. Third, it integrates these insights into a conceptual model of EA that captures its recursive, stage-contingent and socially embedded nature. The conclusion outlines implications for future research and proposes a theory-building agenda to guide further empirical development.

Review Method and Conceptual Synthesis

This review article rests on a structured literature review methodology, drawing on the approach outlined by Tranfield et al. (2003) to systematically synthesize insights from research on IA with the aim of developing a conceptual model and research agenda for theorizing EA. While the IA literature offers valuable perspectives on how individuals reconcile exploration and exploitation within organizations, entrepreneurial contexts impose qualitatively distinct demands, namely resource scarcity, high uncertainty and personal accountability. These differences call for a recontextualization of ambidexterity as a cognitive-behavioral capability grounded in entrepreneurial agency. While

prior reviews have primarily categorized ambidexterity constructs or synthesized outcomes within firm settings (Mu et al., 2022), this review departs by reconceptualizing ambidexterity in founder-led contexts and by constructing a stage-contingent, theory-informed model tailored to entrepreneurial conditions. To guide this recontextualization, the review integrates principles from grounded theory (Scott & Glaser, 1971), especially iterative coding, constant comparison and theory construction from emergent patterns. This hybrid approach, i.e. structured review plus grounded conceptual synthesis, enables both breadth and depth: it ensures transparent coverage of the field while supporting inductive theory-building, which is critical given the fragmented state of EA research. Although traditionally used with primary data, grounded theorizing has proven effective in conceptual literature reviews where theory remains underdeveloped (Shepherd & Suddaby, 2017; Wolfswinkel et al., 2013). This review follows that precedent, treating literature as data to enable conceptual integration. The approach is particularly suitable for EA, a latent construct whose theoretical foundations are dispersed across fragmented empirical domains. The review proceeded in three stages.

First, a review protocol was defined, specifying inclusion criteria, research questions and search strategies. Peer-reviewed articles published between 2007 and 2023 were identified using academic databases (e.g. Google Scholar, Elsevier, Taylor & Francis, Wiley) and keywords designed to capture IA in entrepreneurial contexts (e.g. “individual*”, “entrepreneur*”, “ambidext*”, “exploit*”, “explor*”, “microfoundation*”). To ensure coverage of foundational

and emerging work, the search was supplemented by backward citation tracking of key reviews (Lee & Kreiser, 2018; Mu et al., 2022; Pertusa-Ortega et al., 2021). Studies were included if they presented empirical findings on IA or offered conceptually grounded insights with direct relevance to IA. Studies were excluded if they were purely speculative, lacked theoretical or empirical substance, or focused exclusively on OA. This yielded a final sample of 144 studies, comprising 117 empirical studies, 14 exploratory or qualitative studies, eight literature reviews and five conceptual papers, and covering diverse methods, industries and ambidexterity constructs.

Second, grounded coding was applied to distill conceptual categories. Open coding identified key constructs related to ambidextrous tensions, enabling conditions and behavioral outcomes. Axial coding then organized these elements into a triadic framework informed by SCT (Bandura, 1986), classifying antecedents as personal, behavioral or environmental. These three categories were chosen based on SCT's triadic reciprocal model, which states that human functioning arises from the dynamic interplay between personal factors (e.g. cognition, affect, traits), behavioral patterns (e.g. actions, routines) and environmental influences (e.g. social context, institutional structures) (Bandura, 1986; Wood & Bandura, 1989). This typology is mutually exclusive and collectively exhaustive in the sense that it enables a comprehensive and non-overlapping classification of antecedents relevant to EA. While some antecedents (e.g. interaction with environment) exhibit elements of more than one domain, each was classified according to its primary mechanism of

influence, ensuring a conceptually parsimonious mapping. By mapping the findings onto these three domains, the review adheres to a theoretically grounded precedent that ensures both parsimony and conceptual coherence. SCT was selected for its explanatory emphasis on how self-regulation, social learning and contextual feedback collectively shape adaptive behavior, i.e. mechanisms central to the entrepreneurial condition. Unlike firm-level theories of ambidexterity, SCT enables theorizing how individuals adjust behavior in response to environmental pressures, which aligns well with the EA construct.

Third, integrative coding consolidated the emergent categories into a coherent theoretical model of EA. Here, insights from adjacent theories, such as effectuation (Sarasvathy, 2001), bricolage (Baker & Nelson, 2005) and dynamic capabilities (Teece, 2007), were used to enrich contextual specificity. These theories provided interpretive lenses to assess how entrepreneurs recombine available means (effectuation), apply improvised action (bricolage) and cultivate responsive routines over time (dynamic capabilities); thereby grounding the emerging model of EA in mechanisms observable under conditions of resource constraint, improvisation and iterative learning. Importantly, the model was not pre-specified but emerged inductively from the literature, through the interplay of coding, categorization and conceptual synthesis. Patterns in how antecedents clustered and interacted across studies pointed to recursive dynamics, where entrepreneurial behaviors shaped, and were shaped by, personal agency and contextual feedback. The model further evolved as these patterns were interpreted through both SCT and entrepreneurship-specific

theories, allowing for the identification of stage-contingent logics and feedback loops as key structuring features. In this way, the model may be interpreted as a theory-informed synthesis of the literature rather than an imposed conceptual structure. It integrates empirical regularities with conceptual insight. The model serves as a structuring device for the review findings and offers a potential theoretical contribution.

State of the Literature on Individual Ambidexterity

Since its emergence as a distinct field in 2007 (Mom et al., 2007), research on IA has grown steadily, with a pronounced increase in publications since 2017 (see Figure A1). This expansion spans multiple domains but is most concentrated in management and strategy, which account for the largest share of articles (21%) and citations (26%), including eleven in FT50-ranked journals: five in management and strategy, two in marketing, two in organizational science and two in human resource management journals. Innovation and entrepreneurship outlets have also contributed, particularly during publication peaks in 2015–2016 and 2019–2020, reflecting growing interest in IA's role in shaping adaptive performance. More recently, a shift toward behavioral and social science perspectives suggests increased attention to the cognitive and relational foundations of ambidextrous action (Hanu & Khumalo, 2024; Kuntz et al., 2023). Most of the existing literature focuses on IA within employee populations, with about 60% of studies examining specific job roles or industries. These include sectors such as airlines, information technology,

healthcare and customer service. This focus reflects the key role individuals play in managing exploration and exploitation within firms, a balance seen as central to ambidextrous capability (Raisch et al., 2009). About 20% address leadership roles, with rising interest since 2020. By contrast, only 10% explicitly investigate entrepreneurial contexts, despite a growing acknowledgment that ambidexterity is critical in early-stage venturing. This imbalance underscores a persistent gap: while IA has been extensively studied within established organizations, its expression among entrepreneurs, who face heightened uncertainty, fewer resources and sole strategic responsibility, remains underexplored.

Methodologically, the field is also fragmented. While many studies adopt the classic exploration–exploitation lens (Mom et al., 2019; Rosing & Zacher, 2017), others focus on role-specific tensions, such as adaptive selling versus service delivery (Gabler et al., 2017; Jasmand et al., 2012), dynamic leadership (Mascareño et al., 2021) or knowledge-based trade-offs (Sudrajat et al., 2021). Although diverse, these studies often rely on a small number of validated instruments, most notably those by Mom et al. (2007) and Jasmand et al. (2012), which have been applied across multiple professions (see Table A1). Crucially, however, no unified measurement standard has emerged. Over the past two decades, 26 distinct measures of IA have been used, with many appearing only once or in isolated contexts. While some instruments, such as those by Mom et al. (2007) and Jasmand et al. (2012), have been adopted across multiple occupational settings, a significant proportion of newer

measures remain disconnected from prior work. This proliferation of unaligned constructs has produced a landscape of overlapping, yet non-integrated, operationalizations. As a result, the coexistence of varied approaches hinders comparability across studies and obstructs systematic theoretical accumulation. This review does not assess the measurement tools directly, but treats the reported behaviors as indicative of ambidextrous responses to paradoxical demands, enabling the identification of cross-study patterns in underlying capability formation. In entrepreneurship research, this challenge takes a distinct form, as entrepreneurs often operate without formal support structures, making ambidextrous behavior more fluid, situational and difficult to capture through standardized tools. These gaps call for an integrative framework that adapts IA insights to the entrepreneurial context. This review responds by applying SCT to reinterpret existing IA findings through a venture-stage lens. By linking established ambidextrous antecedents to dimensions of entrepreneurial success, it offers a theory-driven synthesis that clarifies how ambidexterity operates in resource-constrained, high-uncertainty environments, thereby advancing both scholarly understanding and practical relevance.

Conceptual Integration Based on Review Findings

To clarify the mechanisms through which EA unfolds in early-stage ventures, this section presents a conceptual framework that emerged inductively from the literature synthesis. The model was not pre-specified, but developed progressively through the iterative coding and categorization of

reviewed studies, guided by the triadic structure of social cognitive theory (SCT) (Bandura, 1986) (see Figure 1). SCT was initially applied to classify antecedents into personal, behavioral and environmental domains. As the review progressed, patterns across these domains, alongside venture-stage contingencies and feedback effects, revealed a more integrative structure. The resulting model is therefore a theory-informed synthesis, grounded in empirical regularities from the IA literature and interpreted through an SCT lens. Rather than treating EA as a fixed trait or linear outcome, the model conceptualizes it as an emergent capacity shaped by the dynamic interaction of cognition, behavior and environmental context. This conceptualization emerged not from theoretical deduction, but from the structured aggregation of antecedents and outcomes identified across studies. The SCT lens helps explain how entrepreneurs may learn to balance competing demands by interpreting environmental cues, regulating actions and adapting through feedback. This dynamic is particularly relevant in early-stage contexts marked by uncertainty and constraint.

Drawing from these synthesized findings, the model organizes EA's determinants into three analytically distinct domains: (1) personal attributes such as resilience, cognitive adaptability and motivation; (2) behavioral routines including risk modulation, goal-setting and feedback integration; and (3) environmental contingencies such as venture stage, social capital and institutional context. While the review treated these categories independently, SCT's triadic logic implies that they interact recursively over time. For example,

repeated investor rejection may prompt revised pitch strategies (behavior), which in turn may enhance self-efficacy (personal) and generate trust (environmental). These types of dynamics were not empirically coded in the review but are conceptually plausible within the SCT framework. On this basis, the model offers a lens through which EA can be understood as a developmental response to entrepreneurial conditions. A central feature emerging from the literature is the influence of the venture life cycle on ambidextrous functioning. Rather than serving as a contextual modifier, venture stage constitutes a structural principle that conditions how exploration and exploitation are prioritized, coordinated and rebalanced over time. In early phases, exploration prevails as entrepreneurs experiment and search for scalable models. In later stages, exploitation becomes more prominent as routines stabilize and efficiency takes precedence. The timing and completeness of this transition remain open empirical questions. Crucially, this shift is not linear; micro-level adjustments between the two logics occur within each stage, requiring real-time calibration. The model also broadens the view of outcomes.

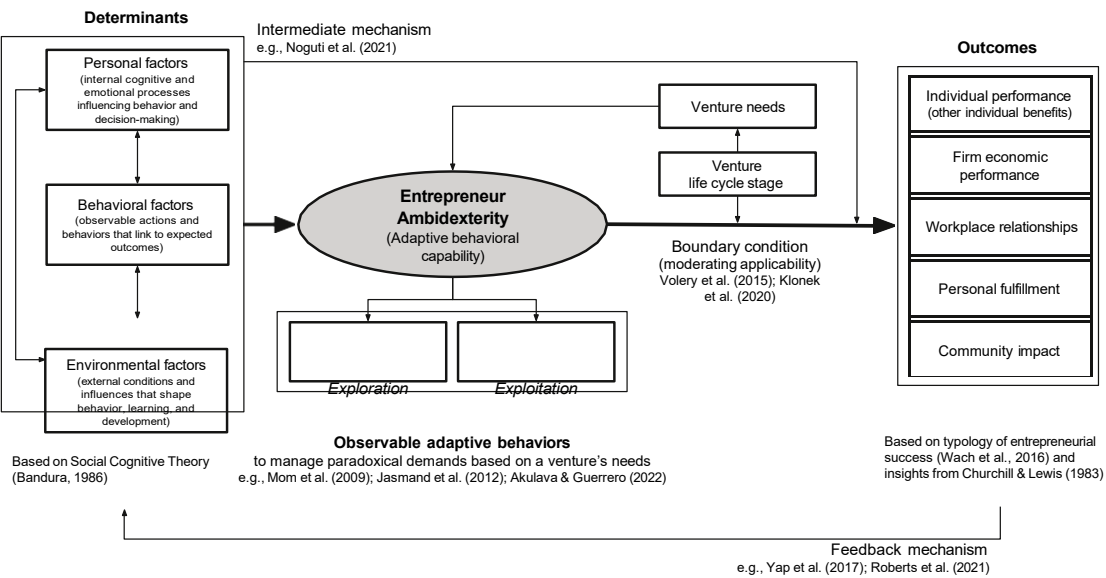
Drawing on Wach et al. (2016) and Churchill & Lewis (1983), it includes both tangible results (e.g. profitability, growth) and intangible, socially constructed outcomes such as perceived competence, flexibility and reliability. These perceptions are critical in early-stage ventures, where stakeholder interpretations shape access to resources and influence how entrepreneurs behave. In turn, these behaviors may reinforce motivation and inform future

actions, creating feedback loops over time (Yap et al. 2017; Roberts et al. 2021). Because EA is latent and context-dependent, it typically does not appear as a discrete trait but is inferred from action patterns, adaptive routines or interpersonal learning cues. These signals serve as interpretive triggers for external stakeholders, shaping how ambidextrous potential is perceived. Rather than being imposed as a conceptual framework in advance, the model developed through the integration of personal, behavioral and environmental factors surfaced across the reviewed studies. It aligns SCT's explanatory structure with the empirical complexity of early-stage venturing, offering a foundation for theorizing how ambidextrous capacities are cultivated, enacted and recognized under conditions of uncertainty.

At the same time, the model is bounded by several contextual and conceptual constraints that delimit its applicability. First, it is tailored to early-stage, founder-led ventures operating under uncertainty; its assumptions may not extend to later-stage firms where role differentiation, hierarchical coordination and routinized processes dominate (O'Reilly & Tushman, 2013; Teece, 2007). Second, the triadic framing, while integrative, may obscure alternative mechanisms emphasized in adjacent perspectives. For example, dynamic capabilities theory prioritizes routinized adaptation and strategic renewal (Teece, 2007), while effectuation theory stresses non-predictive control and goal ambiguity under uncertainty (Sarasvathy, 2001). Third, although SCT posits reciprocal determinism among cognition, behavior and environment (Bandura, 1986), this review analyzed antecedents and outcomes largely in

isolation, given the structure of available empirical evidence. As such, the feedback loops embedded in the model are conceptually grounded but remain empirically underexplored. These boundaries should caution against overgeneralization and clarify the model's scope as a theory-proposition awaiting empirical elaboration.

Figure 1
Social Cognitive Model of Entrepreneur Ambidexterity



Synthesized Determinants of Entrepreneur Ambidexterity

This section synthesizes empirical evidence on the determinants of IA relevant to entrepreneurs. It draws from 117 empirical studies, 77 of which specifically examine antecedent conditions (see Table A2). These determinants are organized according to SCT's tripartite framework, distinguishing (I) personal, (II) behavioral and (III) environmental factors. Among personal factors, three foundational mechanisms are identified—motivation (18 studies), self-efficacy (16 studies) and cognitive processes (30 studies)—with two studies addressing other personal determinants. Behavioral factors are examined in three studies, while environmental factors are supported by 65 studies, further clustered into social (47), cultural (10) and institutional (27) environments. Determinants were grouped using axial coding based on conceptual similarity, recurrence and consistency with SCT's agentic model. At the lowest level, individual determinants such as psychological ownership, empowerment or opportunity recognition reflect the constructs examined. Each determinant is evaluated for its positive, negative or conditional effect on EA. The analysis provides a structured synthesis of how individual-level conditions enable or constrain ambidextrous behavior in entrepreneurial contexts. While the reviewed studies span diverse settings, their findings are interpreted as context-specific expressions of the broader challenge of balancing exploration and exploitation. For example, a shop-floor attendant may need to customize a software package to client needs while adhering to standardized service procedures, an ambidextrous demand that mirrors tensions faced by

entrepreneurs. In entrepreneurial contexts, these tensions become more complex. Early-stage entrepreneurs face concurrent and conflicting demands—such as innovation, efficiency, growth and legitimacy—that unfold within compressed timeframes and fall entirely on the same individual. This co-occurrence intensifies the need for ambidextrous functioning, making the entrepreneur-in-startup combination a uniquely demanding locus of adaptive tension. Rather than a static trade-off, EA is best seen as a dynamic capability, allowing entrepreneurs to manage and respond to multiple pressures simultaneously. This view is grounded in the convergence of key conditions: the simultaneity of competing demands, time compression in early decision-making and concentrated responsibility. Although many antecedents of ambidexterity have been examined in broader organizational contexts, applying them to entrepreneurs requires attention to the distinct mental and behavioral strategies they deploy. Theories such as effectuation (Sarasvathy, 2001) and bricolage (Baker & Nelson, 2005) offer conceptual grounding for understanding EA under constraint. Effectuation emphasizes starting with available means and adjusting goals through feedback rather than following preset plans, a logic suited to early-stage adaptation. Bricolage complements this by highlighting improvised problem-solving, where resources are creatively recombined to meet emerging challenges. Both perspectives underscore adaptive agency under uncertainty and help explain how ambidextrous behaviors emerge not despite volatility, but because of it.

Personal Factors

In the context of SCT, personal factors refer to the internal cognitive and emotional processes that shape how entrepreneurs make decisions and regulate their behavior under uncertainty (Bandura, 1986). These include motivational orientation, self-efficacy, cognitive flexibility, emotional regulation and self-directed learning. Unlike fixed traits, these factors are dynamic and interact continuously with external conditions, enabling entrepreneurs to shift between explorative and exploitative behavior as circumstances evolve.

A total of 18 articles reported 19 distinct motivational constructs linked to ambidextrous behavior. Motivation may play a central role in enabling EA, as it channels the entrepreneur's effort toward managing dual goals. Action-oriented motivation, such as personal initiative, fosters opportunity seeking while reinforcing execution and process improvement (Jasmand et al., 2012; Sok et al., 2016). Intrinsic motivation, grounded in commitment to the venture's mission, helps entrepreneurs remain engaged with both innovation and operational demands, even in the absence of immediate external rewards (Caniëls et al., 2017; Kao & Chen, 2016). Extrinsically driven motivation, such as the desire to demonstrate competence or gain recognition, supports ambidexterity when explorative efforts align with measurable outcomes (Xiang et al., 2019). Psychological ownership also influences goal prioritization: task-focused ownership reinforces exploitation, while venture stewardship supports long-term innovation (Lee & Kim, 2021). Learning goal orientation strengthens this foundation by sustaining persistence across shifting demands

(Awan et al., 2022; Choi & Kessler, 2022). These motivational drivers help entrepreneurs treat exploration and exploitation as interdependent goals within the same strategic frame.

Some 16 articles identified self-efficacy as a relevant antecedent to ambidextrous functioning. Self-efficacy, defined as belief in one's capability to act effectively in uncertain conditions, is a foundational personal resource for maintaining ambidextrous behavior (Bandura, 1997). Entrepreneurs with high self-efficacy are more likely to interpret volatility as an opportunity rather than a constraint, and to engage in iterative learning when facing competing demands (Kauppila & Tempelaar, 2016; Yen et al., 2022). According to SCT, self-efficacy is shaped by four primary sources: mastery experience, observational learning, social persuasion and emotional state. Prior success reinforces confidence in balancing efforts, while observing peers and mentors handling ambidextrous challenges increases perceived attainability (Chang et al., 2019; Scheepers et al., 2017). Positive affect strengthens confidence, whereas prolonged stress may erode it. Serial entrepreneurs and those embedded in resource-rich ecosystems often exhibit higher self-efficacy, enabling them to shift more fluidly between exploration and exploitation. This recursive process, where ambidextrous behavior reinforces self-efficacy, supports EA persistence over time.

In total, 30 articles emphasized cognitive processes as key enablers of ambidextrous behavior. Cognitive processes influence how entrepreneurs frame problems, regulate attention and deploy resources when managing dual

demands. Prominent mechanisms include cognitive appraisal, emotional regulation, resilience and attention control (Boz Semerci, 2022; Luu, 2022; Zhang et al., 2022). For instance, entrepreneurs who appraise uncertainty as a challenge rather than a threat are more likely to persist (Bandura, 1986; Zhang et al., 2019). Emotional regulation supports composure in decision-making, while resilience promotes recovery from adversity, reinforcing cognitive endurance. Entrepreneurs frequently use effectual reasoning to repurpose means toward evolving goals (Sarasvathy, 2001), and bricolage enables creative recombination of scarce resources (Baker & Nelson, 2005). These practices reflect cognitive flexibility that facilitates switching between innovation and execution. Other enablers include absorptive capacity, learning orientation and reflective thinking, which enhance knowledge transfer across exploratory and exploitative contexts (Lee & Lee, 2016; Schweisfurth et al., 2020). Traits such as assessment versus locomotion orientation (Caniëls & van Assen, 2019; Kraus et al., 2019), perspective-taking (Luu, 2022) and paradoxical thinking (Kuntz et al., 2023) may also support ambidextrous cognition, though further work is needed to clarify their scope. These internal conditions form the psychological foundation upon which ambidextrous behavior is built, even as they require concrete enactment in practice.

Behavioral Factors

Behavioral factors represent the observable actions through which EA is enacted. These behaviors translate cognitive capacities into visible practices

that allow entrepreneurs to manage the tension between exploration and exploitation. In SCT, behavior is viewed as intentional action shaped by expectations, self-monitoring and context (Bandura, 1986). Especially in early-stage ventures, behavior serves as a key signal of ambidextrous orientation. Three articles identified four core behavioral mechanisms in entrepreneurial contexts: (1) behavioral integration, (2) risk-taking, (3) resource-seeking and (4) cognitive demand-reduction. These interdependent routines support ambidextrous functioning in resource-constrained environments. SCT highlights how such behaviors develop through social learning, reinforcement and regulatory routines (Locke & Latham, 2002; Schunk, 1989). Entrepreneurs adopt and refine behavioral scripts through feedback and role modeling, forming adaptive repertoires over time (Bandura, 1991). Behavioral integration refers to coordinated interaction across roles and networks. In early-stage ventures, it emerges through collaboration among co-founders, advisors and early employees, fostering alignment and enabling dual focus (Ensley et al., 2006; Li et al., 2015). Risk-taking reflects a calibrated willingness to pursue uncertain opportunities while protecting core operations (Kraus et al., 2019; Li et al., 2015). Resource-seeking entails proactively acquiring inputs to support innovation and execution, often through bricolage (Baker & Nelson, 2005; Luu, 2022). Cognitive demand-reduction involves limiting or outsourcing tasks to preserve focus on strategic priorities (Luu, 2022). Together, these mechanisms form the action-oriented dimension of EA. They enable entrepreneurs to operationalize ambidextrous intent and sustain

agility under uncertainty. While behavioral mechanisms translate cognition into action, they do not operate in isolation; the entrepreneur's environment plays an equally formative role in shaping EA.

Environmental Factors

Within SCT, environmental factors refer to the external conditions that shape individual behavior, influence learning and affect the ability to adapt (Bandura, 1986). In entrepreneurial contexts, these include social, cultural and institutional dimensions, each shaping how ambidextrous behavior is developed, sustained and expressed. Rather than acting as background conditions, environmental influences continuously shape how entrepreneurs perceive opportunities (Mom et al., 2009), regulate action and adapt behavior (Salas Vallina et al., 2019). This dynamic interplay suggests that EA is not merely trait-driven but emerges through alignment between the individual and their context. Across 73 reviewed papers identifying 134 distinct antecedents classified as environmental factors, three categories of influence were consistently found to matter: (1) the structure and strength of social networks, (2) the normative and emotional tone of cultural settings and (3) the institutional architecture governing entrepreneurial behavior.

First, social embeddedness expands access to informational, emotional and strategic resources. Diverse networks enable cognitive diversity and real-time feedback, both essential for ambidextrous functioning (Greve & Salaff, 2003; Hoang & Antoncic, 2003). Ties to peers, mentors and advisors help

entrepreneurs reframe problems, test assumptions and integrate external insight (Mom et al., 2009; Rogan & Mors, 2014). Where formal infrastructure is limited, these relationships offer substitute support systems ranging from moral encouragement to domain-specific advice. Studies show that entrepreneurs embedded in mentorship ecosystems are more likely to maintain dual focus and recover from failure (Keller & Weibler, 2015; Yap et al., 2020). Similarly, co-founder ties and partnerships facilitate shared learning and problem-solving (Chang et al., 2019; Karani et al., 2022). Ecosystems such as incubators and accelerators institutionalize such benefits by offering structured access to feedback, experimentation and collaborative adaptation (Mom et al., 2019; Yen et al., 2022).

Second, the cultural environment influences whether ambidextrous behavior is supported or inhibited. Cultures promoting learning, autonomy and shared purpose provide fertile ground for EA. For example, adhocracy cultures marked by creativity and flexibility legitimize risk-taking and experimentation (Ajayi et al., 2017). Clan cultures, which emphasize collaboration and internal cohesion, help embed exploitative routines through trust and role clarity. These effects are pronounced in early-stage or family-run ventures where rules are informal. Empowerment-oriented cultures promote self-regulation by encouraging psychological ownership (Caniëls et al., 2017). Conversely, conformity-driven cultures or those that penalize failure may discourage experimentation and risk-adjusted adaptation (Yen et al., 2022). In such environments, entrepreneurs may avoid exploration in favor of narrow

exploitation to protect reputation. Thus, culture acts as both enabler and constraint by shaping what forms of ambidextrous action are perceived as legitimate.

Third, institutional conditions set the structural parameters for entrepreneurial choice. Macroeconomic stability, access to capital and regulatory clarity influence whether entrepreneurs invest in innovation or revert to operational conservatism (Good & Michel, 2013; Zhang et al., 2022). EA is often activated in volatile markets as a resilience mechanism that likely enables pivoting between exploration and efficiency (Pietsch et al., 2022; Yap et al., 2020). Institutional support systems, such as infrastructure, training programs and targeted subsidies, enhance confidence and promote adaptive routines (Ma et al., 2023). Incentives that reward outcomes rather than processes also reinforce EA, particularly in lean, team-based ventures where agility is vital (Ijigu et al., 2023; Li et al., 2015). Organizational design mediates these effects: decentralized, outcome-focused structures with rapid feedback loops facilitate ambidexterity, while centralized hierarchies tend to constrain it (Ahmad, Liu, & Irfan, 2022; Tempelaar & Rosenkranz, 2019). Shared decision-making and cross-functional coordination support the balancing of dual logics, whereas rigid systems inhibit discretion and slow adaptive response (Boemelburg et al., 2022; Iqbal et al., 2022). With this account of antecedents and contextual conditions in place, I now shift focus to the consequences of EA across key dimensions of entrepreneurial success.

Linking to Review-Based Outcomes of Entrepreneur Ambidexterity

This section examines the consequences of IA by synthesizing evidence from 74 empirical studies that investigate how ambidextrous behavior influences entrepreneurial success (see Table A3). Outcomes are organized into five domains adapted from Wach et al. (2016) and Churchill & Lewis (1983): (I) individual performance (35 studies), (II) firm economic performance (27 studies), (III) workplace relationships (nine studies), (IV) personal fulfillment (seven studies) and (V) community impact (one study). Within each domain, multiple outcome variables are examined, such as emotional exhaustion, sales revenue growth or organizational resilience. Unlike the antecedent framework, outcomes are not clustered by mechanism but structured as two-level hierarchies: domain and outcome variable. This synthesis identifies how EA contributes to success at individual, venture and relational levels, while also considering trade-offs or contextual boundaries that may limit its positive effects. Taken together, the studies suggest that ambidextrous capabilities underpin a broad range of entrepreneurial success indicators. Success is conceptualized as multidimensional, encompassing financial results, business growth, personal satisfaction, team relationships and broader community contributions (Wach et al., 2016). This perspective reflects the diversity of goals pursued by entrepreneurs, particularly in early-stage or resource-constrained settings, where long-term adaptability may take precedence over immediate profit. These findings align with theories in entrepreneurship that emphasize flexibility, continuous learning and resilience. In particular, the dynamic capabilities

perspective (Teece, 2007) highlights how entrepreneurs develop routines that enable resource reconfiguration in response to change. From this view, ambidextrous behavior functions as a micro-foundation of adaptability, allowing entrepreneurs to pursue innovation while maintaining operational control. The reverse dynamic—where capabilities support ambidextrous behavior—is also plausible and addressed in the discussion. Rather than a static trade-off, ambidexterity operates as an adaptive logic that likely enables entrepreneurs to integrate exploration and exploitation in pursuit of sustained viability. Through this integration, EA contributes not only to financial outcomes but also to strategic renewal and long-term resilience. While the exploration-exploitation dichotomy remains a useful heuristic, early-stage entrepreneurship often involves overlapping, shifting goals that cannot be neatly phased. Success depends on the entrepreneur's ability to navigate these tensions simultaneously and adjust across internal operations and external conditions. In this sense, the outcomes of EA reflect a broader capacity to adapt, sustain and grow ventures.

Individual Performance

A total of 35 empirical studies report 28 outcome variables of IA linked to individual performance, many of which are particularly relevant in entrepreneurial contexts. Ambidextrous behavior enhances resilience, knowledge integration, opportunity recognition and perceived competence, all of which are core capacities for navigating uncertainty. EA may foster resilience by strengthening adaptability, a foundational requirement in volatile,

resource-constrained settings (Hanu & Khumalo, 2024). Entrepreneurs who balance innovation and execution are better equipped to manage shifting demands and absorb shocks (Mom et al., 2015), although such dual engagement imposes cognitive strain and may lead to emotional exhaustion if unregulated (Agnihotri et al., 2017; Amenuvor et al., 2023). The capacity to align explorative initiatives with exploitative control also enhances decision agility, enabling swift, well-calibrated responses to emerging opportunities (Alghamdi, 2018; Sarasvathy, 2001). EA appears to support the integration of internal and external knowledge, a critical resource in dynamic environments (Vidgen et al., 2011). However, empirical evidence suggests a curvilinear relationship: moderate ambidexterity promotes opportunity recognition, while excessive balancing may overload cognitive bandwidth and reduce clarity (Chang et al., 2024; Roberts et al., 2021). Entrepreneurs who modulate their ambidextrous engagement while avoiding both rigidity and fragmentation are more likely to sustain directional coherence (Kobarg et al., 2017). Finally, EA strengthens external signaling. Entrepreneurs who manage innovation and operational control simultaneously may convey strategic agility and executional discipline, qualities valued by investors and stakeholders in early-stage ventures (Noguti et al., 2022).

Firm Economic Performance

This review identifies 27 empirical studies reporting 31 outcomes of IA linked to firm-level economic performance. This includes both financial returns

and growth indicators such as revenue increases, customer acquisition and market share (Wach et al., 2016). Entrepreneurs who exhibit ambidextrous behavior may be more likely to build financially resilient ventures capable of sustaining performance and growth under changing conditions. By aligning opportunity-seeking with effective execution, ambidextrous entrepreneurs support both immediate cash flow and long-term positioning (Sok & O’Cass, 2015a). Empirical evidence suggests that ventures combining innovation with efficient delivery are more likely to attract and retain customers, leading to stable revenue streams (Yap et al., 2020). This integration also enhances strategic agility, enabling entrepreneurs to adjust rapidly to shifting market demands while preserving a coherent value proposition (Wahyudi et al., 2022). In service-based industries, EA supports revenue growth by enabling consistent delivery alongside responsiveness and novelty (Gabler et al., 2017; Jasmand et al., 2012). EA further strengthens operational efficiency. Entrepreneurs who integrate exploratory learning with exploitative refinement make better-informed decisions that reduce waste and enhance returns (Schnellbacher et al., 2019). This dual orientation promotes resource allocation toward high-impact activities and supports continuous improvement through feedback (Mom et al., 2019). Particularly in early-stage ventures, lean structures and flexible role configurations amplify these benefits, fostering both responsiveness and stability (Luu, 2017a). Thus, EA may enable ventures to pursue long-term growth while remaining adaptive under constraint.

Workplace Relationships

This review identifies nine empirical studies that examine outcome variables of IA linked to workplace relationships. Ambidextrous entrepreneurs build stronger interpersonal ties by balancing personalized customer interaction with collaborative, adaptive work environments. EA improves customer satisfaction by enabling entrepreneurs to deliver offerings that are both innovative and reliable. Those who balance exploration and exploitation can quickly respond to feedback, tailoring products and services to meet evolving expectations (Tung, 2016). This responsiveness fosters trust and loyalty by positioning the venture as both agile and dependable, particularly in competitive markets. In early-stage ventures, such ambidextrous responsiveness supports both short-term customer retention and long-term strategic positioning (Akulava & Guerrero, 2023). Internally, EA contributes to work cultures that value creativity and operational discipline. Leaders who model ambidexterity promote flexible coordination and motivate team members to engage in both idea generation and execution (Duan et al., 2021; Luu et al., 2018). This dual orientation reinforces shared responsibility and adaptive collaboration, especially in contexts where formal systems are limited (Keller & Weibler, 2015; Zacher et al., 2016). By integrating exploration and exploitation in their stakeholder relationships, ambidextrous entrepreneurs establish a foundation of trust, experimentation and shared purpose, i.e. core drivers of team success in volatile environments.

Personal Fulfillment

This review identifies seven empirical studies examining eight distinct outcome variables of IA linked to personal fulfillment, with specific attention to entrepreneurial settings. The evidence suggests that ambidextrous entrepreneurs who balance creative and operational tasks often experience a deeper sense of purpose, sustained motivation and continued personal growth. These outcomes result from combining diverse responsibilities, which creates a more meaningful link between daily work and long-term goals. By blending innovation with structure, ambidextrous entrepreneurs avoid monotony while staying strategically focused. This balance supports a stimulating work environment where entrepreneurs address varied challenges aligned with personal values and venture ambitions, promoting a greater sense of achievement (Lee & Lee, 2016). Aligning day-to-day activity with broader purpose strengthens intrinsic motivation, deepens engagement and supports long-term resilience (Slåtten, Mutonyi, Nordli, et al., 2023). EA also promotes continuous learning by requiring entrepreneurs to adapt and grow across multiple domains (Da'as, 2023). This learning process strengthens authenticity, as entrepreneurial work increasingly reflects personal commitments to persistence, adaptability and meaningful contribution. Entrepreneurs who maintain this balance tend to report higher levels of engagement and reduced burnout, as their efforts feel both purposeful and sustainable (Kusanke & Winkler, 2023). In this way, the integration of creative exploration and disciplined execution appears to enable ambidextrous entrepreneurs to cultivate

a sustained sense of fulfillment, reinforcing their psychological resilience and emotional well-being through the ongoing practice of balancing novelty with continuity.

Community Impact

Only one study directly explores the link between EA and community impact. Zheng et al. (2020) examine how ambidextrous behavior shapes social entrepreneurship, where financial and social objectives must be reconciled. Their findings suggest that entrepreneurs who balance profit and purpose are more effective in addressing community needs. By aligning business practices with local values, these entrepreneurs build trust and reputational capital. This dynamic may be especially relevant in emerging domains such as the circular economy, where ecological, social and economic goals intersect.

Conclusions and Avenues for Future Research

Findings and their Theoretical Contribution

This review may contribute to reconfiguring the understanding of EA. Rather than conceptualizing ambidexterity as a fixed individual disposition or context-bound behavior, the study frames EA as an emergent capability shaped over time through situated learning, behavioral adjustment and interpretive flexibility. Drawing on SCT, the proposed model seeks to explain how entrepreneurs may sustain and adjust ambidextrous functioning over time through a recursive alignment between internal regulation and environmental

conditions. In contrast to IA, which has been predominantly examined in stable organizational contexts with formal support systems, EA emerges as a response to the uncertainty, role multiplicity and personal accountability typical of founder-led ventures. Whereas IA unfolds in relatively predictable environments characterized by structural clarity and resource buffers, EA emerges in dynamic, ambiguous contexts that demand constant adjustment, shifting theoretical attention from structurally bounded role occupants in established organizations to entrepreneurs navigating uncertainty and resource constraints. The study makes three contributions. First, it challenges the view of ambidexterity as a static trade-off and instead conceptualizes it as a dynamic skillset cultivated through continuous interaction between cognition, behavior and context. Second, it introduces a structured yet adaptable model that synthesizes widely dispersed IA findings into a coherent framework tailored to entrepreneurial practice, thereby enhancing conceptual clarity in a fragmented field. Third, it expands the range of relevant EA outcomes beyond financial performance to include subjective and relational indicators of entrepreneurial success, emphasizing how ambidextrous behavior influences not only what ventures accomplish but also how entrepreneurs persevere. In doing so, the review positions EA as a potentially important mechanism of resilience and adaptability under constraint, offering new entry points for empirical research on entrepreneurial effectiveness in volatile settings. These I discuss next.

Future Research Avenues

The following agenda highlights (1) temporal, (2) behavioral, (3) personal, (4) environmental, (5) moderating and (6) instrumental research pathways to deepen our understanding of EA and its role in venture success.

First, scholars can research the short- and long-term impact of EA on firm performance and survival. Although EA has been linked to performance outcomes such as growth, efficiency and adaptability (Hanu & Khumalo, 2024; Lam et al., 2019; Schnellbacher et al., 2019), the specific effects on survival, long-term profitability and strategic positioning remain underexplored. In early phases of venture development, exploration may take precedence as entrepreneurs test and refine ideas; in later stages, exploitation often becomes more central for scaling operations and achieving efficiency. Empirical studies should investigate how EA influences both financial and non-financial performance over time, and under which conditions it becomes a sustained competitive advantage. In particular, the interaction between EA and other entrepreneurial capabilities, such as opportunity recognition, resource coordination and stakeholder management, deserves systematic longitudinal study. Researchers should also examine whether past setbacks, including failure, enhance resilience and strengthen ambidextrous competence. Mixed-method approaches could clarify how entrepreneurs recalibrate behavior through reflective learning and emotional recovery, shaping strategic behavior iteratively rather than linearly. Given that early-stage ventures often operate under resource constraints, research should examine whether EA supports not

just short-term adaptation but also longer-term viability. Configurational and longitudinal methods, such as qualitative comparative analysis or latent class growth models, could help identify the conditions under which EA contributes to sustained success, particularly when mediated or moderated by other capabilities.

Second, exploring the interplay and effects of behavioral dynamics and reinforcement is promising. While SCT highlights goal-setting, self-monitoring and reinforcement as important behavioral mechanisms (Bandura, 1986), their specific influence on EA remains insufficiently understood. Entrepreneurs must define layered behavioral goals that address both innovation and operational needs. Research should examine how such behavioral goals are designed, ordered and revised over time to handle competing pressures. Self-monitoring likely enables ongoing adjustment between exploration and exploitation, but its prevalence and impact on learning or persistence require further study. Researchers could also examine how feedback loops, both internal or external, influence behavioral self-regulation in ambidextrous settings. Reinforcement strategies (e.g. self-acknowledgement, peer feedback) may play a role in maintaining motivation during periods of ambiguity. Behavioral modeling is another promising area. Entrepreneurs often replicate behaviors observed in mentors or peers (Lieberman & Asaba, 2006). Studies could investigate how role model exposure, particularly within incubators or peer networks, shapes behavioral routines. Case studies or network analyses may uncover how EA becomes embedded in shared norms and practices.

Third, exploring the effects and interplay of additional personal factors and cognitive processes promises new insights. This review highlights self-efficacy, cognitive flexibility and resilience as central antecedents of EA (Klonek et al., 2021; Ma et al., 2023; Wójcik & Ciszewska-Mlinarič, 2020). Yet several mechanisms remain underdeveloped. Motivation, in particular, warrants closer examination; not just what fosters ambidexterity, but also what undermines it. Entrepreneurs may face motivational fatigue due to persistent bootstrapping, investor demands or ambiguous feedback. Future studies could examine how changes in perceived agency or venture identity affect motivational endurance under ambidextrous pressure. Cognitive resources such as resilience and emotional regulation also merit deeper investigation. In addition, the relationship between personal dispositions and contextual fit deserves more focus. EA may be more effective when an entrepreneur's internal traits, such as adaptability, align with external demands. Future work could explore these fit dynamics, asking when and for whom EA becomes a practical and effective strategy. This includes examining whether a cognitively flexible founder performs differently in loosely structured versus highly guided environments, and how this alignment shapes the utility of EA in practice.

Fourth, I invite scholars to consider the contingencies of environmental and contextual variables. Venture attributes, including age, size and strategic focus, are likely to influence how EA is expressed and how effective it becomes. External forces, such as institutional support, investor expectations or access to peer groups, also affect EA. Entrepreneurial ecosystems may support

ambidexterity by offering opportunities to experiment while also providing executional resources. Comparative studies of incubated and non-incubated ventures may show how such environments help or hinder EA. Future studies could compare how EA functions across industries with varying levels of dynamism and uncertainty. For instance, market volatility, technological change or institutional complexity may alter the optimal balance between exploration and exploitation. Sector-specific inquiries (e.g. fintech, green tech) could clarify the boundary conditions under which EA contributes to entrepreneurial success.

Fifth, the development of a dedicated instrument to measure ambidextrous capability would help the field move forward. Because SCT conceptualizes human agency as the result of reciprocal interactions between cognition, behavior and environmental context (Bandura, 1986), it offers a theoretically robust foundation for developing multi-dimensional measures of EA. Current ambidexterity measures tend to emphasize observable behavior while overlooking deeper cognitive and contextual foundations (Mom et al., 2015). This limits theoretical development and practical application alike. There is a need for validated tools, grounded in SCT, that assess ambidextrous capability across personal, behavioral and environmental dimensions. Such tools should include indicators for self-efficacy, resilience and social support, along with items that assess how entrepreneurs set goals, monitor progress and respond to their environment. Longitudinal validation would help determine how these capabilities evolve through repeated entrepreneurial activity. Structural equation modeling, cross-lagged panel analysis and latent growth modeling

could be used to test dynamic models of EA. A validated SCT-based scale could benefit both researchers and practitioners, for example, by allowing support organizations to assess an entrepreneur's readiness and design targeted interventions. It could also capture how feedback loops reinforce belief systems and guide future behavior, yielding a richer understanding of how ambidextrous capacity develops. This sets the stage for future empirical and theoretical work on ambidextrous capability formation in entrepreneurial contexts.

Practical Implications

This research provides actionable insights for entrepreneurs, investors and policymakers by locating EA within a dynamic social cognitive framework. For entrepreneurs, the findings suggest that ambidexterity must be cultivated deliberately. Strengthening self-efficacy, resilience and cognitive flexibility is essential, as these dispositions enable entrepreneurs to interpret uncertainty as opportunity and shift effectively between innovation and execution. At the behavioral level, routines such as goal-setting, self-monitoring and strategic reflection help sustain dual-task engagement, particularly under pressure. Social and institutional networks provide enabling infrastructure for these efforts, offering feedback, resources and peer learning that reinforce ambidextrous action. Entrepreneurs are encouraged to align their ambidextrous focus with venture development stages, placing greater emphasis on exploration during early-stage experimentation and pivoting toward exploitation

as ventures scale. This transition should be supported through team design, i.e. founders may prioritize exploratory skills early on, then recruit operational talent as execution demands grow. Given that excessive ambidexterity can lead to cognitive strain, entrepreneurs must learn to recalibrate their balance based on context, capacity and feedback. EA should thus be understood as an evolving capability that supports not just immediate adaptability but long-term viability.

For investors, this study offers a framework to more systematically evaluate an entrepreneur's adaptive potential. Rather than treating ambidexterity as a black-box outcome, the model disaggregates it into foundational determinants that together underpin the capacity to manage innovation and execution under uncertainty. These findings suggest that investors could benefit from assessing not just pitch quality or financial projections, but also the presence of enabling personal dispositions and self-regulatory behaviors. Standardized diagnostic tools, structured founder interviews or scenario-based assessments could help surface these latent capabilities during due diligence. Moreover, the model identifies specific environmental enablers such as social networks, feedback-rich ecosystems and mentorship that investors may help activate through their own engagement. By mapping support to the entrepreneur's developmental needs, investors can strengthen ambidextrous capacity over time and increase the likelihood of sustainable venture performance.

Policymakers can reinforce EA by fostering ecosystems that strengthen its personal, behavioral and contextual foundations. Effective support structures

include funding models that reward both novelty and delivery, incubators that encourage collaborative learning, and mentoring platforms that build both cognitive and emotional capacities. Regulatory flexibility that enables experimentation further helps entrepreneurs cope with uncertainty. By acknowledging that EA evolves over time and varies by context, policymakers can design interventions that strengthen not only venture creation, but the development of resilient and adaptive entrepreneurial systems.

Limitations

Despite its comprehensive approach and careful delivery, this review faces several limitations, primarily due to the heterogeneity of IA research and the limited availability of studies directly addressing EA. First, IA research spans diverse roles, industries and task profiles, making it difficult to extract insights that clearly apply to entrepreneurial contexts. Much of this literature focuses on observable behavior, such as shifting between exploration and exploitation, without fully considering the cognitive mechanisms that sustain ambidexterity under conditions of uncertainty and constraint. Moreover, most IA studies are situated in structured organizational environments, where formal systems support individual roles. This differs markedly from entrepreneurial contexts, where founders operate autonomously, juggle multiple responsibilities and adapt continuously. Applying IA findings to entrepreneurship therefore requires interpretive inference and may understate the distinct challenges entrepreneurs face.

A second limitation concerns the reliance on IA literature as an indirect proxy for EA evidence. While theoretically defensible, this approach raises concerns about contextual fit. It remains uncertain which ambidextrous tensions are most relevant for entrepreneurs, or whether EA supports all forms of ambidextrous activity equally. Without more conceptual clarity in this regard, it is difficult to interpret or predict variability in outcomes.

Third, the review also does not fully consider how specific contextual features, such as family ownership or external investor control, influence ambidextrous behavior. For example, family firms may prioritize continuity over innovation, while ventures backed by external capital may face pressure to scale rapidly. These factors could shape how exploration and exploitation are prioritized, with implications for the model's generalizability.

Finally, this review is constrained by the conceptual boundaries of the existing IA literature. Although exploration and exploitation are commonly measured using validated instruments, most notably Mom et al. (2007), these operationalizations tend to emphasize observable behavioral variety while overlooking cognitive and contextual foundations. This behavioral focus constrains the field's ability to account for deeper psychological mechanisms or environmental contingencies. While this review adopts a grounded approach to develop a theory-informed model of EA, it remains reliant on secondary data and interpretive synthesis. Future research should work toward validated multidimensional measures that reflect the SCT-based interplay of personal, behavioral and environmental determinants. Such tools would not only enhance

construct validity, but also enable more nuanced theorizing about how ambidexterity unfolds in early-stage, resource-constrained environments.

Conclusion

This review contributes to the understanding of EA by synthesizing empirical findings through the lens of SCT. Rather than viewing ambidexterity as a fixed trait or organizational artifact, the SCT-based model presented here conceptualizes EA as a capacity developed over time through ongoing interaction between thought, behavior and environment. By organizing the antecedents and expressions of EA into personal, behavioral and contextual domains, the review offers a perspective on how entrepreneurs may manage exploration and exploitation amid uncertainty and pressure. The model helps reframe EA as a learning-oriented, dynamic capability that adapts with venture stage, experience and environmental complexity. In doing so, it shifts the focus away from static antecedents and toward regulatory processes that drive adaptive behavior. While the model foregrounds EA as an emergent capability shaped by the interplay of cognition, behavior and environment, it remains possible that dynamic capabilities themselves are reinforced or even preceded by ambidextrous practice. This raises important questions about temporal ordering and feedback, i.e. whether ambidexterity serves as a micro-foundation of adaptability, or whether adaptive capacity supports ambidextrous behavior. Future empirical work should examine this reciprocal relationship more closely to clarify causal pathways. Based on this synthesis, the proposed research

agenda identifies key areas for conceptual and empirical expansion, including variation in outcomes, long-term development and better ways to measure EA in real-world settings. In doing so, it invites a theoretical reorientation that places the entrepreneur, not the structure or role, as the locus where adaptive capabilities are both enacted and observed, reframing ambidexterity as a phenomenon of entrepreneurial agency rather than organizational design.

Chapter 3: When do Self-Regulatory Traits Matter? Stage-Contingent Enablers of Entrepreneur Ambidexterity

Introduction

Entrepreneur ambidexterity (EA) describes the entrepreneur's ability to alternate between exploring new opportunities and exploiting existing ones. Building on March's (1991) distinction between exploration and exploitation, the concept extends organizational ambidexterity, which explains how firms manage these competing demands to remain competitive (O'Reilly & Tushman, 2013; Teece, 2007). EA brings this logic to the individual level, focusing on how entrepreneurs balance strategic direction and operational execution across different stages of venture development (Bledow et al., 2009; Mom et al., 2007; Volery et al., 2015). This capacity is especially important in early-stage ventures, where behavior has direct and immediate effects on outcomes under conditions of uncertainty and constraint (Baron & Shane, 2007; Eisenhardt & Martin, 2000; Noguti et al., 2022). Rather than viewing EA as a fixed trait, this study conceptualizes it as a dynamic, context-sensitive capacity that enables entrepreneurs to respond flexibly to shifting demands over time. Specifically, EA is treated not as a stable personality disposition, but as a latent behavioral potential that emerges through the alignment of personal traits, regulatory tendencies and situational cues. It reflects a functional readiness to alternate between exploration and exploitation in accordance with evolving venture-stage demands.

Existing research has established that EA is positively associated with early-stage venture performance, adaptability and innovation outcomes (Good & Michel, 2013; Kauppila & Tempelaar, 2016; Volery et al., 2015). Scholars have shown that EA is particularly valuable under conditions of uncertainty and resource constraint, where entrepreneurs must dynamically shift between generating new opportunities and leveraging existing ones (Mom et al., 2015; Noguti et al., 2022). A growing stream of research has also begun to examine psychological traits that may support this capability. For instance, self-efficacy is associated with greater confidence in switching between divergent tasks (Hmieleski & Baron, 2009), and cognitive flexibility has been linked to adaptive decision-making in entrepreneurial contexts (Haynie et al., 2009). These findings suggest that trait-level antecedents may play an important role in enabling entrepreneurs to lead ambidextrously across shifting conditions.

Despite increasing interest in EA, important theoretical gaps remain. First, prior research often assumes that psychological traits beneficial to entrepreneurs are universally effective, yet it remains unclear whether their impact depends on the specific demands of different venture stages. Exploration-heavy early phases may reward decisiveness and speed, while growth-oriented phases may require greater deliberation and consistency (Guerrero, 2021; Gupta et al., 2006). Second, while early accounts of EA emphasized stable dispositions such as traits or styles, more recent research has shifted toward behavioral conceptualizations, i.e. what entrepreneurs do to balance opportunity creation and exploitation (Baron & Shane, 2007; Mom et

al., 2015). However, research focused on behavior has often overlooked the stable cognitive traits that help explain how entrepreneurs adapt. As new methods increasingly use AI to predict behavior, there is a growing risk that theory becomes disconnected from the psychological processes it aims to understand (Chalmers et al., 2021; Lévesque et al., 2022). This calls for a more nuanced, interactive perspective on EA that accounts for the interplay between stable self-regulatory traits and dynamic environmental demands. To capture this interplay, I introduce the concept of trait-stage fit, defined as the perceived congruence between an entrepreneur's self-regulatory traits and the behavioral requirements of a given venture stage. Trait-stage fit is not a trait per se but a contextual appraisal, i.e. a cognitive judgment made by others that reflects how well an individual's traits align with either exploration- or exploitation-heavy demands.

Addressing these gaps is increasingly important as entrepreneurs are expected to navigate rapidly changing venture demands, where cognitive adaptability, not just behavioral competence, has become a central determinant of leadership effectiveness (Xing et al., 2022). To advance a more psychologically grounded understanding of EA, this study introduces a trait-context interaction framework grounded in regulatory mode theory (RMT) (Kruglanski et al., 2000), incorporating locomotion, assessment and resilience as core enabling traits (Bullough & Renko, 2013; Di Santo et al., 2021). While individual traits such as locomotion or assessment may enable EA under specific conditions, trait-stage fit serves as a proxy for EA only when alignment

is demonstrated across both exploration- and exploitation-intensive stages. In other words, consistently high trait-stage fit across contexts signals the potential for ambidextrous responsiveness.

The study makes three contributions. First, it develops a stage-contingent model of trait effectiveness, showing that the value of psychological traits varies systematically across early and growth venture stages (Guerrero, 2021; Ma et al., 2023). Second, it reconceptualizes EA as a moderating capacity that shapes how trait constellations translate into perceived trait-context fit under different contextual demands (Shepherd et al., 2015). Third, it applies a conjoint-based expert judgment experiment to identify how founder profiles are perceived across varying strategic contexts, offering a methodologically rigorous approach to evaluating trait-context fit (Shepherd & Patzelt, 2017; Tett & Burnett, 2003). Together, these contributions advance a dynamic view of entrepreneurial adaptability grounded in psychological traits and establish a foundation for future research on individual adaptability in entrepreneurship.

The structure of this paper is as follows. First, I introduce regulatory mode theory (Kruglanski et al., 2000) as a framework for understanding how self-regulatory traits relate to ambidextrous behavior in entrepreneurship. Second, I present a conjoint-based experiment that examines how locomotion, assessment and resilience interact with EA and venture stage to shape expert evaluations of trait-context fit. This is operationalized through scenario-based ratings of perceived leadership success, which serve as a proxy for adaptive

capacity in stage-contingent entrepreneurial contexts. Third, I discuss the practical relevance of the findings, identify directions for future research and outline how ambidextrous capabilities can be studied as dynamic, context-sensitive traits in early-stage venturing.

Regulatory Mode Theory

RMT explains how individuals pursue goals through two independent self-regulatory orientations: locomotion, which reflects a preference for initiating and maintaining goal-directed action, and assessment, which reflects a preference for critically evaluating alternatives before acting (Higgins et al., 2003; Kruglanski et al., 2000). These orientations are not opposites but orthogonal traits; individuals may score high (or low) on both, and their correlation tends to be small or nonsignificant across empirical studies (Caniëls & van Assen, 2019; Jasmand et al., 2012; Sok et al., 2016). In line with RMT, this study models locomotion and assessment as independent dimensions of self-regulation. In entrepreneurship, these orientations offer a useful lens for understanding how internal dispositions shape behavioral flexibility under uncertainty (Amato et al., 2017). The demands of EA, i.e. balancing opportunity exploration with operational exploitation, align conceptually with these two regulatory modes. Locomotion supports fast, adaptive responses characteristic of early-stage venturing, while assessment facilitates refinement and consistency, which are more critical in later-stage execution and scaling.

Entrepreneurs who can flexibly alternate between these modes are better positioned to align their behavior with evolving venture demands, thereby sustaining both responsiveness and reliability, two capacities central to long-term entrepreneurial effectiveness (Klonek et al., 2021; O'Reilly & Tushman, 2013). Empirical work suggests that a balanced combination of locomotion and assessment enhances role effectiveness, particularly in contexts where innovation must be integrated with disciplined execution (Caniëls & van Assen, 2019; Faia & Vieira, 2017; Kraus et al., 2019). In customer-facing environments, for example, individuals must shift between exploratory sales tactics and the routinization of service delivery, which is a tension that maps directly onto the logic of ambidexterity (Jasmand et al., 2012).

Although related, regulatory focus theory (RFT) addresses a different dimension of self-regulation, and distinguishes between promotion and prevention orientations, capturing motivational goals related to aspiration versus security (Brockner et al., 2004; Hsu et al., 2017). While RFT has informed studies of opportunity recognition and risk-taking, it does not speak directly to how entrepreneurs adjust their behavior to meet the structural demands of different venture stages. RMT is therefore more appropriate for the current study, as it focuses on *how* individuals pursue goals, whether through evaluative deliberation or active execution, rather than *why* they pursue them. This study builds on and extends RMT to theorize how locomotion and assessment shape perceived alignment between trait configuration and contextual demands in exploration-heavy versus exploitation-heavy contexts.

These self-regulatory traits offer insight into how entrepreneurs structure action, manage transitions and respond to shifting demands over time. By leveraging RMT with research on EA, the study highlights how internal goal-regulation styles contribute to context-sensitive adaptability, which is a core feature of ambidextrous capability in early-stage ventures.

Hypotheses Development

Entrepreneurial ventures evolve through distinct stages, each marked by shifting demands that call for different behavioral orientations. Early phases require entrepreneurs to experiment, adapt and learn rapidly under conditions of uncertainty, while later stages demand process refinement, resource efficiency and strategic consolidation (Kazanjian, 1988; Kor et al., 2001). These evolving requirements mirror the ambidexterity paradox central to organizational learning and dynamic capabilities research (Gupta et al., 2006; March, 1991). EA, conceptualized as a dynamic capacity, enables entrepreneurs to manage these tensions by alternating between exploration and exploitation in response to stage-specific challenges (Volery et al., 2015).

The behavioral expression of EA varies meaningfully across the entrepreneurial lifecycle, as founders confront evolving tensions between adaptability and discipline, improvisation and structure. In early-stage settings, ambiguity and volatility necessitate rapid experimentation, opportunity discovery and strategic flexibility. Entrepreneurs must validate their business model, secure initial resources and respond swiftly to environmental feedback (Blank &

Eckhardt, 2024; Eisenhardt & Martin, 2000). Speed and improvisation are essential, but must be balanced with sufficient planning to avoid premature scaling. In contrast, growth stages are characterized by increased structure, operational demands and the need for controlled expansion. Here, EA supports exploitation through process standardization, resource orchestration and market consolidation (Churchill & Lewis, 1983; O'Reilly & Tushman, 2008). As the venture matures, the expression of ambidextrous behavior shifts from broad improvisation to targeted refinement. The founder's behavioral repertoire must adjust accordingly; from a visionary, risk-tolerant posture to one emphasizing reliability, analysis and scalability (Greiner, 1998; Kor et al., 2001). This transition does not eliminate the need for exploration but reframes it within the constraints of a growing organization. Accordingly, the relevance and effectiveness of psychological traits such as locomotion and assessment depend on their alignment with stage-specific priorities.

This stage-contingent framing underscores the need to examine how self-regulatory traits—particularly locomotion, assessment and resilience—align with the behavioral requirements of different venture stages. Rather than assuming that trait effectiveness is uniform across contexts, this study advances the proposition that perceived trait-context fit is contingent on how these traits interact with stage-specific demands. In this view, trait-context fit represents a cognitive mechanism through which ambidextrous capacity is perceived and evaluated, offering a proxy for how EA manifests under different contextual demands. The following theoretical framework draws on RMT and

resilience scholarship to conceptualize trait-stage alignment as a mechanism of EA, and proposes testable hypotheses regarding the conditions under which specific trait constellations are likely to enhance perceived trait-context fit. When such fit is observed across both stages, it functions as an indicator of an entrepreneur's ambidextrous capacity. This study thus treats stage-contingent trait-context fit not as a direct measure of EA, but as a signal of its contextual expression. This is operationalized through expert evaluations of stage-contingent leadership effectiveness. This study focuses on locomotion, assessment and resilience because they are theoretically central to EA and can be expressed through clearly differentiable behavioral cues, making them suitable for experimental testing.

Translating self-regulatory constructs into early-stage entrepreneurial contexts requires careful adaptation, given the heightened volatility and temporal pressure faced by entrepreneurs. To account for these conditions, this study focuses on locomotion, assessment and resilience as a coherent set of traits that capture how entrepreneurs regulate behavior in the face of shifting demands. These three traits offer a robust basis for theorizing variation in EA across venture stages. Without this focus, we lack a clear understanding of how entrepreneurs align action and evaluation in response to changing environmental and strategic pressures. For instance, locomotion may be more valuable in early-stage settings where momentum is essential, while assessment may become increasingly important as ventures scale and require evaluative discipline. These shifting demands imply that the perceived

alignment between an entrepreneur's traits and stage-specific demands is likely to depend on the extent to which individual self-regulatory traits align with stage-specific priorities. The following paragraphs develop separate hypotheses for the initial stage and for the growth stage, each grounded in a distinct theoretical rationale.

Effects of Locomotion and Assessment Orientations on EA

Locomotion refers to an individual's orientation toward initiating and sustaining goal-directed activity without unnecessary delay (Kruglanski et al., 2000). This regulatory mode is characterized by a preference for movement, change and continuous progress over deliberation or stasis. In the entrepreneurial context, locomotion facilitates rapid, forward-moving action (Higgins et al., 2003), enabling entrepreneurs to sustain momentum and engage proactively with emerging opportunities (Kruglanski et al., 2010). By fostering immediate engagement and minimizing hesitation, locomotion supports adaptive responses in uncertain environments where speed and initiative are critical. Individuals high in locomotion are drawn to novelty, progress and action (Pierro et al., 2006). They prefer variety over repetition and are naturally inclined to take initiative, often across multiple tasks simultaneously (Pierro et al., 2006, 2012). In early-stage ventures, where entrepreneurs must simultaneously pursue product development, engage customers and manage operations, such simultaneity enables swift context switching and maintains momentum (Avnet & Tory Higgins, 2003). Under high

uncertainty and limited structure, responsiveness and active experimentation are critical for learning and adaptation. High locomotion facilitates agile responses to unstructured demands and promotes engagement through variety, helping entrepreneurs navigate early-stage complexity by enabling purposeful, forward-directed action rather than undirected activity (Bruch & Ghoshal, 2004; Di Santo et al., 2021; Kruglanski et al., 2010). A locomotion orientation supports early-stage EA because this phase rewards initiative, fluidity and rapid engagement. First, early-stage entrepreneurs must frequently initiate action in the absence of complete information. Locomotion promotes this kind of proactive drive by minimizing hesitation and reinforcing goal-directed momentum (Avnet & Tory Higgins, 2003; Kruglanski et al., 2000). Second, fluidity is essential as entrepreneurs must shift rapidly between evolving tasks, roles and priorities. Individuals high in locomotion are naturally drawn to variety and are able to sustain progress across multiple fronts simultaneously (Di Santo et al., 2021; Pierro et al., 2012). Third, rapid engagement with feedback is critical for learning and adaptation. Locomotion fosters immediate responsiveness to environmental cues, enabling swift adjustments that maintain trajectory and reduce drift (Bruch & Ghoshal, 2004; Di Santo et al., 2021). These mechanisms allow entrepreneurs to remain effective under conditions of ambiguity, temporal pressure and structural incompleteness. Accordingly, I propose:

Hypothesis 1a: High locomotion will be positively associated with perceived trait-context fit in the initial stage.

A low locomotion orientation supports growth-stage EA because mature ventures depend less on initiative and improvisation, and more on consistent routines, executional discipline and efficient coordination (Gupta et al., 2006; Rosing et al., 2011). First, as ventures scale, routinized operations become essential for maintaining reliability, standardization and process control. High locomotion, which favors novelty and progress over repetition, may destabilize such structures by introducing variability and undermining behavioral consistency (Rosing et al., 2011). Second, disciplined execution becomes increasingly important as entrepreneurs must deliver against strategic plans, maintain focus and manage risk exposure. Prior research in sales and service contexts suggests that while behavioral flexibility enhances performance in dynamic environments, it can impair role consistency and executional focus in stable ones (Jasmand et al., 2012; Sok et al., 2016). Related findings also suggest that high locomotion may hinder the kind of sustained, structured behavior needed to ensure reliable performance over time (Caniëls & van Assen, 2019; Kraus et al., 2019). Third, coordination across individuals, teams and systems is central to growth-stage performance. High locomotion can create fragmentation, overextension and unsynchronized task-switching, while lower locomotion supports alignment, predictability and role clarity (Bidmon & Boe-Lillegraven, 2020; Pierro et al., 2012). As these mechanisms suggest that

low locomotion is better suited to the structured, execution-focused demands of the growth stage, I propose:

Hypothesis 1b: Low locomotion will be positively associated with perceived trait-context fit in the growth stage.

In early-stage ventures, where uncertainty is high, time is limited and information is often ambiguous, prolonged deliberation can undermine the rapid responsiveness required for effective entrepreneurial action. High assessment orientation has been linked to decision delay, overprocessing and reduced adaptability in volatile environments, as the need to evaluate multiple alternatives often slows pivoting and discourages improvisation (Higgins et al., 2003; Kruglanski et al., 2000; March, 1991). These tendencies are particularly problematic in the early stages of venture development, where learning through fast iteration and strategic experimentation is essential. Entrepreneurs high in assessment may struggle in such settings due to their inclination to reassess decisions, fixate on incomplete data and avoid committing to action under ambiguity (Mueller et al., 2017; Volery et al., 2015). By contrast, a lower assessment orientation enables more immediate engagement with emergent challenges, minimizing deliberative friction and allowing progress in the absence of perfect information. This decisiveness can serve as a proxy for adaptive capacity when strategic clarity must often be inferred rather than verified. Moreover, individuals high in assessment show a documented bias

toward exploitative over explorative activity, which may further limit their effectiveness in highly dynamic and unstructured environments (Amato et al., 2017; Tang, 2009). These mechanisms suggest that low assessment is better aligned with the cognitive and behavioral demands of the initial venture stage.

Hypothesis 2a: Low assessment will be positively associated with perceived trait-context fit in the initial stage.

In contrast to locomotion, assessment orientation reflects a preference for critical evaluation, comparative judgment and deliberative decision-making (Higgins et al., 2003; Kruglanski et al., 2000). In growth-stage ventures, where the demands of scale, process control and strategic alignment become increasingly prominent, high assessment enables entrepreneurs to refine routines, monitor for misalignment and implement structured improvements. Entrepreneurs high in assessment are likely to monitor process consistency, scrutinize potential misalignments and adjust workflows to ensure strategic alignment. This disciplined attention to evaluative accuracy can sustain executional quality and foster credibility with stakeholders during growth-stage scaling. These evaluative tendencies support perceived trait-context fit by aligning with the precision, consistency and control required in later-stage operations (Gupta et al., 2006; Rosing et al., 2011). Empirical studies show that assessment is positively linked to decision quality under complexity (Sok et al.,

2016), opportunity evaluation (Amato et al., 2017) and role-consistent behavior in structured contexts (Jasmand et al., 2012). Based on this logic, I propose:

Hypothesis 2b: High assessment will be positively associated with perceived trait-context fit in the growth stage.

Entrepreneurs who exhibit high levels of both locomotion and assessment orientations are theorized to possess a dual regulatory capacity that enhances their ability to transition effectively from early stage exploration to later-stage exploitation across the venture lifecycle (O'Reilly & Tushman, 2013; Volery et al., 2015). When both orientations are simultaneously high, entrepreneurs may achieve a more robust form of stage-responsive ambidexterity. Locomotion supplies speed and adaptability, while assessment ensures alignment with broader strategic objectives (Higgins et al., 2003; Kruglanski et al., 2000). This regulatory complementarity should not be viewed as a contrast or a rivalry or competition for dominance between the two orientations. Instead, it reflects a pairing of distinct, independent capacities that can operate in parallel without mutual interference (Kruglanski et al., 2000). This regulatory duality enables entrepreneurs to flexibly shift between action-oriented and evaluation-oriented tendencies, applying each as contextually required, without internal contradiction. Their coexistence enhances adaptive range without internal contradiction. By jointly activating these modes, entrepreneurs may more effectively navigate the shifting cognitive and behavioral demands

associated with different venture stages (Sok et al., 2016; Tushman & O'Reilly, 1996):

Hypothesis 3: Entrepreneurs exhibiting high levels of both locomotion and assessment orientation will be more likely to demonstrate trait-context fit across both initial and growth stages.

Effects of Resilience on Trait-Context Fit Across Venture Stages

Beyond the regulatory traits of locomotion and assessment, resilience represents a third dimension of goal pursuit that enables entrepreneurs to maintain functional agency under pressure. Resilience is defined as the capacity to sustain a functional and proactive response to adversity, encompassing psychological flexibility, emotional regulation and the ability to recover from failure (Ayala & Manzano, 2014; Sutcliffe & Vogus, 2008). Resilience represents a broader self-regulatory capacity for persistence and adaptability, which is central to entrepreneurial functioning under conditions of volatility and constraint (Bullough & Renko, 2013; Zhang et al., 2022). It enables individuals to remain adaptive and goal-directed despite setbacks, uncertainty and fluctuating demands. In this study, resilience is conceptualized as a direct enabler of perceived trait-context fit with differential relevance across venture stages. Theoretical work has identified three core capacities that underlie this adaptability: anticipation, coping and adaptation (Duchek, 2020; Williams et al., 2017) as well as more fine-grained mechanisms such as acceptance of

situational constraints, belief in purposeful action and improvisation under pressure (Coutu, 2002). These capacities are expected to align with different regulatory demands across the venture lifecycle. In early-stage contexts, where volatility, ambiguity and emotional intensity are high, resilience enables entrepreneurs to persist through uncertainty, improvise in response to setbacks and regulate emotions under pressure. These functions amplify the adaptive value of locomotion by sustaining momentum and mitigating the emotional and cognitive fatigue that can accompany forward-driven behavior (Raine & Pandya, 2019). In contrast, growth-stage contexts are defined by structural complexity, strategic commitments and executional pressure. Here, resilience enhances the effectiveness of assessment by preventing evaluative overload, reinforcing operational discipline and promoting strategic clarity (Fisher et al., 2014; March, 1991; Mueller et al., 2017). Thus, while resilience supports entrepreneurial adaptability in both phases, it does so through distinct mechanisms that correspond to the shifting demands entrepreneurs face across the venture lifecycle. Accordingly, I propose:

Hypothesis 4a: High resilience will positively influence the likelihood of perceived trait-context fit in both stages, with a stronger effect in the initial stage, where frequent adaptation and recovery from setbacks are critical.

Hypothesis 4b: Low resilience will negatively influence the likelihood of perceived trait-context fit in both stages, with more pronounced effects in the initial stage due to higher contextual volatility.

Methodology

Research Instrument

This study employed a conjoint experiment to investigate how self-regulatory traits influence perceived fit between individual dispositions and the behavioral demands of different entrepreneurial stages. Respondents evaluated hypothetical founder profiles, each systematically varied across a set of experimentally manipulated attributes, including locomotion, assessment and resilience. These profiles were embedded within early-stage and growth-stage venture contexts to capture stage-contingent evaluations. The dependent variable reflects respondents' judgments about whether the entrepreneur's trait configuration was well-suited to the specific demands of the venture stage. This design allows for a context-sensitive examination of trait-stage alignment as a psychological mechanism underlying perceived entrepreneurial effectiveness. Conjoint designs are widely adopted in entrepreneurship research to study decision-making under uncertainty and cognitive constraint (Fu & Tietz, 2019; Haynie et al., 2009; Shepherd et al., 2013), and are particularly well suited for isolating the perceived influence of individual traits while preserving realism and experimental clarity (Aguinis & Bradley, 2014; Gustafsson et al., 2013). The experiment comprised three components: (1) an introductory briefing defining

the task and focal attributes; (2) a decision task in which participants evaluated hypothetical founder profiles; and (3) a post-task survey collecting demographic and experiential data. To ensure content validity, the instrument was pilot-tested with two friendly serial entrepreneurs. Feedback confirmed the realism and interpretability of the trait descriptions, stage framings and decision prompts, prompting minor revisions to improve clarity and narrative plausibility.

Participants received standardized instructions detailing the purpose of the task, the meaning of each venture stage and the nature of the traits under evaluation. The descriptions avoided explicit references to theoretical constructs (e.g. exploration, exploitation) to reduce the risk of priming respondents. Instead, they were grounded in stage-specific challenges such as adaptability, strategic refinement and resource coordination (see Figure B1). Five interpretive assumptions were adapted from prior conjoint designs (Haynie et al., 2009; Shepherd et al., 2013): (1) respondents should rely on their own entrepreneurial judgment rather than general heuristics; (2) intuitive responses were encouraged, and no answers were intrinsically correct; (3) profiles should be judged independently; (4) all unspecified factors should be assumed equal; and (5) the initial stage emphasized early-stage ambiguity and search, while the growth stage foregrounded structure, coordination and execution. The study used a full factorial design comprising three binary attributes—locomotion (high vs. low), assessment (high vs. low) and resilience (high vs. low)—yielding eight unique trait combinations.

Each profile was evaluated in both an initial-stage and growth-stage context, producing 16 unique observations per respondent. To assess test-retest consistency, one randomly selected profile was repeated, yielding two additional observations per respondent. The 16 unique judgments were used for the main analysis; repeated profiles were used solely to assess internal reliability. To mitigate sequence effects, the profile order was randomized within each stage. The conjoint design ensured orthogonality among attributes, allowing for unbiased estimation of main and interaction effects. The data structure supported inference at three levels: the decision level (trait evaluations), the context level (venture stage), and the respondent level (entrepreneurial background). In total, the design produced 1,248 primary data points (156 respondents \times 8 profiles \times 2 stages), along with 312 additional observations for internal consistency checks.

Sample

The sample frame consisted of experienced entrepreneurs from the DACH region (Germany, Switzerland, Austria and Liechtenstein) recruited via Prolific, an online platform optimized for academic research with targeted sampling capabilities. To ensure domain expertise, strict pre-screening criteria were applied: participants were required to self-identify as founders or co-founders with direct involvement in core entrepreneurial activities, including strategic decision-making, resource acquisition and venture leadership. These platform-level filters were supplemented with custom screening items verifying

role specificity, years of entrepreneurial experience and number of ventures managed.

Out of an initial sampling pool of 213,906 Prolific users, only 629 participants (0.3%) met the predefined screening criteria (current country of residence: Germany, Austria, Liechtenstein, Switzerland; Entrepreneurship: past or current experience; age: 28+) and were deemed eligible for participation. Of these, 216 submitted the survey. Following quality checks, eight participants were excluded for completing the task in less than 109 seconds, which was one standard deviation below the average completion time of 818 seconds across all respondents. An additional 52 were removed for incompleteness or failure to pass a secondary screener confirming direct entrepreneurial experience, such as having initiated or led multiple venture projects. The final sample comprised 156 verified, experienced entrepreneurs and was collected between March and April 2024. Participants ranged in age from 28 to 55 years ($M = 36.4$), and reported an average of 12.44 years of general work experience and 5.19 years of entrepreneurial experience, having played a leading role in an average of 3.19 ventures. The gender distribution—110 male, 45 female and one non-binary respondent—reflects regional norms. Educational attainment was high: 49% held a Master's degree, 33% a Bachelor's degree, 5.1% a doctoral degree and 12.2% reported some college or secondary-level education. To assess possible response bias, early and late respondents were compared on key demographic and experiential variables following Dooley and Lindner (2003). No statistically significant

differences emerged (all p-values > 0.10), except for a minor difference in general work experience ($\Delta = 1.7$ years, $p = 0.048$), which was not deemed critical for sample integrity. The quality and relevance of participants' evaluations rested on their verified entrepreneurial track records, ensuring robust external validity in how founder traits were assessed.

Dependent Variable

The dependent variable captures respondents' evaluations of trait-stage alignment, operationalized as judgments of an entrepreneur's likelihood of successfully leading a venture in either the initial or growth stage. Drawing on Murnieks et al. (2011), perceived leadership success was assessed through two context-specific items rated on a 0–100 slider scale, anchored by “Low” and “High”. Each profile was rated on (1) the likelihood of successful leadership in the initial stage and (2) the likelihood of successful leadership in the growth stage. These ratings reflect how well each trait configuration was perceived to match the behavioral demands of the respective venture stage. The two items were moderately correlated ($r = 0.60$), suggesting that respondents applied a consistent evaluative logic across stages while preserving sufficient distinction to justify stage-specific analysis. This pattern is consistent with my conceptualization of EA as context-contingent trait enactment rather than a fixed or orthogonal capacity. This evaluation-based approach draws on prior research that treats leadership effectiveness as a perceptual construct, typically assessed through third-party ratings (Dabke, 2016; Weinberger, 2009; Yan &

Hunt, 2005). I adapt it here to the stage-contingent entrepreneurial context. Murnieks et al. (2011) demonstrated the utility of conjoint-based evaluations for capturing expert perceptions of founder traits in entrepreneurial contexts, validating the use of structured profile comparisons to assess perceived fit between individual dispositions and venture-relevant demands. While their study focused on passion and identity, the present research extends this logic to examine trait-stage alignment as a context-sensitive signal of adaptive leadership. Leadership effectiveness is frequently inferred through expert or stakeholder judgments, particularly in high-uncertainty contexts where behavioral performance cannot be directly observed (Weinberger, 2009). In the entrepreneurial domain, where early-stage evidence is often sparse or ambiguous, perceptions of leadership capability serve as a meaningful proxy for adaptive potential (Maxwell & Lévesque, 2014; Navis & Glynn, 2011; Zott & Huy, 2007).

The decision to assess perceived leadership success, rather than measure behavioral ambidexterity directly, reflects both conceptual and methodological considerations. Ambidextrous behavior is embedded in situational demands, particularly the contrast between exploration in early-stage environments and exploitation in growth-stage contexts. These demands were operationalized through stage-specific profile descriptions, allowing leadership evaluations to serve as a context-sensitive proxy for EA. In early stages, leadership success hinges on agility, improvisation and responsiveness to feedback; in later stages, it depends on process discipline, resource

coordination and strategic refinement. This framing is theoretically consistent with the study's focus on self-regulatory traits—locomotion, assessment and resilience—as mechanisms enabling effective adaptation to shifting contextual challenges. Accordingly, the conjoint design allows for a fine-grained, stage-contingent analysis of perceived ambidextrous capacity.

Independent and Control Variables

Level 1: Decision-level explanatory variables. At the first level of analysis, the independent variables are three entrepreneurial traits: locomotion, assessment and resilience. These were selected for their conceptual proximity to EA and their empirical clarity and suitability for manipulation within a conjoint experimental framework (Kruglanski et al., 2000; Luthans et al., 2007; Orme, 2009). Locomotion captures the urgency and action orientation underlying fast, forward-moving decision styles, contrasting a high-velocity posture (“just do it”) with a more deliberate, measured mode (“tranquility breeds strength”). Assessment distinguishes between reflective, accuracy-focused decision-making (“only a perfect decision is a good one”) and intuition-driven spontaneity (“always trust your gut”), reflecting the cognitive tension between careful deliberation and rapid adaptation (Kruglanski et al., 2000). Resilience, though less often modeled as a discrete decision trait, was included for its foundational role in self-regulatory persistence. Its operationalization contrasts active coping, i.e. proactive adaptation and effortful problem solving, with passive endurance, i.e. tolerating adversity without initiating change (Luthans et

al., 2007). All three variables were framed as binary attributes to ensure interpretive clarity and preserve methodological parsimony, consistent with best practices in conjoint research (Orme, 2009). The full operational definitions, behavioral framings and scale origins of these trait attributes are summarized in Table B1 in the Appendix.

Level 2: Manipulated contexts. To examine how trait evaluations shift with venture maturity, the experiment manipulated the development stage in which each profile was assessed. Participants evaluated the same founder traits in two distinct contexts: the initial stage, which is typically marked by high uncertainty, fluid strategy and a strong emphasis on exploration, and the growth stage, characterized by operational scaling, strategic discipline and a focus on exploitation (Gupta et al., 2006; Rosing et al., 2011). However, not all ventures conform to this archetype. Some early-stage firms, notably those based on imitative or execution-focused models, may emphasize exploitation from the outset (Fu & Tietz, 2019). To ensure interpretive clarity, the study did not assume a universal mapping of stage to strategic posture. Instead, the manipulation relied on standardized descriptions that explicitly foregrounded exploration-relevant challenges in the initial-stage scenario (e.g. business model discovery, iterative learning) and exploitation-relevant demands in the growth-stage scenario (e.g. process refinement, controlled expansion). These descriptions were pretested to confirm interpretability and consistency across respondents. This design enabled a context-sensitive analysis of entrepreneurial self-regulation, allowing for inferences about how the value of

specific traits varies as ventures progress from exploratory to exploitative phases.

Level 3: Individual-level variables. To account for heterogeneity in respondent judgments, the study captured a range of individual-level characteristics known to influence how entrepreneurial leadership is perceived (Baum & Locke, 2004; Gupta et al., 2006; Murnieks et al., 2011). These included gender, age, education, general work experience, entrepreneurial experience and the number of ventures previously founded or co-founded. Gender was recorded as female, male or other/non-binary to allow for the detection of potential evaluative bias. Education followed a seven-point ordinal scale from secondary school (0) to doctorate (7), based on validated measures from prior conjoint studies (Mueller et al., 2017). Age, captured in years, was included due to its potential association with perceived credibility and leadership maturity (Kautonen et al., 2011). General work experience and entrepreneurial experience, both measured in total years, were collected to reflect cumulative exposure to professional and venture-specific environments. Lastly, the number of startup projects founded or led was recorded as a proxy for depth of entrepreneurial engagement. These control variables were included to isolate the effects of profile-level trait manipulations from respondent-level variation. Measurement details and item origins for all individual-level control variables are summarized in Table B2 in the Appendix.

Analysis and Results

To assess the internal consistency of respondents' evaluations, test-retest reliability was calculated by correlating each profile's initial rating with its repetition as the ninth evaluation of both the initial and the growth stage. The overall Pearson correlation was 0.72, with stage-specific reliabilities of 0.75 for the initial stage and 0.70 for the growth stage. Although marginally below the conventional benchmark of 0.80 for repeated measures, these values suggest moderate to good reliability, indicating that participants understood the profile attributes, stage manipulations and evaluative task. Minor differences in reliability between stages may reflect authentic shifts in respondent interpretation, given the distinct cognitive and behavioral demands of each venture phase. Descriptive statistics for respondent-level variables are presented in Table 1.

As expected, general work experience and entrepreneurial experience are positively correlated, while age correlates strongly with both. Gender and education show minimal correlations with the other control variables, suggesting that they offer independent explanatory power in the models that follow. Given that each respondent rated multiple profiles across two conditions, the data structure is nested, with evaluations (Level 1) clustered within entrepreneurs (Level 2). I used hierarchical linear modeling (HLM) to estimate the effects of self-regulatory traits on perceived leadership effectiveness. The full model significantly improved fit over the null model, $\chi^2(20) = 196.57$ ($p < .001$). HLM is well-suited for conjoint analysis, as it permits the simultaneous modeling of

decision-level variation and respondent-level characteristics (Lohrke et al., 2010). Multicollinearity was not a concern, as all variance inflation factors (VIFs) remained below the standard threshold of 10 across models. A total of 1,248 profile evaluations (156 participants × 8 profiles) were included in the main analysis; repeated profiles were excluded from hypothesis testing and used only for assessing reliability.

Table 1

Descriptive Statistics and Correlations

Variables	Mean	SD	1	2	3	4
1. Age	36.4	6.81				
2. Female	0.29	0.45	0.04			
3. Working experience	12.44	7.01	.83**	-0.01		
4. Entrepreneurship experience	5.19	4.25	.52**	0	.54**	
5. Venture projects	3.19	3.5	0.08	0.05	0.09	.26**

Note: * $p < 0.05$; ** $p < 0.01$.

In the initial stage, shown in Table 2 (Model 1), high locomotion significantly increased perceived leadership success ($\beta = 4.86$, $p < 0.01$), underscoring the importance of adaptability and momentum in unstructured, exploratory contexts. Both high assessment ($\beta = 6.05$, $p < 0.001$) and high resilience ($\beta = 9.4$, $p < 0.001$) also exerted strong positive effects, suggesting that deliberate judgment and perseverance are viewed as advantageous even under volatile early-stage conditions.

Table 2*HLM of Leadership Evaluation at the Initial and Growth Stages*

Variables	Model 1: Initial Stage	Model 2: Growth Stage
	Coefficient (SE)	Coefficient (SE)
<i>Main effects</i>		
Intercept for overall model	39.85*** (4.53)	42.8*** (4.77)
High locomotion (<i>H1a/b</i>)	4.86** (1.86)	0.62 (1.51)
High assessment (<i>H2a/b</i>)	6.05*** (1.58)	8.46*** (1.58)
High resilience (<i>H4a/b</i>)	9.40*** (1.60)	14.28*** (1.60)
<i>Interactions</i>		
High locomotion × High assessment (<i>H3</i>)	-1.11 (2.03)	-0.34 (1.99)
High locomotion × High assessment × High resilience	-0.01 (2.54)	0.57 (2.87)
<i>Controls</i>		
Higher education	7.17* (3.42)	5.14 (3.45)
Age: 31-35 years	-3.24 (2.73)	-2.37 (2.92)
Age: 36-40 years	-2.58 (3.19)	1.12 (3.44)
Age: 41-45 years	1.20 (4.95)	3.97 (4.64)
Age: 46+ years	-0.32 (4.82)	4.64 (5.01)
Entrepreneurial experience: 3-4 years	3.62 (2.67)	2.84 (2.58)
Entrepreneurial experience: 5-9 years	-2.52 (2.86)	-1.52 (3.17)
Entrepreneurial experience: 10+ years	-1.38 (4.35)	-4.56 (4.86)
Male	0.29 (2.21)	-0.65 (2.02)
Other / non-binary genders	-2.86 (4.15)	-5.63 (4.33)
Working experience: 6-10 years	3.33 (3.15)	3.77 (3.45)
Working experience: 11-15 years	2.52 (3.57)	1.29 (4.11)
Working experience: 16+ years	-2.41 (4.69)	-5.09 (5.12)
Wald chi ² at df=20	140.48	203.65
Prob > chi ²	0.4064	0.4406
R-squared (marginal)	0.14	0.21
R-squared (conditional)	0.37	0.45
Akaike information criterion (AIC)	10,707	10,496

Note: N = 1,248 observations; 156 respondents: 156; 8 observations per respondent. HLM = hierarchical linear modeling. Standard errors in parentheses. †H1a/H1b, H2a/H2b, H3 and H4a/H4b refer to hypotheses tested at each stage. Significance: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

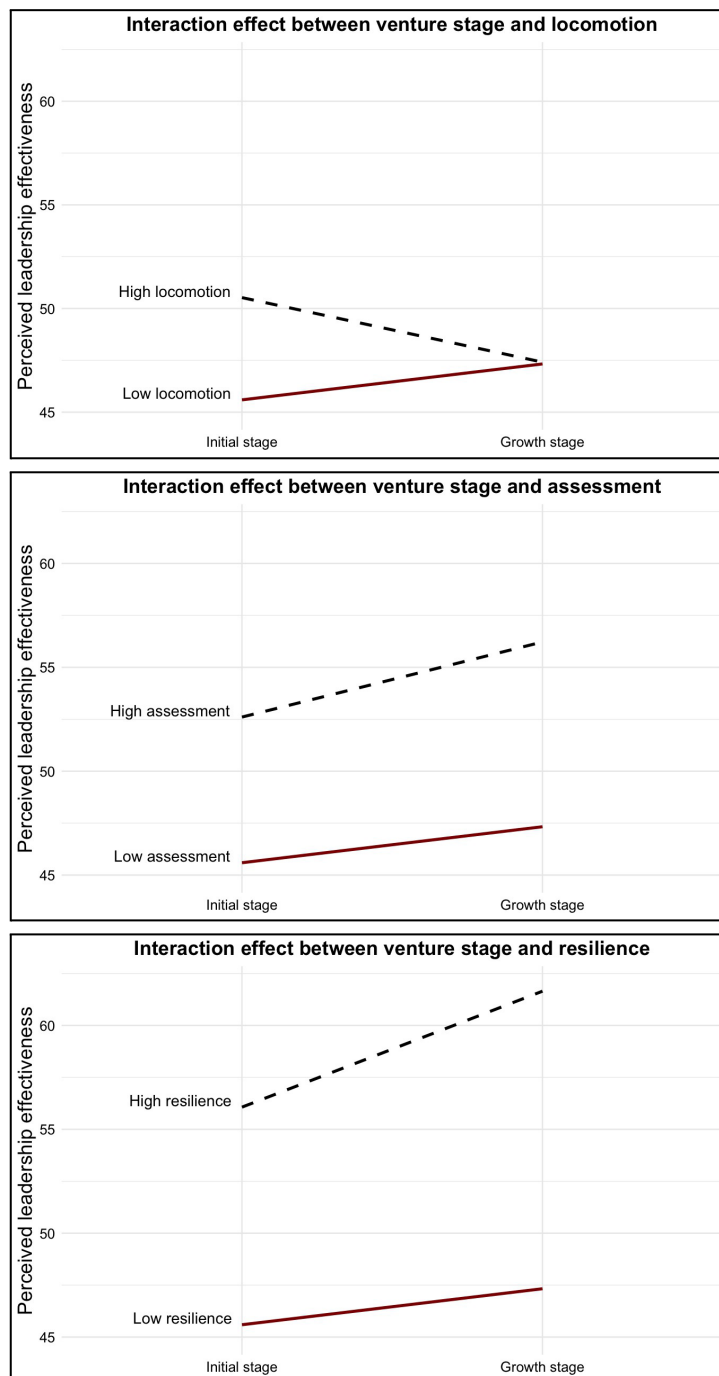
As shown in Figure 2, high locomotion is particularly favored in this phase, reflecting its alignment with the demands of fast-paced entrepreneurial action. Among the control variables, no consistent effects emerged, except for higher education, which exerted a modest positive influence ($\beta = 7.17$, $p < 0.05$), indicating that more educated respondents tended to assign slightly higher ratings to entrepreneurial leadership in early-stage settings. Model diagnostics confirmed adequate fit, with a Wald χ^2 of 140.48 ($p < 0.001$), a marginal R^2 of 0.14, a conditional R^2 of 0.37 and an AIC of 10,707.

In the growth stage, as shown in Table 2 (Model 2), both high assessment ($\beta = 8.46$, $p < 0.001$) and high resilience ($\beta = 14.28$, $p < 0.001$) emerged as strong predictors of perceived leadership effectiveness, reflecting the increasing importance of deliberation and sustained effort in more structured, exploitation-oriented contexts. In contrast, high locomotion did not exert a significant effect ($\beta = 0.62$), indicating that the value of adaptability and rapid action diminishes as ventures mature. These findings support H1a, confirming that locomotion plays a greater role in early-stage leadership, and lend indirect support to H1b by demonstrating its limited utility during the growth phase. No significant interaction between locomotion and assessment was observed ($p > 0.1$), suggesting that the two self-regulatory orientations do not combine synergistically across stages. Likewise, the interaction between venture stage and high assessment was non-significant, implying that the positive effect of assessment generalizes across both contexts. Model fit was

robust, with a Wald χ^2 of 203.65 ($p < 0.001$), a marginal R^2 of 0.21, a conditional R^2 of 0.45 and an AIC of 10,496.

Figure 2

Leadership Evaluations Interpreted as Context-Sensitive Proxy for EA



Looking more closely at the variable 'assessment', its positive influence on perceived leadership success is consistent across both stages (initial stage: $\beta = 6.05$, $p < 0.001$; growth stage: $\beta = 8.46$, $p < 0.001$). The absence of significant interaction effects between assessment and venture stage indicates that its evaluative and deliberative orientation holds stable value, irrespective of contextual demands. Consequently, hypotheses H2a and H2b, which posited stage-contingent effects of assessment, are not supported. As illustrated in Figure 1, high-assessment entrepreneurs are systematically perceived as more capable leaders across both exploratory and exploitative contexts.

By contrast, hypothesis H3, which predicted a synergistic interaction between high locomotion and high assessment, is also not supported. The interaction term fails to reach significance ($p > 0.1$), suggesting that the simultaneous presence of both orientations does not confer a perceived advantage beyond their individual effects. Resilience, however, emerges as a robust and context-sensitive predictor of leadership success. It has a strong and significant main effect in both the initial ($\beta = 9.4$, $p < 0.001$) and growth stages ($\beta = 14.28$, $p < 0.001$), underscoring its general importance across the venture lifecycle. Notably, the interaction between growth stage and high resilience ($\beta = 3.85$, $p < 0.01$) indicates that resilience becomes even more important as ventures transition into more structured phases. This pattern runs counter to H4a, which anticipated stronger effects in the initial stage, and instead highlights resilience as a particularly critical resource for sustaining momentum and strategic focus during growth.

Discussion

This study examined how self-regulatory traits shape expert evaluations of trait-stage fit across exploration- and exploitation-intensive venture stages. The results support a dynamic view of EA as a function of stage-contingent psychological alignment.

Theoretical Implications

This study advances the conceptual understanding of EA by showing how self-regulatory traits—locomotion, assessment and resilience—contribute to perceived trait-stage fit when aligned with the demands of distinct venture stages. Rather than treating EA as a stable capacity, the findings support a context-contingent view in which perceived ambidextrous potential emerges through dynamic trait-context alignment. This notion aligns with interactionist theories of personality expression, which suggest that traits become useful for predicting outcomes only when activated by contextually relevant cues (Judge & Zapata, 2015; Tett & Burnett, 2003). Some traits facilitate adaptive responses regardless of stage, while others do so only under specific contextual conditions.

First, the results for Hypotheses 1a and 1b confirm that locomotion is particularly valued in early-stage contexts, where decisiveness and behavioral momentum are critical, but loses its predictive value in later stages. This stage-contingent pattern confirms that EA is a context-responsive capacity, an idea consistent with dynamic capabilities theory (Teece et al., 1997) and further

developed in recent treatments of EA as a situated, adaptive resource (Volery et al., 2015). At the same time, these findings challenge trait-centric views that treat regulatory tendencies such as urgency or initiative as unconditionally beneficial (Faia & Vieira, 2017). By demonstrating that high locomotion is only advantageous in exploration-intensive settings, my study emphasizes the importance of the alignment of trait expression with evolving task demands. This echoes trait activation theory, which holds that dispositional tendencies manifest behaviorally only when the situation provides relevant triggers or opportunities for expression (Tett & Burnett, 2003). Future research might examine how such evaluations vary depending on the cognitive schemas or entrepreneurial experience of the observer. Without these insights, we risk treating perceptions of trait-stage fit as universally shared, thereby overlooking important differences in how various stakeholders interpret the same entrepreneurial behavior.

Second, the consistent effect of assessment across both stages (H2a, H2b) suggests it functions as an adaptive mechanism, supporting perceived trait-stage fit across both uncertain and structured settings. This contrasts with earlier research that portrayed assessment as a potential liability when quick, flexible responses are needed (Amato et al., 2017; Faia & Vieira, 2017; Sok et al., 2016). These studies suggested that extensive deliberation could hinder responsiveness, as evaluators might interpret it as indecision or overthinking. However, in my findings, high assessment was positively associated with perceived trait-stage fit even in the initial stage, indicating that reflective

decision-making is not uniformly penalized. This challenges the idea that exploration-heavy contexts disfavor deliberation and extends RMT by showing that some self-regulatory traits, like assessment, may hold value across situations. This broader utility may stem from assessment's metacognitive function, which supports real-time cognitive adaptation (Haynie et al., 2010) and contributes to perceived fit, a central component of EA. Future research might examine whether assessment remains advantageous under high time pressure, or whether its value depends on cues that frame deliberation as either thoughtful or hesitant (Jasmand et al., 2012; Sok et al., 2016). Without such inquiry, we risk misjudging when reflective thinking fosters clarity versus when it is mistaken for indecision.

Third, the lack of a significant interaction between locomotion and assessment (H3) questions a common idea in ambidexterity research: that having both traits at once is especially beneficial. Although this complementarity is rarely tested directly, Sok et al. (2016) and Caniëls and van Assen (2019) suggest that balancing exploration and exploitation tends to enhance adaptive performance in customer-facing settings. My findings do not support this assumption. Instead, my study suggests that trait combinations may not always be seen as more effective, especially in structured evaluation tasks. One possible reason is that respondents focused on clear and distinct traits rather than how different traits work together. Another is that showing high levels of both traits made the entrepreneur's style seem unclear, which could hurt how well they were seen to fit the situation. This confusion may be stronger in

evaluation settings that require a lot of mental effort, making it harder for evaluators to notice and combine subtle strengths (Baron & Ensley, 2006). Future work should clarify when and how such combinations are recognized and rewarded, particularly in early-stage decisions about founders or venture teams. Without such clarification, we risk misunderstanding which trait combinations are genuinely valued, i.e. potentially leading to biased assessments or missed opportunities to support founders whose strengths emerge only through more complex trait interactions.

Finally, resilience emerges as a robust and increasingly important predictor of trait-stage fit, particularly in the growth phase. Rather than amplifying or moderating the effects of locomotion and assessment, resilience appears to operate as an independent adaptive resource that enables entrepreneurs to remain effective under growing operational demands. This builds on prior work treating resilience as a foundational trait that sustains effectiveness under adversity (Ayala & Manzano, 2014; Bullough & Renko, 2013), showing that its value increases under exploitative conditions. The findings challenge more limited views of resilience as merely a buffering or auxiliary factor (Mueller et al., 2017), and instead position it as a core psychological anchor of EA. Recent process-based models suggest that resilience is not merely trait-like, but enacted through cycles of adjustment and shifting relationships and roles to cope with ongoing stress (Barton & Sutcliffe, 2023). Future research should examine resilience not only as a stable trait but as a dynamic evaluative signal, which may shape, and be shaped by,

perceptions of trait-stage fit as ventures mature (Barton & Sutcliffe, 2023; Duchek, 2020). Otherwise, we risk oversimplifying resilience as a fixed characteristic, missing how it evolves through experience and influences key judgments about an entrepreneur's long-term effectiveness.

Together, these findings position EA as a latent capacity inferred through trait-stage alignment, a perceptual judgment of whether an entrepreneur possesses the psychological flexibility to adapt across divergent conditions. As such, EA should be understood and applied as a stage-contingent evaluative lens, especially when direct behavioral evidence is limited or difficult to interpret. This interpretive process likely draws on how people reflect on past experiences and look for consistency in behavior, as they form judgments about the entrepreneur's approach in uncertain situations (Haynie et al., 2010; Tett & Burnett, 2003), in line with social cognitive models of self-regulation and how people learn by observing others (Bandura, 1986). This perspective is particularly relevant in early-stage entrepreneurial contexts, where investors, partners or accelerators must infer potential from incomplete signals. If perceived consistently across venture phases, such adaptive potential may lay the psychological groundwork for routinized forms of OA, such as standardized processes for balancing innovation with execution. As ventures grow, this individual capacity may be gradually distributed across teams, routines and structures (Volery et al., 2015), suggesting a developmental arc from personal to organizational forms of balance. Using trait-context fit as a proxy, this study highlights EA as a capacity inferred from how well an entrepreneur's traits

match the demands of the venture stage. This approach emphasizes the role of outside observers who assess whether certain traits appear suitable for specific contexts, offering a practical way to estimate ambidextrous potential in early-stage settings where concrete behavior is limited. EA, thus, functions not only as a behavioral orientation but as an early-stage ability that helps pave the way for later development, which enables scalable, collective adaptation over time.

Managerial Implications

The findings offer actionable insights for entrepreneurs, founding teams and early-stage investors by demonstrating how self-regulatory traits—locomotion, assessment and resilience—differentially support perceived trait-stage fit across venture stages. For entrepreneurs, choosing ventures whose developmental demands align with their regulatory orientation may strengthen both strategic fit and long-term performance. All entrepreneurs must balance action and evaluation, but solo founders face these demands alone. Without the ability to divide responsibilities such as execution and evaluation across individuals, solo founders must shift more frequently between impulsive execution and reflective judgment, which raises the cognitive load and risk of overload (Keller & Weibler, 2015). While my study focused on individual-level dynamics, the challenges faced by solo entrepreneurs in managing competing demands offer a basis for reflecting on how regulatory demands might be distributed or shared in team-based ventures. Recent work by Koch and

colleagues (2024) shows that ambidextrous capacities can emerge from how founding team members interact with one another, with behaviors such as mimicking and switching enabling dynamic responses to exploration and exploitation pressures even in the absence of formal role division. This suggests that regulatory diversity in founders' regulatory tendencies may be a valuable tool for managing stage-specific pressures and maintaining adaptive capacity. In contrast, founding teams may distribute these regulatory demands, but doing so introduces the need for intra-team alignment. This underscores a critical insight: effective scaling requires not only the transition from generalist to specialist roles, but also the calibration of regulatory diversity across the team to match stage-specific challenges. Entrepreneurs must therefore manage both trait-team fit and trait-stage fit, actively curating a balance between agility and deliberation. In early phases, cultivating a working style that emphasizes quick decision-making, trial-and-error learning and flexible execution supports exploration. As ventures move into growth stages, founders should increasingly prioritize structured planning, building psychological endurance, and making careful, evidence-based decisions. Embedding such regulatory transitions into structured onboarding, regular reflection points, and temporary role swaps might help embed adaptability into the team's daily routines and broader culture, supporting smoother transitions across venture stages.

For investors, these results refine the lens through which founder potential is assessed. Entrepreneurs with strong locomotion traits may signal high exploratory drive, a valuable quality in seed-stage contexts. However,

investors, especially hands-on ones, may also seek regulatory complementarity within the founding team. The presence of assessment or resilience-oriented traits may indicate capacity for sustained execution and adaptive scaling. This is especially relevant for investors who engage closely with founding teams and influence early execution: in ventures lacking locomotion-driven leadership, active investor involvement may help mitigate delays or inertia. Such investors can counterbalance dominant trait profiles by reinforcing capacities like assessment or resilience. This invites a broader view of investors as partners in shaping regulatory balance and enhancing founder effectiveness. Moreover, investor-entrepreneur fit becomes increasingly important when both parties bring distinct regulatory orientations. Investors who contribute strategic patience and resilience can complement entrepreneurs' urgency and ambition, enabling a more ambidextrous partnership. Alignment between entrepreneurial traits and investor support logic may improve not only perceived trait-stage fit, but also venture resilience and long-term performance.

Limitations and Future Research

As with any experimental study, this research carries several limitations that qualify the interpretation of its findings and delineate promising avenues for further inquiry.

First, the cross-sectional nature of the study limits insight into how regulatory tendencies unfold or adapt over time. While the scenario-based method enables fine-grained evaluations of trait-stage fit, it does not capture

whether entrepreneurs actively shift between regulatory modes as venture conditions change. Longitudinal or diary-based methods could illuminate whether EA represents a stable signal or a flexible capacity, clarifying whether trait-stage fit is imposed by context or strategically cultivated by the entrepreneur.

Second, several limitations concern how key constructs were operationalized and interpreted. Resilience was measured in binary terms (active vs passive), limiting insight into its emotional, cognitive and behavioral dimensions. EA itself was inferred indirectly via contextual manipulations rather than directly measured. And evaluators' perceptions may have been shaped by subtle linguistic cues (e.g. interpreting "deliberate" as either thoughtful or hesitant). These challenges point to a broader opportunity: future work should combine scenario-based designs with validated trait instruments and systematically manipulate framing language to isolate the social-cognitive mechanisms underlying trait judgments.

Third, the generalizability of the results is shaped by both the evaluator sample and the industry-agnostic framing. Respondents were drawn from the DACH region, an entrepreneurial context known for cautious growth logics and consensus-oriented leadership preferences (Steyrer et al., 2006). These culturally embedded assumptions may have shaped how respondents interpreted and evaluated the trait combinations. Moreover, the vignette design abstracted from specific industry settings. Future work should vary cultural and

sectoral contexts to test whether trait-stage fit generalizes to risk-seeking ecosystems or fast-cycle sectors like biotech or fintech.

Fourth, while this study centered on individual-level traits, future work should explore how regulatory complementarity functions across co-founders, advisors or investors. Team-based research could examine whether asymmetric trait configurations, such as pairing a high-locomotion founder with a high-assessment partner, enhance perceived adaptability or actual decision quality. Similarly, trait divergence between founders and hands-on investors may shape early-stage venture development, especially in early-stage ventures.

Together, these limitations point to a future research agenda that is both integrative and urgent. Capturing how EA emerges and is perceived will require temporally sensitive methods, multilevel designs and a sharper focus on how trait-stage fit is socially inferred. Most critically, scholars must determine whether entrepreneurs actively regulate their cognitive modes, or whether adaptability is something others project onto them. Clarifying this distinction is essential to positioning EA as a dynamic capacity rather than a static signal.

Chapter 4: 'I Like How You Juggle': When do Signals of Entrepreneurs' Ambidextrous Capabilities Influence Investor Decision-Making?

Introduction

Entrepreneur ambidexterity (EA) refers to the entrepreneur's capacity to alternate between exploring new opportunities and exploiting existing ones, a tension that underpins theories of organizational learning and strategic adaptation (March, 1991). While this duality has been examined extensively at the firm level under the concept of organizational ambidexterity (OA), most studies focus on how established organizations manage it through structural or contextual arrangements (Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2004). In contrast, more recent research has extended this logic to the individual level, emphasizing how entrepreneurs balance competing demands in uncertain, resource-constrained environments (Bledow et al., 2009; Mom et al., 2007; Volery et al., 2015). In early-stage ventures, where strategic and operational responsibility is concentrated in the founder, EA acts as a key mechanism for behavioral adjustment under volatile conditions (Baron & Shane, 2007; Eisenhardt & Martin, 2000; Noguti et al., 2022). Conceptualized here as a latent capability, EA is inferred from behavioral patterns rather than observed directly. Drawing on social cognitive theory (Bandura, 1986; Schunk & DiBenedetto, 2020), this study treats EA as arising from the reciprocal interaction of personal, behavioral and environmental factors.

Prior research has linked EA to a range of positive entrepreneurial outcomes, including innovation, learning and strategic adaptability (de Visser &

Faems, 2015; Rosing & Zacher, 2017; Volery et al., 2015). Entrepreneurs who effectively alternate between exploration and exploitation tend to identify novel opportunities while maintaining operational discipline, thereby enhancing performance under uncertainty (Jansen et al., 2009; Zheng et al., 2020). Initial evidence also suggests that EA is supported by cognitive and motivational traits. For example, Bledow et al. (2009) associate ambidextrous behavior with cognitive flexibility and self-regulation, while Good and Michel (2013) link it to dual-process thinking. These studies suggest that EA is not a fixed disposition but a behavioral potential reinforced by psychological mechanisms. Recent findings indicate that investors may consider such capabilities during founder evaluations, particularly when accompanied by visible signals of human capital such as prior experience or education (Noguti et al., 2022).

Despite growing interest in EA as a founder-level capability, little is known about how such latent traits are evaluated by investors. EA must be inferred under conditions of high uncertainty, yet the mechanisms by which investors recognize or disregard it remain undertheorized. Signaling theory offers a promising perspective by suggesting that entrepreneurs rely on observable proxies to convey underlying qualities (Connelly et al., 2011; Spence, 1973), but it remains unclear which signals relate to investment decisions, and how their interpretation varies with venture maturity or investor characteristics. Most studies still treat founder traits as uniformly positive, overlooking initial indications of context-contingent meaning (Islam et al., 2018; Kerr et al., 2018). At the same time, research emphasizes that early-stage

investors often rely on heuristics and affective cues to simplify evaluation under uncertainty (Huang & Pearce, 2015; Murnieks et al., 2011). However, little is known about signals related to founder adaptability. Without greater insight into how trait-level signals are received, weighted and filtered, theory remains limited in explaining how EA relates to investor support. As a result, founders lack guidance for aligning their self-presentation with stage-specific evaluative logics (Bammens & Collewaert, 2014; Gompers et al., 2020). Conceptually, the field still lacks a signal-based understanding of how latent entrepreneurial capabilities such as EA are valued by investors. This omission limits both theoretical explanations of founder evaluation and practical efforts to align adaptive capacity with investor expectations.

Addressing this gap is increasingly important as early-stage investors continue to make high-stakes judgments under conditions of limited information, relying on trait-level cues to infer founder potential without access to verifiable performance data (Gompers et al., 2020; Huang & Pearce, 2015; Maxwell et al., 2011; Zott & Huy, 2007). These decisions hinge not only on the presence of specific traits, but on how such traits are interpreted in relation to venture-stage demands and investor expectations. To examine this process, this study investigates how three founder-level characteristics—work experience, motivation and self-efficacy—serve as context-sensitive signals of EA in early-stage funding evaluations. Drawing on a conjoint experiment with 53 professional expert investors, the study analyzes how the evaluative weight of

these traits varies systematically across seed- and growth-stage contexts and alongside different investor characteristics.

Our novel data support three contributions. First, the study extends signaling theory by demonstrating that the evaluative meaning of founder traits is not fixed, but varies systematically with venture context, introducing a temporal contingency in how signals are interpreted. While early work has examined temporal dynamics in ambidextrous behavior (Chou et al., 2014; Evers & Andersson, 2021), this study adds investor-side perception as a critical lens. Second, it challenges the assumption of trait universality by showing that the same trait may be valued in one stage and penalized in another, highlighting the need for signal-stage alignment. Both insights respond to calls for more dynamic, context-sensitive models of founder evaluation (Berre & Le Pendeven, 2023; Islam et al., 2018). Third, the study contributes to micro-foundational accounts of entrepreneurial finance by illustrating how investor judgments of founder adaptability are shaped by signal interpretation under contextual constraints, offering practical implications for signal management in early-stage contexts.

Signaling Theory and Investor Inference of EA

Signaling theory (Spence, 1973) offers a foundational lens for understanding how individuals convey unobservable qualities to external evaluators. In early-stage entrepreneurial finance, where information asymmetries are pronounced and performance histories are limited, investors

rely on signals as indirect cues to assess founder competence and venture potential (Connelly et al., 2011; Hallen & Eisenhardt, 2012). Entrepreneurs project traits and decisions that serve as proxies for their underlying capabilities. For signals to be effective, they must be both visible and credible: visibility ensures detectability, while credibility depends not only on costliness but also on verification, third-party endorsement and consistency with other cues (Colombo, 2021; Connelly et al., 2011; Hsu & Ziedonis, 2013). Under uncertainty, investors often rely on pattern-based judgments, simplifying evaluations through heuristics and bounded rationality (Patzelt & Shepherd, 2011; Zacharakis & Shepherd, 2001). Observable behavior, such as coachability or confidence, may then serve as meaningful indicators of quality (Busenitz et al., 2005; Chen et al., 2009).

EA, as a latent capability, cannot be observed directly and must be inferred from founder traits associated with adaptive behavior. In past studies, work experience, motivational orientation and self-efficacy in strategic decision-making (Kauppila & Tempelaar, 2016; Noguti et al., 2022) were used productively in this way, each for a separate yet complimentary reason. I briefly introduce all three traits.

Work experience contributes to strategic routines and mental models (Mom et al., 2019). Deep, domain-specific experience may suggest executional reliability, whereas broad, cross-functional experience can indicate versatility and the ability to manage competing demands (Dencker & Gruber, 2015; Lazear, 2004). Conversely, when broad and functionally diverse, it may reflect

exploration-oriented versatility and greater readiness to alternate between competing strategic demands (Bublitz & Noseleit, 2014; Lazear, 2004).

Motivation reflects the entrepreneur's goal orientation and proactive commitment to long-term value creation (Scheepers et al., 2017). Motivation also offers insight into a founder's strategic posture (Mom et al., 2019). Intrinsic motivation, characterized by a focus on autonomy, mastery and long-term impact, is typically associated with exploration (Ryan & Deci, 2000; Yen et al., 2022), while extrinsic motivation, which emphasizes financial incentives, performance outcomes and scalability, is more closely linked to exploitation (Caniëls et al., 2017; Kao & Chen, 2016; Mom et al., 2019).

Self-efficacy enhances persistence and opportunity responsiveness in complex environments (Caniëls et al., 2017) and can signal either a bold or measured posture. Bold self-efficacy, e.g. pursuing breakthrough innovation in untested markets or making high-stakes resource commitments under uncertainty, typically reflects exploration-oriented ambition and inflated risk tolerance (Chen et al., 1998; Ma et al., 2023). Measured self-efficacy, i.e. adjusting venture scope in response to feedback or implementing phased scaling strategies, indicates a well-calibrated belief in one's capabilities and the capacity to balance exploration and exploitation (Mom et al., 2019; Scheepers et al., 2017). Table C1 in the Appendix provides a detailed overview of how these three traits are operationalized as signals in this study, along with their theoretical underpinnings and directional links to EA.

Beyond the signals themselves, signal interpretation is shaped by context, particularly the stage of the venture and the investor's background (Gompers et al., 2020; Huang & Pearce, 2015). In emerging, high-growth sectors, ambidextrous traits may be viewed as essential, whereas in more mature or resource-intensive industries, investors may prefer specialization and process reliability (Islam et al., 2018; Raisch et al., 2009). The same trait may be seen as visionary by one investor and risky by another. These factors influence both what signals are noticed and how they are understood.

In developing my theoretical framework, I build on insights by Murnieks et al. (2011) who showed that investor preferences are shaped by cognitive alignment and perceived similarity. I also take initial inspiration from Noguti et al. (2022), who offer early empirical evidence that founder ambidexterity may shape investor decision-making. However, their study does not theorize how specific traits relate to latent capabilities or how their signals vary in meaning across contexts. My extension of this line of argumentation examines how three founder-level traits—work experience, motivation and self-efficacy—jointly signal EA, and how their interpretation depends on venture stage and investor profile.

Our approach reflects growing interest in how cognitive traits influence early-stage evaluations and complements work emphasizing intuitive and affective processing under uncertainty (Huang & Pearce, 2015). Together, my new and these existing perspectives highlight trait-based inference as a key explanatory mechanism in entrepreneurial funding decisions. In the following

section I argue that the evaluative importance of these traits increases when they align with the contextual expectations of expert investors.

Hypotheses Development

I develop the argument that investors interpret signals of EA through evaluative frames that shift across the venture lifecycle. I build on the knowledge that as ventures move from seed to growth stages, the nature of uncertainty, the types of risk and the criteria used to assess founders evolve (Block et al., 2019; Moritz et al., 2022). In early stages, where uncertainty is high and performance data is limited, investors rely more heavily on founder characteristics as proxies for latent potential (Colombo, 2021; Gompers et al., 2020; Maxwell et al., 2011). Under such conditions, traits associated with EA, such as cognitive flexibility, learning agility and strategic adaptability, are often perceived as desirable indicators of future responsiveness (Huang & Pearce, 2015; Maxwell et al., 2011). By contrast, growth-stage investors operate under reduced uncertainty and are more concerned with executional reliability, process scalability and financial traction. In these settings, ambidextrous traits may be interpreted as either redundant or destabilizing unless coupled with signs of control and operational maturity (Block et al., 2019; Moritz et al., 2022; Tykvová, 2018). These interpretive differences are further shaped by variation in investor type. Business angels, who typically engage at the seed stage, tend to rely on experiential intuition and may privilege founder-level adaptability, relational cues and signals of learning potential (Gompers et al., 2020; Huang &

Pearce, 2015). Growth-oriented venture capitalists and private equity investors prioritize strategic discipline, replicability and measurable results (Block et al., 2019; Kerr et al., 2018). Thus, the evaluative meaning of a founder trait is not fixed but contingent on the venture and the interpretive heuristics of the investor.

Building on this contingency logic, I propose that the venture stage functions not merely as background context but as a formal moderator of signal interpretation. Drawing on signaling theory and cognitive fit perspectives (Connelly et al., 2011; Drover et al., 2018), I argue that founder-level traits do not exert uniform effects on investor evaluations, but are assessed differently depending on the stage-specific logics applied by investors. In early-stage settings, where uncertainty is high and verifiability low, traits such as flexibility and intrinsic motivation may serve as credible proxies for latent adaptability. In contrast, growth-stage evaluations are shaped by concerns with execution, accountability and scale, leading to a reweighting of the same signals, potentially reinterpreting earlier strengths as liabilities, or vice versa. I therefore conceptualize founder traits as context-sensitive cues whose evaluative impact is moderated by venture stage. The following sections apply this logic to the three founder traits introduced above: work experience, motivation and self-efficacy.

Work Experience as a Signal for Investors

Work experience, as a form of human capital, refers to the accumulation of task-relevant knowledge, skills and routines gained through prior occupational roles (Rees, 1965). It has been used to explain entrepreneurial preparedness, strategic judgment and opportunity recognition, and to contextualize venture resilience, scaling capacity and strategic adaptability. In uncertain early-stage investment contexts, investors face limited access to verifiable information and therefore rely on indirect cues such as work experience as a key signal of latent entrepreneurial capability (Connelly et al., 2011; Weiss, 1995). Because core competencies such as strategic adaptability or resilience are difficult to observe directly, investors use work experience as a proxy for underlying traits such as competence, reliability and flexibility (Noguti et al., 2022). The nature of this signal, however, depends on how the experience is structured. Lazear (2004) distinguishes between broad experience, which is gained across diverse roles or industries, and deep experience that is concentrated in a single domain. Broad experience equips founders with cross-functional agility, which enhances adaptability in uncertain, exploratory settings. Deep experience, by contrast, signals mastery and is better suited for environments demanding consistency and process optimization (Bublitz & Noseleit, 2014; Dencker & Gruber, 2015).

In seed-stage ventures, broad experience sends a strong signal of cognitive flexibility and the ability to navigate fluid strategic challenges (Brusche, 2016; Ferrati & Muffatto, 2021). Entrepreneurs with diverse backgrounds are

often better at managing exploration–exploitation trade-offs, adapting to shifting demands and absorbing feedback, which are all key features of ambidextrous behavior (Good & Michel, 2013; Mom et al., 2015). In growth-stage ventures, by contrast, investor priorities shift toward operational scaling and execution. Here, deep experience offers reassurance of reliable performance, domain-specific knowledge and the ability to build routines that enable efficient scaling (Colombo, 2021; Dencker & Gruber, 2015).

As the venture matures from seed to growth stage, the relative importance of breadth vs depths in experience changes accordingly, because investors apply stage-specific heuristics to interpret founder experience. In early stages, where uncertainty is high and strategic direction is still fluid, broad experience signals adaptive capacity, cognitive flexibility and the ability to engage in exploratory learning. These are qualities that are critical under conditions of low verifiability and rapid iteration (Brusche, 2016; Ferrati & Muffatto, 2021). In growth stages, however, investors shift their evaluative lens toward executional reliability and domain-specific problem-solving. In this context, deep experience is reweighted as more valuable because it conveys operational expertise, industry insight and the ability to institutionalize scalable routines (Colombo, 2021; Dencker & Gruber, 2015). Thus, the same experiential trait may be construed as either an asset or a liability depending on the temporal and strategic context in which it is interpreted. In sum, the signaling value of work experience is stage-contingent:

Hypothesis 1a: In the seed stage, investors favor entrepreneurs with broad work experience.

Hypothesis 1b: In the growth stage, investors favor entrepreneurs with deep work experience.

Hypothesis 1c: Venture stage moderates the relationship between work experience and investment likelihood.

Motivation as a Signal for Investors

Entrepreneurial motivation refers to the internal drivers that compel individuals to initiate and persist in venture creation, especially under uncertainty (Murnieks et al., 2020; Shane et al., 2003). It has long been recognized as a foundational antecedent of entrepreneurial action, shaping goal orientation, risk tolerance and strategic behavior (Schunk & DiBenedetto, 2020). In early-stage investment contexts, where uncertainty is high and verifiable performance metrics are scarce, motivation serves as a crucial behavioral signal (Mitteneß et al., 2012). According to signaling theory, such observable cues help investors infer unobservable founder qualities, e.g. resilience, value commitment or strategic intent, that are otherwise difficult to verify (Connelly et al., 2011). Self-determination theory differentiates entrepreneurial motivation into two types: intrinsic and extrinsic (Ryan & Deci, 2000). Intrinsic motivation arises from personal engagement with the creative or problem-solving aspects of venture building, i.e. curiosity, craftsmanship or social contribution, while extrinsic motivation is driven by outcome-oriented goals such as revenue,

valuation or external validation (Murnieks et al., 2020). These motivational orientations shape not only how entrepreneurs make decisions, but also how they are perceived by investors. From an investor's perspective, motivational signals are interpreted as proxies for the founder's strategic posture and temporal orientation.

In seed-stage contexts, intrinsic motivation can signal the founder's willingness to endure uncertainty, iterate based on feedback and prioritize long-term value creation over short-term gains. Such entrepreneurs are often perceived as resilient, because their motivation comes from within. They are product-focused and deeply invested in the venture's core purpose, i.e. traits aligned with early-stage investor preferences for adaptability and learning capacity (Caniëls et al., 2017; Mom et al., 2019). Moreover, intrinsic motivation has been empirically linked to higher levels of EA in dynamic environments, as it fosters the cognitive flexibility and self-directed learning necessary for managing exploration-exploitation trade-offs (Kao & Chen, 2016; Yen et al., 2022). This orientation signals not only a long-term commitment to innovation but also an ability to tolerate ambiguity and adjust direction based on learning and feedback.

In contrast, extrinsic motivation becomes more desirable as ventures mature. At the growth stage, the strategic emphasis is on disciplined execution, with performance evaluated through financial traction, operational efficiency and market expansion (Block et al., 2019; Croce et al., 2017). Founders are expected to scale proven models, meet growth targets and manage resources

toward repeatable outcomes, all of which align with an extrinsic, goal-oriented motivational profile (Caniëls et al., 2017; Kao & Chen, 2016). Extrinsically motivated founders signal their alignment with execution-oriented imperatives (e.g. growth accountability, performance discipline and outcome-driven prioritization), which growth-stage investors interpret as desirable markers of founder-venture fit (Busenitz et al., 2005; Freiberg & Matz, 2023).

The shift from seed stage to the growth stage, is echoed in a switch in preferred entrepreneurial motivation, mainly because investors recalibrate their evaluative focus as ventures mature, shifting from assessing founder resilience and vision to assessing goal alignment, accountability and executional focus (Block et al., 2019; Croce et al., 2017). In early stages, investors interpret intrinsic motivation as a signal of adaptive learning capacity. As the venture progresses, the same traits may be seen insufficiently aligned with the demands of scaling. In growth-stage contexts, extrinsic motivation is reweighted as more valuable because it signals outcome orientation, goal-directed action and alignment with performance-driven scaling logics (Busenitz et al., 2005; Freiberg & Matz, 2023). Thus, investor preferences regarding founder motivation are shaped by the strategic imperatives they expect the founder to fulfill at each stage of the venture lifecycle. Taken together, motivation functions as a context-sensitive signal:

Hypothesis 2a: In the seed stage, investors favor entrepreneurs with intrinsic motivation.

Hypothesis 2b: In the growth stage, investors favor entrepreneurs with extrinsic motivation.

Hypothesis 2c: Venture stage moderates the relationship between motivation and investment likelihood.

Self-Efficacy as a Signal for Investors

Self-efficacy, defined as a belief in one's ability to organize and execute courses of action (Bandura, 1994), has been consistently identified as a critical psychological antecedent of entrepreneurial behavior. In dynamic, uncertain environments, high entrepreneurial self-efficacy has been found to support perseverance, initiative and proactive problem-solving (Chen et al., 1998; Rauch & Frese, 2007). It also enhances goal-setting, increases effort investment and fosters resilience in the face of setbacks, i.e. capacities that are particularly critical in early-stage ventures characterized by ambiguity, minimal structure and limited feedback loops (Baron et al., 2016; Murnieks et al., 2020). However, because self-efficacy is an internal belief, it only becomes relevant to investors when expressed through observable behavior. Signals such as confident posture, decisive communication, ambitious goal-setting and assertive strategic framing allow investors to infer the founder's underlying competence (Colombo, 2021; Mayanja et al., 2021).

In seed-stage contexts, bold self-efficacy is often interpreted as a strength. Expressions of boldness, such as risk-tolerant strategies, confident vision pitches and decisive early actions, signal to investors that the

entrepreneur is willing and able to operate under uncertainty and pursue breakthrough opportunities (Affum-Osei et al., 2020; Colombo, 2021; Huang & Pearce, 2015). Empirical evidence further suggests that entrepreneurs who communicate disruptive, future-oriented visions aimed at reshaping markets and ecosystems, are more likely to attract early-stage funding, as such narratives evoke expectations of extraordinary returns despite their associated risks (Balen et al., 2019). Founders who display high self-efficacy often gain attention by conveying momentum and adaptability (Mom et al., 2019). Although boldness often borders on overconfidence (Hayward et al., 2006) or narcissism (Miller, 2015), investors tend to reward founders who might reasonably be judged as overconfident (Petty et al., 2023).

By contrast, in growth-stage ventures, where business models have been validated and ventures are focused on operational scale, measured self-efficacy becomes more desirable. At this stage, investor attention shifts to signals of executional discipline, reliability and the capacity to manage organizational complexity, aligning with evidence that later-stage success requires different traits than early-stage traction (Freiberg & Matz, 2023). Measured self-efficacy, as expressed through realistic goal-setting, deliberate planning, and calibrated growth trajectories, suggests that the founder can lead structured expansion while remaining strategically focused (Kauppila & Tempelaar, 2016). Innovation remains important, but boldness may be increasingly seen as a liability (Colombo, 2021). Taken together, these patterns suggest that self-efficacy functions as a context-dependent signal.

As the venture matures from the seed stage to the growth stage, bold self-efficacy gives way to an emphasis on a more measured form of self-efficacy (as carefully defined above), for three reasons. First, as ventures mature, investors become less tolerant of assertive signaling that lacks operational grounding. What is interpreted as visionary confidence in early stages may be seen as overconfidence or volatility when strategic execution becomes the priority (Colombo, 2021; Hayward et al., 2006). Second, the informational context changes. Investors now rely less on founder narratives and more on track records, shifting attention to signals of planning ability, scalability and self-regulation (Freiberg & Matz, 2023). Third, the relational norms of investor-founder interaction evolve. Whereas boldness may attract initial attention, later-stage investors favor founders who exhibit coachability, measured ambition and governance alignment (Ciuchta et al., 2018; Petty et al., 2023). This leads to the following hypotheses:

Hypothesis 3a: In the seed stage, investors will favor entrepreneurs with bold self-efficacy.

Hypothesis 3b: In the growth stage, investors will favor entrepreneurs with measured self-efficacy.

Hypothesis 3c: Venture stage moderates the relationship between self-efficacy and investment likelihood.

Methodology

Research Instrument

This study employed a conjoint experimental design to examine how investors evaluate entrepreneurs based on three founder-level traits. Conjoint analysis is well-suited for simulating real-world decision-making under uncertainty and has been widely applied in entrepreneurship research to capture how respondents make trade-offs between competing signals (Fu & Tietz, 2019; Haynie et al., 2010; Shepherd et al., 2013). The instrument comprised three parts: (1) a brief pre-survey collecting participant background data, used to ensure eligibility before participants proceeded to the main task, (2) a task introduction describing the investment scenario and evaluated attributes, and (3) the conjoint task itself. Figure A1 in the Appendix shows the task interface as presented to respondents. The instrument was piloted in advance through individual video calls with two professional early-stage investors, both of whom had prior experience evaluating seed- and growth-stage ventures. These sessions served to assess the realism, interpretability and contextual fit of the profiles. Based on their feedback, minor adjustments were made to the wording of attribute levels and the visual layout of the conjoint interface to enhance clarity and ecological validity. The experiment followed a fully crossed, within-subjects design with three binary attributes—work experience (broad vs. deep), motivation (intrinsic vs. extrinsic) and self-efficacy (bold vs. measured)—evaluated across two venture stages (seed and growth). A full-factorial setup generated eight unique founder profiles,

each evaluated at both stages, yielding a total of 16 evaluations per participant. This design ensured orthogonality and statistical balance without overburdening respondents. Participants rated each profile on two 0–100 scales to indicate their investment likelihood in the seed stage and in the growth stage. To assess response consistency, one randomly selected profile was repeated in each stage condition (seed and growth), resulting in two repeated profiles per participant overall. These were used exclusively for test-retest reliability checks and excluded from the main analysis.

Sample

The study targeted expert professional early-stage investors, specifically venture capitalists (VCs) and business angels (BAs) who routinely assess founders in uncertain, high-stakes contexts. Investor contacts were drawn from Signal, a curated database of over 19,000 investors. Only those 12,980 with verified email or LinkedIn details were retained. I reached out via Lemlist, using LinkedIn messaging as the primary channel and email when necessary. I sent reminders to improve response rates. Of the 12,980 investors contacted, 86 began the survey. Participants were excluded if they did not consent, failed an attention check, or did not complete the full conjoint task. This left 53 complete responses, yielding a response rate of 1.3%, a completion rate of 62%, and a conversion rate of 31% among those who engaged. These figures align with norms for elite respondents (Baruch & Holtom, 2008) and echo the professional expert nature of my sampling pool. The final dataset includes 848 profile

evaluations from 53 expert investors with substantial decision-making authority and track records in venture selection. A detailed anonymized sample overview is included in Appendix Table C2, highlighting the professional diversity and elite status of the sample in line with the study's focus on expert investor judgments. Although modest in absolute size, the sample is consistent with established practices in expert-focused conjoint research. Similar studies include Fu and Tietz (2019; $n = 50$), Murnieks et al. (2016; $n = 53$) and Murnieks et al. (2011; $n = 60$), all of which used conjoint designs with professional investors. These studies emphasize internal validity and cognitive realism over representativeness. Data collection took place in March and April 2025. Median survey completion time was 9.8 minutes (mean = 21.2 min.), suggesting strong engagement. Consequently, data quality was high, with test-retest reliability on randomly repeated profiles, yielding high consistency for both seed-stage ($r = .83$) and growth-stage ($r = .86$) ratings. Nonresponse bias was evaluated using early vs. late comparison t-tests (Armstrong & Overton, 1977), revealing no significant differences in investment-related variables (all $p > .25$). A small but significant age difference ($p = .039$), showed that early respondents were on average 9.2 years older than late respondents. However, given the similarity across all other variables, nonresponse bias is unlikely to have impacted the core findings.

Dependent Variables

Participating expert investors rated their likelihood of investing in each entrepreneur profile on a continuous scale from 0 to 100, where 0 meant “certainly not” and 100 meant “certainly yes”. Each participant provided a rating for every profile under both seed-stage and growth-stage conditions, yielding two separate dependent variables. Consistent with Drover et al. (2018), these investment likelihood scores are interpreted as proxies for signal reception, i.e. they capture how founder traits, framed as signals of ambidextrous capability, shape perceived investment attractiveness. This dual-rating structure allows for the emergence of distinct evaluative logics that I hypothesize investors apply at different stages of venture development. Using a probabilistic slider scale allowed for greater granularity and realism than a Likert-type scale. A Pearson correlation across all respondents ($r = .78$) indicated substantial but imperfect alignment between seed- and growth-stage ratings, supporting the decision to analyze them separately. Although this study does not probe the precise mechanisms and cognitive processes behind investor judgments (e.g. heuristics vs. deliberation), the outcome measures provide insight into how the same signals result in different behaviors depending on the developmental stage of the focal venture.

Explanatory Variables: Independent, Control and Moderator Variables

Level 1: Decision-level explanatory variables. At the first level of analysis, the independent variables are three founder attributes: work experience,

motivation and self-efficacy. These were selected based on their relevance to EA and their prominence in signaling-based investor research (Fu & Tietz, 2019; Volery et al., 2015). Work experience contrasted deep, specialized expertise (aligned with exploitation) against broad, cross-functional backgrounds (aligned with exploration) (Good & Michel, 2013; Lazear, 2004). Motivation distinguishes intrinsic drivers such as curiosity and customer value from extrinsic drivers like revenue and performance goals (Mom et al., 2019; Ryan & Deci, 2000). Self-efficacy was represented in the profiles through two contrasting forms of expressed confidence: bold confidence (e.g. visionary framing, risk-tolerant ambition) and measured confidence (e.g. strategic realism, cautious planning). This design follows prior work linking confidence signals to underlying self-efficacy beliefs (Bandura, 1994; Ma et al., 2023). While respondents interacted with observable expressions of confidence, the theoretical construct at stake was self-efficacy, defined as a latent belief in one's capacity to achieve goals. All variables were selected for both theoretical clarity and signal recognizability, in line with conjoint design standards (Orme, 2009). Table C1 in the Appendix shows a detailed summary.

Level 2: Venture stage context. To examine how signal interpretation shifts across stages of venture development, the experiment varied the venture stage in which each founder profile was evaluated. Participants evaluated each profile at the seed stage and the growth stage. The seed stage was presented as a phase of high uncertainty and experimentation, with an emphasis on product–market fit and adaptive learning (Beckman et al., 2012; Gruber et al.,

2015). The growth stage was framed as a period of scaling, efficiency and strategic refinement, where investors prioritize reliability and execution (Wiltbank et al., 2009; Zahra et al., 2006). Profiles in both stages were, *ceteris paribus*, situated within high-tech industries for comparability.

Level 3: Individual-level variables. To control for variation in investor profiles and preferences, individual characteristics were collected. These included age, gender, education level, investor type, investment stage preference, years of experience, number of past investments, and country of residence. Given that United States-based investors were overrepresented in the sample, a binary control variable was created to distinguish US-based participants (coded as 1) from all others (coded as 0). This adjustment helps mitigate potential geographic bias in the models, particularly as evaluative heuristics and investment criteria may differ across national contexts (Block et al., 2019; Brooks et al., 2014). Prior research suggests these factors shape how investors interpret risk and assess founder traits (Block et al., 2019; Brooks et al., 2014; Moritz et al., 2022); e.g. older investors may favor less risky ventures (Block et al., 2019), while male investors may lean toward high-growth, high-risk profiles (Brooks et al., 2014). Education, particularly in technical domains, is associated with greater openness to innovation (Mueller et al., 2017). Table C3 in the Appendix provides an overview of the individual-level variables.

Analysis and Results

Descriptive statistics and sample characteristics are summarized in Table 3. Participants ranged in age from 24 to 79 years ($M = 47.0$, $SD = 14.57$), with an average of 12.5 years of investment experience ($SD = 10.54$) and 27.2 venture investments ($SD = 18.87$). The sample was predominantly male (92%) and highly educated ($M = 17.8$ years of formal education, $SD = 1.51$). Investment experience correlated strongly with age ($r = .72$, $p < .001$) and number of investments ($r = .54$, $p < .001$), and age also correlated with number of investments ($r = .38$, $p < .01$). Education showed no significant associations with age, gender or experience. Most participants were based in North America, with 62% located in the United States. The sample was primarily composed of venture capitalists (70%), followed by business angels (23%) and private equity or limited buy-out investors (6%). Nearly 90% focused on seed-stage or early-stage ventures. Participants reported sectoral expertise across a range of industries, most commonly in finance and insurance, information technology and health care. Investment experience correlated strongly with age ($r = .72$, $p < .001$) and number of investments ($r = .54$, $p < .001$), while age also correlated moderately with number of investments ($r = .38$, $p < .01$). Investor type showed a modest positive correlation with gender ($r = .31$, $p < .05$), indicating some variation in role distribution.

Table 3*Descriptive Statistics and Correlations*

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Age (years)	46.98	14.57	1							
2. Gender (0 = Male, 1 = Female)	0.09	0.3	0.08	1						
3. Education (years)	17.79	1.51	0.09	0.04	1					
4. US investor (0 = No, 1 = Yes)	0.62	0.49	0.27	0.12	-0.03	1				
5. Experience (years)	12.53	10.54	0.72***	0.01	-0.04	0.22	1			
6. Number of investments	27.17	18.87	0.38**	0.1	-0.13	0.25	0.54***	1		
7. Investor type (categorical)	2	1.68	0.26	0.31*	-0.1	0.14	0.04	-0.22	1	
8. Investor stage (categorical)	1.66	0.73	-0.06	0.06	0.07	0.01	0.01	-0.16	-0.02	1

Note: *p < .05; **p < .01; ***p < .001.

Investor type: 1 = VC fund, 2 = Growth equity fund, 3 = LBO fund, 4 = Family office, 5 = Business angel, 6 = Other.
Investor stage: 1 = Seed-stage, 2 = Early-stage, 3 = Growth/Expansion-stage, 4 = Later-stage.

Table 4 reports the results for the hierarchical linear models (HLM) of the seed and growth stage investment likelihood and examines whether founder-level signals influence investor evaluations differently across venture stages. All models show strong overall explanatory power and model statistics. To establish a baseline, the controls-only models (Model 1 and Model 3) were first estimated, and several notable patterns emerged. Business angel investors evaluated ventures more conservatively than venture capitalists ($\beta = -17.389$, $p < .10$), and investors with a higher number of past investments tended to assign lower evaluation scores ($\beta = -0.570$, $p < .05$), indicating more critical appraisal by more experienced decision-makers. Additionally, investors with a sectoral focus in construction consistently gave significantly lower scores ($\beta = -31.784$, $p < .01$), possibly reflecting domain-specific expectations around venture scalability and risk.

Table 4*HLM Models of Investor Evaluation at the Seed and Growth Stages*

Variables	Model 1:	Model 2:	Model 3:	Model 4:	Model 5:
	Seed Stage Controls-only	Seed Stage Full	Growth Stage Controls-only	Growth Stage Full	Pooled (Stage Interaction)
	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)
<i>Main effects</i>					
Broad work experience	—	-9.693*** (1.949)	—	-2.014 (1.969)	-9.693*** (1.949)
Extrinsic motivation	—	-14.278*** (2.692)	—	-0.618 (2.522)	-14.278*** (2.692)
Bold self-efficacy	—	4.476+ (2.507)	—	-2.099 (1.848)	4.476+ (2.507)
Growth stage	—	—	—	—	-3.146 (3.182)
<i>Interaction terms</i>					
Broad work experience × Growth sta.	—	—	—	—	7.679** (2.497)
Extrinsic motivation × Growth stage	—	—	—	—	13.660*** (3.054)
Bold self-efficacy × Growth stage	—	—	—	—	-6.575* (2.553)
<i>Controls</i>					
Gender (0 = Male, 1 = Female)	31.481 (16.775)	31.481 (16.775)	37.602+ (16.645)	37.602+ (16.645)	34.542+ (16.489)
Education (years)	-1.029 (1.764)	-1.029 (1.764)	-2.178 (1.821)	-2.178 (1.821)	-1.603 (1.720)
Age (years)	-0.366 (0.319)	-0.366 (0.319)	-0.517 (0.369)	-0.517 (0.369)	-0.441 (0.326)
US investor (0 = No, 1 = Yes)	-6.260 (7.008)	-6.260 (7.008)	5.510 (7.186)	5.510 (7.186)	-0.375 (6.799)
Investor experience (years)	0.999* (0.445)	0.999* (0.445)	1.131* (0.461)	1.131* (0.461)	1.065* (0.430)
Investor experience (# investments)	-0.570* (0.247)	-0.570* (0.247)	-0.762* (0.246)	-0.762* (0.246)	-0.666* (0.236)
Investor type: Growth equity fund	-9.746 (9.981)	-9.746 (9.981)	4.916 (15.748)	4.916 (15.748)	-2.415 (12.474)
Investor type: Leveraged buyout fund	-0.961 (17.634)	-0.961 (17.634)	28.215 (20.692)	28.215 (20.692)	13.627 (18.441)
Investor type: Business angel	-17.389+ (8.629)	-17.389+ (8.629)	-18.832+ (8.988)	-18.832+ (8.988)	-18.111+ (8.423)
Stage focus: Early-stage	4.417 (5.651)	4.417 (5.651)	5.830 (5.699)	5.830 (5.699)	5.124 (5.351)
Stage focus: Growth-/expansion	-7.667 (9.493)	-7.667 (9.493)	-9.573 (10.799)	-9.573 (10.799)	-8.620 (9.598)
Stage focus: Later stage	-4.937 (32.635)	-4.937 (32.635)	-6.750 (38.976)	-6.750 (38.976)	-5.843 (34.371)
Industry focus	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>	<i>Included</i>
Intercept	81.856* (35.369)	91.604* (35.557)	108.405* (42.134)	110.770* (42.338)	102.760* (37.298)
<i>Model fit</i>					
Wald chi ²	66.41	150.45	71.26	74.42	172.65
df	32	35	32	35	39
Prob > χ ²	0	0	0	0	0
R ² (marginal)	30.06%	41.82%	42.19%	42.55%	38.30%
AIC	3881.4	3803.37	3735.88	3738.72	7505.63

Note: Number of observations per stage model = 424; pooled model = 848. Number of respondents = 53. Education and gender operationalized as continuous and binary variables, respectively. Industry fixed effects are included in all models but omitted here for parsimony. The "Growth stage" variable reflects the experimental evaluation context and is conceptually distinct from investors' self-reported stage focus (e.g. growth-/expansion-stage focus). Significance levels: + p < .10, * p < .05, ** p < .01, *** p < .001.

These effects remain robust across all models and underscore the importance of accounting for heterogeneity among investor profiles. Models 2 and 4 then tested the main effects of work experience, motivation and self-efficacy on investor evaluations, without including interaction terms for both stages. In this context, broad work experience has a significant negative effect on investor evaluations ($\beta = -9.693$, $p < .001$), which interestingly contradicts Hypothesis 1a. Rather than rewarding cross-functional experience, investors at the seed stage tend to view generalist backgrounds less favorably, possibly preferring depth in a specific domain. Extrinsic motivation is negatively associated with investor support ($\beta = -14.278$, $p < .001$), which supports Hypothesis 2a. The effect of bold self-efficacy is positive but only marginally significant ($\beta = 4.476$, $p < .10$), offering limited support for Hypothesis 3a. This suggests that while visionary confidence may be viewed positively, it is not a strong determinant of investor preference at the seed stage. The growth-stage model, Model 4 in Table 4, shows that contrary to expectations, neither broad work experience, extrinsic motivation nor bold self-efficacy have a significant effect on investor evaluations in later-stage contexts, thus offering no support for Hypotheses 1b, 2b and 3b.

To assess the strength and reliability of the models, fit statistics were examined across all hierarchical linear models. The Wald χ^2 values showed strong overall explanatory power (seed-stage model: $\chi^2 = 150.45$, $p < .001$; growth-stage model: $\chi^2 = 74.42$, $p < .001$; pooled interaction model: $\chi^2 = 172.65$, $p < .001$). R^2 values indicate that the seed-stage model explained 41.82% of

variance, the growth-stage model 42.55% and the pooled model 38.30%. The Akaike Information Criterion (AIC) further confirmed the robustness of the models, with the pooled model including interaction terms (AIC = 7,505.63) showing better fit compared to the additive models (seed: AIC = 3,803.37; growth: AIC = 3,738.72), supporting the decision to model stage-specific effects. Additionally, checks for multicollinearity across all models showed no variance inflation factor (VIF) exceeding accepted thresholds, indicating that the effects are not distorted by correlations among predictors. These results confirm that the models are well-specified and reliable, and that the effects of entrepreneur signals and investor characteristics are distinct and interpretable. Notably, founder-level signals explained more variance in early-stage evaluations ($R^2 = 41.82\%$) than in growth-stage models ($R^2 = 42.55\%$ vs. 42.19% for controls only), indicating that founder traits play a greater role when venture-level indicators are limited. Model fit comparisons further support the inclusion of interaction terms. The pooled model (Model 5), which incorporates venture stage interactions, shows a substantial improvement in explanatory power over the additive models: $\Delta AIC = -36.46$ versus Model 2 and $\Delta\chi^2 = +22.20$ ($df = 4$, $p < .001$), confirming that moderation effects significantly enhance model specification. To isolate the explanatory weight of founder-level signals, control-only models showed a substantial drop in explained variance in the seed-stage model (from 41.82% to 30.06%), but only a marginal change in the growth-stage model (from 42.55% to 42.19%). This pattern suggests that investor evaluations are more strongly shaped by founder traits in early-stage

contexts, where firm-level indicators are scarce, than in later stages, where other criteria likely dominate. Although the focal attributes show limited direct effects in the growth-stage model, a pooled specification incorporating interaction terms provides a more nuanced perspective by testing whether the relevance of founder signals shifts systematically with the venture stage.

A pooled mixed-effects model, Model 5, estimated the full set of controls, main effects and interaction terms between each signal and the venture stage (dummy coded as 0 = seed stage, 1 = growth stage). While simpler specifications were tested to isolate the contribution of each model component, only the full version is reported in Table 4, as it includes the interaction terms necessary to test the proposed moderation effects. Unlike the separate stage-specific models (Model 2 and Model 4), which estimate the effects of founder signals within each venture stage (Hypotheses 1a, 2a, 3a and 1b, 2b, 3b), the pooled specification enables a formal test of moderation (Hypotheses 1c, 2c, and 3c), allowing us to assess whether the effects of founder-level signals differ systematically across stages. These last hypotheses are modeled as interaction effects between each founder trait and the stage variable, testing whether investor interpretations shift in response to contextual change.

The results reveal three significant two-way interactions, offering partial support for the idea that the relevance of signals changes with venture stage. First, the interaction between broad work experience and growth stage is positive and significant ($\beta = 7.679$, $p < .01$). This suggests that although broad experience is penalized in the seed stage, its negative impact lessens, and may

even turn positive, as ventures seek funding in the growth stage. This finding offers qualified support for Hypothesis 1c. Second, the interaction between extrinsic motivation and growth stage is also positive and highly significant ($\beta = 13.660$, $p < .001$). This shows that entrepreneurs driven by outcome-oriented goals, such as financial returns or market share, tend to be viewed less favorably in seed-stage contexts but are evaluated more positively at the growth stage. This supports Hypothesis 2c. Third, the interaction between bold self-efficacy and growth stage is negative and significant ($\beta = -6.575$, $p < .05$). This indicates that while boldness has limited influence during the seed stage, it becomes increasingly seen as a drawback in growth-stage evaluations. This finding supports Hypothesis 3c. The joint support of Hypotheses 1c, 2c and 3c indicates that the influence of founder-level signals on investment likelihood is moderated by venture stage. Each trait's relevance shifts significantly across stages, supporting the proposed contingency model of entrepreneurial signal interpretation. Control effects remained directionally consistent across all models (see Table 4 and Appendix Table C4). Several patterns suggest the influence of evaluator characteristics on signal interpretation: Business angels were consistently more conservative than venture capital investors, and construction-focused investors assigned lower ratings across both stages, possibly reflecting domain-specific expectations regarding scalability and risk. These patterns, while peripheral to the main hypotheses, underscore the heterogeneity in investor decision logics and reinforce the analytical value of modeling both founder- and investor-level attributes.

Figure 3

Investor Evaluation of Observable Traits Interpreted as Proxies for Latent EA

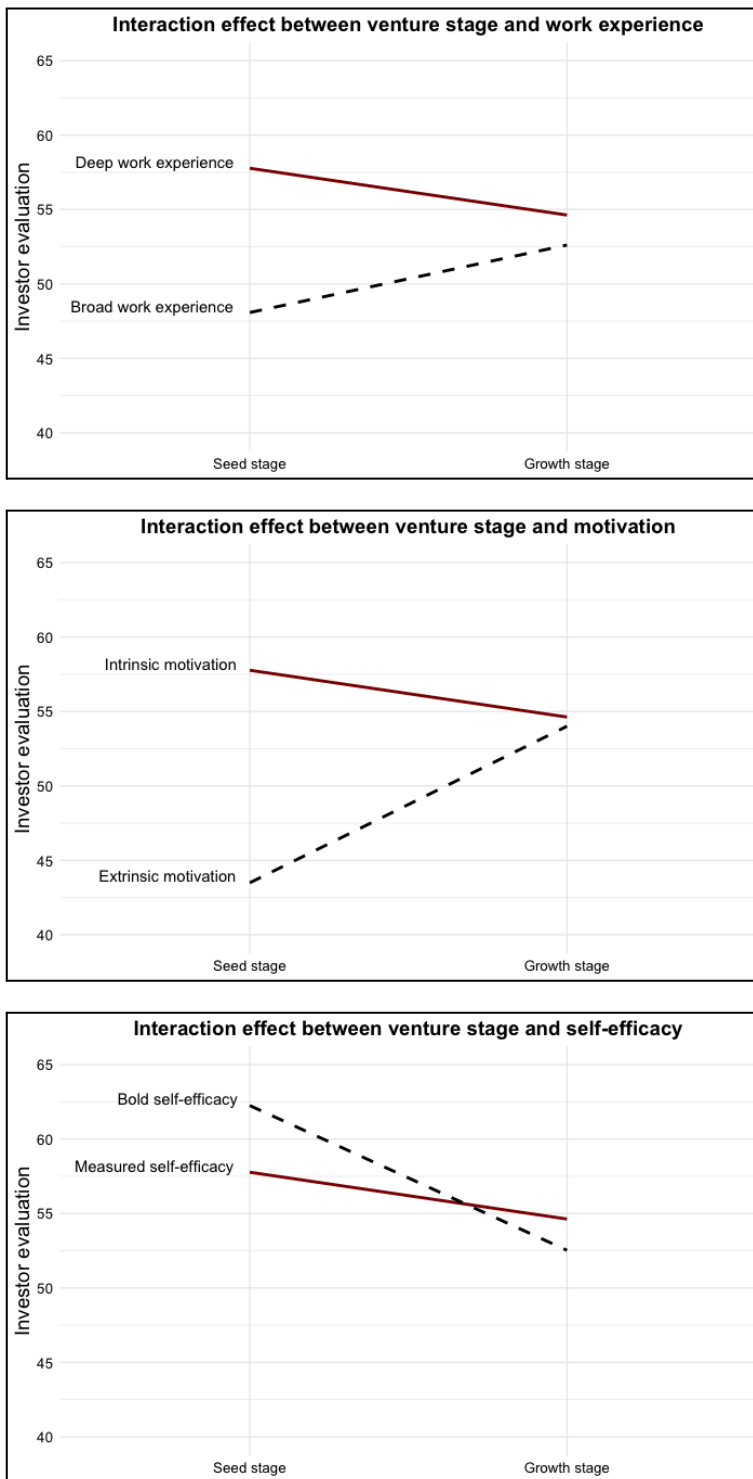


Figure 3 illustrates the nature of these interaction effects by showing predicted investor evaluations across different venture stages for both motivation and experience. The dotted lines in the three figures highlight how extrinsic motivation and broad work experience become more relevant in investors evaluations as ventures mature. Finally, the preference for bold self-efficacy in seed stages reverses and is replaced by a relative preference for measured self-efficacy in the growth stage.

Discussion

This study examined how three founder traits—work experience, motivation and self-efficacy—serve differently as evaluative signals of EA across venture stages. The findings reveal that the perceived value of these traits shifts systematically with venture maturity, highlighting the temporal contingency and interpretive variability of signals related to adaptive founder capabilities.

Theoretical Implications

This study overall contributes to the literature on EA by empirically validating its evaluative relevance in early-stage funding contexts. While previous research has conceptually argued that EA supports entrepreneurial performance under uncertainty (Volery et al., 2015), and recent work has demonstrated that ambidextrous founders are more likely to secure venture funding (Noguti et al., 2022), this study extends these conversations by demonstrating that early-stage investors interpret observable founder

traits—such as work experience, motivational orientation and self-efficacy—as context-sensitive proxies for ambidextrous potential. These traits were conceptually anchored along an exploration-exploitation continuum, building on prior work that links intrinsic motivation, broad experience and bold self-efficacy to exploration, and extrinsic motivation or domain-specific expertise to exploitation (Kao & Chen, 2016; Mom et al., 2019; Yen et al., 2022). Jointly, these findings contribute to a dynamic, socially embedded understanding of EA, in which adaptive capacity is not only enacted by the entrepreneur, but also co-constructed through investor perception, what this study conceptualizes as a performative capability. These effects were not uniform: formal moderation tests reveal that the influence of each trait on investment likelihood is conditional on the venture stage, affirming that founder signals are differentially interpreted depending on the maturity of the venture. I detail three contributions below.

First, the findings show that the value of individual traits shifts systematically with the venture's stage of development. Broad work experience is penalized in seed-stage evaluations, where deep domain expertise is often seen as a signal of operational readiness, but is positively valued in growth contexts, where cross-functional versatility signals a capacity to manage strategic complexity. Whereas Dencker and Gruber (2015) emphasize the opportunity-enhancing value of generalist experience, I theorize and empirically substantiate its differential effects across venture stages. My findings thus introduce a stage-contingent inversion that challenges prior assumptions about experience as a uniformly positive signal. This extension is reconcilable with

work suggesting that deep, domain-specific experience is particularly valued in early-stage evaluations, where operational readiness is difficult to verify and generalist profiles may be perceived as diffuse or ambiguous (Dencker & Gruber, 2015; Gimmon & Levie, 2010; Ko & McKelvie, 2018). Likewise, motivation emerges not simply as an internal driver but as a contextually evaluated signal of strategic intent. Drawing on self-determination theory, which distinguishes between intrinsic motivation (driven by personal meaning and engagement) and extrinsic motivation (oriented toward external rewards and outcomes) (Ryan & Deci, 2000), I show that investor preferences are not determined by these motivational orientations per se, but by how they align with stage-specific expectations. While prior research has linked intrinsic motivation to adaptive learning and exploration (Caniëls & van Assen, 2019; Kao & Chen, 2016), and extrinsic motivation to goal clarity and disciplined execution (Yen et al., 2022), my findings demonstrate that these traits acquire shifting evaluative meanings across the venture lifecycle. In early-stage assessments, intrinsic motivation is decoded as a signal of creative persistence, tolerance for ambiguity and long-term commitment. In later-stage contexts, however, extrinsic motivation becomes more valued, as it aligns with investor expectations for growth accountability, outcome prioritization and executional focus. These patterns suggest that motivation is not simply inferred as a psychological input, but performed and interpreted as a strategic signal of founder-venture fit. Future research might explore how entrepreneurs intentionally frame their motivational posture in ways that resonate with investor heuristics, thereby managing

signal-stage fit as an adaptive, performative capability. Bold self-efficacy, reflecting exploration-oriented ambition, appears to be moderately tolerated at the seed stage, though its evaluative strength is limited. The marginal significance observed in my data suggests that while boldness may attract initial attention, it is unlikely to be a decisive factor in early-stage funding decisions. This pattern reflects prior research showing that assertive, high-confidence founder traits may create a strong positive impression early on (Pollack & Bosse, 2014), though such effects are context-dependent. However, while earlier work focused on the impression-formation potential of boldness at a single point in time (Hayward et al., 2006), my findings extend this view by uncovering a systematic shift: such traits may later be reinterpreted as overconfidence or even hubris in growth-stage evaluations, particularly when paired with resistance to advice or excessive risk-taking (Balen et al., 2019; Huang & Pearce, 2015). These results confirm the temporal contingency of entrepreneurial signals (Drover et al., 2018).

My second contribution extends beyond EA as a behavioral repertoire, which instead is selectively favored under different contextual conditions. This breaks with earlier positions that treat ambidexterity as an internal capability observable primarily through formal organizational structures (Birkinshaw & Gibson, 2004; Raisch et al., 2009), and instead supports the view that external stakeholders infer strategic intent from observable founder traits (Guerrero, 2021; Kaplan & Orlikowski, 2013). While this stakeholder-oriented view of ambidexterity has primarily been theorized in the context of organizational

structures (Guerrero, 2021), the present findings extend it to the individual level, suggesting that founder adaptability is also inferred through externally visible cues. This in turn implies that in early-stage evaluations, where formal mechanisms are absent, investors appear to construct founder-level ambidexterity from perceived patterns of decision-making and strategic behavior. Such inference involves more than recognizing behavioral flexibility; it rests on attributing a deeper cognitive orientation, namely a capacity for strategic switching or dynamic regulatory alignment (Bledow et al., 2009; Good & Michel, 2013; Mom et al., 2015). In this sense, ambidextrous potential emerges not as a fixed trait, but as a socially construed and context-sensitive capability, shaped through the interplay of investor heuristics, stage-specific expectations and the weighing of trait-based signals.

My third contribution deepens signaling theory by illustrating that the interpretive strength of a signal depends not just on its visibility or costliness, but on its alignment with shifting venture logics. Traditional accounts treat signals as stable indicators of latent quality (Spence, 1973), yet this study shows that the same trait, e.g. bold self-efficacy, can be interpreted differently, e.g. as visionary or reckless, depending on when and how it is assessed. This finding therefore answers calls for more nuanced models of entrepreneurial signaling that incorporate temporal and cognitive variation (Colombo, 2021; Janney & Folta, 2003), and responds to critiques that the signaling literature remains theoretically fragmented and underutilized in early-stage financing (Svetek, 2022). My results directly operationalize investor-side interpretation

under contextual constraints, offering a dynamic, receiver-centric view that has been widely called for but rarely implemented. To continue advancing this agenda, future research should not only examine which signals founders emit, but also how investors make sense of them, particularly under varying informational and temporal constraints. This highlights the need for signaling studies, particularly those using experimental or conjoint methods, to systematically account for signal decoding processes and evaluator-side contingencies, which in turn suggests that future research on entrepreneurial finance may benefit from designs that include both founder and funder perspectives. This will allow for a more complete understanding of how signals are co-constructed, reweighted and reinterpreted across venture stages. It also complements social-cognitive theories of EA (Bandura, 1986; Schunk & DiBenedetto, 2020), suggesting that adaptive capacity is not only generated through internal self-regulation, but constituted through its performative articulation and the interpretive frames applied by evaluators in contextually specific decision environments.

Taken together, my three contributions clarify how and when EA becomes evaluatively meaningful, not through direct observation but through investors' interpretation of founder-level signals within specific contextual constraints. EA, in this sense, is neither purely behavioral nor purely dispositional; it is a contextualized, perceived and enacted capability, co-constructed at the interface of internal adaptability and external recognition. Viewed more broadly, I advance a performative view of EA, aligning with a

growing literature that conceptualizes entrepreneurial capabilities as relational accomplishments that unfold through signaling, interpretation and contextual legitimation. Whereas prior applications of performativity theory have largely focused on strategic practice and organizational routines (Kaplan & Orlikowski, 2013; Rindova et al., 2009), I build on this perspective by showing how performativity operates at the founder level, where EA is enacted and interpreted in relation to stage-contingent investor expectations. Strategic action, in this view, emerges not simply from internal traits or plans, but from entrepreneurs' capacity to frame their adaptability in ways that resonate with investor logics and stage-specific expectations. This reconceptualization invites further research on how entrepreneurs manage signal-stage fit, and how investor-side variation (e.g. experience, evaluative schemas, risk preferences) moderates the inference of adaptive potential. This also has important methodological consequences. Studies of EA need to take the venture's stage of development explicitly into account, since investor interpretations of founder behavior vary systematically across stages. If stage is ignored, the effects of EA may appear inconsistent, or may be wrongly explained by stable founder traits rather than by how evaluators interpret signals in different decision contexts.

Managerial Implications

Translating these findings into actionable guidance, this study offers stage-sensitive insights for entrepreneurs, support organizations and investors. For entrepreneurs, the findings highlight the importance of adapting how they

present their capabilities to investors, as the value placed on specific traits changes depending on the stage of the venture. In early-stage contexts, where uncertainty is high, entrepreneurs should focus on demonstrating deep, domain-specific expertise and intrinsic motivation. At the seed stage, confidence is best conveyed through pragmatic, domain-specific focus, as overly broad experience may be interpreted as ambiguity rather than adaptability. Solo founders, in particular, must internalize both the signaling and the execution of strategic intent, heightening the performative burden of appearing both adaptable and credible across stages. This increases the cognitive burden of adapting one's presentation style without a complementary team buffer. Conversely, founder teams may therefore benefit from curating trait profiles not only for external audiences but also within the team, balancing domain-specific depth with versatility across roles. Most importantly, as ventures move into growth stages, entrepreneurs should consider placing greater emphasis on broad experience, which, although evaluated less favorably than deep specialization across stages, becomes increasingly acceptable and even valued as complexity rises. However, depth remains a stronger overall predictor of investor preference, especially at early stages. Founders should therefore frame their experience portfolios dynamically, emphasizing different facets depending on venture maturity. Similarly, adopting a more results-oriented or extrinsic motivational stance is more favorably received in growth contexts, while self-efficacy should be expressed with caution: bold confidence is acceptable in seed stages but becomes less

desirable as ventures mature. The ability to recalibrate such signals represents a performative skill central to EA, enabling founders to align trait presentation with shifting investor logics and trust criteria. In this sense, managing signal-stage fit is not merely cosmetic but a performative expression of adaptability, i.e. a capability central to EA itself.

Support institutions, such as accelerators and incubators, have an important role in preparing entrepreneurs for these challenges. They should provide training that sensitizes entrepreneurs to how their traits are interpreted differently across stages, and how framing strategies can shift evaluative inferences. This goes beyond developing technical or business skills; entrepreneurs also need support in learning how to frame their experience, motivation and self-efficacy in ways that resonate with different investor types at different points in the venture lifecycle. This could include scenario-based pitch simulations tailored to stage-specific investor logics, or structured feedback sessions that expose founders to divergent heuristics. By incorporating investor-style reflection and feedback into accelerator programs, support organizations can help entrepreneurs experiment with different strategic framings and refine how their traits are interpreted in real-time evaluation settings.

For investors, these findings suggest the need to reflect on how evaluation criteria shift with the stage of the venture. While focused expertise and intrinsic motivation may be more appealing in early-stage settings, growth-stage ventures often benefit from entrepreneurs who bring diverse

experience and a clear focus on performance outcomes. Investors who apply the same criteria across all stages risk missing out on strong entrepreneurs whose signals may not align with traditional expectations. This reframing also invites investors to consider how their own heuristics shape interpretation: founder traits that seem ambiguous in one context may signal strategic fit in another. By developing stage-sensitive interpretive frameworks, or engaging in structured alignment dialogues, investors can enhance their ability to decode adaptive potential and avoid penalizing contextually appropriate deviations. By recognizing that signal interpretation is context-dependent, investors can make more informed and flexible decisions, supporting ventures that not only exhibit internal adaptability but also engage in effective strategic self-presentation.

Robustness Checks

To verify the completeness and specification of the analytical models, all theoretically plausible two- and three-way interaction terms between founder-level signals and investor characteristics were tested. These included combinations such as founder traits crossed with investor type and investor stage focus. While a small number of interactions reached statistical significance, all involved subgroups with extremely low representation (e.g. leveraged buyout investors and later-stage focus, each $n = 4$ to 8), limiting generalizability. These exploratory results are documented in Appendix Table C4, are reported for completeness, but should be interpreted with caution due to sample size constraints.

Limitations and Future Research

This study has several limitations that open avenues for further research. First, while the conjoint design isolates the effects of three founder-level traits—work experience, motivation and self-efficacy—it also necessarily abstracts from the relational and identity-based dynamics that often shape real-world evaluations. Social cues such as perceived similarity, interpersonal trust or gender-based heuristics are known to influence early-stage investment decisions (Balachandra et al., 2019; Brooks et al., 2014; Franke et al., 2006), yet are assumed to be the same across all evaluations. Future studies could adopt mixed methods, for example by combining experimental data with interviews or observational techniques, to explore how signal interpretation is shaped by identity congruence and interactional context.

Second, the profile-based structure of the conjoint task, while methodologically rigorous, struggles to fully capture opportunity costs inherent in real-world funding decisions. Investors rarely evaluate ventures in isolation. Instead, they must allocate limited resources across competing alternatives under uncertainty, time pressure and informational ambiguity, often relying on tacit knowledge and holistic impressions (Kirsch et al., 2009). Future research might complement conjoint tasks with choice-based designs, portfolio simulations or embedded field experiments to better approximate investor cognition under realistic evaluative conditions.

Third, the study focuses on a limited set of traits associated with EA. Although grounded in prior literature, the exclusion of attributes such as cognitive flexibility, emotional regulation or leadership style narrows the representational scope of ambidextrous potential. Given that EA is inherently multidimensional, future research should expand the trait space and examine how different combinations of signals interact to convey adaptability across industries, venture types or team configurations.

Fourth, the expert investor sample is a stronghold of this study and professionally highly relevant, and although it includes a small number of corporate venture capitalists, family offices and private equity investors, these categories are underrepresented, limiting our ability to generalize across heterogeneous funding logics. Moreover, although the sample was international, it was skewed toward North American investors, potentially limiting the cross-cultural generalizability of the findings. Future work should examine how signal interpretation varies across investor types and cultural contexts (Li & Zahra, 2012; Tykvová, 2018), especially in settings with different levels of institutionalization or risk tolerance.

Fifth, the study is confined to early- and growth-stage ventures, leaving open how EA functions in later-stage contexts where adaptive capacity may shift from individuals to organizational routines. Research on multi-founder or scaling teams could clarify whether and how ambidextrous traits remain important as ventures mature and decision-making becomes distributed. Moreover, interpretive patterns observed in later-stage evaluations may be

shaped by retrospective visibility effects rather than forward-looking assessment. For instance, bold founders who fail early rarely enter the growth-stage sample, producing a survival bias that may inflate the perceived value of measured self-efficacy. This complicates causal attribution and invites future research to distinguish between traits that drive actual versus perceived long-term entrepreneurial success (Freiberg & Matz, 2023).

Finally, while this study captures evaluation outcomes, it does not examine the underlying cognitive processes that produce them in detail. Although stage-specific trait preferences are clearly observed, we do not yet know how investors weigh competing signals, reconcile ambiguities or apply heuristics. As Drover et al. (2018) emphasize, understanding signaling requires attention not only to the signals themselves but to the interpretive frameworks investors apply. Process-tracing methods or think-aloud protocols could help uncover how adaptive capacity is inferred under uncertainty. Future research might also investigate whether signal-stage alignment predicts downstream outcomes such as funding durability, pivot behavior or venture resilience.

Chapter 5: General Conclusions

Thematic Integration and Conceptual Synthesis

This dissertation investigates how entrepreneurs develop and apply ambidextrous capabilities, and how these capabilities are perceived as contributing to venture success across varying contextual conditions. Grounded in the premise that early-stage entrepreneurs must explore novel opportunities and exploit existing resources under conditions of uncertainty and constraint (Volery et al., 2015), the three essays collectively contribute to a unified inquiry into the determinants, outcomes, enactment and third-party evaluation of EA. Each chapter examines a distinct facet of the construct, while together offering a cumulative, multi-level understanding of how EA functions in early-stage venture contexts.

The first essay, chapter 2, offers a conceptual redefinition of EA by synthesizing insights from social cognitive theory (Bandura, 1986; Wood & Bandura, 1989) with findings from entrepreneurship research. Addressing the fragmented and often implicit treatment of individual ambidexterity, I develop a novel theoretical framework that conceptualizes EA as a latent, emergent capability arising from the reciprocal interaction of cognitive, behavioral and environmental factors. The model proposes that EA is most fully realized when three enabling factors align: (1) a motivational commitment to integrating exploration and exploitation as simultaneous imperatives; (2) cognitive enablers such as self-efficacy, resilience and framing capacity that influence how

entrepreneurs process information, manage tension and prioritize strategic actions; and (3) the enactment of context-sensitive behaviors, including risk calibration and behavioral integration, that translate ambidextrous intent into practice. While these components are reciprocally reinforcing, EA may still be partially enacted when only one or two conditions are present, yet in a more fragmented or less sustainable form. This reinforces the view that EA is not a stable personality trait but a dynamic, multi-dimensional process shaped by ongoing interactions between individual agency and environmental demands. Furthermore, I link EA to five domains of entrepreneurial outcomes based on the multidimensional success typology proposed by Wach et al. (2016): (1) individual performance, (2) firm-level economic performance, (3) workplace relationships, (4) personal fulfillment and (5) community impact. These findings suggest that ambidextrous entrepreneurs are better able to integrate innovation and execution, which enhances adaptability, stakeholder relationships and long-term viability. By combining trait-level dispositions, behavioral strategies and contextual moderators into a unified model, I established a theoretical foundation that informed the empirical analyses in subsequent essays. I conclude by outlining six key research directions: (1) examining EA's temporal dynamics and long-term effects, (2) identifying behavioral regulation mechanisms, (3) expanding trait-based antecedents, (4) analyzing contextual moderators, (5) developing psychometrically robust EA measures, and (6) exploring how EA evolves across the venture lifecycle in interaction with complementary entrepreneurial capabilities.

The second essay, chapter 3, empirically tests a central proposition of the social cognitive model introduced in the first essay, namely that EA emerges from the alignment between cognitive dispositions and situational demands. Drawing on trait activation theory (Tett & Burnett, 2003) and regulatory mode theory (Kruglanski et al., 2000), I investigate how three cognitive traits—locomotion, assessment and resilience—enable entrepreneurs to navigate explorative and exploitative challenges across different venture stages. These traits are not conceptualized as universally adaptive, but rather as context-dependent enablers whose value is contingent on their fit with task demands. The essay tests how each trait is differentially associated with perceived leadership effectiveness in venture contexts dominated by exploration versus exploitation. The underlying mechanism reflects a trait–context fit logic: entrepreneurs are perceived as more effective when they display traits that align with the dominant task logic of the situation, e.g. locomotion in early-stage, high-exploration settings, and resilience in later-stage, high-exploitation contexts, whereas assessment does not significantly predict effectiveness in either setting. Using a conjoint-based experimental design, I demonstrate that effectiveness judgments hinge not on trait possession alone but on the appropriateness of trait deployment relative to contextual demands. Importantly, the findings reveal that resilience amplifies the effect of trait–context alignment, functioning as a moderator that enhances adaptive flexibility. This supports my view that EA consists of not merely having relevant traits but activating and applying them in response to evolving

situational requirements. Thus, I substantiate a key mechanism proposed in the conceptual framework, namely that ambidextrous capacity resides in the ability to enact the right trait in the right context. In doing so, it shifts the analytical focus from static traits to dynamic traits deployment, reinforcing the notion of EA as a processual and evaluative construct.

The third essay, chapter 4, examines whether and under what conditions EA enhances the likelihood of early-stage funding success. Building on the social cognitive model developed in the first essay, I operationalize EA as a latent capability that manifests through founder attributes with signal value—specifically, prior work experience, motivational orientation and self-efficacy. Drawing on signaling theory (Connelly et al., 2011; Spence, 1973), I investigate whether these attributes, when understood as markers of ambidextrous capacity, increase investors' likelihood of funding the venture. A conjoint-based experimental design reveals that EA signals only enhance funding prospects when they align with investor preferences, which are themselves contingent on the venture lifecycle stage. In early-stage contexts, investors favor attributes that emphasize exploration, such as intrinsic motivation and bold self-efficacy, which signal the founder's willingness to innovate under uncertainty and pursue novel opportunities. Conversely, in growth-stage settings, investors attribute higher value to ambidextrous or exploitative traits, such as broad work experience and measured self-efficacy, indicating a preference for balanced, scalable execution. These stage-contingent patterns are further moderated by investor type: business

angels tend to favor exploratory signals, prioritizing founder passion and visionary drive, while venture capitalists exhibit a stronger preference for execution-oriented or ambidextrous profiles that promise disciplined growth and operational control. Thus, EA enhances funding likelihood only when its constituent signals are congruent with both the temporal demands of the venture and the evaluative heuristics of the investor. This finding reinforces the view that EA is not a universally valued trait but a context-sensitive capability whose instrumental value depends on its interpretive alignment with external stakeholder expectations.

Taking the three essays together, I show that EA is best understood as a latent, multi-dimensional capability that emerges through the alignment of cognitive traits, behavioral strategies and environmental demands. I demonstrate that EA is not uniformly effective but becomes valuable when enacted in ways that match shifting venture demands. Rather than suggesting that ambidextrous entrepreneurs always outperform more focussed explorers or exploiters, the findings indicate that adaptability, i.e. the ability to switch between exploration and exploitation as conditions evolve, is what relates to effectiveness. Explorative traits may be rewarded in early-stage contexts, and exploitative traits in later ones, but only founders who can recalibrate their strategic posture over time, activating different traits in response to shifting venture-stage demands, are consistently evaluated more favorably. Moreover, because EA is not always directly observable, its instrumental value is conditional on contexts in which external stakeholder perception determines

access to critical resources, such as funding, partnership or institutional support. In such evaluative environments, EA's value depends on whether it is credibly projected and recognized by others. In this sense, EA functions both as an internal adaptive resource and, when required by evaluative conditions, as an externally interpreted signal. By tracing this dual role, I conclude that EA holds promise not as a fixed ideal type but as a dynamic, relational capability whose relevance emerges through the interaction of entrepreneurial behavior and contextual evaluation.

Theoretical Contributions

This thesis advances theory by developing EA as a distinct, context-sensitive construct and articulating three contributions that cumulatively build its conceptual and empirical foundation.

First, throughout the thesis, I reconceptualize EA as a multi-dimensional capability that emerges from the reciprocal interaction between cognition, behavior, and environment. Anchored in social cognitive theory (Bandura, 1986), this view diverges from prior accounts that define ambidexterity either as a stable dispositional trait (Jasmand et al., 2012; Mom et al., 2009) or as an emergent property of organizational structures (Birkinshaw & Gibson, 2004; Tushman & O'Reilly, 1996). By contrast, I position EA as a founder-centric, cognitively grounded capability that materializes through adaptive behavioral adjustment in response to shifting venture-stage demands. The framework, developed in chapter 2, responds to persistent critiques that ambidexterity

research has insufficiently theorized the temporal, psychological and contextual mechanisms by which individual actors sustain dualities under uncertainty (Guerrero, 2021; Schnellbacher et al., 2019). Building on calls to investigate the micro-level cognitive foundations of entrepreneurial action (Baron & Ensley, 2006; Mitchell et al., 2002), my model integrates constructs such as motivational and self-regulatory orientation, self-efficacy, resilience, situational interpretation and goal prioritization into a dynamic system of adaptive responses. These mechanisms do not operate in isolation but interact recursively, enabling real-time behavioral calibration in structurally sparse and feedback-deficient settings (Boccardelli & Magnusson, 2006; Shepherd & Patzelt, 2019). This social-cognitive reframing advances theoretical clarity by modeling ambidextrous functioning as an enacted and continuously reconstructed process rather than a stable trait or fixed behavioral portfolio. Importantly, I frame EA not as a general-purpose competency but as a context-contingent form of adaptive expertise (Boz Semerci, 2022; Scheepers et al., 2017) that develops through exposure to high-uncertainty, high-autonomy environments. This distinguishes it from broader constructs such as strategic flexibility or innovation orientation, with which it partially overlaps but should not be conflated. This reconceptualization also advances the dynamic capabilities literature (Teece et al., 1997; Winter, 2003; Zahra et al., 2006) by specifying the intra-individual microfoundations that enable founders to integrate, build and reconfigure behavioral strategies in response to changing venture demands. This reconceptualization also corrects the OA literature's tendency to treat

ambidexterity as either structurally engineered or uniformly beneficial (Guerrero, 2021; Volery et al., 2015). Instead, I argue that EA is emergent, situationally enacted and evaluatively unstable, i.e. its relevance and expression contingent on external demands and internal capacities. In doing so, this contribution offers a developmental and situationally grounded account of EA that more accurately reflects the volatile, resource-constrained nature of early-stage venturing.

Second, with the empirical testing of the moderating effect of the venture stage, I demonstrate that the value of EA does not stem from the entrepreneur alone but depends on how well their traits align with the shifting demands of venture development. I show that traits commonly linked to ambidextrous behavior are not consistently beneficial; instead, their value shifts depending on whether the context calls for exploration or exploitation. This finding advances trait activation theory (Tett & Burnett, 2003) by illustrating that trait usefulness is contingent on situational relevance, not inherent adaptability. By showing that traits such as locomotion or resilience are differentially rewarded across initial and growth-stage contexts, I conceptualize EA as a higher-order capability that enables entrepreneurs to activate different trait combinations in response to evolving task demands. This contributes to dynamic capabilities research (Boccardelli & Magnusson, 2006; Zahra et al., 2006) by highlighting how adaptability is enacted through real-time trait deployment rather than fixed profiles. In doing so, I respond to calls for more temporally sensitive models of ambidexterity (Schnellbacher et al., 2019; Volery et al., 2015) by showing that EA operates not as a fixed configuration but as a contextually calibrated

mechanism that links individual traits to venture-stage demands. Thereby, I shift the focus from trait possession to trait–context alignment and recast EA as a developmental capability that unfolds through recursive interactions between trait activation and contextual feedback, rather than as a dispositional constant. This view departs from prior studies that conceptualize individual ambidexterity in static or trait-like terms, as in Klonek et al. (2021), where EA is framed as a relatively stable behavioral capacity linked to habitual role enactment. This temporal reconceptualization contributes to entrepreneurial cognition literature by modeling how founders regulate strategic tension through the adaptive activation of cognitive traits over time (Baron & Ensley, 2006; Mitchell et al., 2002; Shepherd & Patzelt, 2019). It also extends staged models of venture development by theorizing EA as an enabling mechanism that links trait deployment to lifecycle-specific demands, thereby aligning with dynamic capability views that emphasize temporal alignment and situated adaptability (Schnellbacher et al., 2019; Teece et al., 1997; Volery et al., 2015).

With respect to the third and last proposed theoretical contribution, I extend theoretical understandings of how entrepreneurial capabilities are recognized and valued by highlighting EA’s latent nature and the interpretive challenges this creates for external evaluators. While signaling theory has emphasized the role of observable traits in conveying latent founder quality (Connelly et al., 2011; Spence, 1973), most applications assume relatively stable signal-meaning associations. Recent reviews, however, have called for more contingency-sensitive approaches to signaling, particularly models that

account for how signal effectiveness may vary by venture stage (Colombo, 2021). Building on this emerging line of inquiry, I theorize and empirically demonstrate that the value of EA signals is not intrinsic, but contingent on their interpretive alignment with stage-specific expectations. While prior work has explored how signal type or strength influences investor decisions (Busenitz et al., 2005; Svetek, 2022), I extend these insights by showing that the perceived value of ambidextrous traits—such as self-efficacy or motivational orientation—varies systematically across seed and growth-stage evaluations. This dissertation advances a signal–stage fit logic that treats the evaluative context not as a neutral backdrop but as an active moderator of how symbolic founder attributes are read and weighted. My dissertation shows that EA is not directly assessed, but inferred through symbolic proxies, such as founder traits, behavioral cues and narrative framings, whose meanings shift with evaluative context. For instance, traits associated with exploration may be valued in seed but discounted in later stages, where signals of exploitation gain weight. In doing so, I contribute to recent efforts to refine signaling theory in entrepreneurial finance (Balachandra et al., 2019) by theorizing and empirically demonstrating how symbolic proxies are subject to context-specific interpretive variation, i.e. advancing a relational, stage-contingent understanding of how dynamic capabilities become evaluatively legible. By integrating a signal–stage fit perspective, my findings show that evaluative logic is co-determined by both signal characteristics and temporal context. While signaling theory helps explain how EA is inferred under evaluative conditions, such as investor

decision-making, it does not capture the underlying nature of EA itself. Its relevance lies in clarifying the interpretive mechanisms through which latent traits are externally decoded, not in defining the cognitive and behavioral foundations from which EA emerges. I therefore complement capability theory (Teece et al., 1997; Zahra et al., 2006) by showing that the strategic utility of EA hinges not only on its internal enactment but also on its external recognizability within shifting evaluative environments. Capabilities must not only be performed, they must also be perceived. This interpretive turn complements recent interest in the microfoundations of dynamic capabilities (Helfat & Peteraf, 2015) by emphasizing the role of external cognition, i.e. the evaluative judgments of stakeholders, in shaping how founder capabilities translate into strategic advantage. Therefore, this dissertation adds an interpretive lens to the capability literature, emphasizing the relational and time-sensitive nature of how entrepreneurial potential is assessed.

Practical Contributions

This dissertation reframes EA as a cognitively grounded, context-sensitive personal meta-capability that enables founders to regulate strategic tension by dynamically calibrating exploration and exploitation in response to evolving venture-stage demands. Rather than treating EA as a generic trait or stable behavioral style, my research demonstrates that it is a latent, situationally enacted and socially interpreted capability that must be developed, projected and evaluated differently over time. This

reconceptualization addresses a critical blind spot in entrepreneurship practice: without such a framework, entrepreneurs often rely solely on intuition, and investors on vague heuristics, to assess what is in fact a dynamic and temporally contingent skill set. In clarifying the nature and function of EA, my findings yield actionable insights for three core audiences: (1) entrepreneurs seeking to strengthen their adaptive repertoire; (2) investors aiming to assess founder potential; and (3) support organizations tasked with cultivating cognitive foundations for venture success.

For entrepreneurs, EA functions as a meta-capability that governs how other entrepreneurial competencies—such as opportunity recognition, decision-making or business model design—are integrated, sequenced and recalibrated under changing conditions. It is not a fixed trait, but an ongoing capacity for behavioral adjustment, sustained through feedback loops between self-regulation, situational interpretation and goal prioritization. My findings emphasize that exploration and exploitation must be continuously balanced; not as a one-time act, but as an embedded process of adaptive cognition. This dynamic posture is particularly vital in high-uncertainty environments characterized by resource scarcity and compressed decision timelines. While EA is supported by foundational traits (e.g. self-efficacy, resilience, metacognition), these can be cultivated over time, which echoes research on the trainability of entrepreneurial cognition and adaptive thinking (Baron & Henry, 2010; Haynie et al., 2009). Entrepreneurs who are aware of their cognitive profile can better adjust their strategic behavior to stage-specific

demands, thereby improving both execution and opportunity navigation. Beyond internal enactment, entrepreneurs must also make their ambidextrous potential legible to external stakeholders. Because EA is largely latent and seldom directly observable, it is inferred through behavioral signals, narrative framings and trait-based cues. However, signaling is not simply a matter of disclosure. It requires strategic calibration to match the signal to the interpretive heuristics of specific audiences. Signals of EA only gain evaluative traction when they align with investors' expectations at a given venture stage. This calls for what might be termed "signaling literacy", i.e. the ability to project an adaptive identity that resonates with context-sensitive frames (Zott & Huy, 2007). Entrepreneurs who master this skill can enhance their perceived legitimacy, attract better-aligned capital and reduce misalignment during evaluation. Moreover, EA need not be confined to individual founders. My findings suggest that adaptive capacity may also be distributed across founding teams, particularly when co-founders consciously balance each other's exploratory and exploitative tendencies. This perspective suggests that venture teams may benefit from explicitly cultivating complementary ambidextrous roles, distributing adaptive responsibilities in ways that reflect each founder's relative strengths. Such team-level calibration can serve as a practical mechanism for enacting EA when individual cognitive bandwidth is limited.

For investors, the dissertation offers a refined lens for interpreting founder potential beyond conventional indicators. Rather than over-relying on surface traits or business metrics, evaluators should attend to the latent

cognitive capabilities that underlie adaptive strategic action. This is particularly important in early-stage contexts, where formal structures are absent and ambiguity is high. Different types of investors apply distinct evaluative heuristics: the findings show that investor judgments are shaped not only by the traits themselves, but by the strategic logics and schemas through which they are interpreted. While high-growth investors tend to favor boldness and initiative, conservative investors assign greater value to measured control and context sensitivity. Training investors to recognize how cognitive adaptability manifests and how it varies across venture stages can improve early-stage screening and better match founders with the capital they need.

For support organizations, such as incubators and accelerators, the dissertation underscores the value of designing programs that foster not only technical proficiency or business acumen, but also the cognitive and behavioral foundations of adaptive capacity. Incubator curricula that train entrepreneurs in self-awareness, resilience and situational judgment can help build the psychological infrastructure necessary for ambidextrous behavior. Moreover, explicit training in signaling, i.e. how to articulate one's adaptive potential in ways that match different evaluative contexts, can enhance founder legitimacy and resource access. My findings indicate that signals of EA are not directly assessed but inferred from symbolic proxies, such as work experience, motivational cues and confidence displays, whose interpretive weight shifts depending on both the venture stage and the investor's evaluative schema. For example, in seed-stage pitches to business angels, founders may benefit from

emphasizing their breadth of experience across domains, intrinsic motivation rooted in the creative process and customer impact, as well as strong confidence in pursuing ambitious, high-risk goals. By contrast, in later-stage evaluations or when targeting performance-oriented venture capitalists, it may be more effective to foreground specialist work experience, a results-driven focus on growth and revenue targets, and a measured, strategically cautious approach to planning and execution. To respond to this variability, support programs should train founders in situational signaling literacy, i.e. the capacity to diagnose the evaluative frame of a given audience and adaptively foreground the most resonant trait-based signals. This capability can be cultivated through pitch simulations, personalized feedback and coaching in narrative reframing. Support systems should therefore be structured not only to facilitate venture creation, but to cultivate adaptive cognition and its effective communication as foundational entrepreneurial resources. By doing so, support institutions can help institutionalize adaptability as a cornerstone of entrepreneurial development, extending beyond venture creation toward long-term venture survival.

Taken together, the insights developed in my dissertation not only offer guidance for entrepreneurs and support organizations but also inform my own engagement with entrepreneurship. The conceptual tools and empirical findings presented here are directly applicable to the cognitive and strategic challenges encountered in early-stage venturing. They have reshaped how I approach venture design, founder development and the cultivation of ambidextrous

capacity under real-world conditions. In this sense, the dissertation is both a scholarly contribution and a strategic resource, i.e. a framework I intend to draw on in future entrepreneurial and advisory roles to support more adaptive, cognitively aware, venture development.

Limitations and Future Research

The contributions of my dissertation are subject to some overarching limitations affecting all three essays. First, while perceptual outcomes, such as investor evaluations, are valuable proxies for assessing EA, they are based on hypothetical scenarios, which do not capture the dynamic and often emotional aspects of real-world entrepreneurship. These limitations are connected to broader debates about the ecological validity and contextual realism in entrepreneurship research (Welter, 2011). Moreover, the use of hypothetical scenarios sets the analytical focus on evaluative heuristics rather than the underlying cognitive and emotional mechanisms that shape decision-making in high-pressure, real-world contexts. Future research should seek to incorporate observational methods, such as field experiments or longitudinal studies, to better understand the causal links between EA and actual outcomes such as growth, adaptability or funding over time. These methods could also reveal how EA influences the trajectory of ventures and whether specific traits can be fostered or inhibited as the venture matures.

Second, although conjoint experiments are valuable for isolating trait-level effects and enhancing internal validity, they abstract from the

complexities of real-world entrepreneurial decision-making, such as interpersonal dynamics, time pressure and uncertainty. While conjoint experiments excel in isolating specific traits, they do not capture the social, emotional and strategic nuances involved in entrepreneurial judgment quite as well. Yet these may be crucial in interpreting EA's impact on venture outcomes. Future research should therefore combine experimental designs with ethnographic or observational methods to explore how EA is enacted and interpreted under real-world conditions of uncertainty and time pressure. By incorporating qualitative approaches, researchers can understand how external evaluators, such as investors or mentors, interpret EA based on interpersonal dynamics, cognitive biases and environmental pressures.

Third, while my dissertation focuses on a limited set of traits as determinants of EA, ambidextrous functioning is likely influenced by a broader constellation of cognitive, behavioral and environmental factors. Capacities such as learning orientation, empathy and social adaptability may play a crucial role in enabling entrepreneurs to interpret situational demands, modulate their behavioral posture and engage constructively with diverse stakeholders. Future research should investigate how these and other foundational traits interact with contextual feedback to shape the dynamic expression of EA. Moreover, given that many early-stage ventures are co-founded, future research should also draw on research on team cognition (Ensley et al., 2006) and investigate how ambidexterity is distributed among co-founders, how it evolves over time within teams, and how collective signaling strategies can foster ambidextrous

behaviors. Exploring team-based EA is critical as the collective and complementary capacity to navigate exploration and exploitation may differ from individual-level capabilities and have distinct implications for venture success.

Fourth, the focus on early and growth-stage ventures leaves the development of EA in later-stage ventures largely unexplored. As ventures mature, ambidextrous capabilities may become embedded within teams or organizational systems, requiring the entrepreneur to transfer individual adaptive capabilities into scalable routines. The transition from EA to OA presents a key challenge, particularly as the founder must navigate the shift from hands-on involvement to delegating adaptive decision-making to a broader team. Future studies should explore how EA evolves from an individual trait to a collective organizational capability and its implications for leadership succession, long-term venture adaptability and the development of OA. These studies could also investigate the organizational processes and structures that facilitate the transfer of EA from the founder to the organization, as well as how OA interacts with other organizational capabilities like innovation and operational efficiency.

Taken together, these limitations make clear that the study of EA is still in its early stages. While my dissertation provides initial building blocks, much remains to be explored about how entrepreneurs develop, apply and communicate ambidextrous capabilities as their ventures evolve. Rather than offering final answers, I intended to open new avenues for inquiry that better reflect the lived complexity of entrepreneurship. By drawing attention to the

dynamic, often hidden ways in which founders adapt to shifting demands, I hope this research inspires others to deepen, extend and challenge the ideas presented here. Understanding EA more fully will not only improve theory, but also equip founders, investors and educators with better tools to support adaptive, resilient entrepreneurship in practice.

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Appendices

Appendix A (Chapter 2)

Figure A1

Number of IA and EA Publications by Year and Research Methodology

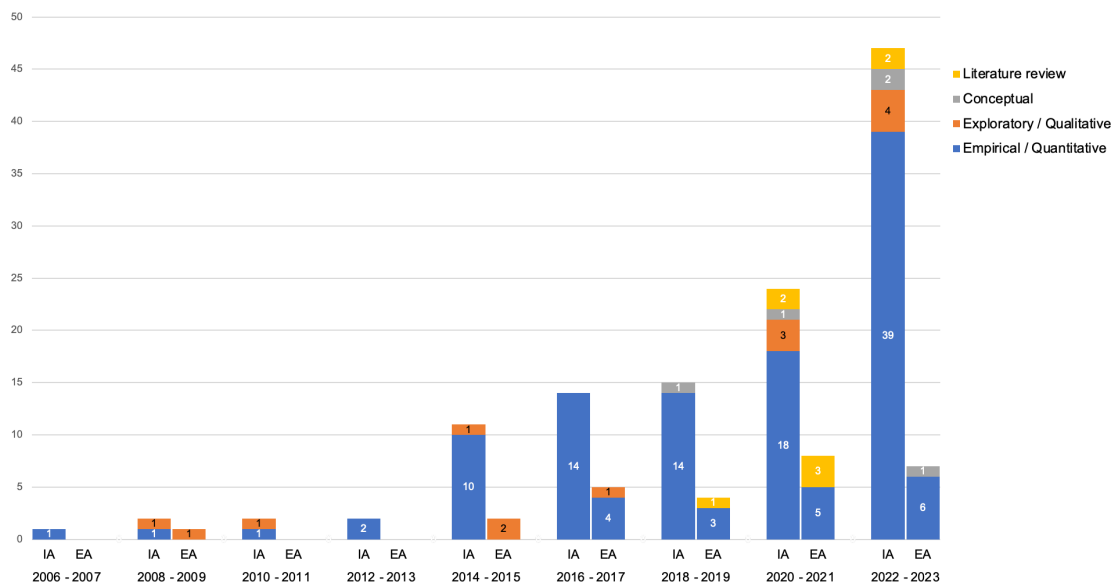


Table A2*Determinants of Individual Ambidexterity*

Determinant	Effect	Supporting study	Instrument origin	Sample
Personal factors				
<i>Motivation</i>				
Achievement orientation	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
Attitudes towards efficiency-flexibility ambidexterity	+	Yu et al. (2020)	Marinova et al. (2008)	Sales & service staff
Autonomy of control	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
Career concern	+	Affum-Osei et al. (2020)	Mom et al. (2007)	Sales & service staff
Driven to work	+	Sok et al. (2016)	Jasmand et al. (2012)	Sales & service staff
Employee engagement	+	Ajayi et al. (2017)	Ajayi et al. (2017)	Individuals
Enjoyment of work	+	Sok et al. (2016)	Jasmand et al. (2012)	Sales & service staff
Individual entrepreneurial orientation	+	Kraus et al. (2019)	Mom et al. (2007)	Employees
Intrinsic motivation	+	Caniëls et al. (2017)	Mom et al. (2007)	Managers
	+	Kao & Chen (2016)	Lubatkin et al. (2006)	Sales & service staff
	+	Mom et al. (2019)*	Mom et al. (2007)	Managers
Learning goal orientation	+	Awan et al. (2022)	Mom et al. (2007)	Managers
	+	Choi & Kessler (2022)	Mom et al. (2007)	Sales & service staff
	+	Xiang et al. (2019)	Mom et al. (2007)	Managers
Locomotion orientation	+	Caniëls & van Assen (2019)	Mom et al. (2007)	Employees
	+	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service staff
	+	Kraus et al. (2019)	Mom et al. (2007)	Employees
	+	Sok et al. (2016)	Jasmand et al. (2012)	Sales & service staff
	+	Van der Borgh et al. (2017)	Van der Borgh & Schepers (2014)	Sales & service staff
Organizational identification	+	Van der Borgh et al. (2017)	Van der Borgh & Schepers (2014)	Sales & service staff
Performance goal orientation	+	Xiang et al. (2019)	Mom et al. (2007)	Managers
Personal initiative	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
Proactiveness	-	Kao & Chen (2016)	Lubatkin et al. (2006)	Sales & service staff
	+	Kraus et al. (2019)	Mom et al. (2007)	Employees
Psychological ownership	+ / -	Garcia et al. (2022)	Mom et al. (2007)	Employees
Psychological ownership of the job	+	Lee & Kim (2021)	Mom et al. (2007)	Top executives

Determinant	Effect	Supporting study	Instrument origin	Sample
Psychological ownership of the organization	+	Lee & Kim (2021)	Mom et al. (2007)	Top executives
Work engagement	+	Gaan & Shin (2023)	Lubatkin et al. (2006)	Sales & service staff
<i>Self-efficacy</i>				
Accountability	+ / -	Garcia et al. (2022)	Mom et al. (2007)	Employees
Career confidence	+	Affum-Osei et al. (2020)	Mom et al. (2007)	Sales & service staff
Career control	+	Affum-Osei et al. (2020)	Mom et al. (2007)	Sales & service staff
Change-related self-efficacy	+	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Control over workplace decisions	+	Iqbal et al. (2022)	Mom et al. (2007)	Students & educators
Core self-evaluation	+	Awan et al. (2022)	Mom et al. (2007)	Managers
Empowerment	+	Choi & Kessler (2022)	Mom et al. (2007)	Sales & service staff
Entrepreneurial self-efficacy	+ / -	Ma et al. (2023)	Lubatkin et al. (2006)	<u>Entrepreneurs</u>
General self-efficacy	+	de Villiers Scheepers et al. (2017)	Chandler et al. (2011)	<u>Entrepreneurs</u>
	+	Kauppila & Tempelaar (2016)*	Mom et al. (2007)	Employees
	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
	+	Boz Semerci (2022)	Mom et al. (2007)	<u>Entrepreneurs</u>
	+	Yu et al. (2020)	Marinova et al. (2008)	Sales & service staff
	+	Zhang et al. (2022)	Mom et al. (2007)	Employees
Learning orientation	+	Kauppila & Tempelaar (2016)*	Mom et al. (2007)	Employees
Personal identification	+	Chang et al. (2019)	Mom et al. (2007)	Employees
Role breadth self-efficacy	+	Mom et al. (2019)*	Mom et al. (2007)	Managers
	+	Zheng (2022)	DeCarlo & Lam (2016)	Sales & service staff
<i>Cognitive processes</i>				
Ability	+	Ahmad et al. (2021)	Jasmand et al. (2012)	Sales & service staff
Absorptive capacity for need knowledge	+	Schweisfurth et al. (2020)	Mom et al. (2007)	Employees
Absorptive capacity for solution knowledge	+	Schweisfurth et al. (2020)	Mom et al. (2007)	Employees
Assessment orientation	+ / -	Caniëls & van Assen (2019)	Mom et al. (2007)	Employees
	+	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service staff
	-	Kraus et al. (2019)	Mom et al. (2007)	Employees
	+ / -	Sok et al. (2016)	Jasmand et al. (2012)	Sales & service staff
Career curiosity	+	Affum-Osei et al. (2020)	Mom et al. (2007)	Sales & service staff

Determinant	Effect	Supporting study	Instrument origin	Sample
Challenge	+	Choi & Kessler (2022)	Mom et al. (2007)	Sales & service staff
Cognitive appraisal (challenge)	+	Boz Semerci (2022)	Mom et al. (2007)	<u>Entrepreneurs</u>
Cognitive appraisal (hindrance)	-	Boz Semerci (2022)	Mom et al. (2007)	<u>Entrepreneurs</u>
Cognitive flexibility	+	Good & Michel (2013)	Good & Michel (2013)	Students & educators
Cognitive framing of failure	+ / -	Wójcik & Ciszewska-Mlinarič (2020)	He & Wong (2004)	<u>Entrepreneurs</u>
Cognitive skill	+	Lee & Lee (2016)	Mom et al. (2007)	Employees
Cognitive style	+ / -	De Visser & Faems (2015)	Mom et al. (2007)	Top executives
Conscientiousness	+	Keller & Weibler (2015)	Weibler & Keller (2011)	Managers
	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
Context responsiveness	+	Kuntz et al. (2023)	Mom et al. (2007)	Managers
Divergent thinking	+	Good & Michel (2013)	Good & Michel (2013)	Students & educators
Emotional intelligence	+	Kao & Chen (2016)	Lubatkin et al. (2006)	Sales & service staff
Equity sensitivity	+	Shahid et al. (2023)	Mom et al. (2007)	Employees
Focused attention	+	Good & Michel (2013)	Good & Michel (2013)	Students & educators
Functional tenure	-	Mom et al. (2015)*	Mom et al. (2007)	Managers
Handling work stress	+	Zhang et al. (2019)	Birkinshaw & Gibson (2004)	Employees
Information skill	+	Lee & Lee (2016)	Mom et al. (2007)	Employees
Innovation	+	Kraus et al. (2019)	Mom et al. (2007)	Employees
Multitasking behaviors	-	Klonek et al. (2021)	Klonek et al. (2021)	<u>Entrepreneurs</u>
Need knowledge	+	Schweisfurth et al. (2020)	Mom et al. (2007)	Employees
Openness to experience	+	Keller & Weibler (2015)	Weibler & Keller (2011)	Managers
	+	Shahid et al. (2023)	Mom et al. (2007)	Employees
Opportunity recognition	+	Chang et al. (2016)	Chang et al. (2016)	Students & educators
Organizational tenure	+	Mom et al. (2015)*	Mom et al. (2007)	Managers
Paradoxical thinking	+	Kuntz et al. (2023)	Mom et al. (2007)	Managers
Perspective taking	+	Luu (2022)	Luu (2022)	Sales & service staff
Polychronicity	+	Gaan & Shin (2023)	Lubatkin et al. (2006)	Sales & service staff
Psychological capital	+	Popaitoon et al. (2022)	Mom et al. (2007)	Employees
Reflective learning	+	Kuntz et al. (2023)	Mom et al. (2007)	Managers
Regulatory focus	+	Faia & Vieira (2017)	Jasmand et al. (2012)	Sales & service staff
	+	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service

staff

Determinant	Effect	Supporting study	Instrument origin	Sample
Resilience	+	Zhang et al. (2022)	Mom et al. (2007)	Employees
Role and responsibility	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
Role segmentation	-	Tempelaar & Rosenkranz (2019)*	Mom et al. (2007)	Managers
Social skill	+	Lee & Lee (2016)	Mom et al. (2007)	Employees
Solution knowledge	+	Schweisfurth et al. (2020)	Mom et al. (2007)	Employees
Work-based learning	+	Hanu et al. (2023)	Mom et al. (2007)	Employees
Miscellaneous				
Career stage	+	de Villiers Scheepers et al. (2017)	Chandler et al. (2011)	<u>Entrepreneurs</u>
Gendered effectual reasoning	+	Akulava & Guerrero (2023)	Chandler et al. (2011)	<u>Entrepreneurs</u>
Behavioral factors				
Behavioral integration	+	Li et al. (2015)	Mom et al. (2007)	Top executives
Risk-taking	+	Li et al. (2015)	Mom et al. (2007)	Top executives
	+	Kraus et al. (2019)	Mom et al. (2007)	Employees
Challenge-seeking (job crafting)	+	Luu (2022)	Luu (2022)	Sales & service staff
Demand-reducing (job crafting)	-	Luu (2022)	Luu (2022)	Sales & service staff
Resource-seeking (job crafting)	+	Luu (2022)	Luu (2022)	Sales & service staff
Environmental factors				
Social environment				
Ability-enhancing HR practices	+	Mom et al. (2019)*	Mom et al. (2007)	Managers
	+	Al-Agry (2021)	Prieto-Pastor & Martin-Perez (2015)	Employees
Ambidextrous leadership	+	Luu et al. (2017a)	Mom et al. (2007)	Sales & service staff
	+	Oluwafemi et al. (2020)	Mom et al. (2007)	Managers
	+	Jabeen et al. (2023)	Mom et al. (2007)	Students & educators
	+	Ijigu et al. (2022)	Mom et al. (2007)	Sales & service staff
	+	Ijigu et al. (2023)	Mom et al. (2007)	Sales & service staff
Ambidextrous selling orientation	+	Van der Borgh et al. (2017)	Van der Borgh & Schepers (2014)	Sales & service staff
Behavioral integration of top management team	+	Duan et al. (2021)	Mom et al. (2007)	Top executives
Bottom-up knowledge inflows	+	Mom et al. (2007)*	Mom et al. (2007)	Managers
CEO centrality in knowledge networks	+	Fernández-Mesa et al. (2023)	Mom et al. (2007)	Top executives
Charismatic leadership	+	Ahmad et al. (2021)	Jasmand et al. (2012)	Sales & service staff
Connectedness	+	Mom et al. (2009)*	Mom et al. (2007)	Managers

Determinant	Effect	Supporting study	Instrument origin	Sample
Coordination flexibility-oriented HRM	+	Popaitoon et al. (2022)	Mom et al. (2007)	Employees
Coworker social support	+	Chang et al. (2019)	Mom et al. (2007)	Employees
Departmental research ambidexterity	+	Chang et al. (2016)	Chang et al. (2016)	Students & educators
Developmental inducements	+	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Dialogue	+	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
Employee perception of managerial trustworthiness	+	Alam et al. (2023)	Mom et al. (2007)	Employees
Empowerment climate	+	Zheng (2022)	DeCarlo & Lam (2016)	Sales & service staff
Entrepreneurial networks	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
Ethical leadership	+	Shahid et al. (2023)	Mom et al. (2007)	Employees
External contact heterogeneity	+	Rogan & Mors (2014)*	Rogan & Mors (2014)	Managers
External social networks	+	Zheng (2022)	DeCarlo & Lam (2016)	Sales & service staff
High-Involvement HR Systems	+	Prieto-Pastor & Martin-Perez (2015)	Prieto-Pastor & Martin-Perez (2015)	Employees
Horizontal knowledge inflows	+	Mom et al. (2007)*	Mom et al. (2007)	Managers
Informal ties (external)	+	Rogan & Mors (2014)*	Rogan & Mors (2014)	Managers
Informal ties (internal)	+	Rogan & Mors (2014)*	Rogan & Mors (2014)	Managers
Inspirational leadership	+	Salas Vallina et al. (2019)	Mom et al. (2007)	Employees
	+	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
Interaction with environment	+	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
Internal communication	+	Ijigu et al. (2023)	Mom et al. (2007)	Sales & service staff
Internal social networks	+	Zheng et al. (2022)	DeCarlo & Lam (2016)	Sales & service staff
Knowledge brokerage	+	Yap et al. (2020)	Mom et al. (2007)	Top executives
Leader vision	+	Zhang, Zhang & Law (2022)*	Mom et al. (2007)	Employees
Learning goal orientation	+	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Management support	+	Prieto-Pastor & Martin-Perez (2015)	Prieto-Pastor & Martin-Perez (2015)	Employees
	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
Manager trust in salesperson	+	Ahmad et al. (2022)	Mom et al. (2007)	Sales & service staff
Network density	+	Rogan & Mors (2014)*	Rogan & Mors (2014)	Managers
Novelty ecosystem	+	Mayanja et al. (2021)	Mom et al. (2007)	Managers
Opportunity	+	Ahmad et al. (2021)	Jasmand et al. (2012)	Sales & service staff
Opportunity-enhancing HR practices	+	Mom et al. (2019)*	Mom et al. (2007)	Managers

+ Al-Agry (2021)

Prieto-Pastor &
Martin-Perez (2015)

Employees

Determinant	Effect	Supporting study	Instrument origin	Sample
Organizational context	+	Schnellbacher & Heidenreich (2020)	Mom et al. (2007)	Employees
	+	Lee & Lee (2016)	Mom et al. (2007)	Employees
Organizational flexibility	+	Chang et al. (2016)	Chang et al. (2016)	Students & educators
Organizational learning capability	+	Salas Vallina et al. (2019)	Mom et al. (2007)	Employees
Paradoxical leadership	+	Kauppila & Tempelaar (2016)*	Mom et al. (2007)	Managers
	+	Klonek et al. (2021)	Klonek et al. (2021)	<u>Entrepreneurs</u>
	+	Zhang, Zhang & Law (2022)*	Mom et al. (2007)	Employees
Participation and involvement	+	Ijigu et al. (2022)	Mom et al. (2007)	Sales & service staff
Participation in cross-functional interfaces	+	Mom et al. (2009)*	Mom et al. (2007)	Managers
Participative leadership	+	Chang et al. (2019)	Mom et al. (2007)	Employees
	+	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
Performance monitoring	+	Ijigu et al. (2022)	Mom et al. (2007)	Sales & service staff
Power status	-	Ma et al. (2023)	Lubatkin et al. (2006)	<u>Entrepreneurs</u>
Psychological empowerment	+ / -	Garcia et al. (2022)	Mom et al. (2007)	Employees
Public service motivation	+	Luu et al. (2017b)	Mom et al. (2007)	Sales & service staff
Resource flexibility-oriented HRM	+	Popaitoon et al. (2022)	Mom et al. (2007)	Employees
Sense of belongingness	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
Servant leadership	+	Luu (2022)	Luu (2022)	Sales & service staff
	+	Arshad et al. (2022)	Mom et al. (2007)	Students & educators
Social network	+	Yap et al. (2020)	Mom et al. (2007)	Top executives
Social valuation of re-entry	+	Boz Semerci (2022)	Mom et al. (2007)	<u>Entrepreneurs</u>
Store manager support	+	Gaan & Shin (2023)	Lubatkin et al. (2006)	Sales & service staff
Team climate	+	Arshad et al. (2022)	Mom et al. (2007)	Students & educators
Team conflict management	+	Duan et al. (2021)	Mom et al. (2007)	Top executives
Teamwork	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
TMT network density	+	Fernández-Mesa et al. (2023)	Mom et al. (2007)	Top executives
Top-down knowledge inflows	+	Mom et al. (2007)*	Mom et al. (2007)	Managers
	+	Torres et al. (2015)	Mom et al. (2007)	Managers
Training and development	+	Ijigu et al. (2022)	Mom et al. (2007)	Sales & service staff
Transformational leadership	+	Keller & Weibler (2015)	Weibler & Keller (2011)	Managers

+ Li et al. (2015) Mom et al. (2007) Top executives

Determinant	Effect	Supporting study	Instrument origin	Sample
	+	Yu et al. (2020)	Marinova et al. (2008)	Top executives
	+	Duan et al. (2021)	Mom et al. (2007)	Sales & service staff
	+	Zheng (2022)	DeCarlo & Lam (2016)	Sales & service staff
Trust building	+	Zhang et al. (2019)	Birkinshaw & Gibson (2004)	Employees
Ubuntu collectivism	+	de Villiers Scheepers et al. (2017)	Chandler et al. (2011)	<u>Entrepreneurs</u>
Work environment	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
Work-life balance	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
<i>Cultural environment</i>				
Adhocracy culture	+	Ajayi et al. (2017)	Ajayi et al. (2017)	Individuals
Clan culture	+	Ajayi et al. (2017)	Ajayi et al. (2017)	Individuals
Constructive controversy	+	Xiang et al. (2019)	Mom et al. (2007)	Managers
Cooperative goal interdependence	+	Xiang et al. (2019)	Mom et al. (2007)	Managers
Culture of empowerment	+	Caniëls et al. (2017)	Mom et al. (2007)	Managers
Experimentation	+	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
Knowledge sharing culture	+	Caniëls et al. (2017)	Mom et al. (2007)	Managers
	+	Ajayi et al. (2017)	Ajayi et al. (2017)	Individuals
Performance-avoid goal orientation	-	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Prevention climate	-	Boemelburg et al. (2022)*	Kostopoulos & Bozionelos (2011)	Employees
Promotion climate	+	Boemelburg et al. (2022)*	Kostopoulos & Bozionelos (2011)	Employees
Psychological distance	+ / -	Alam et al. (2023)	Mom et al. (2007)	Employees
Risk-taking	+	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
Service climate	+	Choi & Kessler (2022)	Mom et al. (2007)	Sales & service staff
Subjective norms (peer pressure)	+	Yu et al. (2013)	Marinova et al. (2008)	Sales & service staff
Supportive organizational culture	-	Hanu et al. (2023)	Mom et al. (2007)	Employees
Workplace spirituality	+	Alam et al. (2023)	Mom et al. (2007)	Employees
<i>Institutional environment</i>				
Behavior-based control	-	Ahmad et al. (2022)	Mom et al. (2007)	Sales & service staff
	-	Amenuvor et al. (2023)	Yu et al. (2013)	Sales & service staff
Bounded discretion	-	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service staff
Centralization	-	Boemelburg et al. (2022)*	Kostopoulos & Bozionelos (2011)	Employees
Control system (behavior-based vs. outcome-based)	+ / -	Faia & Vieira (2017)	Jasmand et al. (2012)	Sales & service staff

Determinant	Effect	Supporting study	Instrument origin	Sample
Cross-functional coordination	+	Tempelaar & Rosenkranz (2019)*	Mom et al. (2007)	Managers
Decision-making authority	+	Mom et al. (2009)*	Mom et al. (2007)	Managers
Dynamic contexts	+	Good & Michel (2013)	Good & Michel (2013)	Students & educators
Dynamic structural framework	+	Iqbal et al. (2022)	Mom et al. (2007)	Students & educators
Economic freedom	+ / -	Zhang et al. (2022)	Mom et al. (2007)	Employees
Economic status	+	Ma et al. (2023)	Lubatkin et al. (2006)	<u>Entrepreneurs</u>
Environmental dynamism	+	Yap et al. (2020)	Mom et al. (2007)	Top executives
Extrinsic motivation	+	Caniëls et al. (2017)	Mom et al. (2007)	Managers
Extrinsic reward	-	Kao & Chen (2016)	Lubatkin et al. (2006)	Sales & service staff
Firm life cycle stage	+ / -	Klonek et al. (2021)	Klonek et al. (2021)	<u>Entrepreneurs</u>
Formalization	-	Mom et al. (2009)*	Mom et al. (2007)	Managers
	+	Folger et al. (2022)	Mom et al. (2007)	Employees
	+ / -	Boemelburg et al. (2022)*	Kostopoulos & Bozionelos (2011)	Employees
Long-term compensation	+	Li et al. (2015)	Mom et al. (2007)	Top executives
Middle management involvement	-	Fernández-Mesa et al. (2023)	Mom et al. (2007)	Top executives
Motivation	+	Ahmad et al. (2021)	Jasmand et al. (2012)	Sales & service staff
Motivation-enhancing HR practices	+	Mom et al. (2019)*	Mom et al. (2007)	Managers
	+	Al-Agry (2021)	Prieto-Pastor & Martin-Perez (2015)	Employees
Organic structure	+	Ajayi et al. (2017)	Ajayi et al. (2017)	Individuals
Organizational architecture	+	Schnellbacher & Heidenreich (2019)	Mom et al. (2007)	Employees
Outcome-based control	+	Ahmad et al. (2022)	Mom et al. (2007)	Sales & service staff
	+	Amenuvor et al. (2023)	Yu et al. (2013)	Sales & service staff
Perceived competition	+	Pietsch et al. (2022)	Mom et al. (2007)	Students & educators
Perceived tech. turbulence	+	Folger et al. (2022)	Mom et al. (2007)	Employees
Performance appraisal	+	Ijigu et al. (2023)	Mom et al. (2007)	Sales & service staff
Performance-based rewards	+	Ijigu et al. (2023)	Mom et al. (2007)	Sales & service staff
Performance-prove goal orientation	+	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Promotion opportunities	+	Ijigu et al. (2023)	Mom et al. (2007)	Sales & service staff
Rewards	+	Karani et al. (2022)	Lubatkin et al. (2006)	Employees
Team identification	-	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service s.

Note: * FT 50 journal publication

Table A3*Outcomes of Individual Ambidexterity*

Outcome	Supporting study	Instrument origin	Sample
<i>Individual performance</i>			
Adaptive selling behavior	Agnihotri et al. (2017)	Jasmand et al. (2012)	Sales & service staff
Ambidextrous learning	Prieto-Pastor & Martin-Perez (2015)	Prieto-Pastor & Martin-Perez (2015)	Employees
Cognitive strain	Keller & Weibler (2015)	Weibler & Keller (2011)	Managers
Efficiency	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service staff
Emotional exhaustion	Amenuvor et al. (2023)	Yu et al. (2013)	Sales & service staff
Individual decisions' long-term performance	Torres et al. (2015)	Mom et al. (2007)	Managers
Individual performance	Kobarg et al. (2017)	Mom et al. (2007)	Students & educators
	Vidgen et al. (2011)	Jansen et al. (2006)	Employees
	Zhang et al. (2019)	Birkinshaw & Gibson (2004)	Employees
Innovative behaviors	Slåtten et al. (2023)	Mom et al. (2007)	Employees
	Kung et al. (2020)	Mom et al. (2007)	Employees
Innovative performance	Alghamdi (2018)	Mom et al. (2007)	Employees
	Zacher et al. (2016)	Mom et al. (2007)	Employees
Innovative work behavior	Caniëls & Veld (2019)	Mom et al. (2007)	Employees
	Jabeen et al. (2023)	Mom et al. (2007)	Students & educators
	Shahzadi & Khurram (2020)	Mom et al. (2007)	Employees
Knowledge brokerage activities	Yap et al. (2020)	Mom et al. (2007)	<u>Entrepreneurs</u>
Likelihood that employees will become entrepreneurs	Yeganegi et al. (2019)	Yeganegi et al. (2019)	Employees
New venture funding	Noguti et al. (2022)	Noguti et al. (2022)	<u>Entrepreneurs</u>
Opportunity exploitation of individual faculty	Chang et al. (2016)	Chang et al. (2016)	Employees
Performance	Mom et al. (2015)*	Mom et al. (2007)	Managers
	Yu et al. (2013)	Marinova et al. (2008)	Employees
Performance in selling existing products	Van der Borgh & Schepers (2014)	Van der Borgh & Schepers (2014)	Sales & service staff
Performance in selling new products	Van der Borgh & Schepers (2014)	Van der Borgh & Schepers (2014)	Sales & service staff
Proactive selling of existing products	Van der Borgh et al. (2017)	Van der Borgh & Schepers (2014)	Sales & service staff
Proactive selling of new products	Van der Borgh et al. (2017)	Van der Borgh & Schepers (2014)	Sales & service staff

Prosocial service behavior

Choi & Kessler (2022)

Mom et al. (2007)

Employees

Outcome	Supporting study	Instrument origin	Sample
Role conflict	Agnihotri et al. (2017)	Jasmand et al. (2012)	Sales & service staff
	Amenuvor et al. (2023)	Yu et al. (2013)	Sales & service staff
Seizing ability	Roberts et al. (2021)	Mom et al. (2007)	Managers
Service performance	Affum-Osei et al. (2020)	Mom et al. (2007)	Employees
Subjective sales performance	Faia & Vieira (2017)	Jasmand et al. (2012)	Employees
Task performance	Good & Michel (2013)	Good & Michel (2013)	Managers
	Kapoutsis et al. (2019)	Schriesheim & Hinkin (1990)	Employees
	Zhang et al. (2022)	Mom et al. (2007)	Students & educators
Team members' individual innovation	Zhang, Zhang & Law (2022)*	Mom et al. (2007)	Individuals
Well-being during crises	Hanu & Khumalo (2024)	Mom et al. (2007)	Employees
Work performance	Arshad et al. (2022)	Mom et al. (2007)	Students & educators
	Ijigu et al. (2023)	Mom et al. (2007)	Employees
<i>Firm economic performance</i>			
Academic entrepreneurship performance	Chang et al. (2024)	Mom et al. (2007)	Students & educators
Commitment to service quality	Gabler et al. (2017)	Gabler et al. (2017)	Employees
Competitive advantage	Wahyudi et al. (2022)	Mom et al. (2007)	Top executives
Cross-sales revenue	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Customer value co-creation	Luu et al. (2018)	Mom et al. (2007)	Employees
Customer-organization identification	Luu et al. (2018)	Mom et al. (2007)	Employees
Department effectiveness	Schnellbacher & Heidenreich (2020)	Mom et al. (2007)	Employees
Department efficiency	Schnellbacher & Heidenreich (2020)	Mom et al. (2007)	Employees
Department performance	Schnellbacher & Heidenreich (2020)	Mom et al. (2007)	Employees
Department's commercialization performance	Chang et al. (2016)	Chang et al. (2016)	Employees
Entrepreneurial orientation	Luu (2017a)	Mom et al. (2007)	Managers
	Wahyudi et al. (2022)	Mom et al. (2007)	Top executives
Financial performance	Sok & O'Cass (2015b)	He & Wong (2004)	Managers
Firm performance	Yap et al. (2020)	Mom et al. (2007)	Top executives
IA-service performance	Kao & Chen (2016)	Lubatkin et al. (2006)	Employees
Innovation outcomes	Akulava & Guerrero (2023)	Chandler et al. (2011)	<u>Entrepreneurs</u>
Innovation performance	Rosing & Zacher (2017)	Mom et al. (2007)	Employees
Knowledge accumulation	Schnellbacher & Heidenreich (2020)	Mom et al. (2007)	Employees
Organisational resilience	Hanu & Khumalo (2024)	Mom et al. (2007)	Employees

Outcome	Supporting study	Instrument origin	Sample
Organizational ambidexterity	Al-Agry (2021)	Prieto-Pastor & Martin-Perez (2015)	Employees
Organizational climate for innovation	Mom et al. (2019)*	Mom et al. (2007)	Managers
	Kung et al. (2020)	Mom et al. (2007)	Employees
Organizational innovation	Naveed & Danish (2022)	Mom et al. (2007)	Employees
Organizational reform	Luu (2017a)	Mom et al. (2007)	Managers
Organizational social capital	Naveed & Danish (2022)	Mom et al. (2007)	Employees
R&D resources allocated to exploitative (explorative) activities	De Visser & Faems (2015)	Mom et al. (2007)	Top executives
Sales performance	Gabler et al. (2017)	Gabler et al. (2017)	Sales & service staff
	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service staff
	Zheng et al. (2022)	DeCarlo & Lam (2016)	Sales & service staff
Sales revenue growth	Lam et al. (2019)*	DeCarlo & Lam (2016)	Sales & service staff
Schools' ambidexterity	Da'as (2023)	Mom et al. (2007)	Students & educators
Service delivery value	Yen et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Service innovation capability	Ahmad et al. (2022)	Mom et al. (2007)	Sales & service staff
	Ahmad et al. (2022)	Jasmand et al. (2012)	Sales & service staff
	Ahmad et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Service quality of care	Slåtten et al. (2023)	Mom et al. (2007)	Employees
Service recovery performance	Ahmad et al. (2022)	Mom et al. (2007)	Sales & service staff
	Ahmad et al. (2022)	Jasmand et al. (2012)	Sales & service staff
	Ahmad et al. (2022)	Jasmand et al. (2012)	Sales & service staff
<i>Workplace relationships</i>			
Customer satisfaction	Faia & Vieira (2017)	Jasmand et al. (2012)	Employees
	Jasmand et al. (2012)*	Jasmand et al. (2012)	Sales & service staff
Customer-employee identification	Luu et al. (2018)	Mom et al. (2007)	Employees
Employee agility	Sudrajat et al. (2021)	Mom et al. (2007)	Employees
Employee creativity	Tung (2016)	Jasmand et al. (2012)	Employees
Employee promotion focus	Tung (2016)	Jasmand et al. (2012)	Employees
Employee psychological empowerment	Tung (2016)	Jasmand et al. (2012)	Employees
Organizational support for creativity	Da'as (2023)	Mom et al. (2007)	Students & educators

Outcome	Supporting study	Instrument origin	Sample
Team performance	Ayuri & Nasution (2022)	<i>Unspecified</i>	Employees
	Schnellbacher & Heidenreich (2020)	Mom et al. (2007)	Employees
Work engagement	Wang et al. (2024)	<i>Unspecified</i>	Employees
<i>Personal fulfillment</i>			
Cognitive skills	Lee & Lee (2016)	Mom et al. (2007)	Employees
Creativity	Da'as (2023)	Mom et al. (2007)	Employees
	Slåtten et al. (2023)	Mom et al. (2007)	Employees
	Wang et al. (2024)	<i>Unspecified</i>	Employees
Creativity-fostering-teacher-behavior	Da'as (2023)	Mom et al. (2007)	Students & educators
Degree of task autonomy	Van der Borgh & Schepers (2014)	Van der Borgh & Schepers (2014)	Sales & service staff
Emotional exhaustion	Ahmad et al. (2022)	Jasmand et al. (2012)	Sales & service staff
Information skills	Lee & Lee (2016)	Mom et al. (2007)	Employees
Job satisfaction	Kusanke & Winkler (2023)	Mom et al. (2007)	Employees
Social skills	Lee & Lee (2016)	Mom et al. (2007)	Employees
<i>Community impact</i>			
Social entrepreneurship performance	Zheng et al. (2020)	Zheng et al. (2020)	<u>Entrepreneurs</u>

Note: * FT 50 journal publication

Appendix B (Chapter 3)

Figure B1

Introduction of Conjoint Experiment as Shown to the Respondents

Welcome and thank you for joining this experiment!

Your experience as an entrepreneur has given you insight into diverse founders and how different factors like regulatory changes, competition or market shifts impact ventures.

In this exercise, you'll evaluate venture potential in the Initial and Growth Stages, assessing the **likelihood that the founders will lead their venture successfully during these stages**.

You'll use two sliders to rate each stage from 0 to 100%, based on the challenges and characteristics provided. Your judgments, drawing on your intuition and experience, are crucial—there are no wrong answers.

Your feedback is invaluable for understanding decision-making in venture development.

Please assume the following about venture projects at the Initial Stage:

- The venture is in its initial phase, with no positive cash flow yet, but the business model shows promise.
- The founder must search and evaluate a scalable business model, with the outcomes of these efforts still unclear.
- High adaptability is required from the founder to navigate this stage, necessitating the acquisition of new skills and knowledge.

Please assume the following about venture projects at the Growth Stage:

- The venture is in a rapid growth stage, generating positive cash flow and focusing on maximizing returns from established markets and products.
- The founder must demonstrate operational efficiency and effective management of resources to sustain and grow the venture's profitability.
- It is vital to effectively exploit existing assets while maintaining a competitive edge in a mature market.

In both stages, the market is characterized by turbulence, causing high levels of change and uncertainty, which could impact the venture's success.

Table B1*Conjoint Constructs (Evaluated Attributes)*

Construct	Description	Levels	Source
Locomotion	Reflects an action-oriented regulatory focus, indicating a preference for movement toward goals	<i>Rapid</i> : "Just do it" (moving rapidly from task to task); <i>Patient</i> : "Tranquility breeds strength" (moving patiently from task to task)	Adapted from Kruglanski et al. (2000)
Assessment	Captures an evaluation-oriented regulatory focus, indicating preference for deliberate information processing in goal pursuit	Analytical: "Only a perfect decision is a good one" (critical evaluation); <i>Intuitive</i> : "Always trust your gut" (intuitive decision-making)	Adapted from Kruglanski et al. (2000)
Resilience	Measures capacity to handle uncertainty, assessing an approach that is actively engaging versus enduring	<i>Actively engaging</i> : addressing and mitigating risks effectively; <i>Passively enduring</i> : "Taking the pain" without mitigating risks	Adapted from Connor & Davidson (2003)

Table B2*Individual-Level Variables (Respondent Characteristics)*

Variable	Description	Scale / Measurement	Source
Gender	Self-reported gender identity	<i>Male, Female, Other / non-binary</i>	—
Education level	Highest level of education on a 7-point scale (0 = high school, 7 = doctorate degree)	0-7	Adapted from Mueller et al. (2017)
Age	Current age in years	18-99	—
Working experience	Total years of full-time working experience	0-80	—
Entrepreneurship experience	Total years of full-time involvement in entrepreneurial roles	0-80	—
Venture project involvement	Number of venture projects the respondent has initiated or been actively involved in	0-50	Adapted from Mueller et al. (2017)

Table B3*Further Analysis of HLM Model Including Moderating Effects of Resilience*

Variables	Coefficient	SE
<i>Main effects</i>		
Intercept for overall model	40.19***	3.30
Growth stage	1.01	1.33
High locomotion	4.27**	1.61
High assessment	5.46***	1.11
High resilience	9.35***	1.48
<i>Interactions (level 1 × level 2)</i>		
Growth stage × High locomotion	-3.82*	1.62
Growth stage × High assessment	2.83*	1.08
Growth stage × High resilience	4.78**	1.47
High assessment × High resilience	2.02	1.21
High locomotion × High resilience	0.22	1.30
<i>Interactions (higher-order)</i>		
Growth stage × High assessment × High resilience	-0.85	1.63
Growth stage × High locomotion × High resilience	-1.01	1.36
<i>Controls</i>		
Higher education	7.09*	3.30
Wald chi ²	298.69	
Prob > chi ²	< 2.2e-16	
R-squared (marginal)	0.15	
R-squared (conditional)	0.37	
Akaike information criterion (AIC)	21,267	

Note: Number of observations: 1248, Number of respondents: 156, Observations per respondent: 8. Abbreviations: HLM, hierarchical linear modeling. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix C (Chapter 4)

Figure C1

Introduction of Conjoint Experiment as Shown to the Respondents

You have completed the first part. Please conduct the following case experiment:

Your expertise as an investor provides unique insights into how founder characteristics—such as work experience, motivation, and confidence in achieving desired goals—influence investment decisions.

In this exercise, you will evaluate founders based on their work experience, motivation and confidence. Consider how these traits align with the challenges and goals of the venture stage (*Seed* or *Growth*) when rating **your likelihood of investing** from 0% to 100%.

Your judgments, informed by your intuition and experience, are critical—there are no right or wrong answers.

Your feedback is invaluable for advancing our understanding of how investors evaluate founders across different venture stages. Thank you for contributing to this research!

Please assume the following about venture projects at the Seed Stage:

- This stage is characterized by evolving markets and continuous experimentation as ventures seek to validate their business models.
- Ventures are prioritizing the development of novel solutions and positioning themselves for rapid growth in high-potential sectors.
- The main goal is finding and refining a product-market fit while navigating the challenges of early venture formation.

Please assume the following about venture projects at the Growth Stage:

- Ventures have moved past initial experimentation and are now focused on scaling operations and refining processes.
- These ventures have a more predictable market position and are working on sustaining growth through operational maturity.
- The business model has been proven, and the focus is on optimizing for financial performance and long-term sustainability.

In both stages, ventures operate in high-tech markets characterized by significant R&D investments, intense competition, and the necessity for continuous innovation. Strategic decisions are shaped by the demands of pioneering cutting-edge technologies and the evolving nature of these markets.

Figure C2*Explanations of Conjoint Profiles as Shown to the Respondents*

Please evaluate your investment decision based on the **three** following founder conditions, which differ from one founder to another. Each condition has **two** distinct manifestations.

- 1. Founder's work experience**
 - **Deep experience:** The founder has substantial experience and focuses on a specific role or area, demonstrating mastery and consistent execution.

OR

 - **Broad experience:** The founder has diverse experience across roles and industries, showcasing versatility and responsiveness to changing challenges and opportunities.
- 2. Founder's motivation**
 - **Intrinsic (task-focused) motivation:** The founder is driven by the satisfaction of building and improving products, valuing customer impact and long-term contribution.

OR

 - **Extrinsic (reward-focused) motivation:** The founder is motivated by achieving measurable results, such as revenue growth and scalability, focusing on financial milestones.
- 3. Founder's confidence in their own ability to achieve goals**
 - **Measured confidence:** The founder has balanced confidence by setting realistic goals and employing carefully planned, sustainable strategies to ensure steady progress and minimize risks.

OR

 - **Bold confidence:** The founder has high confidence by setting ambitious goals and pursuing bold, high-growth strategies, even in the face of significant risks, aiming for rapid progress and breakthrough innovations.

Table C1*Conjoint Constructs (Evaluated Attributes)*

Construct	Description	Levels	Source
Signals of work experience	Reflects the founder's type of work experience, signaling either specialization within a domain or cross-functional versatility.	<p><i>Deep</i> (coded as 0): Entrepreneur has accumulated substantial experience within a specific role or domain, typically signaling focused expertise and reliability in execution. While this depth supports stable performance, it may be perceived as limiting strategic flexibility, unless acquired in highly dynamic environments.</p> <p><i>Broad</i> (coded as 1): Entrepreneur has diverse experience across functions or domains, supporting strategic flexibility and cognitive readiness to engage in both innovation and execution tasks, signaling potential for ambidextrous adaptability.</p>	Adapted from Lazear (2004); Bublitz & Noseleit (2014); Mom et al. (2015)
Signals of motivation	Reflects the founder's primary driving force behind venture activities, signaling either an intrinsic focus on product development or an extrinsic focus on financial outcomes.	<p><i>Intrinsic</i> (coded as 0): Entrepreneur is intrinsically motivated by the process of creating and improving, valuing customer impact and long-term contribution, indicating a strategic preference for exploration.</p> <p><i>Extrinsic</i> (coded as 1): Entrepreneur is driven by measurable results like revenue and growth, emphasizing scalable success and financial indicators, indicating a strategic preference for exploitation.</p>	Adapted from Ryan & Deci (2000); Yen et al. (2022); Kao & Chen (2016); Caniels et al. (2017)
Signals of self-efficacy	Reflects the founder's level of confidence, which influences their approach to goal-setting, strategic decision-making and risk-taking. It signals how the founder balances ambition with practicality.	<p><i>Measured</i> (coded as 0): Entrepreneur sets realistic goals and employs carefully planned, sustainable strategies to ensure steady progress and minimize risks, balancing exploration and exploitation with strategic prudence.</p> <p><i>Bold</i> (coded as 1): Entrepreneur sets ambitious goals and pursues high-risk, high-reward strategies, often in untested markets, signaling a strategic bias toward exploration and growth under uncertainty.</p>	Adapted from Chen et al. (1998); Ma et al. (2023); Mom et al. (2019); Scheepers et al. (2017)

Table C2*Anonymized Overview of Professional Investor Sample (N = 53)*

No.	Country	Investor type	Stage focus	Industry focus	Investment Experience	Description
					Years (# of Investments)	
1	Canada	Business angel	Seed stage	15, 16	20 (50+)	Serial entrepreneur and active angel investor with four exits and numerous investments across cleantech, life sciences and agtech; advisor, speaker, and blockchain policy advocate.
2	Canada	Venture capital fund	Early stage	10	24 (34)	Co-founder and general partner of an early-stage VC firm focused on B2B fintech and SaaS; has overseen multiple high-profile exits and serves on various boards in North America.
3	Canada	Venture capital fund	Seed stage	6, 8, 9, 10, 11, 13, 16, 18, 20	10 (50+)	Partner at a Canadian venture firm focused on early-stage tech investments; launched Angellist Ventures in Canada and co-founded a major tech ecosystem initiative.
4	China	Venture capital fund	Early stage	9, 10, 16	25 (25)	Vice chairperson at a global deep-tech VC firm. Two decades of cross-border investment experience with board roles across multiple high-growth firms.
5	Costa Rica	Venture capital fund	Early stage	8, 9, 10, 11, 13, 15	10 (30)	Partner at a venture firm focused on Latin America; 10+ years of experience across private equity, venture capital and strategic advisory; former executive at Mesoamerica and UBS.
6	Denmark	Venture capital fund	Seed stage	3, 4, 10, 11, 13	5 (7)	Investment manager at a Copenhagen venture firm investing in Seed and Series A across the Nordics; angel investor with a portfolio spanning medtech, SaaS and climate-tech.
7	France	Venture capital fund	Early stage	5	2 (3)	Partner at an early-stage VC focused on green tech and B2B innovation, with a distinguished background in industry strategy, public finance and corporate leadership. Formerly a senior automotive executive.
8	Germany	Venture capital fund	Seed stage	4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16, 18	3 (3)	Investment associate at a German early-stage VC with prior experience in strategy consulting and operational roles in high-growth ventures.
9	Greece	Venture capital fund	Seed stage	16	3 (7)	Portfolio lead at an early-stage venture fund; supports investment activity and portfolio development.

10	India	Business angel	Seed stage	7, 9	4 (3)	Serial entrepreneur and angel investor with experience in ad tech, mobile gaming and B2C. Co-founded a social platform acquired by a major digital media group.
11	India	Venture capital fund	Seed stage	5, 8	2 (2)	Investment analyst at TDK Ventures with a background in engineering and deep tech experience as founder of a robotics software firm.
12	Italy	Venture capital fund	Early stage	16, 19, 20	5 (15)	Investor at LIFTT, a deep tech VC firm focused on technology transfer and early-stage innovation.
13	Netherlands	Leveraged buyout fund	Growth-/ expansion stage	3, 4, 5, 8, 9, 10, 11	1 (2)	Investment manager at a mid-market private equity firm with focus on majority-stake growth investments in established companies in traditional industries with €3-15M EBITDA.
14	Netherlands	Venture capital fund	Growth-/ expansion stage	9, 10, 15	17 (12)	Partner at a multi-fund European venture firm with €600M AUM; background in private equity, M&A and strategic investment; active board member and long-term supporter of scale-up ventures.
15	New Zealand	Venture capital fund	Seed stage	5, 7, 10, 19, 20	4 (20)	New Zealand-based investor with experience in real estate and venture capital; manages private property portfolio while continuing to explore startup investments.
16	Switzerland	Business angel	Seed-stage	5, 9, 13	7 (5)	Zurich-based business angel and strategic advisor with a background in digital innovation; extensive experience guiding early ventures on blockchain strategy and operational scaling.
17	Thailand	Venture capital fund	Early stage	5, 6, 7, 8, 10, 13, 15, 16, 18, 19, 20	8 (50+)	Managing partner at a B2C-focused venture firm investing across emerging Asia; 20+ years of global experience in tech, travel and consumer sectors; business angel with 50+ investments, including multiple exits and IPOs.
18	United Kingdom	Venture capital fund	Early stage	9	30 (50+)	General partner at an early-stage fund focused on deep tech; exited founder with background in biomedical science and predictive analytics; active advisor, mentor and panelist on healthcare innovation and AI.
19	United Kingdom	Venture capital fund	Early stage	18	8 (50+)	Managing partner at a European early-stage AgriFood venture fund, overseeing investments in startups advancing sustainable food systems.
20	United Kingdom	Venture capital fund	Early stage	16	4 (4)	Venture partner and health economist with two decades of experience in clinical medicine, management consulting and venture capital.
21	USA	Business angel	Early stage	9, 10, 16	8 (10)	Angel investor at Boston Harbor Angels, leading due diligence efforts in life sciences and advising numerous early-stage ventures.

22	USA	Business angel	Early stage	7, 9	18 (8)	Colorado-based angel investor and partner focused on Latin America; background in digital media, sales and venture building.
23	USA	Business angel	Early stage	11, 15, 16	22 (30)	Philanthropist and general partner at a family office investing in early-stage enterprise software startups; serves as advisor in fintech and digital health.
24	USA	Business angel	Early stage	5, 8, 9, 10, 11, 19, 20	10 (20)	Early-stage investor and advisor with deep roots in the San Francisco startup ecosystem. Background in advertising, journalism and brand strategy; has supported numerous ventures through growth phases.
25	USA	Business angel	Early stage	10, 13, 15, 16	2 (2)	Experienced startup executive, active angel investor with Launchpad Venture Group; supports early-stage founders with capital, GTM and deep operational insight.
26	USA	Business angel	Early stage	7, 9, 11	15 (15)	Angel investor and advisor, former VC turned operator with experience at global investment firms and a six-year operating track record scaling a fintech startup from Series B to IPO.
27	USA	Business angel	Seed stage	16	20 (50+)	Managing director at a venture capital firm leading life science investments across North America. Active in the Gulf Coast startup scene with prior founder experience and expertise in early-stage biomedical ventures.
28	USA	Business angel	Seed stage	9	10 (25)	Managing director at an early-stage investment firm focused on women-led ventures; former CEO with 25+ years across banking, corporate strategy and entrepreneurial ecosystems.
29	USA	Business angel	Seed stage	7, 9, 10, 11, 15, 16, 18, 19, 20	25 (30)	Angel investor and co-founder of a global virtual accelerator, providing capital access and coaching to early-stage startups on investor readiness and venture growth.
30	USA	Growth equity fund	Early stage	5, 9, 10, 16	40 (45)	Co-founder and managing partner at a US-based private equity firm and active business angel with 25+ years of experience in fund management, strategy consulting and corporate finance; has served on boards across biotech, SaaS and manufacturing.
31	USA	Growth equity fund	Growth-/ expansion stage	9	10 (3)	Investor at Innovius Capital, a San Francisco-based VC firm focused on Series A & B enterprise SaaS.
32	USA	Growth equity fund	Later stage	3, 5, 6, 7, 8	2 (30)	Investor at a Dallas-based private equity firm focused on alternative assets with background in marketing, consulting and financial strategy; advocate for inclusive capital access.

33	USA	Venture capital fund	Early stage	10	15 (40)	Investor and chief of staff at a VC based in NYC; prior roles in growth equity, strategy consulting and B2B tech; 10+ years in SaaS, fintech and climate-tech.
34	USA	Venture capital fund	Early stage	4, 7, 9, 10, 16, 18	3 (6)	Associate at a venture capital firm with prior experience as founder, operator and revenue team leader.
35	USA	Venture capital fund	Early stage	9, 10	15 (50+)	Managing partner at a venture capital firm with track record of successful exits in biotech and software; co-founded a VC-backed firm acquired by Sony and led multiple ventures to acquisition.
36	USA	Venture capital fund	Early stage	9, 10, 16	45 (50+)	Chairperson of a global multi-stage venture firm with over \$6 billion AUM. Pioneer in early-stage investing and co-founder of one of the first seed-focused VC funds.
37	USA	Venture capital fund	Early stage	9, 10, 11, 19, 20	6 (50+)	Managing director at a tech-focused investment bank with 12+ years of experience advising on M&A in emerging tech sectors.
38	USA	Venture capital fund	Early stage	9, 10	9 (40)	Venture partner at FJ Labs and founder of an exited AI platform; 10+ years in investment, product and startup leadership; backed 500+ ventures and co-founded a global founder platform.
39	USA	Venture capital fund	Growth-/ expansion stage	9, 10	27 (40)	Managing director at a high-volume pre-VC investment firm in Palo Alto with over 1,800 tech startups funded; former tech founder and CEO.
40	USA	Venture capital fund	Growth-/ expansion stage	3, 5, 9, 10, 11, 13	2 (2)	Investor at Dogwood Ventures, a growth-stage fund based in Atlanta that backs high-traction B2B software startups; prior roles at Y Combinator and Google for Startups.
41	USA	Venture capital fund	Seed stage	3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16	10 (6)	Senior strategy consultant and venture advisor; founder of multiple advisory firms and mentor in North American startup ecosystems.
42	USA	Venture capital fund	Seed stage	4, 5, 7, 8, 13, 19, 20	17 (50+)	Co-founder and managing partner of an early-stage venture fund focused on tech transformation of legacy systems.
43	USA	Venture capital fund	Seed stage	4, 5, 8, 9, 10, 11, 15, 16	8 (10)	Palo Alto-based startup coach and former VC; 15+ years of experience advising early-stage teams on product strategy, fundraising and GTM.
44	USA	Venture capital fund	Seed stage	9, 20	40 (50+)	Managing partner at an early-stage venture firm and principal of a family office; long-standing investor with a portfolio of over 100 startups and prior roles as public company CEO, serial entrepreneur and government scientist; widely recognized in national VC and policy-linked innovation circles.

45	USA	Venture capital fund	Seed stage	9, 10, 15, 16	5 (20)	Director at a global entrepreneurship organization supporting high-growth founders in underserved markets; prior experience in strategy consulting and entrepreneur selection across Latin America and the U.S.
46	USA	Venture capital fund	Seed stage	8, 9, 10, 11, 16, 19, 20	5 (50+)	Early-stage investor and family office associate, supporting high-net-worth families and Latin founders through pre-seed venture investments.
47	USA	Venture capital fund	Seed stage	9, 10, 16	25 (50+)	Seasoned technology executive and early-stage investor with 30+ years of experience in founding, scaling and exiting venture-backed firms. Co-leads a venture firm that supports military veterans as entrepreneurs.
48	USA	Venture capital fund	Seed stage	9, 10, 16	20 (50+)	Founder and CEO of a leading global pre-seed investment platform, with over 4,000 venture investments and more than 20 unicorns. Seasoned entrepreneur with multiple exits who has shaped the accelerator model and serves on numerous advisory boards.
49	USA	Venture capital fund	Seed stage	5	10 (50+)	Partner at a mission-driven food systems investment firm with deep experience as founder, board member and mentor across North America.
50	USA	Venture capital fund	Seed stage	3, 4, 5, 8, 9, 10, 15, 16, 20	6 (31)	Early-stage investor based in NYC, currently at Commonweal Ventures. Business angel in healthtech, fintech and deep-tech through a family office.
51	USA	Venture capital fund	Seed stage	10, 16	6 (50+)	Managing director at a family-owned private investment company; member of the investment review committee with prior experience in private equity.
52	USA	Venture capital fund	Seed stage	3, 4, 5, 8	10 (30)	Principal investor at an early-stage venture firm that focuses on seed to growth equity in sustainable industry solutions across energy, mobility and manufacturing.
53	USA	Venture capital fund	Seed stage	4, 5, 6, 7, 10	6 (25)	Investor at BDev Ventures focused on B2B SaaS in US and Latin America; launched multiple CVC funds and executed \$5B+ in buy-side transactions.

Note: Industry categories are coded using the North American Industry Classification System (NAICS). Codes correspond to the following sectors: 1 – Agriculture, forestry, fishing and hunting; 2 – Mining, quarrying and oil and gas extraction; 3 – Utilities; 4 – Construction; 5 – Manufacturing; 6 – Wholesale trade; 7 – Retail trade; 8 – Transportation and warehousing; 9 – Information; 10 – Finance and insurance; 11 – Real estate and rental and leasing; 12 – Professional, scientific and technical services; 13 – Management of companies and enterprises; 14 – Administrative and support, waste management and remediation; 15 – Educational services; 16 – Health care and social assistance; 17 – Arts, entertainment and recreation; 18 – Accommodation and food services; 19 – Other services (except public administration); 20 – Public administration.

Table C3*Individual-Level Variables (Respondent Characteristics)*

Variable	Description	Scale / Measurement	Source
Gender	Gender identity	<i>Male, Female, Other / non-binary</i>	Self-reported
Education level	Highest level of education completed	8–21 years (e.g. 8 = middle school, 21 = doctorate)	Adapted from Mueller et al. (2017)
Age	Current age in years	18–99	Self-reported
Country of residence	Current country of residence	<i>ISO 3166 country codes (e.g. Afghanistan to Zimbabwe)</i>	Self-reported
US investor	Binary indicator of whether the respondent resides in the United States	0 = Non-US, 1 = US-based	Constructed to correct for sample bias (this study)
Investor type	Main investor category	1–6 (1 = VC fund, 2 = Growth equity fund, 3 = LBO fund, 4 = Family office, 5 = Business angel, 6 = Other)	Adapted from Block et al. (2019)
Investment experience	Total years of full-time involvement in professional investment activities	0–80	Adapted from Maxwell et al. (2011)
Investment volume	Number of venture projects in which the respondent has invested	0–100	Adapted from Maxwell et al. (2011)
Investment venture stage focus	Stage of portfolio companies most commonly targeted	<i>Seed-stage, Early-stage, Growth/Expansion-stage, Later-stage</i>	Adapted from Block et al. (2019)
Investment industry focus	Industries of portfolio companies most commonly targeted	Categorized using North American Industry Classification System (NAICS)	—

Table C4

Significant Stage-Contingent Moderation Analyses

Variables	Model 6: Self-Efficacy × Investor Type	Model 7: Motivation × Investor Type	Model 8: Motivation × Investor Stage Focus	Model 9: Work Experience × Investor Stage Focus
<i>Main effects</i>				
Bold self-efficacy	7.257* (3.119)	—	—	—
Extrinsic motivation	—	-14.716*** (3.314)	-14.530*** (3.582)	—
Broad work experience	—	—	—	-9.270** (2.503)
Growth stage	7.304** (2.651)	-5.169+ (2.825)	-7.310* (3.130)	-5.390* (2.166)
<i>2-way interactions</i>				
Bold self-efficacy × Investor type: Leveraged buyout fund	-9.007** (3.119)	—	—	—
Extrinsic motivation × Investor type: Leveraged buyout fund	—	-26.034*** (3.314)	—	—
Extrinsic motivation × Investor stage focus: Later-stage	—	—	-8.220* (3.582)	—
Broad work experience × Investor stage focus: Growth-/expansion stage	—	—	—	-13.080* (5.267)
Broad work experience × Investor stage focus: Later-stage	—	—	—	18.520*** (2.503)
<i>3-way interactions</i>				
Bold self-efficacy × Investor type: Leveraged buyout fund × Growth stage	27.885*** (3.256)	—	—	—
Extrinsic motivation × Investor type: Leveraged buyout fund × Growth stage	—	17.439*** (4.065)	—	—
Extrinsic motivation × Investor stage focus: Later-stage × Growth stage	—	—	27.150*** (4.937)	—
Broad work experience × Investor stage focus: Later-stage × Growth stage	—	—	—	-26.510*** (3.651)
Intercept	91.687* (39.234)	102.673* (39.336)	101.035* (35.031)	98.405* (35.272)
<i>Model fit</i>				
Wald χ^2	108.14	161.48	147.94	121.01
df	41	41	41	41
Prob > χ^2	0	0	0	0
R ² (marginal)	33.13%	36.59%	34.86%	33.12%
AIC	7574.15	7520.81	7534.34	7561.28

Note: Number of observations = 848; number of unique respondents = 53; observations per respondent = 16. Only significant interaction effects ($p < .05$) are displayed; all controls included in all models but omitted for parsimony. The "Growth stage" variable reflects the experimental evaluation context and is conceptually distinct from investors' self-reported stage focus (e.g. growth-/expansion-stage focus). Significance levels: + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Caution: Two- and three-way interaction terms involving leveraged buyout investors (LBO) and later-stage investment focus are based on extremely small subgroups ($n = 8$ and $n = 4$, respectively). While some effects are statistically significant, they should be interpreted as exploratory and with limited generalizability.

Sección en Español

Resumen

El concepto de Ambidestreza del Empresario (AE, por sus siglas en español; en inglés *Entrepreneur Ambidexterity*) se refiere a la capacidad cognitiva del emprendedor para equilibrar exploración y explotación frente a las cambiantes demandas del emprendimiento. A diferencia de la ambidestreza organizacional o de empleados, la AE se centra en la adaptabilidad mental del fundador bajo condiciones de alta incertidumbre y escasez de recursos. Esta tesis investiga la AE como una capacidad crítica pero poco explorada que influye en el éxito de los emprendimientos en etapas iniciales, con el objetivo de avanzar en la teoría, informar la práctica y abordar las exigencias cognitivas que enfrentan los emprendedores al gestionar presiones simultáneas para innovar y ejecutar.

La tesis presenta tres ensayos complementarios que responden a la pregunta: ¿Cómo desarrollan y aplican los emprendedores capacidades ambidiestras, y cómo se perciben dichas capacidades en distintos contextos?

El Ensayo 1 propone un modelo conceptual y una agenda de investigación sobre la AE, basados en la teoría social cognitiva. Sintetiza evidencia dispersa sobre ambidestreza individual y clasifica sus antecedentes en factores personales, conductuales y contextuales. El modelo describe la AE como una capacidad emergente y sensible al contexto, que impulsa adaptabilidad, reconocimiento de oportunidades, resiliencia personal y atractivo

ante inversores, pero que también conlleva riesgos como la sobrecarga cognitiva derivada de una implicación sostenida en demandas en conflicto.

El Ensayo 2 examina cómo rasgos autorregulatorios específicos permiten al emprendedor adaptarse a las demandas cambiantes de exploración y explotación según la etapa de desarrollo del emprendimiento. Muestra que distintos rasgos importan en distintos momentos, destacando la naturaleza contingente de la AE.

El Ensayo 3 analiza cómo inversores en etapas tempranas interpretan rasgos del fundador como señales de AE. Encuentra que el valor percibido de la experiencia, motivación y autoeficacia varía según la madurez del emprendimiento.

Introducción

Fundamentos Teóricos

El concepto de Ambidestreza del Empresario (AE, por sus siglas en español; en inglés Entrepreneur Ambidexterity), introducido por Volery et al. (2015), describe la capacidad cognitiva de los empresarios para equilibrar la exploración y la explotación a lo largo del tiempo. Este concepto se inscribe en una línea de investigación más amplia que analiza cómo individuos y organizaciones enfrentan la tensión inherente entre descubrir nuevas oportunidades y aprovechar las capacidades existentes, una dualidad ampliamente reconocida como central para lograr el éxito sostenido en entornos dinámicos. Esta tradición investigadora se origina en los estudios

sobre ambidestreza organizacional (AO), definida como la habilidad de una empresa para explorar nuevas posibilidades mientras explota simultáneamente sus recursos actuales (March, 1991). La evidencia empírica muestra que las organizaciones que logran mantener este equilibrio tienden a ser más adaptables y a obtener ventajas competitivas sostenidas (O'Reilly & Tushman, 2008; Raisch et al., 2009).

En respuesta a este desafío, se han propuesto soluciones estructurales y procedimentales, como la creación de unidades separadas para la exploración y la explotación, o el fomento de contextos organizativos que permitan a los individuos alternar entre ambas (Birkinshaw & Gibson, 2004). No obstante, la investigación en AO ha permanecido centrada principalmente en procesos y estructuras a nivel organizacional. Frente a esto, una corriente emergente ha desplazado la atención hacia el nivel individual, dando lugar al concepto de ambidestreza individual (AI) (Bledow et al., 2009; Mom et al., 2007). La AI analiza cómo empleados y directivos combinan comportamientos exploratorios y explotativos en sus actividades cotidianas, a menudo en contextos marcados por conflictos de rol, presión temporal o ambigüedad estructural (Jasmand et al., 2012; Mom et al., 2009).

Este giro hacia el nivel micro ha proporcionado ideas valiosas sobre las bases individuales de la ambidestreza, pero solo recientemente se ha extendido al ámbito emprendedor, donde normalmente no existen estructuras formales y las exigencias adaptativas son más intensas. En estos entornos, los individuos pueden explorar generando nuevas ideas o experimentando con

enfoques distintos, y explotar perfeccionando habilidades o mejorando procesos existentes. Con el tiempo, esta línea de investigación ha incorporado formas específicas de conducta ambidextra, como estilos de liderazgo adaptativo que fomentan simultáneamente la innovación y la eficiencia (Kauppila & Tempelaar, 2016; Rosing et al., 2011; Zhang et al., 2022), o funciones que exigen equilibrar tareas de venta y atención al cliente (Jasmand et al., 2012). Otros estudios se han centrado en cómo los profesionales de ventas manejan la adquisición de nuevos clientes sin descuidar las relaciones existentes (Lam et al., 2019). Aunque estos trabajos resaltan las habilidades cognitivas y conductuales necesarias para gestionar demandas conflictivas, generalmente asumen que los individuos actúan dentro de organizaciones estables que les proveen apoyo y recursos.

En contraste, el estudio de la AE se centra en un contexto diferente, donde los individuos —específicamente los empresarios— deben gestionar simultáneamente la exploración y la explotación sin el respaldo de una organización establecida. La AE hace referencia a la capacidad cognitiva del empresario para enfrentar eficazmente estas demandas contrapuestas, usualmente en entornos marcados por alta incertidumbre, recursos limitados y responsabilidad directa sobre los resultados (Klonek et al., 2021; Volery et al., 2015). A diferencia de la AI, que se enfoca más en comportamientos observables, la AE pone énfasis en capacidades mentales internas como la resiliencia, la flexibilidad y el pensamiento estratégico (Baron & Ensley, 2006; Campagnolo et al., 2022; Haynie et al., 2009). El empresario debe detectar

oportunidades de crecimiento sin comprometer la eficiencia y sostenibilidad del negocio.

Este cambio de enfoque permite identificar tres diferencias clave entre la AE y la AI. Primero, el sujeto de estudio en la AE es el empresario o fundador, quien actúa como decisor principal y gestor de recursos, en lugar de un empleado dentro de una organización. Segundo, la AE se enfoca en las capacidades cognitivas del individuo más que en sus comportamientos observables. Tercero, la AE se manifiesta principalmente en etapas iniciales del emprendimiento, donde la ausencia de estructuras formales hace que las capacidades del empresario tengan un impacto directo en la supervivencia y crecimiento del negocio (Guerrero, 2021; Klonek et al., 2021; Schnellbacher et al., 2019).

La AE se entiende mejor como una capacidad flexible y potencial, no como un patrón fijo de actuación. Se desarrolla mediante la interacción entre las capacidades personales del empresario y el entorno en el que opera (Volery et al., 2015). Esta habilidad le permite alternar entre la creación de nuevas oportunidades y la mejora de operaciones existentes, algo esencial para mantener la viabilidad del negocio. Por ejemplo, un empresario puede desarrollar un nuevo producto mientras encuentra maneras de reducir costos, logrando así que la empresa se mantenga innovadora y financieramente estable (Blank & Eckhardt, 2024; Sok & O’Cass, 2015b; Zheng et al., 2020).

La investigación sugiere que la AE está relacionada con resultados positivos a nivel de la empresa, incluyendo una mayor innovación, crecimiento

sostenido y mejor recepción por parte de inversores (Noguti et al., 2022; Volery et al., 2015; Yap et al., 2020). Es importante destacar que la AE depende de la capacidad del empresario para integrar estas demandas en el tiempo, alternando entre ellas con rapidez, manteniendo ambas lógicas en mente y respondiendo con flexibilidad conforme cambian las exigencias del entorno. Esto la diferencia de la AO, donde las empresas grandes suelen contar con estructuras y recursos temporales que les permiten separar exploración y explotación en distintas unidades o fases. En cambio, los empresarios rara vez tienen esta opción. Operan bajo severas restricciones de recursos y presión temporal, lo que les exige integrar actividades divergentes dentro de un solo rol y en plazos comprimidos, convirtiendo a la AE en una competencia crítica para sobrevivir y prosperar en mercados dinámicos (Bryant, 2009; Poon et al., 2020; Wang & Rafiq, 2014).

En resumen, la AE aporta una nueva perspectiva a la investigación sobre ambidestreza al vincularla con el pensamiento y la toma de decisiones emprendedoras. Muestra cómo las capacidades individuales fomentan la adaptabilidad en situaciones de alta incertidumbre y escasez de recursos. Este fundamento conceptual invita a examinar con mayor profundidad los contornos empíricos de la AE, sus antecedentes formativos y su interpretación social, temas que se desarrollan en las siguientes secciones de esta tesis.

Motivación

La AE no solo enriquece nuestra comprensión de la ambidestreza individual, sino que también conecta los enfoques cognitivos y conductuales en el campo del emprendimiento, abriendo nuevas direcciones tanto para la investigación como para la práctica. La literatura sobre AE contribuye a explicar cómo los empresarios gestionan demandas contrapuestas, y por qué esta habilidad resulta esencial para el éxito, especialmente en contextos de etapa temprana. En este sentido, esta tesis doctoral se articula en torno a tres motivaciones principales: (1) la necesidad de avanzar en la teoría sobre AE para comprender mejor este fenómeno; (2) el deseo de ofrecer orientación útil a empresarios reales respecto a la AE; y (3) una motivación personal derivada de experiencias propias que resaltan la importancia de este tema.

En primer lugar, desde una perspectiva teórica, la AE representa un área nueva y prometedora en el estudio de la ambidestreza. La mayor parte de la investigación se ha centrado tradicionalmente en cómo las organizaciones equilibran la exploración (buscar nuevas oportunidades) y la explotación (optimizar operaciones existentes) para sobrevivir y prosperar en el tiempo (March, 1991; O'Reilly & Tushman, 2008). Posteriormente, los estudios comenzaron a prestar atención al papel de los individuos dentro de las organizaciones —como directivos o empleados— que contribuyen a dicho equilibrio (Bledow et al., 2009; Mom et al., 2007). Sin embargo, estos trabajos se basan principalmente en personas que operan dentro de estructuras organizativas formales, con acceso a sistemas, equipos y apoyo. Los

empresarios enfrentan una realidad distinta. A menudo trabajan en solitario o en equipos muy pequeños, sin los recursos ni el respaldo disponibles en empresas consolidadas. Para ellos, pensar y actuar ambidextramente no es una opción estratégica, sino una necesidad para sobrevivir.

La investigación sobre AE busca precisamente vincular la ambidestreza con la cognición emprendedora, es decir, con la manera en que los empresarios piensan, toman decisiones y se adaptan en entornos volátiles (Baron & Ensley, 2006; Mitchell, 2004). La AE se centra en la agilidad mental y la capacidad de adaptación, ayudándonos a entender qué habilidades cognitivas permiten que algunos empresarios prosperen donde otros fracasan. Estudiar la AE amplía nuestro conocimiento sobre qué hace que un empresario tenga éxito. Examina capacidades como la autorregulación, la resiliencia y el pensamiento flexible, que van más allá de la simple identificación de oportunidades. Este enfoque aclara cómo los empresarios enfrentan y resuelven tensiones contradictorias, frecuentemente bajo presión intensa y con recursos escasos.

En segundo lugar, la AE no es solo un concepto teórico. Es una habilidad concreta y crítica para los empresarios, especialmente en las etapas iniciales de una empresa. En esos momentos, deben equilibrar la generación de nuevas ideas con el aprovechamiento de iniciativas ya existentes, a veces en el mismo día. A diferencia de los directivos en grandes empresas, no pueden delegar tareas ni confiar en otros para gestionar esta tensión. Para los fundadores individuales o equipos reducidos, la AE suele marcar la diferencia

entre la supervivencia y el fracaso. En estos casos, la AE se convierte en una táctica de supervivencia (Davis et al., 2009; Wang & Rafiq, 2014).

El empresario debe alternar constantemente entre el pensamiento creativo y la resolución práctica de problemas. Debe adaptarse a cambios en las necesidades del cliente, a variaciones del mercado y a desafíos imprevistos. La investigación demuestra que los empresarios ambidextros tienen más probabilidades de obtener financiamiento temprano, hacer crecer sus negocios y posicionarse favorablemente en mercados competitivos (Schnellbacher et al., 2019; Sok & O’Cass, 2015b; Volery et al., 2015; Yap et al., 2020). Más allá de la supervivencia, la AE también permite que los empresarios prosperen. Aquellos capaces de gestionar simultáneamente la ejecución a corto plazo y la visión a largo plazo tienden a tener mayor éxito en entornos inciertos y dinámicos. Esto convierte a la AE en una competencia fundamental para cualquier persona que estudie o practique el emprendimiento, y un área donde aún se necesita mucha orientación. Todavía sabemos poco sobre cómo se desarrolla la AE, cómo se manifiesta en la práctica y cómo puede ser identificada y fomentada.

En tercer lugar, esta tesis también está motivada por la experiencia personal. He trabajado tanto en startups como en unidades de innovación corporativa, liderando proyectos desde la idea inicial hasta su escalamiento e incluso su salida. A lo largo de este recorrido, experimenté la necesidad constante de equilibrar la planificación estratégica con la ejecución operativa. Un momento requería pensamiento visionario; el siguiente, acción precisa. En

mi rol supervisando múltiples proyectos emprendedores, debía alternar entre startups en distintas fases, pasando de tareas exploratorias en la mañana a resolver retos de crecimiento por la tarde.

Este cambio mental continuo reveló no solo la dificultad práctica de equilibrar demandas contradictorias, sino también la complejidad cognitiva que implica adaptarse a expectativas de rol cambiantes y, a veces, contradictorias. Estas experiencias me hicieron comprender la importancia de entender y mejorar el pensamiento ambidextro en el emprendimiento. Más que ilustrar un reto personal, sugirieron que la AE puede ser una capacidad fundamental —aunque subteorizada— que permite a los empresarios navegar estas tensiones. Esta tesis, por tanto, no es solo un estudio académico. Es también un esfuerzo personal por explorar cómo empresarios como yo pueden gestionar mejor estos desafíos. Busca ofrecer ideas sobre cómo transitar entre tareas, usar los recursos de manera inteligente y construir equipos emprendedores capaces de equilibrar exploración y explotación a lo largo del tiempo.

Vacíos de Investigación

Los vacíos presentados a continuación fueron formulados inicialmente antes del trabajo empírico y continúan guiando el desarrollo general de esta tesis. No obstante, los ensayos posteriores los refinan y operacionalizan mediante subpreguntas específicas. Persisten varias lagunas importantes en el estudio de la AE que dificultan el avance del campo, tanto en términos teóricos

como de aplicabilidad práctica. Estos vacíos operan en dos niveles interrelacionados: (1) una fragmentación teórica general, que limita el desarrollo acumulativo de la AE como constructo, y (2) omisiones a nivel de agenda, que dificultan su especificación empírica y relevancia operativa. En conjunto, estos vacíos motivan el enfoque multiperspectivo de la presente tesis doctoral.

En primer lugar, en el plano teórico general, no existe aún un marco integrador y coherente que organice los antecedentes y resultados de la AE. Si bien varios estudios han propuesto rasgos, comportamientos o condiciones ambientales que favorecen la ambidestreza en empresarios (Noguti et al., 2022; Schnellbacher et al., 2019; Volery et al., 2015), el campo permanece fragmentado y, en gran medida, carente de una base teórica sólida. La mayoría de los trabajos anteriores han tratado los antecedentes y los resultados de forma aislada, lo que ofrece un poder explicativo limitado sobre cómo emerge, se desarrolla y contribuye la AE al éxito a nivel de la empresa. En consecuencia, diversos autores han solicitado un esfuerzo conceptual acumulativo que aclare los límites y la estructura del constructo (Guerrero, 2021; Yap et al., 2017). Sin dicho marco, la investigación sobre AE corre el riesgo de permanecer en un estado descriptivo y desconectado, en lugar de avanzar hacia una consolidación teórica integradora.

En segundo lugar, a nivel de agenda, los estudios existentes aportan poca comprensión sobre cómo interactúan los antecedentes de la AE con las condiciones contextuales, especialmente a lo largo de las distintas etapas del desarrollo de una empresa. Aunque investigaciones anteriores han explorado

cómo rasgos como la resiliencia, el enfoque regulatorio o la complejidad conductual contribuyen a comportamientos ambidextros (Baron & Tang, 2011; Bledow et al., 2009; Haynie et al., 2009), son escasos los estudios que analizan si estos rasgos son igualmente adaptativos en diferentes contextos emprendedores. Klonek et al. (2021) mostraron que los empresarios siguen patrones de alternancia entre exploración y explotación, los cuales varían según las exigencias del multitasking y la etapa del emprendimiento. Por su parte, Boz Semerci (2022) evidenció que los estilos de atribución interactúan con la autoeficacia para dar forma a la ambidestreza. Sin embargo, aún se sabe poco sobre cómo estos rasgos individuales interactúan con demandas específicas de cada etapa para facilitar o dificultar el desarrollo de la AE. Esta limitación impide comprender la AE como una capacidad contingente a la etapa, que evoluciona dentro de contextos emprendedores dinámicos.

En tercer lugar, también a nivel de agenda, la AE rara vez se ha examinado como una señal socialmente construida; es decir, como una cualidad latente que debe ser percibida e interpretada por otros para influir en resultados como la obtención de financiamiento o el establecimiento de alianzas. Solo unos pocos estudios han explorado si, y cómo, rasgos relacionados con la AE —como la experiencia laboral, la motivación o la autoeficacia— actúan como señales de adaptabilidad cognitiva (Butticè et al., 2022; Moss et al., 2015; Noguti et al., 2022). Esta omisión es especialmente relevante en contextos de inversión en etapas tempranas, donde la evaluación depende en gran medida de las características del fundador. Sin una mejor

comprensión de cómo se infiere y valora la AE desde la perspectiva de los stakeholders, su relevancia para el financiamiento y el apoyo al emprendimiento sigue siendo escasamente comprendida y teóricamente poco desarrollada.

Estructura y Objetivos de Esta Tesis

Esta tesis doctoral adopta un formato acumulativo compuesto por tres artículos académicos independientes. Cada artículo aborda una dimensión distinta, pero interrelacionada, de la AE, aportando así una capa adicional a la investigación general. El objetivo es teorizar, especificar e investigar empíricamente la AE como una capacidad cognitivamente fundamentada, sensible al contexto y socialmente construida, con relevancia directa para el éxito de los emprendimientos en etapas tempranas.

En el centro de esta indagación se encuentra la siguiente pregunta de investigación: ¿Cómo desarrollan y aplican los empresarios capacidades ambidexas, y cómo son estas capacidades percibidas como contribuyentes al éxito empresarial en diferentes contextos?

Para abordar esta cuestión, la tesis examina la AE desde tres perspectivas complementarias: (1) su estructura teórica y límites definicionales, (2) sus antecedentes psicológicos y su contingencia contextual, y (3) su percepción externa en escenarios evaluativos como el financiamiento en etapas tempranas. Esta secuencia refleja una progresión deliberada desde la

integración conceptual hacia la elaboración empírica y, finalmente, hacia una teorización sociocognitiva.

El primer artículo, correspondiente al capítulo 2, contribuye a los fundamentos conceptuales de la AE mediante la síntesis de la literatura existente sobre sus antecedentes y resultados. Basándose en la tradición de la ambidestreza individual, desarrolla un modelo sociocognitivo que mapea cómo factores personales, conductuales y ambientales interactúan para favorecer el pensamiento ambidextro. También identifica cinco dominios de resultados —desde la adaptabilidad individual hasta el rendimiento a nivel de empresa— a través de los cuales la AE puede contribuir al éxito emprendedor. Con ello, el ensayo proporciona un marco estructurado para comprender la AE y prepara el terreno para su investigación empírica. Plantea las siguientes preguntas:

- *¿Cómo se conceptualiza y mide la AE en la literatura actual?*
- *¿Qué factores posibilitan o fortalecen la AE en los empresarios?*
- *¿Qué resultados se asocian con la AE, particularmente en términos de éxito emprendedor?*
- *¿Qué vacíos de conocimiento deben abordarse para avanzar en el campo?*

Este primer artículo ofrece una arquitectura teórica de la AE, identificando sus posibles antecedentes y los resultados asociados en cinco dominios clave del éxito emprendedor. Contribuye así con un marco

sociocognitivo que reconceptualiza la AE como una capacidad latente y multinivel, moldeada por la interacción de factores personales, conductuales y contextuales.

El segundo artículo, desarrollado en el capítulo 3, investiga empíricamente la AE, analizando cómo ciertas disposiciones cognitivas permiten comportamientos ambidextros en distintas etapas del desarrollo empresarial. Este estudio contribuye a la teorización de la AE como una capacidad contingente a la etapa, al explorar sus antecedentes psicológicos bajo demandas empresariales variables. Examina cómo los rasgos de autorregulación —locomotion y assessment (Kruglanski et al., 2000)— interactúan con la resiliencia para favorecer una alineación ambidextra entre la cognición emprendedora y las presiones contextuales. En lugar de medir directamente la AE, el estudio la operacionaliza a través de estos rasgos cognitivos, demostrando cómo su valor varía según la etapa del emprendimiento. Así, el ensayo profundiza en la dinámica interna y la sensibilidad contextual de la AE. La pregunta principal es: *¿Cómo influyen los rasgos de autorregulación, como locomotion y assessment, junto con la resiliencia, en la capacidad del empresario para gestionar demandas exploratorias y explotativas en diferentes etapas del emprendimiento?* Este artículo demuestra que la AE opera como una capacidad sensible al contexto, enraizada en disposiciones cognitivas. Sin embargo, no aborda cómo estas capacidades son interpretadas y valoradas por observadores externos.

Esta omisión se retoma en el tercer artículo, presentado en el capítulo 4, que aporta a la comprensión de la AE como una señal socialmente construida en contextos de financiamiento en etapas tempranas. Como capacidad latente, la AE debe ser inferida a través de atributos visibles del empresario, como la experiencia, la motivación o la autoeficacia. Este estudio investiga si, y cómo, dichos atributos funcionan como señales creíbles de pensamiento ambidextro, y cómo varía la percepción de los inversores en función de sus criterios evaluativos y perfiles de riesgo. Así, se ilumina la legibilidad externa y la valoración estratégica de la AE. Las preguntas principales son: *¿Cuándo se alinean las señales de capacidades ambidexas de los empresarios con las preferencias de los inversores? ¿Cómo influye dicha alineación en la probabilidad de éxito en la obtención de financiamiento?*

En conjunto, los tres ensayos ofrecen una visión acumulativa y multidimensional de la AE. Por un lado, la AE se desarrolla a partir de rasgos cognitivos cuya relevancia cambia según la etapa del emprendimiento. Por otro, se vuelve visible y relevante mediante señales que influyen en cómo los inversores y otros actores evalúan al empresario. Esta tesis posiciona la AE como una capacidad de doble cara: guía la toma de decisiones internas y, al mismo tiempo, influye en la percepción externa del empresario.

Finalmente, el capítulo 5, correspondiente a la discusión general, sirve como conclusión integradora de esta tesis. Más que reiterar hallazgos previos, articula las contribuciones de los tres ensayos para construir una comprensión más completa de la AE. Desarrolla una visión de la AE como una capacidad

multinivel, enraizada en disposiciones cognitivas, expresada a través de estrategias conductuales e interpretada mediante evaluaciones externas. La AE se adapta al contexto, señala competencias subyacentes y adquiere relevancia en función de cómo las audiencias —como los inversores— interpretan y valoran estas señales según sus expectativas y heurísticas evaluativas específicas de etapa. El capítulo 5 también ofrece una reflexión crítica sobre los límites del constructo, las decisiones metodológicas tomadas y sus implicaciones para futuras investigaciones. De esta forma, completa el arco teórico de la tesis y traza un camino para el desarrollo y aplicación futura del concepto de AE.

Conclusiones

Esta tesis doctoral investiga cómo los empresarios desarrollan y aplican capacidades ambidextras, y cómo estas son percibidas como contribuyentes al éxito empresarial en condiciones contextuales variables. Basada en la premisa de que los emprendedores en etapas tempranas deben explorar nuevas oportunidades al tiempo que explotan recursos existentes bajo condiciones de incertidumbre y restricción (Volery et al., 2015), los tres ensayos que componen esta tesis aportan, de forma conjunta, a una indagación unificada sobre los determinantes, resultados, puesta en práctica y evaluación externa de la AE. Cada capítulo aborda una faceta distinta del constructo, pero en su conjunto ofrecen una comprensión acumulativa y multinivel de cómo opera la AE en contextos emprendedores de etapa temprana.

El primer ensayo, correspondiente al capítulo 2, ofrece una redefinición conceptual de la AE al integrar aportes de la teoría sociocognitiva (Bandura, 1986; Wood & Bandura, 1989) con hallazgos de la investigación en emprendimiento. Frente al tratamiento fragmentado y frecuentemente implícito de la ambidestreza individual, desarrollo un nuevo marco teórico que conceptualiza la AE como una capacidad latente y emergente, producto de la interacción recíproca entre factores cognitivos, conductuales y ambientales. El modelo plantea que la AE se manifiesta plenamente cuando convergen tres factores facilitadores: (1) un compromiso motivacional con la integración simultánea de exploración y explotación; (2) habilitadores cognitivos como la autoeficacia, la resiliencia y la capacidad de re-encuadre, que influyen en cómo el empresario procesa información, gestiona tensiones y prioriza acciones estratégicas; y (3) la ejecución de comportamientos sensibles al contexto, como la calibración del riesgo y la integración conductual, que traducen la intención ambidextra en acción práctica.

Aunque estos componentes se refuerzan mutuamente, la AE puede expresarse parcialmente incluso cuando solo uno o dos de ellos están presentes, aunque de forma más fragmentada o menos sostenible. Esto refuerza la idea de que la AE no es un rasgo de personalidad estable, sino un proceso dinámico y multidimensional moldeado por interacciones continuas entre la agencia individual y las demandas del entorno. Asimismo, vinculo la AE con cinco dominios de resultados emprendedores, siguiendo la tipología multidimensional de éxito propuesta por Wach et al. (2016): (1) desempeño

individual, (2) rendimiento económico de la empresa, (3) relaciones laborales, (4) realización personal y (5) impacto comunitario. Los hallazgos sugieren que los empresarios ambidextros integran mejor la innovación con la ejecución, lo cual mejora su adaptabilidad, relaciones con stakeholders y viabilidad a largo plazo. Al combinar disposiciones personales, estrategias conductuales y moderadores contextuales en un modelo unificado, establezco una base teórica que informa los análisis empíricos de los ensayos posteriores. Concluyo señalando seis líneas clave para futuras investigaciones: (1) analizar la dinámica temporal y los efectos de largo plazo de la AE; (2) identificar mecanismos de autorregulación conductual; (3) ampliar los antecedentes disposicionales; (4) examinar moderadores contextuales; (5) desarrollar instrumentos psicométricos robustos para medir AE; y (6) explorar cómo evoluciona la AE a lo largo del ciclo de vida del emprendimiento en interacción con otras capacidades emprendedoras.

El segundo ensayo, capítulo 3, somete a prueba empírica una de las proposiciones centrales del modelo sociocognitivo del primer ensayo: que la AE emerge del alineamiento entre disposiciones cognitivas y demandas situacionales. Basándome en la teoría de activación de rasgos (Tett & Burnett, 2003) y la teoría del modo regulatorio (Kruglanski et al., 2000), investigo cómo tres rasgos cognitivos —locomotion, assessment y resiliencia— permiten a los empresarios navegar desafíos exploratorios y explotativos en distintas etapas del emprendimiento. Estos rasgos no se conceptualizan como universalmente

adaptativos, sino como habilitadores contextualmente dependientes, cuyo valor está condicionado por su ajuste con las exigencias de la tarea.

El ensayo evalúa cómo cada rasgo se asocia diferencialmente con la percepción de efectividad en el liderazgo, según se trate de contextos dominados por la exploración o la explotación. El mecanismo subyacente responde a una lógica de ajuste rasgo–contexto: los empresarios son percibidos como más eficaces cuando exhiben rasgos que se alinean con la lógica dominante de la situación, por ejemplo, locomotion en fases tempranas de alta exploración, y resiliencia en fases de crecimiento centradas en la explotación. En cambio, assessment no predice significativamente la efectividad en ninguno de los escenarios.

Mediante un diseño experimental basado en conjoint analysis, demuestro que los juicios de efectividad no dependen solamente de la posesión de rasgos, sino de su despliegue adecuado frente a las demandas contextuales. Específicamente, la resiliencia amplifica el efecto del ajuste rasgo–contexto, actuando como moderador que incrementa la flexibilidad adaptativa. Esto respalda la idea de que la AE no reside únicamente en disponer de los rasgos adecuados, sino en activarlos estratégicamente en función del contexto. En consecuencia, desplazo el foco analítico desde los rasgos estáticos hacia su implementación dinámica, reforzando la noción de la AE como un constructo procesual y evaluativo.

El tercer ensayo, capítulo 4, examina si, y bajo qué condiciones, la AE incrementa la probabilidad de obtener financiamiento en etapas tempranas.

Partiendo del modelo sociocognitivo desarrollado en el primer ensayo, operacionalizo la AE como una capacidad latente que se manifiesta a través de atributos del fundador con valor de señal —específicamente, experiencia laboral previa, orientación motivacional y autoeficacia. Basándome en la teoría del señalamiento (Connelly et al., 2011; Spence, 1973), investigo si estos atributos, cuando se interpretan como indicadores de AE, aumentan la probabilidad de recibir inversión.

Un experimento de conjoint revela que las señales de AE solo mejoran las perspectivas de financiamiento cuando se alinean con las preferencias de los inversores, las cuales dependen del estadio del emprendimiento. En fases iniciales, los inversores valoran atributos exploratorios como la motivación intrínseca y una autoeficacia audaz, que indican disposición a innovar bajo incertidumbre. En cambio, en contextos de crecimiento, otorgan mayor valor a rasgos ambidextros o explotativos, como una experiencia laboral amplia y una autoeficacia medida, lo que denota preferencia por la ejecución disciplinada y escalable. Estas preferencias también varían según el tipo de inversor: los business angels tienden a priorizar señales de exploración —como la pasión fundadora—, mientras que los venture capitalists muestran mayor inclinación hacia perfiles orientados a la ejecución o con equilibrio ambidextro.

En resumen, la AE mejora la probabilidad de financiamiento solo cuando sus señales constituyentes son congruentes con las exigencias temporales del emprendimiento y las heurísticas evaluativas del inversor. Esto refuerza la idea de que la AE no es un rasgo universalmente valorado, sino una capacidad

contextualmente sensible cuyo valor instrumental depende de su alineación interpretativa con las expectativas de los stakeholders externos.

En conjunto, los tres ensayos muestran que la AE se entiende mejor como una capacidad latente y multidimensional que emerge del alineamiento entre rasgos cognitivos, estrategias conductuales y demandas contextuales. La AE no es uniformemente eficaz, sino valiosa cuando se activa de forma congruente con las exigencias cambiantes del emprendimiento. Lejos de sostener que los empresarios ambidextros siempre superan a los exploradores o explotadores enfocados, los hallazgos indican que es la adaptabilidad —es decir, la capacidad de alternar entre exploración y explotación según evolucionen las condiciones— lo que se relaciona con la efectividad. Los rasgos exploratorios pueden ser premiados en etapas tempranas, y los explotativos en etapas avanzadas, pero solo aquellos fundadores capaces de recalibrar su enfoque estratégico a lo largo del tiempo son sistemáticamente evaluados de forma favorable.

Además, dado que la AE no siempre es directamente observable, su valor instrumental depende del contexto evaluativo, en el cual la percepción de terceros determina el acceso a recursos críticos como financiamiento, alianzas o apoyo institucional. En estos entornos, la AE adquiere relevancia solo si puede proyectarse de forma creíble y ser reconocida por otros. En este sentido, la AE opera tanto como recurso adaptativo interno como señal interpretada externamente. Al rastrear este doble rol, concluyo que la AE no debe entenderse como un tipo ideal fijo, sino como una capacidad dinámica y

relacional cuya relevancia emerge de la interacción entre la conducta emprendedora y su evaluación contextual.

Contribuciones Teóricas

Esta tesis contribuye al desarrollo teórico mediante la formulación de la AE como un constructo distintivo y sensible al contexto, articulando tres contribuciones clave que, en conjunto, constituyen su fundamentación conceptual y empírica.

Primero, a lo largo de toda la tesis, reconceptualizo la AE como una capacidad multidimensional que emerge de la interacción recíproca entre cognición, conducta y entorno. Anclada en la teoría sociocognitiva (Bandura, 1986), esta visión se distancia de enfoques previos que definen la ambidestreza ya sea como un rasgo disposicional estable (Jasmand et al., 2012; Mom et al., 2009), o como una propiedad emergente de estructuras organizativas (Birkinshaw & Gibson, 2004; Tushman & O'Reilly, 1996). En cambio, posiciono la AE como una capacidad centrada en el fundador y basada en mecanismos cognitivos, que se manifiesta a través de ajustes conductuales adaptativos ante demandas cambiantes según la etapa del emprendimiento. El marco teórico desarrollado en el capítulo 2 responde a críticas persistentes respecto a que la literatura sobre ambidestreza ha teorizado de manera insuficiente los mecanismos temporales, psicológicos y contextuales que permiten a los actores individuales sostener dualidades bajo condiciones de incertidumbre (Guerrero, 2021; Schnellbacher et al., 2019).

Siguiendo llamados a investigar las bases cognitivas del emprendimiento en el nivel micro (Baron & Ensley, 2006; Mitchell et al., 2002), mi modelo integra constructos como la orientación motivacional y autorregulatoria, la autoeficacia, la resiliencia, la interpretación situacional y la priorización de metas, en un sistema dinámico de respuestas adaptativas. Estos mecanismos no operan de forma aislada, sino que interactúan recursivamente, permitiendo una calibración conductual en tiempo real en entornos con baja estructuración y escasa retroalimentación (Boccardelli & Magnusson, 2006; Shepherd & Patzelt, 2019). Este replanteamiento sociocognitivo mejora la claridad teórica al modelar la ambidestreza no como un rasgo estático ni como un portafolio fijo de conductas, sino como un proceso continuamente enactado y reconstruido. En particular, enmarco la AE no como una competencia de propósito general, sino como una forma de expertise adaptativo contingente al contexto (Boz Semerci, 2022; Scheepers et al., 2017), que se desarrolla en entornos caracterizados por alta incertidumbre y autonomía. Esto la distingue de constructos más amplios, como la flexibilidad estratégica o la orientación a la innovación, con los cuales presenta solapamientos parciales pero no debe confundirse. Además, esta reconceptualización contribuye a la literatura sobre capacidades dinámicas (Teece et al., 1997; Winter, 2003; Zahra et al., 2006) al especificar las microfundaciones intraindividuales que permiten a los fundadores integrar, construir y reconfigurar estrategias conductuales en respuesta a las demandas cambiantes del emprendimiento. También corrige la tendencia de la literatura sobre AO a tratarla como estructuralmente diseñada o

uniformemente beneficiosa (Guerrero, 2021; Volery et al., 2015). En su lugar, sostengo que la AE es emergente, enactada situacionalmente y evaluativamente inestable, es decir, que su relevancia y expresión dependen tanto de demandas externas como de capacidades internas. Esta primera contribución ofrece, por tanto, una visión situada y evolutiva de la AE que refleja más fielmente la naturaleza volátil y restringida de los emprendimientos en etapas tempranas.

Segundo, mediante el análisis empírico del efecto moderador de la etapa del emprendimiento, demuestro que el valor de la AE no depende exclusivamente del empresario, sino de cuán bien se alinean sus rasgos con las demandas cambiantes del desarrollo empresarial. Muestro que los rasgos comúnmente asociados con comportamientos ambidextros no son universalmente beneficiosos, sino que su valor depende de si el contexto demanda exploración o explotación. Este hallazgo amplía la teoría de activación de rasgos (*trait activation theory*, Tett & Burnett, 2003), al demostrar que la utilidad de los rasgos no reside en su adaptabilidad inherente, sino en su relevancia situacional. Al mostrar que rasgos como locomotion o resiliencia son valorados diferencialmente en contextos de etapa inicial o de crecimiento, conceptualizo la AE como una capacidad de orden superior que permite a los empresarios activar combinaciones de rasgos en función de demandas específicas de la tarea.

Esta visión contribuye a la teoría de capacidades dinámicas (Boccardelli & Magnusson, 2006; Zahra et al., 2006), al poner de relieve cómo la

adaptabilidad se expresa mediante la activación de rasgos en tiempo real, en lugar de mediante perfiles fijos. Con ello, respondo a llamados por modelos más sensibles al tiempo en el estudio de la ambidestreza (Schnellbacher et al., 2019; Volery et al., 2015), mostrando que la AE no opera como una configuración fija, sino como un mecanismo calibrado contextualmente que conecta rasgos individuales con exigencias específicas del ciclo de vida del emprendimiento. Así, desplazo el foco desde la mera posesión de rasgos hacia el alineamiento entre rasgo y contexto, y redefino la AE como una capacidad que se despliega a través de interacciones recursivas entre activación de rasgos y retroalimentación contextual. Esta perspectiva contrasta con estudios anteriores que conceptualizan la ambidestreza individual como un rasgo estable, como en Klonek et al. (2021), donde la AE se describe como una capacidad conductual relativamente fija vinculada a la ejecución de roles. Esta reconceptualización temporal aporta a la literatura sobre cognición emprendedora al modelar cómo los fundadores regulan tensiones estratégicas mediante la activación adaptativa de rasgos cognitivos a lo largo del tiempo (Baron & Ensley, 2006; Mitchell et al., 2002; Shepherd & Patzelt, 2019). También extiende los modelos por etapas del emprendimiento, al teorizar la AE como un mecanismo habilitador que conecta el despliegue de rasgos con las demandas específicas del ciclo de vida, alineándose con visiones de capacidad dinámica basadas en la adaptación situada y en el ajuste temporal (Schnellbacher et al., 2019; Teece et al., 1997; Volery et al., 2015).

Tercero, amplió el entendimiento teórico sobre cómo se reconocen y valoran las capacidades emprendedoras, al resaltar la naturaleza latente de la AE y los desafíos interpretativos que esto supone para evaluadores externos. Aunque la teoría del señalamiento ha enfatizado el papel de rasgos observables en la transmisión de cualidades latentes del fundador (Connelly et al., 2011; Spence, 1973), la mayoría de sus aplicaciones asumen asociaciones estables entre señal y significado. Sin embargo, revisiones recientes han pedido enfoques más sensibles a la contingencia, que expliquen cómo varía la efectividad de las señales según la etapa del emprendimiento (Colombo, 2021).

Sobre esta base, teorice y demuestro empíricamente que el valor de las señales de AE no es intrínseco, sino dependiente de su alineación interpretativa con expectativas específicas de etapa. Mientras que trabajos previos han analizado cómo el tipo o la intensidad de la señal influyen en decisiones de inversión (Busenitz et al., 2005; Svetek, 2022), amplió esta línea argumental al mostrar que el valor percibido de rasgos ambidextros —como la autoeficacia o la orientación motivacional— varía sistemáticamente entre las evaluaciones de etapa semilla y de crecimiento. Esta tesis introduce una lógica de ajuste señal–etapa, en la que el contexto evaluativo no es un simple telón de fondo, sino un moderador activo que determina cómo se interpretan y ponderan los atributos simbólicos del fundador.

Demuestro que la AE no se evalúa directamente, sino que es inferida a través de proxies simbólicos, como rasgos del fundador, indicadores conductuales y encuadres narrativos, cuyos significados dependen del

contexto. Por ejemplo, los rasgos asociados con la exploración pueden ser valorados en la etapa semilla, pero desestimados en fases posteriores, donde señales de explotación ganan peso. Con ello, contribuyo al refinamiento reciente de la teoría del señalamiento en finanzas emprendedoras (Balachandra et al., 2019), al demostrar que los proxies simbólicos están sujetos a variaciones interpretativas contextuales, avanzando así hacia una comprensión relacional y sensible al tiempo de cómo las capacidades dinámicas se hacen evaluativamente legibles.

Al integrar una perspectiva de ajuste señal–etapa, mis hallazgos muestran que la lógica evaluativa está co-determinada por las características de la señal y el contexto temporal. Si bien la teoría del señalamiento explica cómo se infiere la AE bajo condiciones evaluativas, como en las decisiones de inversión, no capta la naturaleza subyacente de la AE. Su relevancia reside en aclarar los mecanismos interpretativos mediante los cuales se decodifican externamente los rasgos latentes, no en definir las bases cognitivas y conductuales desde las que emerge la AE. Por ello, complemento la teoría de capacidades (Teece et al., 1997; Zahra et al., 2006) mostrando que la utilidad estratégica de la AE depende no solo de su ejecución interna, sino también de su reconocibilidad externa dentro de entornos evaluativos cambiantes. Las capacidades no solo deben ser enactadas, también deben ser percibidas. Este giro interpretativo complementa el interés reciente en las microfundaciones de las capacidades dinámicas (Helfat & Peteraf, 2015), al enfatizar el papel de la cognición externa, es decir, los juicios evaluativos de los stakeholders, en

determinar cómo las capacidades del fundador se traducen en ventajas estratégicas. Así, esta tesis incorpora una lente interpretativa a la literatura de capacidades, resaltando el carácter relacional y dependiente del tiempo con que se evalúa el potencial emprendedor.

Implicaciones Prácticas

Esta tesis reconceptualiza la AE como una meta-capacidad personal, cognitivamente fundamentada y sensible al contexto, que permite a los fundadores regular tensiones estratégicas mediante la calibración dinámica entre exploración y explotación en función de las demandas cambiantes del emprendimiento. Lejos de tratar la AE como un rasgo genérico o un estilo de comportamiento estable, esta investigación demuestra que se trata de una capacidad latente, enactada situacionalmente e interpretada socialmente, que debe desarrollarse, proyectarse y evaluarse de forma distinta a lo largo del tiempo. Esta reconceptualización responde a un punto ciego crítico en la práctica emprendedora: sin un marco de este tipo, los emprendedores suelen confiar únicamente en la intuición, y los inversores en heurísticas vagas, para evaluar lo que en realidad es un conjunto de habilidades dinámicas y temporalmente contingentes. Al clarificar la naturaleza y función de la AE, los hallazgos de esta tesis ofrecen aportes prácticos para tres audiencias clave: (1) emprendedores que buscan fortalecer su repertorio adaptativo; (2) inversores interesados en evaluar el potencial del fundador; y (3) organizaciones de apoyo encargadas de fomentar las bases cognitivas del éxito emprendedor.

Para los emprendedores, la AE opera como una meta-capacidad que regula cómo se integran, secuencian y recalibran otras competencias emprendedoras —como el reconocimiento de oportunidades, la toma de decisiones o el diseño de modelos de negocio— bajo condiciones cambiantes. No se trata de un rasgo fijo, sino de una capacidad sostenida en el tiempo mediante ciclos de retroalimentación entre autorregulación, interpretación situacional y priorización de metas. Los hallazgos subrayan que exploración y explotación deben equilibrarse de manera continua; no como un acto puntual, sino como un proceso incrustado de cognición adaptativa. Esta postura dinámica es particularmente vital en entornos de alta incertidumbre, escasez de recursos y presión temporal. Si bien la AE se apoya en rasgos fundacionales (por ejemplo, autoeficacia, resiliencia, metacognición), estos pueden desarrollarse con el tiempo, en línea con investigaciones sobre la entrenabilidad de la cognición emprendedora y el pensamiento adaptativo (Baron & Henry, 2010; Haynie et al., 2009).

Los emprendedores que conocen su perfil cognitivo pueden ajustar mejor su comportamiento estratégico a las demandas de cada etapa, mejorando tanto la ejecución como la capacidad de identificar oportunidades. Además de enactarla internamente, los fundadores deben hacer que su potencial ambidextro sea legible para actores externos. Dado que la AE es en gran medida latente y raramente observable de forma directa, esta se infiere a partir de señales conductuales, marcos narrativos y pistas basadas en rasgos. Sin embargo, emitir señales no implica simplemente revelar información:

requiere una calibración estratégica para que la señal se alinee con las heurísticas interpretativas de audiencias específicas. Las señales de AE solo adquieren valor evaluativo cuando coinciden con las expectativas del inversor en una etapa determinada del emprendimiento. Esto demanda una “alfabetización en señalamiento”, es decir, la capacidad de proyectar una identidad adaptativa que resuene con marcos sensibles al contexto (Zott & Huy, 2007). Quienes dominan esta habilidad aumentan su legitimidad percibida, atraen capital más alineado y reducen el riesgo de desajuste en la evaluación.

Además, la AE no tiene por qué ser exclusiva del individuo fundador. Los hallazgos sugieren que la capacidad adaptativa también puede distribuirse a nivel de equipo fundador, especialmente cuando los cofundadores equilibran de manera consciente sus tendencias exploratorias y explotativas. Esta perspectiva sugiere que los equipos fundadores pueden beneficiarse de cultivar roles ambidextros complementarios, distribuyendo las responsabilidades adaptativas según las fortalezas relativas de cada miembro. Esta calibración a nivel de equipo puede actuar como un mecanismo práctico para implementar la AE cuando la capacidad cognitiva individual está limitada.

Para los inversores, la tesis proporciona una lente refinada para interpretar el potencial del fundador más allá de indicadores convencionales. En lugar de depender excesivamente de rasgos superficiales o métricas empresariales, los evaluadores deberían atender a las capacidades cognitivas latentes que sustentan la acción estratégica adaptativa. Esto resulta especialmente relevante en contextos de etapa temprana, donde las

estructuras formales están ausentes y la ambigüedad es alta. Distintos tipos de inversores aplican diferentes heurísticas evaluativas: los hallazgos demuestran que los juicios se configuran no solo por los rasgos, sino por los esquemas estratégicos a través de los cuales estos son interpretados. Mientras que los inversores orientados al crecimiento valoran la audacia y la iniciativa, los perfiles más conservadores prefieren el control medido y la sensibilidad contextual. Capacitar a inversores para que reconozcan cómo se manifiesta la adaptabilidad cognitiva y cómo varía según la etapa puede mejorar la selección en fases tempranas y facilitar un mejor emparejamiento entre fundadores y capital.

Para organizaciones de apoyo, como incubadoras y aceleradoras, la tesis subraya la importancia de diseñar programas que no solo fomenten competencias técnicas o conocimientos de negocio, sino también las bases cognitivas y conductuales de la capacidad adaptativa. Currículos de incubación que entrenen a los emprendedores en autoconocimiento, resiliencia y juicio situacional pueden fortalecer la infraestructura psicológica necesaria para un comportamiento ambidextro. Además, la formación explícita en señalamiento —es decir, en cómo articular el propio potencial adaptativo de modo que encaje con contextos evaluativos diversos— puede mejorar la legitimidad percibida del fundador y su acceso a recursos.

Los hallazgos indican que las señales de AE no se evalúan directamente, sino que se infieren de proxies simbólicos como la experiencia laboral, indicios motivacionales o muestras de confianza, cuyo peso

interpretativo varía según la etapa del emprendimiento y el esquema evaluativo del inversor. Por ejemplo, en presentaciones a business angels en etapa semilla, puede ser ventajoso enfatizar una experiencia transversal, motivaciones intrínsecas vinculadas al proceso creativo y confianza en metas ambiciosas de alto riesgo. En cambio, en evaluaciones de etapa posterior o frente a venture capitalists orientados a resultados, puede ser más eficaz resaltar experiencia especializada, enfoque en crecimiento e ingresos, y un estilo estratégico medido.

Para responder a esta variabilidad, los programas de apoyo deberían entrenar a los fundadores en alfabetización situacional del señalamiento, es decir, la capacidad de diagnosticar el marco evaluativo de una audiencia determinada y resaltar adaptativamente los rasgos más resonantes. Esta capacidad puede cultivarse mediante simulaciones de pitch, retroalimentación personalizada y entrenamiento narrativo. Los sistemas de apoyo deberían estructurarse no solo para facilitar la creación de empresas, sino para fomentar la cognición adaptativa y su comunicación efectiva como recursos fundacionales del emprendimiento. Al hacerlo, pueden ayudar a institucionalizar la adaptabilidad como piedra angular del desarrollo emprendedor, extendiendo su relevancia más allá de la creación hacia la supervivencia a largo plazo.

En conjunto, los aportes de esta tesis no solo ofrecen orientación para emprendedores e instituciones de apoyo, sino que también informan mi propia práctica como emprendedor. Los marcos conceptuales y los hallazgos empíricos aquí presentados son directamente aplicables a los desafíos

cognitivos y estratégicos que surgen en el emprendimiento en etapa temprana. Han transformado mi manera de abordar el diseño de proyectos, el desarrollo de fundadores y la construcción de capacidades ambidextras en condiciones reales. En este sentido, la tesis constituye tanto una contribución académica como un recurso estratégico, es decir, un marco que planeo aplicar en futuros roles emprendedores y de asesoramiento para fomentar un desarrollo empresarial más adaptativo y cognitivamente consciente.

Limitaciones y Direcciones para Futuras Investigaciones

Las contribuciones de esta tesis están sujetas a una serie de limitaciones generales que afectan a los tres ensayos que la componen.

En primer lugar, aunque los resultados perceptuales —como las evaluaciones de inversores— son valiosos como proxies para evaluar la AE, se basan en escenarios hipotéticos que no capturan plenamente los aspectos dinámicos y, a menudo, emocionales del emprendimiento en el mundo real. Estas limitaciones están relacionadas con debates más amplios sobre la validez ecológica y el realismo contextual en la investigación en emprendimiento (Welter, 2011). Además, el uso de escenarios hipotéticos dirige el foco analítico hacia las heurísticas evaluativas, más que hacia los mecanismos cognitivos y emocionales subyacentes que moldean la toma de decisiones bajo presión. Investigaciones futuras deberían incorporar métodos observacionales, como experimentos de campo o estudios longitudinales, para comprender mejor los vínculos causales entre la AE y resultados reales, como

el crecimiento, la adaptabilidad o la financiación a lo largo del tiempo. Estos métodos también podrían revelar cómo la AE influye en la trayectoria de las empresas y si ciertos rasgos pueden desarrollarse o inhibirse conforme la empresa madura.

En segundo lugar, si bien los experimentos conjoint son útiles para aislar efectos a nivel de rasgo y fortalecer la validez interna, abstraen de la complejidad inherente a la toma de decisiones emprendedoras en contextos reales, marcada por dinámicas interpersonales, presión temporal e incertidumbre. Aunque estos experimentos destacan por su capacidad para analizar rasgos específicos, no capturan con la misma eficacia los matices sociales, emocionales y estratégicos que intervienen en los juicios emprendedores. No obstante, estos elementos pueden ser cruciales para interpretar el impacto de la AE en los resultados del emprendimiento. Por ello, futuras investigaciones deberían combinar diseños experimentales con métodos etnográficos u observacionales, para explorar cómo se enacta e interpreta la AE bajo condiciones reales de presión e incertidumbre. La incorporación de enfoques cualitativos permitiría también comprender cómo evaluadores externos —como inversores o mentores— interpretan la AE a partir de dinámicas interpersonales, sesgos cognitivos y presiones del entorno.

En tercer lugar, aunque esta tesis se centra en un conjunto limitado de rasgos como determinantes de la AE, es probable que el funcionamiento ambidextro esté influido por una constelación más amplia de factores cognitivos, conductuales y ambientales. Capacidades como la orientación al

aprendizaje, la empatía o la adaptabilidad social podrían desempeñar un papel crucial para permitir que los emprendedores interpreten las demandas situacionales, modulen su postura conductual y se relacionen eficazmente con diversos stakeholders. Futuras investigaciones deberían analizar cómo estos y otros rasgos fundacionales interactúan con la retroalimentación contextual para moldear la expresión dinámica de la AE. Además, dado que muchas startups en etapa temprana son cofundadas, se recomienda que futuras investigaciones se nutran de la literatura sobre cognición en equipos (Ensley et al., 2006) y estudien cómo se distribuye la ambidestreza entre cofundadores, cómo evoluciona con el tiempo en el seno de los equipos y qué estrategias colectivas de señalamiento pueden fomentar comportamientos ambidextros. Explorar la AE a nivel de equipo es fundamental, ya que la capacidad colectiva y complementaria de navegar entre exploración y explotación puede diferir de las capacidades individuales, y tener implicaciones distintas para el éxito empresarial.

En cuarto lugar, el enfoque de esta tesis en emprendimientos en etapas iniciales y de crecimiento deja sin explorar cómo se desarrolla la AE en empresas más maduras. A medida que los emprendimientos avanzan, las capacidades ambidexas pueden quedar incorporadas dentro de equipos o sistemas organizacionales, lo que obliga al fundador a transferir sus capacidades adaptativas individuales a rutinas escalables. Esta transición de la AE individual a la AO representa un desafío clave, en particular cuando el fundador debe pasar de una implicación directa a delegar decisiones

adaptativas en un equipo más amplio. Futuras investigaciones deberían explorar cómo evoluciona la AE desde una capacidad individual hacia una capacidad colectiva organizacional, y cuáles son sus implicaciones para la sucesión de liderazgo, la adaptabilidad a largo plazo y el desarrollo de la AO. Estas investigaciones podrían también examinar los procesos y estructuras organizacionales que facilitan dicha transferencia, así como la interacción de la AO con otras capacidades organizativas, como la innovación o la eficiencia operativa.

En conjunto, estas limitaciones dejan claro que el estudio de la AE se encuentra aún en una etapa temprana de desarrollo. Aunque esta tesis proporciona bloques fundacionales, queda mucho por explorar sobre cómo los empresarios desarrollan, aplican y comunican sus capacidades ambidextras a medida que sus emprendimientos evolucionan. Más que ofrecer respuestas definitivas, esta investigación pretende abrir nuevas vías de indagación que reflejen mejor la complejidad vivida del emprendimiento. Al centrar la atención en las formas dinámicas y muchas veces invisibles mediante las cuales los fundadores se adaptan a demandas cambiantes, espero que esta tesis inspire a otros investigadores a profundizar, extender y desafiar las ideas aquí presentadas. Comprender la AE de forma más completa no solo enriquecerá la teoría, sino que también dotará a fundadores, inversores y educadores de mejores herramientas para fomentar un emprendimiento adaptativo y resiliente en la práctica.

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