Claremont Colleges Scholarship @ Claremont

**CGU Theses & Dissertations** 

CGU Student Scholarship

Summer 2023

# Assessment of Founders in Venture Capital Investment Decisions

Gregory Gerald Hennessy Claremont Graduate University

Follow this and additional works at: https://scholarship.claremont.edu/cgu\_etd Part of the Business Administration, Management, and Operations Commons, Entrepreneurial and Small Business Operations Commons, and the Psychology Commons

## **Recommended Citation**

Hennessy, Gregory Gerald. (2023). *Assessment of Founders in Venture Capital Investment Decisions*. CGU Theses & Dissertations, 590. https://scholarship.claremont.edu/cgu\_etd/590.

This Open Access Dissertation is brought to you for free and open access by the CGU Student Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in CGU Theses & Dissertations by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@claremont.edu.

# Assessment of Founders in Venture Capital Investment Decisions

by Gregory Gerald Hennessy

Claremont Graduate University 2023

© Copyright Gregory Gerald Hennessy, 2023. All rights reserved.

## APPROVAL OF THE DISSERTATION COMMITTEE

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Gregory Gerald Hennessy as fulfilling the scope and quality requirements for meriting the degree of PhD in Psychology.

> Michelle Bligh, Chair Claremont Graduate University Executive Vice President and Provost Professor of Organizational Behavior

Jeffrey Yip Simon Fraser University Assistant Professor, Management and Organization Studies

> Vijay Sathe Claremont Graduate University Professor of Management

Charles Murnieks University of Missouri – Kansas City Associate Professor

#### Assessment of Founders in Venture Capital Investment Decisions

by

Gregory Gerald Hennessy Claremont Graduate University: 2023

This manuscript documents a research project that employs grounded theory to determine what criteria contemporary investors in early-stage startups use to assess founders. One of the first questions posed by entrepreneurship researchers - even before entrepreneurship had formalized as a field - was, what criteria do investors consider when making investments in startups? Initially, the central concern was whether it was the founder(s) or the business model, often characterized as the "jockey" or the "horse." From the start, it was generally accepted that the founder was the primary consideration, especially in early-stage ventures. Nonetheless, while business model considerations were parsed into separate factors (e.g., market, financial, product), understanding of founder characteristics evolved rather slowly and centered on the macroeconomic construct of human capital - an aggregate measure of investment in human factors that is ill-suited to measuring micro-level characteristics of individuals. Of course, years of education and experience are reasonable criteria and in many cases are a sound foundation for assessing entrepreneurs. Recently, researchers have been increasingly examining the role of individual-level traits and behaviors across a range of entrepreneurship questions. For example, characteristics such as passion and persistence have been examined for their roles in issues like entrepreneurial intention, performance, and decision-making. Some researchers have examined how such characteristics affect investment decisions, especially among angel investors who

essentially have no reliable business model information to include in their decision-making process. Also relatively recently, other organizational researchers, especially those outside of entrepreneurship, have begun serious inquiries into the constituent elements of leadership and the role of purpose, character and emotion in organizations. To assess whether these factors have infiltrated the investment selection criteria of professional early-stage venture investors, the project described herein assesses whether these topics are now openly considered during the investment selection process. Over a dozen investors were interviewed to solicit the criteria they use when evaluating the founders of early-stage ventures prior to investment. All study participants stated that they assessed the startup founder, and most underscored the importance of assessing the startup team. Participants suggested several criteria are important when assessing a startup founder, which included hard skills, soft skills, personality, character, and mindset or mental attitude. Hard skills essentially correspond to human capital and other legacy criteria that have long been understood to be part of founder assessment. The other criteria are clusters of traits and abilities that are related to the once-frowned-upon factors. This research contributes to the discussion of founder assessment by linking it explicitly to established theories from the broader management, leadership, and social science arenas.

*Keywords*: selection, assessment, entrepreneurship, founders, purpose, passion, character, personality, mindset

## **DEDICATION**

To Claire,

whose unconditional love and support kept me going through the countless trials and tribulations of the past decade.

To Don,

who taught me more than any teacher,

I miss our conversations already.

## ACKNOWLEDGEMENTS

Returning to graduate school later in life brings with it a host of advantages and disadvantages. The disadvantages tend to stick out like a sore thumb. In your twenties, you can abuse your body and neglect friends and family in the service of overcoming the rigors of graduate training. Later in life, your health and the health of your friends and family rightly earn more mindshare. Relationships rightly merit more attention. The advantages are more ethereal. There are plenty of important ones, but they tend to be subtle. As a returning student, my life experience often afforded me a perspective that helped get me over the hurdles that a doctoral program presents to its students. As I reach the end of the process, I feel that life experience amplifying the gratitude I have for all those who helped get me to this point. I could not have done it alone. Scores of people have helped me. I list many below but have probably managed to leave a few out. To those, forgive my oversight.

First and foremost, I wish to thank the members of my committee: Drs. Michelle Bligh, Jeffrey Yip, and Vijay Sathe. It has taken me way too long to complete this project, and all three have been on board since it was a mere kernel of an idea. At crucial junctures over the years, they have provided outstanding feedback and guidance. Over the course of this project, my committee chair, Michelle, has gone from Professor, to Dean of the School of Social Science, Evaluation, and Policy, and very recently to Provost of the University. Each transition was an entirely reasonable opportunity to pass on oversight of this project to another member of the faculty. I am grateful to still have her on board.

Over the course of this project, Jeff left Claremont – and the country – to join the faculty at Simon Frasier University in Vancouver, BC. Though by no means bound to this project, he

v

graciously agreed to remain on my committee, and I am grateful for his willingness to do so. From the moment Vijay agreed to serve as my third reader, I have been thankful for his involvement. His expertise filled an important gap in the guidance needed for this project, and he joined the committee though he barely knew me. I am extremely fortunate to have this committee in my corner. Recently, Dr. Charles Murnieks joined my committee as external reader. As a leading scholar on the role of passion in entrepreneurship, I can think of no one more qualified than Dr. Murnieks to ensure that this project and this manuscript meet contemporary academic standards. I am thrilled that he has joined my team.

In addition to my dissertation committee, I would like to thank the faculty of the Division of Behavioral and Organizational Sciences (DBOS) at Claremont Graduate University for sharing their expertise. I had the distinct privilege to be among the last students of and teaching assistants for the late Dr. Mihalyi Cziksentmihalyi. He taught me so much about positive psychology, creativity, innovation, and most importantly, how to be a better person. Alongside Mike, Dr. Jeanne Nakamura's teaching, leadership of the Foundations teaching team, and guidance of the positive psychology student speaker series significantly shaped my experience at CGU. It was during my first campus visit, during a meeting with Mike and Jeanne that I knew I had found someplace special.

My arrival at CGU was in many ways an effort to move beyond my prior formal background in economics. So, it was perhaps inevitable that I would fall into the orbit of Dr. Paul Zak. As a multidisciplinary social scientist, Paul asks questions that cannot be easily pidgeonholed into a single discipline. His Center for Neuroeconomic Studies (CNS) was my second home for several years. Although my dissertation topic led me in a different direction ultimately, Paul nonetheless helped kick off this project by introducing me to a venture investor. His work continues to fascinate me, and I will follow it for years to come.

Others on the DBOS faculty also prepared me for the execution and completion of this project. I learned a great deal from Drs. Becky Reichard and Maritza Salazar (now at UC-Irvine). Each offered me a double-dose of the their expertise in organizational science, first as instructor, then by allowing me to serve as their teaching assistant. Each was also a fixture in my first year at CGU through their sharing of their expertise in the process and philosophy of organizational research. Another fixture of my first year who has shaped my development is Dr. Dale Berger, Professor of Psychology Emeritus. His technical competence and ability to communicate is matched only by his caring for students. In the same vein, I have to acknowledge Dr. Jason Siegel. His class on survey methods is quite probably the best class I took while at CGU in terms of practical application and quality of delivery. Lastly, I have to thank Dr. Stewart Donaldson. Without his entrepreneurial leadership in the launch and development of the positive psychology program, I probably would not have landed at Claremont in the first place. Moreover, although I never took a class from him, he never failed to help when asked: first, recording of video stimuli for my first-year research project; later, filling out my oral exam committee.

I might never have made it through the program's requirements if were not for the support of colleagues at the Center for Neuroeconomic Studies. In particular, Dr. Jorge Barraza, Dr. Elizabeth Terris, and Garret Thoelen ensured the success of my first CGU research project. All told, more than a dozen people helped out during the various stages of my involvement with CNS. I wish to thank them all.

vii

As a returning student, it would have been easy to feel like a fish out of water. However, the outstanding CGU DBOS student body made me feel welcome. I would like to thank the students ahead of me who served as teaching assistants and role models for how to succeed in doctoral studies, especially Matthew Ballew, Matt Dubin, Laura Graham, Vanessa Kettering, Masakatsu (Bob) Ono, and Rhonda Rodgers – all now rightfully bearing a PhD after their names. You helped me more than you probably realize.

I want to also thank the members of my oral exam study group, especially Thiraput (Poom) Pitichat who organized and energized the group. I wish I could say that I passed the oral exam with flying colors, but the truth is that it was a marginal performance. So, without the help of group members Emily Chan, Kathryn Doiron, Benjamin Falls, Amber Kea-Edwards, Vienne Lau-Dicicco, Haoxiong (David) Li, and Qing (Helen) Yan, I might have stumbled hard. Most have already completed their PhD; a few, like me, are on a slower pace. It was a real pleasure to work with you all.

Countless classmates welcomed me into study groups or otherwise helped me get the most out of my time at CGU. I am biased, but I think I had the best study group for Foundations of Positive Psychology. Courtney Ackerman, Blake Beckman, Jem Lugo, and Meghan Smith were instrumental in getting me through my first semester. Others not already mentioned who never failed to help me learn include Alison Abercrombie, Anne Brafford, Jeff Fajans, Daniel Gruner, Taylor Louie, Lisa Soto-Torres, Sam Spurlin, Sumana Sri, and Patricia Xi. I am sure there are others; I appreciate all who have helped me learn, grow, and develop during my time at CGU.

viii

I want to thank Linda Pillow and all of the staff who ensure that the program runs without a hitch. You are the unsung heros helping so many people achieve their dreams.

My acknowledgements would not be complete without extending sincere thanks to Wharton professors Nancy Rothbard, Adam Grant, and the late Sigal Barsade. It was serving as Business Simulation Expert for their management and leadership class that rekindled my desire for a PhD, and it was Adam that steered me toward Claremont Graduate University, in particular. Over the years, each has been a source of inspiration and encouragement, and this manuscript would not have been written if it were not for them.

Special thanks go out to (again) Adam Grant and Nathan Lillegard of the University of Oregon's Lundquist Center for Entrepreneurship, who generously introduced me to early-stage sventure investors in their networks. Their support allowed me to reach my target number of participants with a certain degree of ease.

Lastly, I want to thank all the early-stage venture investors who shared their valuable time with me, helping me understand how they assess founders and venture management teams broadly. This research stands on their work in the real world.

# **Table of Contents**

Chapter 1: Introduction	1
Problem	2
Chapter 2: Literature Review	10
Entrepreneurs	11
Venture Capitalists	20
Venture Investment Decision-Making	26
Chapter 3: Method	56
Participants	57
Sample	58
Research Design Overview	59
Ethical Considerations	64
Issues of Trustworthiness	66
Research Background and Potential Bias	66
Overall Quality Assurance	67
Credibility	68
Transferability	69
Chapter 4: Results	71
Description of the Sample	72
Data Analysis Results	74
Chapter 5: General Discussion	107
Discussion of Research Questions	108
References	136
Appendix: Codebook	186

# List of Figures

Figure 1: The Venture Capital Value Chain	32
Figure 2: Research Question Nodes	75
Figure 3: Transcripts Coded to Each Research Question	75
Figure 4: Participant Responses Assigned to Initial Codes	76
Figure 5: Initial Codes are Grouped into Emergent Themes	77
Figure 6: Identified Soft Skills	81
Figure 7: Theme and Subthemes of Personality	88
Figure 8: Theme and Subthemes of Persuasiveness	92
Figure 9: Theme and Subthemes of Character	96
Figure 10: Theme and Subthemes of Hard Skills	100
Figure 11: Theme and Subthemes of Mind Set	104
Figure 12: Assessment Breadth versus Depth	110
Figure 13: Assessments Combining Breadth and Depth	112
Figure 14: Narrowing Assessment Breadth and Depth	113

# List of Tables

Table 1: Widely Cited Investment Selection Decision-making and Criteria Studies	27
Table 2: Venture Capital Decision-Making Process: Early Models	32
Table 3: Four Factor Model of the Venture Capitalist Investment Decision	37
Table 4: Participant Pseudonyms, Gender, Role, Education, and Primary Industry	72
Table 5: Participant Responses Regarding Who is Assessed in Management	79
Table 6: Participant Responses Supporting the Persuasiveness Theme and Subthemes	93
Table 7: Participant Responses Supporting the Character Theme and Subthemes	96
Table 8: Participant Responses Supporting the Hard Skills Theme and Subthemes	101
Table 9: Participant Responses Supporting the Mind Set Theme and Subthemes	104

#### **Chapter 1: Introduction**

The selection criteria used by venture capitalists to make investment decisions has been a line of inquiry for half a century (Ács & Audretsch, 2006; Barkham, 1994; Brandstätter, 2011; Roper, 1998; Unger et al., 2011; Van Ness & Seifert, 2016; Wells, 1974; Zhao & Seibert, 2006), and so has been a part of the very formalization of the field of entrepreneurship (Aldrich, 2012; Davidsson, 2016, 2017). Early investigations into the criteria applied by outside investors leveraged extant theories of entrepreneurial personality or human capital (Gorman & Sahlman, 1989; Goslin & Barge, 1986; Khan, 1987; MacMillan et al., 1985, 1987; Robinson, 1987; Sandberg et al., 1989; Timmons et al., 1987; Tyebjee & Bruno, 1981, 1984). The growing interest in entrepreneurial studies has been broadening the range of human factors examined in the pursuit of insight into new venture performance (Baum & Silverman, 2004), which in turn make their way into investor selection criteria (Dhochak & Sharma, 2016; Gompers et al., 2020). Increasingly, characteristics such as creativity, flexibility, problem-solving, and design thinking appear as factors in the assessment of founders and ventures (Baron, 2008; De Cock et al., 2020). Of particular importance is a growing interest in exactly how entrepreneurs go about leading their ventures in reaching a scale of operations that supports profitability and a successful exit opportunity for early investors (Ferreira et al., 2019; Streletzki & Schulte, 2013a). Whereas historical approaches to founder assessment have treated founders essentially as bundles of resources and traits (e.g., MacMillan et al., 1985, 1987; Rakhman & Evans, 2005; Tyebjee & Bruno, 1984; Zhang, 2012), contemporary research is increasingly focusing on founder behaviors and abilities that shape the establishment of the venture as a viable competitive entity (e.g., Blank, 2013; Ries, 2011; Vogel, 2017) – which is a precursor for creating an exit event

such as an initial public offering or purchase by a larger company (Appelhoff et al., 2016). With the more expansive role of founders, it should not be surprising that there are calls for expanding the theory of entrepreneurship to include a broader array of concepts from the social sciences, including social beliefs, cultures and values (Ferreira et al., 2019). It is a trend that points to the need to revisit investment selection criteria generally, and venture management criteria in particular.

#### Problem

Even before today's broader view of venture management gained favor, research showed that venture capitalists (VCs) were generally better equipped to evaluate non-human factors in an investment decision, such as market conditions, business execution, and technology (Barney et al., 2001; Kozmetsky et al., 1985; Riquelme & Watson, 2002; Smart, 1999; Zacharakis & Meyer, 1998). Arthur Rock, an early investor in both Intel and Apple, has said, "nearly every mistake I've made has been in picking the wrong people, not the wrong idea" (Bygrave & Timmons, 1992, p. 6). The prevalence of the challenge associated with backing founders who can lead the venture to a successful exit is exemplified by Wasserman's (2008) observation that fewer than one-quarter of founders were no longer CEO by the time the venture had its initial public offering. Despite decades of research into the criteria used by VCs to select ventures for investment, satisfaction with identified criteria and models remains low (Graves & Ringuest, 2018). Given the regularity with which venture management is reported to be the primary driver of selection, the lack of clear progress can be at least partly attributed to lack of progress in understanding the "people" characteristics that matter. While organizational scientists have made significant strides in unpacking team and leadership effectiveness, the discussion of venture

selection criteria seems mired in historically bound debates centered on human capital, such as whether education background or experience are more important (Streletzki & Schulte, 2013b). Together, this suggests that how human factors shape investment decisions remains a topic both worthy of research and essential to investors.

The lingering dissatisfaction might be associated with a historical focus on individuals (e.g., founders) rather than on management teams. Among the most frequently cited journal articles on selection criteria, it is not uncommon to see assessment criteria that are related solely to the entrepreneur's potential performance, such as familiarity with the industry (Muzyka et al., 1996; Shepherd et al., 2000; Tyebjee & Bruno, 1984), employment history (Muzyka et al., 1996; Tyebjee & Bruno, 1984), industry experience (MacMillan et al., 1985; Muzyka et al., 1996; Riquelme & Rickards, 1992; Tyebjee & Bruno, 1984), personality (MacMillan et al., 1985), education (Baum & Silverman, 2004; Cooper et al., 1994; Shepherd et al., 2000), or overall human capital (Baum & Silverman, 2004; Colombo & Grilli, 2005; Cooper et al., 1994; Kaplan et al., 2009). In a few cases, entrepreneur-focused assessment models include criteria that are related to the entrepreneur's ability to work with others, but even these are usually entrepreneurcentric. For example, Kaplan and Strömberg (2004) consider the entrepreneur's ability to attract necessary employees, which would seem to be a beneficial capability but is not the same thing as the ability to work effectively on a team. Given that the majority of new ventures are founded and led by teams (Kamm et al., 1990; Klotz et al., 2014; Ruef, 2010; Ucbasaran et al., 2003), a focus on individual human capital leaves a lot of potential explanatory power untapped.

Even where management criteria are specified, they are typically simple aggregations of individual traits rather than criteria associated with team performance. For example, evaluating

factors such as education (Dimov & Shepherd, 2005; Franke et al., 2006), management skill (Tyebjee & Bruno, 1984), performance history (Fried & Hisrich, 1994; Tyebjee & Bruno, 1984), experience (Beckman et al., 2007; Dimov & Shepherd, 2005; Franke et al., 2006; MacMillan et al., 1985; Muzyka et al., 1996; Shepherd, 1999), and quality (Kaplan & Strömberg, 2004; Tyebjee & Bruno, 1984), amounts to evaluating the management team as individuals, then making sure that either they each meet some standard or that the deficits of one manager can be offset by strengths of another manager. In a few cases, the advantages of having a team whose individual expertise spans a range of relevant domains (e.g., marketing, sales, finance, operations) is identified (Beckman et al., 2007; Dimov & Shepherd, 2005; Hall & Hofer, 1993; Kaplan & Strömberg, 2004; MacMillan et al., 1985; Muzyka et al., 1996; Tyebjee & Bruno, 1984), however no mention is made of the added challenges to effective performance that such cross-disciplinary teams present (Salazar et al., 2012; Salazar & Salas, 2013). So, even where the discussion of selection criteria mentions management teams, not all the factors associated with team performance are captured by prior studies, which means they also leave the potential explanatory power of team performance untapped.

In some cases, studies reference leadership which points to the interpersonal aspects of growing a venture. For example, Muzyka et al. (1996) refer to the "leadership potential" of lead entrepreneurs and venture teams overall and Fried and Hisrich (1994) refer to "leadership capabilities" and "demonstrated leadership ability" without defining the terms or how they are assessed. Franke et al. (2006) refer to "experience leading teams" without specifying specific abilities or whether that leadership was effective. So once again, potential explanatory power that

could be captured through assessing venture management characteristics that shape overall performance is left unexploited.

It is important to note that it is not clear whether this individual-centric view of human criteria arises from a narrow framing on the part of researchers or from researchers accurately reflecting the individual-centric views of investors. Much of the contemporary understanding of team and leader effectiveness has been arrived at in the last 20 years ... after the foundational studies of selection criteria had already established an individualized interpretation of human capital as the basis of discussion. Researchers are in the process of establishing the role of team and leadership capabilities in venture performance (Caliendo & Kritikos, 2012; De Cock et al., 2020; Ensley et al., 2006; Ferreira, et al., 2019; Zacharakis & Meyer, 2000), which suggests that any significant findings will work their way into selection. So, a key issue is whether investors are already assessing venture teams on interpersonal capabilities, such as team and leadership skills. Although venture capitalists are savvy and experienced business professionals, they are known to be overconfident (Zacharakis & Shepherd, 2001) and intuitive (Khan, 1987; Levie & Gimmon, 2008; McMillan et al., 1987) — a combination that impedes learning (Bacon-Gerasymenko, 2019) and could allow outdated points of view to persist. Does a recent Delphi study participant's comment that, "Investment decisions/management varies widely and is more of an art" (Cannice et al., 2016, p. 11) reflect a selection context that inherently cannot be made systematic or a decision-making process that consciously or unconsciously chooses to avoid making it so?

The lack of clear progress in establishing criteria that are a reliable predictor of venture success has important consequences for individual venture capital firms and the industry in

general. Poor deal selection leads to poor portfolio outcomes, and two-thirds of VC firms launch only one fund (Tyabji & Sathe, 2010). Firms that make it to a second fund have an advantage in sourcing, evaluating, and negotiating terms with ventures seeking outside investment, which affords them more learning opportunities and can lock in their position in the VC market. As a result, a "caste system" (Tyabji & Sathe, 2010) has emerged in which top-tier firms benefit from reinforcing feedback processes where success attracts money and talent, which in turn promote future success. Venture management selection criteria that capture the largely untapped role of interpersonal capabilities has the potential to not only improve individual firm performance, but also reshape the venture capital industry.

To lay the foundation for a comprehensive understanding of the role that interpersonal capabilities play in contemporary selection criteria and employing a grounded theory approach to identifying factors in the decision-making process, investors in early-stage ventures were asked to describe their investment selection criteria. The interviews focused on two research questions. First, who in the venture do investors assess during the investment selection process? Second, what criteria do investors find important when assessing venture management? Participant responses revealed a focus on founders. Many participants expressed an interest in understanding the venture team, but immediate circumstances generally prevented them from assessing the range of team members that they would ideally. Specifically, while the interviews were underway, funds available for venture investing outweighed ventures seeking funding – a market asymmetry that heavily favors those seeking to raise funds. So, even among investors that desired to broadly assess the venture team, short decision deadlines and finicky founders led them to focus on the founders only. The criteria used to make assessments was also affected by

the market asymmetry. The same short deadlines and selective founders generally required potential investors to narrow the range of criteria they were able to assess prior to making an investment decision. However, regardless of the market asymmetry, differences were observed in the range of criteria deemed important – stemming largely from the investors mental models and predispositions. Overall, five categories of selection criteria emerged: soft skills, hard skills, personality, character, and mindset. This manuscript reviews the literature on founder selection, describes the research employed and the results obtained, and concludes with a discussion of limitations and implications.

#### Contribution

The current study contributes to the literature in four different ways. First, it updates what is known about how investors assess venture founders when making an investment decision. Investment selection criteria received much attention in the early years of entrepreneurship research, and much of the established perspectives on this matter are tied to several decades-old studies. Second, it demonstrates that despite advances in theory and practical techniques of assessment, even investors who appreciate the human factors in selection tend to rely on intuition. Third, it raises important questions for researchers about how the context of investment selection shapes the extent of assessment. Finally, it paves the way for helping practitioners improve their assessment of venture founders and management.

#### **Update Selection Criteria**

Identifying the investment decision-making process and the selection criteria employed during that process was one of the early topics of investigation in entrepreneurship scholarship. Throughout the 1980s and into the 1990s, founder capabilities were generally viewed through the Human Capital lens – a construct from macroeconomics. At a period when much of the scholarly investigation into entrepreneurship was being driven by researchers with an economics background, it served as a foundation for understanding how human elements factor into the entrepreneurial process in general and investment selection in particular. As a wider variety of social scientists entered the field, additional lenses on the human element were applied. This study revisits the question of founder assessment in light of the richer understanding of founders afforded by these additional lenses, and in doing so, it reveals that some investors are assessing founders from the point of view that is much more contemporary than the Human Capital-centered one that is ingrained in the scholarly perspective.

#### Intuitive Assessments

Investors in early-stage ventures are generally successful businesspeople in their own right. Many are experienced entrepreneurs and have a rigorous approach to assessing an early-stage venture's product, market, and financial aspects. The people's side of the venture is often a different story. This study demonstrates that advances in organizational science have made their way into the assessment criteria professional investors use during investment selection but that even among relatively people-savvy investors, there is a tendency to rely on an intuitive assessment of founders and to dismiss the opportunity to even experiment with, much less regularly apply, assessment mechanisms that offer the potential for more rigorous assessment.

#### Questions for Further Study

Through its investigation of assessment criteria, this study uncovers several critical unanswered questions. First, how do market conditions shape criteria? Participants were

interviewed at or near the peak of the venture investment market (mid-2021), and it was not uncommon to hear accounts of due diligence being cut short to meet tight decision deadlines. Second, how does an individual's or firm's investment strategy shape their selection criteria? For example, a strategy focused on covering a technology space can afford to de-emphasize founder characteristics since the goal is to be strategically positioned when a dominant technology emerges. Third, what factors other than investment strategy shape an investor's interest in people criteria? Investment strategy is a clear example of a contextual factor that might affect the criteria and extent of founder assessment, but are there individual differences of the investor that drive the assessment of founders? Lastly, given the reluctance even people-oriented investors seem to have for rigorous founder assessment, it would be very insightful to know what factors shape an investor's interest in thoroughly assessing people.

### **Practical Contributions: Improving Founder Assessment**

The findings of the current study and its immediate practical extensions have the potential to help investors improve their assessments of founders and overall decision-making in at least two ways. First, the findings can help investors pick a set of criteria that suit their investment strategy. Second, in many cases, the criteria associated with the results of the current study have validated scales associated with them. Connecting investors with such validated scales has the potential to improve their assessments' rigor.

#### **Chapter 2: Literature Review**

Modern market economies rely on a constant churning of the business landscape "that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one" (Schumpeter, 2003, p. 83). The churn drives technological advancements, economic growth, and social mobility (Drucker, 1985; Gartner, 1985; Klepper, 2016; Quadrini, 2000; Schumpeter, 1934). The destruction is easy to spot: shuttered storefronts, plant closures and layoffs. It is also easy to understand: money runs out, vendors go unpaid, and work grinds to a halt. Creation is a bit different, especially understanding it. "Grand opening" signs are visible indicators of retail creation, and Initial Public Offerings denote an important milestone enjoyed by some particularly successful companies. However, it can hard to spot other aspects of economic creation and harder still to appreciate where business ideas come from and how they manifest into an actual business.

This chapter begins with a brief discussion of entrepreneurship broadly that will help establish the context for readers new to the topic. A summary review of research into entrepreneurs will highlight the traditional research approaches for understanding entrepreneurs: personality and human capital models. Next, a contemporary view of the role of entrepreneurs will be described, leveraging the alternative opportunity-based theories of entrepreneurial action: opportunity discovery, and opportunity creation. The very issue of opportunities is a hotly debated topic in entrepreneurship, but the alternative action theories prove useful in the examination of investment selection criteria. The current research examines the criteria that professional investors use when selecting venture investments, so an overview of the role of venture capitalists is provided. Having described the two sides of the investment decision, the investment selection process and criteria are discussed, with particular focus on founder criteria.

## Entrepreneurs

At the center of business creation are entrepreneurs, who discover, evaluate, and exploit opportunities to create goods and services (Gartner, 1990; Hitt et al., 2001). Their vital role has made them a focus of scholarly study for at least 50 years (Ács & Audretsch, 2006; Barkham, 1994; Brandstätter, 2011; Roper, 1998; Unger et al., 2011; Van Ness & Seifert, 2016; Zhao & Seibert, 2006), with the latter half of that period seeing not only tremendous growth in interest and output, but also maturation and institutionalization of entrepreneurship as a field of study (Aldrich, 2012; Davidsson, 2016, 2017). According to Davidsson (2016), entrepreneurs drive the economy forward by: providing customers with additional choices and in some cases providing more value; encouraging incumbent firm to refine their market offerings, thereby increasing their efficiency and/or effectiveness; and when seen as successful, drawing in new entrants, thereby raising the competitive pressure and ultimately efficiency and effectiveness.

Some entrepreneurs have the financial resources to fund their business venture on their own, or with the help of friends and family, but most need to find outside investors to provide the financial resources needed to get the business up and running (Gompers & Lerner, 2001). This mismatch is nothing new. Entrepreneurs have long used contractual arrangements to partner with those with an excess of capital and a willingness to risk some of it on a new venture. For example, Christopher Columbus paired up with the Castilian Crown to support his drive to discover, evaluate, and exploit a new route to the Far East. Two centuries later, when Scottish economist John Law sought to discover, evaluate, and exploit opportunities in the French colonies of North America, he found an investor in Irish-French economist Richard Cantillon, who had made a fortune early in life as a banker and merchant.

For such a partnership to be effectuated, investors have to decide whether the venture is promising enough and the terms favorable enough that the potential return is worth the risk (Dimov et al., 2007; Dubini, 1989; Fried & Hisrich, 1994; Khan, 1987). So too, current owners must find the investment terms favorable enough that they are willing to agree to the investment (Hsu, 2007; Ko & McKelvie, 2018; Zhang, 2011). While a good deal of research has gone into both sides of the partnership, this chapter focuses on venture investors, and in particular, the founder characteristics that such investors assess when making investment decisions. Over the course of five decades, dozens of research studies have shown that investors assess ventures along two fundamental dimensions: the business and the founder(s). It is hard to find an entrepreneurship paper from the 1980s that does not employ the metaphor of "the horse" (the business) and "the jockey" (the founder) as a means to describe these two fundamental dimensions. Naturally, investors would prefer to invest in ventures with both a promising business case and strong leadership (Kaplan & Strömberg, 2004), but such ventures are relatively scarce. Over time, VCs and other early-stage investors distinguish themselves in how they decide the more common cases involving ventures that are imperfect in one or more ways. Different VCs report weighing either management or business factors differently (Kaplan et al., 2009). However, when it comes to early-stage ventures characteristics of the founder(s) generally have primacy over those of the business.

It is worth noting that founders have varying attitudes toward external funding, especially given the loss of control that typically comes with it (Wasserman, 2008). Wasserman points out

that founders typically face of choice of either maintain control of the venture or raising the funds needing to grow the venture to its potential scale. Control-oriented founders, like those discussed by Kets de Vries (1985), are reluctant to raise external funds, will raise less money each round, or forsake funding altogether in order to maintain their control. Some investors will refuse to back such founders (Wasserman, 2008), looking instead for ventures whose founders have the potential to lead their ventures over the long term.

The selection of ventures for investment is not a mere side issue when it comes to the role of professional investors in entrepreneurial ecosystems. While deal sourcing, deal selection, and post-investment value-adding activities all contribute to value creation, VCs rate deal selection as the most important of the three (Gompers et al., 2020). Empirical studies show human factors are significant drivers of exit returns (e.g., Streletzki & Schulte, 2013a) supporting their inclusion in the deal selection calculus.

The central role played by the venture founders in the selection process was revealed in the earliest investigations of VCs investment decision-making (e.g., MacMillan et al., 1985, 1987; Tyebjee & Bruno, 1984). One of the first findings in selection research was the consensus among VCs that if faced with a choice between an "A" founder with a "B" business opportunity and a "B" founder with an "A" opportunity, invest in the "A" founder (Gompers & Lerner, 2001; MacMillan et al., 1985). Gladstone and Gladstone (2002) reiterate this early finding, noting that a venture can have a good idea and poor management and lose every time, whereas a good management team can turn a poor idea into a winner. Gompers et al. (2020) recently observed that when it comes to selecting investments, VCs see the venture team as more important than business-related characteristics such as product or technology. In terms of responsibility for the ultimate success or failure of the venture, outside investors assign responsibility to the founder and venture team rather than to the business.

Not surprisingly, then, the nature of the entrepreneurial team is an important component of the sourcing and screening process. Baron and Hannan (2002) and Hellmann and Puri (2000) focus on how founding teams are formed and their attractiveness as investment opportunities. Gompers, et al. (2010) show that past success as an entrepreneur is an important factor that VC firms focus on when assessing potential investments. Recently, a growing interest in the role of affect in entrepreneurship is highlighting the important dynamics of founding teams, establishing the very concept of team entrepreneurial passion (Cardon, Glauser, & Murnieks, 2017), how team passion emerges (Cardon, Post, & Forster, 2017), and its effects on outcomes (Cardon, Post, & Forster, 2017) and decision making (Huang et al., 2019). Despite all this attention, human factors are typically under-appreciated by venture capitalists, and Streletzki and Schulte (2013b) argue that venture capital firms are not selecting on the right criteria. These findings, together with widespread disappointment in investment decisions (Graves & Ringuest, 2018), suggest that practitioners need evidence-based guidance about venture selection, especially with regard to founder characteristics.

Research has revealed that VCs found assessing founders to be difficult (Barney et al., 2001; Kozmetsky et al., 1985; Riquelme & Watson, 2002; Smart, 1999; Zacharakis & Meyer, 1998). Arthur Rock, an early investor in both Intel and Apple, has said, "nearly every mistake I've made has been in picking the wrong people, not the wrong idea" (Bygrave & Timmons, 1992, p. 6). Despite decades of research, a clear understanding of the role of the entrepreneur in venture selection and performance remains elusive, and venture investors still experience

substantial disappointment with their decisions (Graves & Ringuest, 2018). As a participant in a recent Delphi study told researchers, "Investment decisions/management varies widely and is more of an art" (Cannice et al., 2016, p. 11). A long-standing explanation for this lack of progress stems from evidence that VCs as decision-makers are overconfident (Zacharakis & Shepherd, 2001) and intuitive (Khan, 1987; Levie & Gimmon, 2008; McMillan et al., 1987) — a combination that impedes learning, particularly when it comes to the management of venture portfolios (Bacon-Gerasymenko, 2019).

#### Founder Assessment Criteria

One's beliefs influence both what one observes and how one interprets what is observed (Rutjens & Brandt, 2018). Entrepreneurship scholars are not immune to this influence, so their fundamental beliefs about entrepreneurs will shape their observation and interpretation of investors' selection criteria. Perspectives on entrepreneurship are rich and varied (e.g., Ahmetoglu et al., 2017; Davidsson, 2017; Essers et al., 2017; Fayolle et al., 2018; Shepherd & Patzest, 2017), and an accounting of them is beyond the scope of this chapter. Instead, this review draws upon the previously discussed alternative theories for entrepreneurial action to underscore the role of human factors in investment selection.

A focus on human factors is worthwhile for at least two primary reasons. First, given the long-established primacy of founders' characteristics in investors' decision-making (e.g., MacMillan et al., 1985, 1987; Rakhman & Evans, 2005; Tyebjee & Bruno, 1984; Zhang, 2012), inadequate evaluation criteria for founders are a likely source of lingering dissatisfaction with investment decisions (Graves & Ringuest, 2018). Second, VCs and other professional investors are generally better equipped to evaluate rigorously non-human factors in an investment decision

such as market conditions, business execution and technology (Smart, 1999), suggesting that insights into human factors will be of more practical use to investors.

Assessing Market Entry Role of Founders. The contemporary study of entrepreneurship is generally traced back to the Austrian School of economics and in particular, the works of Schumpeter (1934) and Kirzner (1973). Given these origins, early consideration of the entrepreneur's role was as a precipitator of microeconomic market entry. For Kirzner (1971, 1973) and many others still influenced by the Austrian school, opportunities are gaps that develop in the market landscape (Suddaby et al., 2015) which entrepreneurs discover (Shane & Venkataraman, 2000). Individual entrepreneurs themselves play a limited role, since gaps are real and objective phenomena that will eventually be identified through the search activities of the entrepreneur class (Alvarez & Barney, 2007; Shane & Venkataraman, 2000). Regarding the assessment of entrepreneurs for investment selection and for performance prediction, economicsbased researchers turned to human capital theory (Becker, 1993), which was developed to account for qualitative differences in labor such as those resulting from investments in education. This approach uses investment-like traits such as years of experience or education to explain entrepreneurs' success at exploiting an identified gap.

To the extent that entrepreneurs are intrepid explorers searching to discover gaps in the marketplace, then another central issue in entrepreneurship is understanding who chooses to become an entrepreneur (for example, see Levine & Rubinstein, 2017; Poschke, 2013; Stanworth et al., 1989). Research into individual differences that distinguishes entrepreneurs from non-entrepreneurs centers on capabilities associated with discovering and exploiting opportunities (Alvarez & Barney, 2007; Pittaway et al., 2018), such as alertness to opportunities (Kirzner,

1973; Wood & McKinley, 2010). This perspective leads to a trait-based approach (e.g., McClelland, 1961) for distinguishing entrepreneurs from non-entrepreneurs (Gartner, 1989) which has a number of consequential pitfalls (Pittaway & Tunstall, 2016), most notably an accumulation of trait associations with no meaningful net contribution to understanding (Gartner, 1989).

Researchers have begun to map the processes for raising needed capital leveraging theories such as exploitation of network ties (Shane & Cable, 2002), social co-optation (Starr & MacMillan, 1990), employment of symbolic mechanisms (Zott & Huy, 2007), and solicitation of endorsements (Carter & Manaster, 1990; Janney & Folta, 2006; Plummer et al., 2016). They have also been assembling the catalogue of factors used in funding decisions, including criteria related to founder and venture team human capital (Ebbers & Wijnberg, 2012; Gulati & Higgins, 2003), business plans (Delmar & Shane, 2004), and social capital (Florin et al., 2003).

In this role, entrepreneurs are like prospectors, and the relevant human factors center on those that affect whether one becomes a prospector at all and, if so, those that affect how effective you will be at making a find. However, entrepreneurs seeking formal outside investment have generally already made a find and are looking for funding to exploit it. So for VCs and other potential investors entering the picture at this point, the human factors associated with opportunity discovery are less relevant that those that will affect how the opportunity is groomed to its fullest potential. Does the entrepreneur have the skills, abilities, and behaviors needed to lead successfully the effort to make the most of the business opportunity? Such characteristics are not a part of these largely economics-based discovery theories (Davidsson,

2017). Other researchers, however, take a different perspective on the role of entrepreneurs and offer insights into founders that are more informative to the investment selection process.

Assessing Product, Service, and Organizational Development Role of Founders. The past two decades have seen a widening of the perspective of scholarly entrepreneurship research. A major turning point was Shane and Venkataraman's (2000) framework that widens the lens of inquiry to include process and behavioral considerations. Leaders in entrepreneurship studies have called for broader participation in the field, including management, organizational, and other social scientists who could apply their disciplines' theoretical frameworks to the entrepreneurial context (e.g., Shepherd, 2015), and an influx of researchers has broadened the range of questions asked and the types of analysis employed, particularly with regard to how entrepreneurs shape the way that market gaps are cultivated in the face of changing customer preferences, shifts in technology, and the like (Venkataraman et al., 2012; Wood & McKinley, 2010) and how entrepreneurs lead their ventures' exploitation of them. The entrepreneur is in a dynamic, interdependent relationship with the market landscape (Alvarez & Barney, 2007; Fletcher, 2006; Suddaby et al., 2015) and is exerting agency to turn a mere market gap into a business opportunity (Fletcher, 2006; Sarasvathy, 2004; Wood & McKinley, 2010). Necessarily, this view of the entrepreneur underscores generative abilities and behaviors associated with the process of creation.

Whereas early models of entrepreneurship draw primarily on traditional economic thinking (Fisher, 2012; Pryor et al, 2016), recently models integrating behavioral theories have been gaining ground. The impetus to broaden theories of motivation and decision making arise at least in part from the fact that "people enter and persist in entrepreneurship despite low risk-

adjusted returns" (Astebro et al, 2014, p.50) which suggests that standard "rational" models cannot fully explain founder behavior. For example, rather than finding entrepreneurial motivation in the identification of marketspace gaps and their exploitation, Bird and Schjoedt (2009) frame their investigation on the actions needed to launch and grow a venture, which could be tied to a passion for starting a business more than filling a market need. Others (e.g., Baker & Nelson, 2005; Sarasvathy, 2001) theorize that entrepreneurs focus more on making use of the resources they have available rather than on finding and filling market opportunities based on economic analysis, which could be tied to a need for independence, for example. Many of these advances are the offshoots of behavioral economics (Astebro et al, 2014) which attribute nonrationale entrepreneurial behavior to three causes: differences in risk aversion, overconfidence, and nonmonetary individual preferences. However, others (e.g., Pryor et al., 2016) are moving well beyond the confines of behavioral economics in their integration of behavioral and cognitive factors in entrepreneurial decision making and action. Still others (e.g., Baron, 2008; Cardon et al., 2009; Elfenbein, 2007; Foo, 2011; Huang et al., 2019) are employing affect theories to contribute to the discussion of entrepreneurial behavior and decision-making. For example, Huang et al. (2019) offer insights into entrepreneurial team decision-making by examining the influence of group fear and group hope – two emotions whose tensions may contribute to the escalation of commitment often seen on entrepreneurial teams but not easily explained through rational economic theory. Lastly, there has been growing interest in the operational aspects of entrepreneurship with some researchers turning their attention away from why entrepreneurs do what they do and towards what they are actually doing. This often involves applying leadership theories to the role of founder, founding team, or venture management team.

Such research has implications for venture performance and exit, and thereby, should inform investment selection, and so is central to the discussion that follows.

How researchers view entrepreneurs is one thing; how investors view them when making investment decisions is another. Ideally, they should be related, but the two perspectives are inherently different. Investor selection is the real-world phenomenon that researchers are trying to understand by studying it. Biases arising from the researcher's worldview affect how selection is understood, but they are not part of the selection process itself. Investor bias, if present, might. Therefore, before reviewing the research on selection criteria, it is useful to also establish who venture investors are and what process they use to come to a decision.

#### **Venture Capitalists**

The need for outside investment arises when there is a mismatch between those with innovative ideas and those with the capital to exploit them (Ko & McKelvie, 2018). Most new ventures require little or no capital, and what capital is required can be raised through drawing down personal savings and the capital of friends and family (Gompers & Lerner, 2001). When third-party capital is needed, entrepreneurs often turn first to "angel" investors – wealthy patrons who are willing to invest capital in return for an equity stake in the business. However, ventures whose capital needs exceed what is readily accessible from angels can become candidates for funding from a professionally raised and managed venture fund. These tend to be ventures with very high growth potential that require considerable investment in order to achieve the scale necessary to succeed (Brush et al., 2008; Hite & Hesterly, 2001). Such ventures are rare, and relatively few new ventures wind up in the market for venture capital (Gompers & Lerner, 2001).

Venture capitalists are business professionals who raise and manage capital funds for the purpose of making investments in early-stage businesses (Barry, 1994), though technically, any case where financial resources are invested in a private company where the investor subsequently takes an active role in the business decision-making can be considered a venture capital investment (Sahlman, 1990). In market economies with a vibrant entrepreneurial sector, investors have more investment opportunities than they can possibly fund, so although research has been conducted on how entrepreneurs navigate the VC process (e.g. Bengtsson & Wang, 2010; Fairchild, 2011; Falik et al., 2016; Shane & Cable, 2002) much more scholarly work has focused on understanding VCs and their investment selection process.

The professionalization of venture investing arises from the unique risks and high levels of uncertainty that new ventures face, particularly high-growth-potential ventures requiring significant capitalization. While any business venture involves risk, MacMillan et al. (1985) identified six categories of risk associated with new ventures that have to be evaluated and managed: losing the entire investment, competitive risk, management failure, leadership failure, being unable to bail out if necessary, and failure to implement the venture idea – the last two being somewhat unique to early-stage ventures. Moreover, decisions to invest in an early-stage venture are made in the face of imprecise measures, varied and often conflicting factors, and tremendous economic uncertainty (Aouni et al., 2014). It is a situation that is too risky for many investors. Venture capitalists, however, typically look for extraordinary returns on their investments and are experts at managing the high levels of uncertainty. For many VCs, the ideal venture to invest in is one that has a product or service backed by technology with a strong potential for future growth, but which faces near-term failure (Baum & Silverman, 2004). In fact,

a startup whose risk of failure is too low is unlikely to be interesting to the VC community, since the probability of success will already be factored into the investment price and the rate of return commensurately will be lower.

Given that investors vigorously guard their capital, they tend to employ rigorous evaluation of opportunities (Gompers & Lerner, 1998). However, there are probably as many different ways to make an investment decision as there are investors (Feld & Mendelsohn, 2019; Gorman & Sahlman, 1989; Kaplan & Strömberg, 2004). So it comes as no surprise that the examination of how VCs make decisions was of keen interest in the 1980s on the heels of the emergence of the VC industry in the U.S. (Bruno & Tyebjee, 1985; Chan, 1983; Gorman & Sahlman, 1989; Goslin & Barge, 1986; Khan, 1987; Kozmetsky et al., 1985; MacMillan et al., 1985, 1987; Rea, 1989; Robinson, 1987; Sandberg et al., 1989; Timmons et al., 1987; Tyebjee & Bruno, 1981, 1984).

These foundational studies were conducted during the era dominated by the viewpoint that entrepreneurs are primarily identifiers of market gaps and before process-oriented behavioral views of the entrepreneur gained traction. So, even though the VC decision research was establishing that managerial capability was the most significant factor in the selection process and highly influenced expected risk and returns (Tyebjee & Bruno, 1984), these capabilities were generally framed *a priori* and interpreted *ex post* by researchers focusing on traits associated with the ability to identify market gaps. Precedent established, researchers examining the criteria investors use for assessing founders in the decision process maintained the trait-oriented view in the decades that followed. For example, Kaplan and Strömberg (2004) confirm previous survey results that VCs consider factors that include the attractiveness of the market, strategy,

technology, product or service, customer adoption, competition, deal terms and the quality and experience of the management team. True to the prevalent view they were operating within, the "quality and experience of the management team" is characterized by traits, rather than behaviors or process abilities. For example, in one of the earliest scholarly studies of entrepreneurship, Wells (1974) identified *management commitment* as the most important criteria in venture evaluation. Other early studies found *quality of management* (Poindexter, 1976), and *management skills & history* (Tyebjee & Bruno, 1984) to be most important. Macmillan et al. (1985, 1987) expanded the range of human factors identified to be important, but in general continued the trait-orientation, identifying factors such as *capacity for sustained and intense effort, ability to articulate well when discussing venture*, and *attention to detail*.

As interest in a process-oriented view of entrepreneurship grew, so did a recognition that VCs can play important role in cultivating value creation in their portfolio companies (e.g., Black & Gilson, 1998; Gompers & Lerner, 1999; Kortum & Lerner, 2000; Leleux & Surlemont, 2003; Manigart et al., 2002, 2006; Sahlman, 1990; Sapienza et al., 1996; Wright & Lockett, 2003). Whereas opportunities have already been discovered by the time VCs encounter them, they may subject to the nurturing and shaping that investors can offer – if you view opportunities as things that are being created. So as a process point-of-view gained favor, researchers began to show the beneficial impact on venture performance associated with VC backing (Gompers & Lerner, 1999; Kortum & Lerner, 2000). However, different investors take different approaches to selecting and managing their portfolios.

# Venture Capitalist Types

Much of the research into VCs' decision-making has been oriented toward identifying a prototypical process that generically describes how investments are selected. As a result, individual and organizational differences in selection were under-studied (Dimov et al., 2007) until relatively recently. Early studies indicated that the process is fairly standard and stable, though different types of investors weigh the various steps and criteria differently. Such findings may stem at least in part from the fact that the typologies associated with VCs under consideration were often based on the source of risk. For example, MacMillan et al. (1985) identified three types of VCs according to the focus of their risk management, those that: (a) carefully assess the competitive and implementation risks; (b) seek easy bail out; and (c) deliberately keep as many options open as possible. However, such categorizations do not highlight differences in selection styles, nor were they meant to. Looking only at European VCs, Muzyka et al. (1996) also found three types, though a different three, but again oriented to how they prioritized risk factors -those that focus on: (a) geography, (b) the deal, and (c) the management team. From the discovery perspective, investment decisions have a lot in common with financial portfolio management and VC involvement is essentially over once the investment is made.

As the process-oriented view of entrepreneurship gained momentum and researchers examined how investment decisions were made more closely, and they discovered that different types of VCs approach the decision-making process differently. In particular, there is a good deal of variation in how investors approach post-investment involvement in the venture. Studies employing this process-oriented view of the decision revealed that some VCs place primary

emphasis on the management team characteristics, while others focus mainly on the business considerations, and still others on the technology (Knockaert et al., 2010), investor types which have been called people, financial, and technology investors (Knockaert & Vanacker, 2013). People investors put in effort up front to find the right founders and venture teams, but they will be less involved in value-adding activities. Knockaert and Vanacker (2013) argue that such investors put the effort in up front to find the "right" management and so do not have to be directly involved as much down the road. Financial investors focus on the business model and often follow a portfolio management approach to investing. Dimov et al. (2007) find that VCs with expertise in finance tend to avoid early-stage investments, possibly stemming from an overreliance on financial analysis. It is certainly the case that the context of early-stage ventures is rich in uncertainty, which sets up conditions that violate the assumptions of traditional "rational" finance modeling. Heuristics and real options are geared toward uncertainty, but traditional finance experts generally do not embrace them. Such circumstances also indicate that founders have an oversized role in the venture outcome, and financial expertise does not convey the expertise needed to make high quality decisions around human factors. Lastly, technology investors place greater weight on the technology and its potential and as a result expect to provide hands-on guidance after investment. So one thing is clear: the decision-making process is affected by the investor type.

The process-oriented view of entrepreneurship opens the door to assessing founders based on their process-oriented knowledge, skills, and abilities. Beginning with the identification of a market gap, founders specify their vision for the opportunity, establish and shape an organization to pursue the opportunity, the lead the effort to exploit it. Founders have an interactive relationship with market gap and the opportunity it presents, and their value contribution is closely linked to their ability to drive the creative process. Before making an investment, VCs must evaluate the venture and the founder's ability drive its success, which will be examined next.

#### Venture Investment Decision-Making

Since the assessment of founders is being made as part of a larger investment decisionmaking process, it may be useful to outline that larger process. Because not all investors are alike and there may be differences in processes or criteria, an overview of research into VC typologies will set the stage for more detailed discussion of investment decision-making. All told, at least four dozen peer-reviewed studies have investigated the venture capital decision-making process and the criteria used for selecting investments, though a comprehensively exhaustive count with broad inclusion criteria would probably place the number over 100 (see Table 1 for a selection of the most frequently cited studies). Nine studies have been cited over 1000 times (Baum & Silverman, 2004; Bygrave & Timmons, 1992; Colombo & Grilli, 2005; Cooper et al. 1994; Fried & Hisrich, 1994; Gorman & Sahlman, 1989; Kaplan & Strömberg, 2004, MacMillan et al., 1985; Tyebjee & Bruno, 1984) and another ten cited at least 500 times (Beckman et al., 2007; Dimov & Shepherd, 2005; Feeser & Willard, 1990; Hall & Hofer, 1993; MacMillan et al., 1987; Muzyka et al., 1996; Shepherd, 1999; Zacharakis & Meyer, 1998, 2000; Zacharakis & Shepherd, 2001). Together, these studies form the backbone of established knowledge in investment selection process and criteria.

# Table 1

Widely Cited Investment Selection Decision-Making and Criteria Research Studies

Author(s)	Year	Reference	Cites	Cites/year
Cooper, Gimeno-Gascon & Woo	1994	Cooper, C. A., Gimeno-Gascon, F. J., & Woo, C. (1994). Initial human and financial capital as predictors of new venture performance. <i>Journal of Business Venturing</i> , <i>9</i> , 371–395	3169	121.9
Gorman & Sahlman	1989	Gorman, M., & Sahlman, W. A. (1989). What do venture capitalists do? <i>Journal of Business Venturing</i> , <i>4</i> , 231–248.	1954	63.0
Tyebjee & Bruno	1984	Tyebjee, T. T., & Bruno, A. V. (1984). A model of venture capitalist investment activity. <i>Management Science</i> , <i>30</i> (9), 1051-1066.	1675	46.5
Bygrave & Timmons	1992	Bygrave, W. D., & Timmons, J. (1992). Venture capital at the crossroads. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.	1599	57.1
MacMillan, Siegel & Narasimha	1985	MacMillan, I. C., Siegel, R., & Narasimha, P. S. (1985). Criteria used by venture capitalists to evaluate new venture proposals. <i>Journal of Business Venturing</i> , <i>1</i> (1), 119-128.	1553	44.4
Baum & Silverman	2004	Baum, J. A. C., & Silverman, B. S. (2004). Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. <i>Journal of Business</i> <i>Venturing</i> , <i>19</i> , 411–436.	1437	89.8
Colombo & Grilli	2005	Colombo, M. G., & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view. <i>Research Policy</i> , <i>34</i> , 795–816	1409	93.9
Kaplan & Strömberg	2004	Kaplan, S. N., & Strömberg, P. (2004). Characteristics, contracts, and actions: Evidence from venture capitalist analyses. <i>Journal of Finance</i> , <i>59</i> , 2177–2210	1223	76.4
Fried & Hisrich	1994	Fried, V. H., & Hisrich, R. D. (1994). Toward a model of venture capital investment decision making. <i>Financial Management</i> , 28-37.	1052	40.5

MacMillan, Zemann & Narasimha	1987	MacMillan, I. C., Zemann, L., & Narasimha, P. N. (1987). Criteria distinguishing successful from unsuccessful ventures in the venture screening process. <i>Journal of Business Venturing</i> , 2(2), 123-137.	825	25.0
Hall & Hofer	1993	Hall, J., & Hofer, C. W. (1993). Venture capitalists' decision criteria in new venture evaluation. <i>Journal of Business Venturing</i> , 8(1), 25-42.	780	28.9
Zacharakis & Meyer	1998	Zacharakis, A. L., & Meyer, G. D. (1998). A lack of insight: do venture capitalists really understand their own decision process?. <i>Journal of Business Venturing</i> , <i>13</i> (1), 57-76.	634	28.8
Dimov & Shepherd	2005	Dimov, P. D., & Shepherd, D. A. (2005). Human capital theory and venture capital firms: Exploring "home runs" and "strike outs". <i>Journal of Business Venturing</i> , 20, 1– 22.	621	41.4
Zacharakis & Shepherd	2001	Zacharakis, A. L., & Shepherd, D. A. (2001). The nature of information and overconfidence on venture capitalists' decision making. <i>Journal of Business Venturing</i> , <i>16</i> , 311–333	617	32.5
Feeser & Willard	1990	Feeser, H. R., & Willard, G. E. (1990). Founding strategy and performance: A comparison of high and low growth high tech firms. <i>Strategic Management Journal</i> , <i>11</i> (2), 87-98.	615	20.5
Beckman, Burton & O'Reilly	2007	Beckman, C. M., Burton, M. D., & O'Reilly, C. (2007). Early teams: The impact of team demography on VC financing and going public. <i>Journal of Business Venturing</i> , <i>22</i> (2), 147-173.	591	45.5
Zacharakis & Meyer	2000	Zacharakis, A. L., & Meyer, G. D. (2000). The potential of actuarial decision models: can they improve the venture capital investment decision? <i>Journal of Business Venturing</i> , <i>15</i> (4), 323-346.	552	27.6
Shepherd	1999	Shepherd, D. A. (1999). Venture capitalists' assessment of new venture survival. <i>Management Science</i> , <i>45</i> (5), 621-632.	549	26.1
Muzyka, Birley & Leleux	1996	Muzyka, D., Birley, S., & Leleux, B. (1996). Trade-offs in the investment decisions of	523	21.8

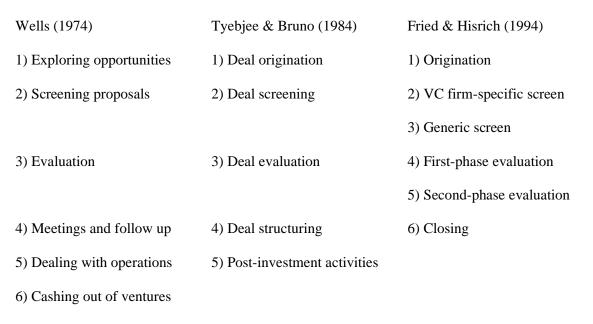
		European venture capitalists. <i>Journal of Business Venturing</i> , 11, 273–287.		
Franke, Gruber, Harhoff & Henkel	2006	Franke, N., Gruber, M., Harhoff, D., & Henkel, J. (2006). What you are is what you like-similarity biases in venture capitalists' evaluations of start-up teams. <i>Journal of</i> <i>Business Venturing</i> , 21, 802–826.	366	26.1
Wright, Robbie & Ennew	1997	Wright, M., Robbie, K., & Ennew, C. (1997). Venture capitalists and serial entrepreneurs. <i>Journal of Business Venturing</i> , <i>12</i> (3), 227- 249.	361	15.7
Kaplan, Sensoy & Strömberg	2009	Kaplan, S. N., Sensoy, B. A., & Strömberg, P. (2009). Should investors bet on the jockey or the horse? Evidence from the evolution of firms from early business plans to public companies. <i>Journal of Finance</i> , <i>64</i> , 75–115.	357	32.5
Timmons, Muzyka, Stevenson & Bygrave	1987	Timmons, J.A., Muzyka, D.F., Stevenson, H.H. and Bygrave, W.D. (1987). Opportunity recognition: the core of entrepreneurship. <i>Frontiers of Entrepreneurship Research</i> , 7(2) 109-123.	276	8.4
Riquelme & Rickards	1992	Riquelme, H., & Rickards, T. (1992). Hybrid conjoint analysis: An estimation probe in new venture decisions. <i>Journal of Business</i> <i>Venturing</i> , 7(6), 505-518.	244	8.7
Robinson	1988	Robinson Jr, R. B. (1987). Emerging strategies in the venture capital industry. <i>Journal of</i> <i>Business Venturing</i> , 2(1), 53-77.	241	7.5
Shepherd, Ettenson & Crouch	2000	Shepherd, D. A., Ettenson, R., & Crouch, A. (2000). New venture strategy and profitability: A venture capitalist's assessment. <i>Journal of Business Venturing</i> , <i>15</i> (5-6), 449-467.	239	12.0
Petty & Gruber	2011	Petty, J. S., & Gruber, M. (2011). "In pursuit of the real deal": A longitudinal study of VC decision making. <i>Journal of Business</i> <i>Venturing</i> , 26(2), 172-188.	194	21.6
Dixon	1991	Dixon, R. (1991). Venture capitalists and the appraisal of investments. <i>Omega</i> , <i>19</i> (5), 333-344.	184	6.3
Sandberg, Schweiger & Hofer	1988	Sandberg, W.R., Schweiger, D.M., & Hofer, C.W. (1988). The use of verbal protocols in determining venture capitalists' decision	140	4.4

		processes. <i>Entrepreneurship Theory and Practice</i> , 12(Winter), 8–20.		
Khan	1987	Khan, A. M. (1987). Assessing venture capital investments with noncompensatory behavioral decision models. <i>Journal of Business</i> <i>Venturing</i> , 2(3), 193-205.	139	4.2
Tyebjee & Bruno	1981	Tyebjee, T. & Bruno, A. (1981). Venture capital decision making: Preliminary results from three empirical studies. In K.H. Vesper (Ed.), <i>Frontiers of Entrepreneurial Research</i> (pp. 281–320). Wellesley, MA: Babson College.	129	3.3
Smart	1999	Smart, G. H. (1999). Management assessment methods in venture capital: An empirical analysis of human capital valuation. <i>Venture</i> <i>Capital: An International Journal of</i> <i>Entrepreneurial Finance</i> , 1(1), 59-82.	128	6.1
Boocock & Woods	1997	Boocock, G., & Woods, M. (1997). The evaluation criteria used by venture capitalists: evidence from a UK venture fund. <i>International Small Business Journal</i> , <i>16</i> (1), 36-57.	123	5.3
Goslin & Barge	1986	Goslin, L.N. & Barge, B. (1986). Entrepreneurial qualities considered in venture capital support. In R. Ronstadt, J.A. Hornaday, R. Petersen, & K.H. Vesper (Eds.), <i>Frontiers</i> <i>of entrepreneurship research</i> (pp. 366–377). Wellesley, MA: Babson College.	113	3.3
Knight	1994	Knight, R. M. (1994). Criteria used by venture capitalists: a cross cultural analysis. <i>International Small Business Journal</i> , <i>13</i> (1), 26-37.	111	4.3
Bruns, Holland, Shepherd & Wiklund	2008	Bruns, V., Holland, D. V., Shepherd, D. A., & Wiklund, J. (2008). The role of human capital in loan officers' decision policies. <i>Entrepreneurship Theory and Practice</i> , <i>32</i> (3), 485-506.	109	9.1
Rea	1989	Rea, R.H. (1989). Factors affecting success and failure of seed capital/start-up negotiations. <i>Journal of Business Venturing</i> , 4, 149–158.	104	3.4

Despite this expansive set of research, any overarching decision model is inevitably relatively simplistic and descriptive rather than theoretical and rigorous given the variation in practice across VC firms (Tyebjee & Bruno, 1984). One of the earliest studies focusing squarely on venture capital (Wells, 1974) identified a six-step process which was essentially replicated by other early investigations (see Table 2), the main differences being the point at which researchers considered the process over. Whereas Wells (1974) considers the process through the point of exit, Fried & Hisrich (1994) end their process analysis at the point of deal closing and Tyebjee & Bruno (1984) fall in between, including post-investment activities but not explicitly including exit. Even after decades of additional research, models of VCs' decision-making process are strikingly similar and generally have five or six steps. This is somewhat surprising given the range of starting and stopping points under consideration. For example, Klonowski (2018) documents the entire VC value chain from fund formation (which is, strictly speaking, not a part of investment selection) to exit in six steps (see Figure 1). Others focus more narrowly on the deal selection process — Klonowski's steps 2, 3, and 4 — and nonetheless often end up with a similar number of steps. A notable exception is Zacharakis (2010), who uses information processing theory to develop a four-stage model of investment decision-making, consisting of (a) origination, (b) screening, (c) evaluation, and (d) negotiation. However, the number of steps, which is an outcome of the researcher's cognitive "chunking" (Miller, 1956), is less interesting than the perspective used when analyzing the decision-making process.

## Table 2

Venture Capital Decision Making Process: Early Models



## Figure 1

The Venture Capital Value Chain (Klonowski, 2018)



The venture capital investment process and the venture capital value chain

# Investment Selection When the Focus is Identification of Market Gaps

While the reported number of steps has remained relatively consistent, it is not an indication that researchers have learned little about the process. Rather than debating or refining the steps, advances often take the form of "drilling down" into the process. For example, Fried & Hisrich (1994) identify that deal screening often has two stages, (a) an initial screen to sort for

opportunities that meet VC firm-specific criteria (e.g., technology space), and (b) for those that pass the first, a second screen based on standard evaluation criteria. They also parse deal evaluation into two phases: the first to determine whether the venture warrants serious interest; the second to identify obstacles to investment and how to overcome them. Other research has more closely examined the characteristics of established steps. For example, the VCs in Hall and Hofer's (1993) study took an average of less than six minutes to decide whether to advance a potential investment beyond the initial screen — Tyebjee & Bruno's (1984) "Step 2." Total time spent on evaluating a potential investment was less than 21 minutes. Through such studies, researchers have revealed quite a bit about how VCs evaluate investments.

Such studies treat the entrepreneur as an object in the process, not a party to it, which is consistent with the view that entrepreneurs are discoverers of market gaps. Even as the scope of research inquiry was broadened, the limited role of the entrepreneur was not. For example, consider the effect of networks in the VC community on the decision-making process. It has been shown that in well-developed VC communities, it is not uncommon for VCs to refer prospects to other VCs, across every stage of the process. Such referrals can be part of either a "no" (e.g., "no, but try this other VC firm) or a "yes" (e.g., "we're in, and we want to see if this other VC firm will co-invest"). Hall and Hofer (1993) document that the source of an investment opportunity can affect the level of initial interest in it and shape its evaluation. In other words, a prospect that is referred by a trusted VC colleague will be treated differently from a prospect that is a "cold" submission. This is an important insight, but the venture, and by extension the entrepreneur, appear to have at best only a limited role in the process. They are commodities exchanged among investors.

Such treatment of entrepreneurs as an object in the entrepreneurship process has been a useful research lens. For example, a great deal has been learned about how investment selection varies regionally by focusing exclusively on the VC's decision-making process. Researchers have found important differences across regions depending on the nature of regional equity markets and their VC communities. Perhaps the clearest case is India, where Silva (2004) has shown that the sequential steps commonly observed in other regions are more interactive, occurring sometimes simultaneously. Moreover, the advantages of a narrow consideration of entrepreneurs is not limited to international studies and comparisons. For example, it continues to provide US researchers with a useful frame for understanding investment decision making. Recently, Ewens et al. (2018) discuss how falling cloud computing costs have lowered the cost of development and spurred a more experimental approach among some VCs — putting in less money across more ventures and letting results speak for themselves. This finding suggests a lowering of the screening hurdles accompanied by a more hands-off relationship with ventures — meaning less practical guidance and support. It is a useful insight, but as is typical of research employing the discovery view, the entrepreneurs have no role in the finding.

## Investment Selection When the Entrepreneurial Process Matters

As recognition grew that founders factor into the entrepreneurial process in important ways, the assessment criteria began to include a broader array of human factors. Operational factors including skills and behaviors gain prominence alongside the more established traits associated with the identification of market gaps. An early indication of this more expansive view was Baum and Silverman's (2004) finding that VCs engage in both "scouting" and "coaching" of ventures — the former tied to the identification of market gaps and the latter tied

to a more process-oriented view of entrepreneurship. As the entrepreneur's role became more central to theories of venture selection and performance, researchers began to investigate the investor-founder dyad from a variety of perspectives, including governance (e.g., Jolink & Niesten, 2016), contracting and negotiations (e.g., Kaplan & Strömberg, 2004; Lim & Cu, 2012; Payne et al., 2009), relationships (e.g., Bernstein et al., 2016; Khanin & Turel, 2015; Leece et al., 2012, Panda & Dash, 2016), and social networks (Lim & Cu, 2012). Still others examine business traits (for example, Balen et al., 2019), and who gets how much funding, looking at differential outcomes by founder.

#### Investment Selection Criteria

The roots of this line of inquiry are some of the early studies that contributed to the formalization of the field of entrepreneurship (Bruno & Tyebjee, 1985; Gorman & Sahlman, 1989; MacMillan et al., 1985, 1987; Poindexter, 1976; Robinson, 1987; Timmons et al., 1987; Tyebjee & Bruno, 1984; Wells, 1974). These pioneering studies revealed that investors consider characteristics of the founder to be a vital element in the selection decision. However, as is typical in such pioneering studies, these were necessarily relatively atheoretical exercises intended to establish the landscape of issues — a necessary bit of empirical fact-finding (Hambrick, 2007; Locke, 2007) before proper models could be built and theories tested. On the heels of these foundational studies and continuing to this day have been research studies to specify and validate the criteria within each category, a task made harder by the fact that there is extensive use of gut feeling in VCs' decision-making (Levie & Gimmon, 2008) and that the criteria investors espouse may not match the criteria they actually use (Levie & Gimmon, 2008; Shepherd, 1999; Zacharakis & Meyer, 1998).

In the first widely circulated published study on investment selection criteria, Tyebjee and Bruno (1984) identified 23 deal characteristics which factored into five underlying dimensions: (a) market attractiveness (size, growth, and access to customers); (b) product differentiation (uniqueness, patents, technical edge, profit margin); (c) managerial capabilities (skills in marketing, management, finance and the references of the entrepreneur); (d) cash-out potential (future opportunities to realize capital gains by merger, acquisition or public offering); and (e) environmental threat resistance (technology life cycle, barriers to competitive entry, insensitivity to business cycles and down-side risk protection). Across 35 years of research into investment selection, studies have confirmed the landscape of criteria, though generally market and competitive criteria are clustered together, leading to a broad consensus around four main categories (Smart, 1999), shown in Table 3, that can be summarized as (a) entrepreneur/team capabilities, (b) product/service attractiveness, (c) market/competitive conditions, and (d) potential returns if venture is successful. Of course, there are exceptions. For example, Hisrich and Jankowicz (1990) combined product/service and market/competition considerations into a single category and reported three categories: management, unique opportunity, and appropriate return. Some researchers in the 1990s began identifying how VCs' perspectives are part of the selection process, noting for example that investment decisions can be influenced by requirements of the VC firm and the characteristics of the deal (Hall & Hofer, 1993; Muzyka et al., 1996).

Despite broad agreement on selection criteria categories and years of research into specific criteria, VCs are not particularly satisfied with their ability to assess venture human factors in a manner that predicts venture performance (Graves & Ringuest, 2018). Opportunities

# Table 3

Four Factor Model of the Venture Capitalist Investment Decision (Smart, 1999)

Factor	Description
Entrepreneur(s)	<ul> <li>Characteristics of the people in the venture</li> <li>Ability to work hard</li> <li>Experience in target industry</li> <li>Education</li> </ul>
Product (or Service)	<ul> <li>Characteristics of the venture's product</li> <li>Technology</li> <li>Design</li> <li>Patents</li> </ul>
Market	<ul> <li>Factors external to the venture</li> <li>Industry attractiveness</li> <li>Industry trends</li> <li>Macroeconomic outlook</li> </ul>
Money	<ul> <li>Factors associated with the venture's financial position and outlook</li> <li>Capital requirements</li> <li>Cash flow, balance sheet, income statement</li> <li>Return: Payback/IRR/NPV</li> </ul>

to advance what is known about selection criteria undoubtedly exist in every category, but three considerations suggest it is particularly worthwhile to examine more closely the role that human factors play in investment selection decisions. First, a better understanding of the role of human factors in investment decisions and venture performance is likely to offer greater benefit than improvements in the other categories, given the reported primacy of founder/management team criteria in the selection process (e.g., Bachher & Guild, 1996; Cohen & Dean, 2005; De León & Guild, 2003; Drover et al., 2017; Ebbers & Wijnberg, 2012; Franke et al., 2008; Gorman & Sahlman, 1989; Kaplan et al., 2009; Ko & McKelvie, 2018; MacMillan et al., 1985; Muzyka et al., 1996; Poindexter, 1976; Sahlman, 1997; Shepherd, 1999; Silva, 2004; Smart, 1999; Spence, 1974; Tyebjee & Bruno, 1981; Wells, 1974). Second, there is broad agreement that assessing

founders is particularly difficult for VCs (Kozmetsky et al., 1985; Levie & Gimmon, 2008; Smart, 1999; Zacharakis & Meyer, 1998) and that more research is needed (Barney et al., 2001, p. 634; Levie & Gimmon, 2008; Riquelme & Watson, 2002, p. 395; Smart, 1999, p. 72). Third, although there have undoubtedly been evolutions in how products, markets, and finances are evaluated in entrepreneurial settings over the years, more than any other category, the role of founder characteristics have been directly and sharply influenced by the rise of the processoriented perspective of entrepreneurship.

# Founder Assessment When the Focus is Identification of Market Gap

Early investigation into the criteria used by professional investors to assess founders was built primarily on two foundational areas of entrepreneurship research: the searches for the entrepreneurial personality and for the drivers of venture performance. The study of entrepreneurs' personality has long been a central focus in the field of entrepreneurial research (Herron & Robinson, 1993), particularly among researchers with a psychology or behavioral science background. The focus is on stable psychological characteristics or *traits* associated with taking entrepreneurial actions. Researchers with an economics background generally turned to the economic notion of *human capital* – the knowledge, skills, and abilities residing within and used by individuals that drive improvements in cognitive ability, which leads to greater success in their pursuits (Becker, 1993; Schultz, 1961).

Venture capital investments come after the market gap has already been discovered, so investment selection is based on the premise that the founder is driving a straightforward process of exploitation. Selection is a matter of assessing for the personality, education, and work experience associated with building a venture to fill the identified market need, and both personality and human capital models have been the basis for research into investment selection.

The Entrepreneurial Personality. Personality's role in the modern era of entrepreneurship traces back to at least McClelland (1961), who highlights the association between achievement orientation and entrepreneurial behavior, since individuals who are high in need for achievement tend to exploit entrepreneurial opportunities (McClelland, 1965; Miner et al., 1989; Rauch & Frese, 2007) and perform better in entrepreneurial activities (Lee & Tsang, 2001). Since then a range of psychological traits has been explored for their relationship with entrepreneurial action, including but not limited to, self-efficacy (Bandura, 1977, 1986, 2012; Rauch & Frese, 2007), locus of control (Paulhus & Van Selst, 1990; Phares, 1976; Rauch & Frese, 2007, Rotter, 1966), narcissism (Campbell & Miller, 2011; Smith et al., 2016), Machiavellianism (Castille et al., 2017; Christie & Geis, 1970), psychopathy (Jonason & Jackson, 2016), attention deficit hyperactivity disorder (see, e.g., Wiklund et al., 2016), stress tolerance (Rauch & Frese, 2007) and desire for autonomy (Brandstätter, 1997; Cromie, 2000; Rauch & Frese, 2007; Shane, 2003; van Gelderen, 2016; van Gelderen & Jansen, 2006).

*Personality as Assessment Criterion.* Although such personality associations may be of some use to a potential investor, the personality traits associated with leading a venture to its full scale may not be the same ones that affect the decision to become an entrepreneur in the first place. By the time outside investors are involved, the raw market gap has already been identified, so if an entrepreneur's job is primarily spotting the market opportunity, then the emphasis of assessment falls naturally to founder traits associated with the ability to execute a business plan for monetizing it. For example, Robinson (1987) identified a number of selection criteria, the

three most important being expressly related to the founder: personal motivation, organizational/managerial skills, and executive managerial experience. From this perspective, entrepreneurship is essentially just a form of work, where the key input is labor hours (Lee, 2019) and the traits that matter are those that align with work characteristics (Holland, 1973; Vinchur et al., 1998). Researchers and professional investors viewing entrepreneurs through this frame are unlikely to raise factors such as creativity, problem solving, and leadership. Even recently, researchers are still using laundry lists of characteristics to reveal the importance of essentially the same set of desirable founder traits (e.g., Dhochak & Sharma, 2016).

Out of a general pursuit of the individual differences that are associated with entrepreneurial tendencies and performance arose trait-based inquiries into founder assessment for investment decision-making. For example, an individual's risk tolerance was central to entrepreneurship's first formal theory (Cantillon, 2010; see commentary in Palich & Bagby, 1995) and continues to be of interest (Bouchouicha & Vieider, 2019; Hvide & Panos, 2014; Jackson et al., 1972; Kim & Noh, 2016; Kirzner, 1973; Leibenstien, 1968; McGrath et al., 1992). The rationale is that entrepreneurship involves dealing with less structured situations embodying greater uncertainty (Bearse, 1982). Moreover, compared to managers in a hierarchy, entrepreneurs bear significantly more responsibility for the decisions they make (Gasse, 1982; Kilby, 1971; Knight, 1921). So assessing founders' risk tolerance prior to making an investment decision would be a logical extension of proven factors (Rauch & Frese, 2007; Stewart & Roth, 2004).

Other personality traits shown to be associated with venture performance are also natural criteria to consider in the investment selection process. A number of researchers have looked at

the relationship between entrepreneurship and the Big Five personality traits (namely, openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism; see Zhao et al., 2010, for a meta-analytic review). For example, Ciavarella et al (2004) found conscientiousness to be positively related to venture survival, while openness to experience was negatively related. Relationships with extraversion, neuroticism, and agreeableness wer not demonstrable. However, a consensus has not been reached. Some expect that entrepreneurs should tend to be more extraverted than non-entrepreneurs since extraverts should be more likely to exploit entrepreneurial opportunities (Cooper et al., 1988; Wooten et al., 1999) and should be better at acquiring and organizing resources (Burke et al., 2000). Taking a different research approach, Zhao and Seibert (2006) examined the effect of personality on entrepreneurial status based on 23 separate studies. Compared to managers, entrepreneurs scored higher on openness to experience, conscientiousness, and emotional stability (the positive end of the neuroticism scale) and lower on agreeableness. Extraversion again failed to demonstrate a significant effect.

Whereas some have found personality traits to be important predictors of venture performance (Caliendo & Kritikos, 2008; Hornaday & Aboud, 1971; Taormina & Lao, 2007; Zhao et al., 2010), others have found the effects of personality have been somewhat weak in explaining either venture success or investment selection (Baum et al., 2001; Begley & Boyd, 1987; Low & MacMillan, 1988). This may be at least in part driven by the fact that any meaningful differences apply first and foremost to the decision to pursue an entrepreneurial path (e.g., Ahmed, 1985; Begley & Boyd, 1987; Carland et al., 1995; Stewart & Roth, 2001; Stewart et al., 1999), leaving little variation in trait by the time outside investment is sought and thereby sapping the potential explanatory power of the trait. Meta-analyses have been employed with some success in detecting small but important relationships (Hunter & Schmidt, 2004) that might be missed in individual studies if they are statistically underpowered (Tett et al., 1991). Such studies have shown that there are small but significant differences between entrepreneurs and managers when it comes to the Big Five dimensions of Agreeableness, Conscientiousness, Neuroticism, Openness to Experience (Zhao & Seibert, 2006; there was no observable difference in Extraversion), as well as Achievement Orientation (Zhao & Seibert, 2006) and Risk-Taking (Stewart & Roth, 2001, 2004; Zhao & Seibert, 2006). Small effect sizes may account for the limited direct use of personality traits in investment selection, since for professional investors who may not be well-suited to making such assessments, the effort to make them may not be worth the incremental insight they might provide.

It may also be the case that whether and how traits matter may depend on the characteristics of the venture context (Sandberg & Hofer, 1987). For example, it appears that risk-taking may be a double-edged sword. It is positively related to the exploitation of entrepreneurial opportunities (Caliendo et al., 2009; Stewart & Roth, 2001) but negatively related to venture performance (Miner et al., 1989) due to an increased propensity to take unnecessary risks. Similarly, the desire for independence is positively related to the starting of new businesses (Hills & Welsch, 1986) but decreases their survival rate (Cooper et al., 1988). The drive to get out from someone else's control, it turns out, is apparently not related to identifying a promising opportunity or being able to capitalize on one. In summary, looking for trait predictors has its limitations.

Some researchers question the role of personality in entrepreneurship altogether. Gartner (1985), for example, argues that there is no single "type" of entrepreneur and that, as a group,

they are highly heterogeneous — a proposition supported by certain recent advances, for example, in the identification of three different types of entrepreneurial passion (Cardon et al., 2009, 2017; Mueller et al., 2017). If there is not a common profile, then it is unlikely that there would be common predictors. If there is not an "average entrepreneur" then the average personality profile cannot be determined. Shortcomings such as this have led some to conclude that personality-based descriptive studies have nothing to offer to entrepreneurship theory development (Low & McMillan, 1988, p. 148) and others to suggest that the search for effects of personality and other individual differences be discontinued altogether in entrepreneurship research (e.g., Aldrich et al., 2020).

**Human Capital.** The current study focuses on the role of *human factors* – the full range of individual differences and characteristics – in investment selection. In addition to personality – a subset of individual traits – a second theoretical basis for assessing human factors in investor selection research is economics construct of *human capital*. Studies looking at firm performance broadly (i.e., outside the entrepreneurial sphere) have showed human capital to be a direct antecedent of firm performance (e.g., Hitt et al., 2001; Jiang et al., 2012). Perhaps not surprisingly, then, the construct is widely employed in entrepreneurship research as well (Martin et al., 2013; Unger et al., 2011) and is associated with an individual's ability to establish a new venture and drive its early performance (Ardichvili et al., 2003; Chell, 2013; Colombo & Grilli, 2005; Davidsson & Honig, 2003; Dimov, 2010, 2017; Shane, 2000), so it is an avenue whose application to investment selection is more fitting than personality-based approaches .

Early stage ventures usually face tremendous uncertainty with relatively few tangible assets, making them a risky investment. As a result, the knowledge, skills, and abilities of the

venture team are often the main source of competitive advantage (Cohen & Levinthal, 1990; Colombo & Grilli, 2005; Cooper et al., 1994; Feeser & Willard, 1990, Haynes & Hillman, 2010). Founders play an especially pivotal role in venture success, integrating and coordinating the venture team (Colombo & Grilli, 2010), making key capital and technology decisions (Porter & Ketels, 2003), and driving product and process innovation (Casson, 2005; De Cock et al., 2020; Teece & Pisano, 1994) to name just a few of their unique and vital contributions. As a result, entrepreneurship scholars have often turned to human capital theory as a precursor to venture success (Bae et al., 2014; Davidsson & Honig, 2003; Lee, 2019; Martin et al., 2013; Unger et al., 2011).

To the extent that the entrepreneur's primary role is the spotting of market gaps, ventures exist to exploit the opportunities that entrepreneurs have already discovered, and an entrepreneur's human capital can serve this exploitation in at least three ways set forth by Cooper et al. (1994). First, it can offset insufficient financial resources which constrain many new ventures (Chandler & Hanks, 1998; Kato et al., 2015). Second, it can aid the development of social capital (Mosey & Wright, 2007) and skills (Baron & Markman, 2000) which are vital to venture success (Semrau & Werner, 2014). Third, it shapes venture strategy, which in turn is associated with venture success (Baum et al., 2001; Knight, 2001). Because it is widely seen as a useful predictor of venture performance, founder human capital is seen as an important criterion for the investment selection process (Baum & Silverman, 2004; MacMillan et al., 1987).

*Human Capital as Assessment Criteria.* The human capital construct has been widely adopted among entrepreneurship researchers, including those examining VC investment selection. When evaluating the prospective performance of ventures under consideration for

investment, VCs most often cite human capital as a criterion they consider (Zacharakis & Meyer, 2000). When individual investors gather into firms, they develop firm-wide selection processes, and these, too, place a heavy emphasis on the human capital of the founders (Streletzki & Schulte, 2013b). In the realm of founder characteristics influencing VC investment decisions, human capital plays a vital part in Smart's (1999) four-factor model (Table 3) which he crafted from an integration of prior research (i.e., Dubini, 1989; Kozmetsky et al., 1985; Roure & Keeley, 1990; MacMillan et al., 1985). Scholarship has widely supported the view that founders' education and experience are the single biggest factor in investment decisions (Baum & Silverman, 2004; Beckman et al., 2007; Kaplan et al., 2009; Zacharakis & Meyer, 2000), and scholarly attention on human capital as a selection criteria centers on education and experience (Streletzki & Schulte, 2013a).

*Limitations of human capital as criteria.* Advances notwithstanding, human capital is a fairly narrow view of founder contribution to and value creation in new ventures and its limitations are becoming increasingly evident. It is, according to Becker (1993), an account of past individual investments (e.g., education and experience) and of individual resources that can be drawn upon (e.g., the ability and willingness to work long hours). However, the theory does not specify the mechanism through with human capital is translated into venture performance. Several mechanisms have been proffered, including path dependence, imperfect strategic factor markets, and appropriability (Crook et al., 2011), but such mechanisms leave the entrepreneur as just a pawn in a market or process which does little to advance an understanding of the human factors that actually drive venture success (Lee, 2019; Unger et al., 2011).

Insufficient understanding of the mechanisms by which entrepreneurs shape the success of the ventures they lead limits how much human capital, an antecedent, can tell us about venture performance, a distal consequence. This inherently limits the value that human capital has as selection criteria. For example, Streletzki and Schulte (2013b) show that, in terms of exit performance, founder teams without technically experienced members outperform founder teams that include at least one founder with technical working experience — a somewhat counterintuitive finding. However, founders are doing much more than working on the technology, and without a behavioral mechanism model to test, it is impossible to interpret this result. The mechanisms linking human capital to venture performance have the potential to explain such counterintuitive results by surfacing the confounds arising from multiple simultaneous chains of causality. For example, Bertoni and colleagues (2019) identify that human capital has both a wealth and a capability effect. Each is part of a larger mechanism linking human capital to venture performance as a minor actor in the venture's story.

Some researchers respond to the limitations of the human capital view in a different way, arguing that human factors are a red herring, and that the business rather than the founder is really more important to success (Kaplan et al., 2009). While the consensus view that human factors are paramount certainly might be wrong, it might also simply be that the human capital construct and its application are insufficient for advancing the science of founder selection criteria.

*Moving Beyond Human Capital.* Founder contributions to their ventures go well beyond those arising from their accumulated experience. As the process-oriented view of

entrepreneurship gained influence, founder generative capabilities gained recognition. For example, Muzyka et al. (1996) found that the most important in VCs' evaluations of venture proposals are: (a) the leadership potential of the lead entrepreneur (a creation criterion); (b) the leadership potential of the management team (a creation criteria); and (c) the team's industry expertise (a discovery criteria). In addition to past accomplishments, factors affecting how the venture team would shape the opportunity and its exploitation have become an increasingly common part of the discussion (e.g., Tzabbar & Margolis, 2017), with some arguing outright for a more forward-looking process-oriented approach to understanding venture performance (Appelhoff et al., 2016).

Some researchers, sticking close to economic theory, see the mismatch between human capital theory and investor practice as evidence that investors are either making suboptimal decisions (e.g., Levie & Gimmon, 2008) or suffer from disparities between espoused theories and theories in use (e.g., Anderson, 1997; Argyris & Schon, 1974; Savaya & Gardner, 2012). Others (e.g., Dimov, 2017; Marvel et al., 2016), call for a broad reconsideration of how human capital theory is used in entrepreneurship research.

*Human Capital Outcomes.* The widespread use of the human capital construct has anchored inquiry into the human factors driving venture performance and therefore selection criteria. However, as an anchor, it has also tied the field to its relatively narrow view of the human factors driving venture performance. As researchers began to take a more processoriented view of entrepreneurship and to look for the founder characteristics that would be associated with successfully shaping and exploiting opportunities, human capital anchored them in place. For example, consider Zacharakis and Meyer's (2000) inclusion of "leadership ability"

in their criteria set. As phrased, it is a prospective ability consistent with a process-oriented view of entrepreneurship where founders shape the raw market gap into a business opportunity (i.e., they could have used "leadership experience" which would have been more consistent with the resource accumulation mindset of human capital). However, rather than tapping into the leadership literature to define it as a prospective ability, they describe it as "average number of years of management experience" (p. 336) for the venture team. The label suggests a recognition that the prospective ability was potentially important, but the metric assigned was of the established resource-based view variety. Moreover, among leadership experts, there are important differences between leadership and management (Kniffin et al., 2020; Kotter, 1991), and still further, an association between years of experience and leadership ability is, at best, questionable (for example, see Edelman & van Knippenberg, 2018; Fiedler, 1970, 1972).

Others (e.g., Marvel et al., 2016) make a distinction first raised by Unger et al. (2011) and label the generative human factors (i.e., knowledge, skills, and abilities) arising from the accumulation of human capital as "Human Capital Outcomes," which affords room to push the boundaries about what is known about the founder characteristics that affect venture performance and investment selection while still honoring the role of human capital's more narrow definition. This distinction exemplifies the transition from the broad and readily measurable criteria associated with exploiting a well-defined market gap to prospective criteria that are associated with creating and shaping a high-value and robust business opportunity.

Dimov (2017) argues that, "the time has come to acknowledge the limits of the capital analogy and consider that the human application deals with different dimensions" (p. 223) and makes a case for revising the use of human capital in entrepreneurship towards a more

qualitative and configurational frame, one that would appreciate individually complex cases while also affording analysis across cases. However, it is important to note that the discussion he proposes is still framed by and labelled as "human capital" even though the indicators he refers to include examples of prospective, generative, and opportunity creation-oriented factors that have stretched the envelope of human capital. That the criteria used to evaluate founders expanded beyond the strict application of the original human capital theory to include criteria that are more prospective and behavioral was a signal that investors and scholars were giving more consideration to the mechanisms underlying entrepreneurial activity — what founders do and how they do it. The next section describes such advances in greater detail.

#### Founder Assessment When the Entrepreneurial Process Matters

With interest growing in how entrepreneurs nurture and develop opportunities, researchers have increasingly been examining traits tied to the mechanisms of venture performance (Ferreira et al., 2019). Whereas early investigations into personality focused on who discovers opportunities and decides to make a go at exploiting them, a second avenue of investigation opened up as some began to look for the personality traits that indicate how entrepreneurs go about exploiting opportunities – turning an identified market gap into a profitable business. Viewed through this lens, the founder is not just a venture manager, but is the leader of the effort to shape the opportunity while at the same time leading the development of the organization and technology that will exploit it. Founders have a much more expansive, generative role when viewed through this lens, and as this view gained support, broader questions were asked about how founders shape not only venture performance, but also the opportunity itself. An implication of this point of view is that receiving outside investment marks an escalation of the entrepreneurial process, not an end to it.

Building on what has been learned about the association between pre-entry founder characteristics and venture success, there has been growing interest in the characteristics shaping founder behavior once the venture is underway (Caliendo & Kritikos, 2012). Though growing, compared to the vast literature on pre-entry characteristics like personality and human capital, the amount of research into post-entry behaviors and characteristics is relatively small (Lee, 2019), which is noteworthy given the frequency with which "the ability to work long hours" is cited as a selection criterion and in light of the tremendous amount of work that founders do (Wincent & Örtqvist, 2009). So, it is acknowledged that founders have to spend a lot of time working on the venture, but there is relatively little known about what they are actually doing during that time. Moreover, in this process-oriented view of entrepreneurship, the founder's work contribution might be the primary driver of venture performance (Davidsson & Honig, 2003). So it seems reasonable to expect that founder characteristics affecting the execution of entrepreneurial tasks would be important drivers of venture performance and thereby investor selection.

This more forward-looking and behavioral view of founder contribution has been gaining ground. Unlike the asset-like criterion discussed in the previous section that is essentially an accounting of what the founder has done previously, this process-oriented view stimulates thinking about criteria relating to what the founder will do in the future. For example, proactivity, the desire to shape one's environment (Crant, 1996) through initiative-taking behavior (Fay & Frese, 2001), has been argued by Rauch and Frese (2007) to be vital for

entrepreneurs. Certainly, the evidence for these can and should be drawn from the founder's past, but the characteristics themselves are about what lies ahead. Similarly, in contrast to prior studies highlighting some interpretation of human capital, Carlos Nunes et al. (2014) find that VCs are looking for venture teams that are (a) hard working, (b) good at delegating, (c) think strategically and have a vision for the venture, and (d) understand the technology and market. Contrast these traits with resources such as years of experience or years of education, which also are evidenced from history, but which do not imply anything about founder behavior in the execution of entrepreneurial tasks. Venture capitalists seem to learn to appreciate a forward-looking behavioral assessment of founders, since Franke et al. (2006) have shown that while inexperienced VCs tend to focus on the historical qualifications of individual members of the venture team, experienced VCs are more interested in team cohesion – a factor critical to future team performance.

**Operational Perspective of Entrepreneurship.** Increasingly researchers are integrating theories that span entrepreneurship, management, and behavioral science to delve into the behaviors and mechanisms of entrepreneurial action. For example, De Cock et al. (2020) use the lean start-up method (LSM) as a frame for understanding the operational contributions of founders. Founders employing LSM will establish a rapid learning cycle by entering their markets with a minimally viable product, fail cheaply and quickly, and revise their offerings and business models across many small iterations (Blank, 2013; Ries, 2011; Vogel, 2017). LSM emphasizes experimentation as a way to manage the uncertainty and complexity that founders face. When ventures rapidly prototype and deploy offers it shapes the investment decision process in at least two ways. First, it affords ventures the chance to score early "wins" which

helps establish the viability of the venture. Second, LSM's well-organized and -conducted market tests demonstrate vital market development skills which professional investors tend to value highly. Although De Cock et al. (2020) do not go into detail about the management team and skills required to implement LSM, their research is a clear step towards an operational assessment of founders and the mechanisms underlying success. LSM and other operational viewpoints are beginning to highlight founder contributions in new ways that will point the way to a better understanding of the founder criteria that investors should apply when selecting investments.

*Traits Associated with Post-Entry Behavior.* In the past decade, scholars have been advancing theories with a greater focus on what entrepreneurs are doing in the course of leading the ventures they launch (Ferreira et al., 2019), though the roots of such operational inquiry go back much further. Schumpeter (1934) describes entrepreneurs as creative, which points to a trait – creativity – that not only helps entrepreneurs in the discovery of opportunities but also is vital to the problem-solving required to lead ventures in the exploitation of them (Ensley et al., 2002). Creativity's close conceptual cousin "innovativeness" (e.g., Csikszentmihalyi, 1996; Drucker, 1985, 1998, 2002, 2014) also has implications for both the discovery and creation views (Heunks, 1998; Rauch & Frese, 2007) being shown to be related to venture success (Baum & Silverman, 2004).

The shift in view is noticeable across many traits: in the discovery view, traits are discussed in terms of how they affect an entrepreneur's ability to spot an opportunity and willingness to pursue its exploitation, but in the creation view they are discussed in terms of how they affect the exploitation and shaping of the opportunity. Confidence, which helps a person

decide to become an entrepreneur (Cardon & Kirk, 2015) can also be discussed in terms of its effect on a founder's capacity to make risky decisions throughout a venture's life (Cardon & Kirk, 2015; Sirmon et al., 2011). An entrepreneur's social capital, a common discovery-oriented criterion, takes on additional meaning once the venture is underway, affecting the founder's ability to attract talent and other resources and driving venture success (Mosey & Wright, 2007). While persistence (Bandura, 1991) is an asset in entrepreneurship generally (Audia et al. 2000; Cardon & Kirk, 2015; Poon et al., 2006; Shane et al., 2003; Utsch et al., 1999), the challenge of overcoming operational and strategic obstacles once a venture is funded gives persistent founders an edge (Carter et al., 1996; Markman et al., 2005; Timmons & Spinelli, 2009; Wu & Dagher, 2007). Self-efficacy (Bandura, 1991), a potential driver of persistence (Multon & Brown, 1991; Shane et al., 2003), not also has a broad role in entrepreneurship (De Noble et al., 1999), but plays a particularly important part in the operational challenges of shaping an opportunity over months or years (Cardon & Kirk, 2015; Shane et al., 2003).

Besides seeing old traits in a new light, the process-oriented view draws attention to additional traits whose importance manifests only once the venture is underway. An important example of this is a person's orientation toward self-development and learning (Chell, 2013). Human capital criteria capture learning achievements, but that is not the same thing (Crook et al., 2011). Founders are continuously encountering new information about the market, technology, and potential customers — information that should shape the offering, the organization, and their own understanding of opportunity (Collins, 2009; Morris et al., 2005; Shir et al., 2019; Vera & Rodriguez-Lopez, 2004). So self-development and learning are vital to LSM and venture performance in general. Some VCs place a priority on mentoring the venture management teams in their portfolio (Baum & Silverman, 2004; MacMillan et al., 1985, 1987; Maxwell et al., 2011; Mitteness et al., 2012; Sapienza, 1992), but even those that do not should appreciate that founders open to self-development and learning will be easier to work with and more successful (Baum & Silverman, 2004; Mitteness et al., 2012). An indication of the value that comes from the learning associated with operational experience is evidence that founders with at least one start up in their history are more successful than first-timers (Box et al., 1994; Florin, 2005; Lerner et al., 1997) and that VCs weigh such experience heavily in their investment decisionmaking (Streletzki & Schulte, 2013b).

Regardless of whether a market gap was discovered by a single person, most contemporary ventures are brought to fruition by two or more founders (Carland et al., 1984; Wasserman, 2012), and researchers are identifying the characteristics of teams and team members that are associated with venture success (Franke et al., 2008; Zhou & Rosini, 2015). For example, teams high in the personality trait of openness to experience are more able to question existing assumptions about the opportunity, develop new perspectives, and modify what they are doing (Judge et al., 2002). Recently, such openness-oriented teams have been shown to be associated with more creative and unconventional organizational cultures (Zhou et al., 2015).

Entrepreneurship was once seen as a largely unknowable phenomenon, driven by random events and idiosyncratic individuals (Cardon et al., 2005). Early research added evidence and rigor to the traits commonly held to be true about entrepreneurs, that they are rugged individualists able to spot gaps in the market that no one else sees, and take the risks to pursue them (Kirzner, 1973; Leibenstien, 1968; McGrath et al., 1992). In his synthesis of findings arising from close work with eight entrepreneurs, Kets de Vries (1985) describes how these bold

adventurers can have a 'dark side' to their personalities, encompassing a need for control, a sense of distrust, and a desire for applause. It is a view still held by some; however, the spread of startup communities and the rise of venture capital have made this an increasingly outdated view (Cardon et al., 2005). As Gimeno et al. (1997) point out, today's entrepreneurs benefit from experience managing managers – hardly the description of garage tinkerers. But, in fact, this is not an entirely new portrait of the entrepreneur. Baumol (1968, 1993) describes founders as both identifiers of market gaps and the leaders who put those ideas into practice. Entrepreneurs who progress beyond the gap-identification stage and into creation are leaders, especially if they have reached the point of seeking outside funding. Researchers have begun viewing founders as leaders, though the surface of this new characterization is just being scratched. It is at this point not clear whether or how professional investors are using leadership criteria as a basis for assessment when making investment decisions. The current study addresses this issue by asking professional investors about who they assess on a venture management team when making an investment decision and what criteria do they use to evaluate them.

# **Chapter 3: Method**

Qualitative case studies often require the researcher to interact with the people and processes associated with the phenomena under investigation. While there may be instances where researchers are able to observe target phenomena from a secret observation post, most case study research requires at a minimum that the people involved be informed of the study. Therefore, researchers are inherently becoming part of the system under study, and there are a range of roles the researcher can play in the course of gathering and analyzing case studies. For example, Stake (1995) identifies five potential roles for case study researchers: teacher, advocate, evaluator, biographer, and interpreter. In some roles, such as Stake's advocate, the researcher may be somewhat directly involved in the phenomena under observation; in others, the researcher aims to remain an impartial observer. In the proposed study, the researcher aims to maintain primarily an observer role – one akin to Stake's *teacher*, a role geared toward promoting the study reader's "natural human inclination to become educated" (Stake, 1995, p. 92). While the case interview approach to gathering data necessarily involves the researcher's direct interaction with participants, the goal is to gather data, interpret it, and report it in as objective of a manner as possible.

## **Grounded Theory**

Complementing the case study method is grounded theory (Glaser & Strauss, 2017), a systematic and inductive approach to understanding complex social processes (Glaser, 1978). Its strength is that affords the researchers and participants that are closest to a phenomenon to tailor how it is studied (Corley, 2015). This "up close" view promotes the emergence of theories grounded directly from data (Simmons, 2011). As such, grounded theory is well-suited for

answering important questions about theoretical contributions like what's new? And so what? (Gligor et al., 2016; Whetten, 1989). It provides the researcher both with flexibility to be creative and essential guardrails (Walsh et al., 2015). So, it is an apt approach for investigating contemporary investor perspectives on founder selection criteria.

Employing grounded theory entails the use of systematic procedures and techniques for collecting and analyzing qualitative data such as behaviors and field data in the service of developing theories and hypotheses that can be verified (Mello & Flint, 2009). Data are collected, typically in the form of interviews, and analyzed iteratively, allowing subsequent data collection to be shaped by experience and lessons learned. The back-and-forth between data collection and analysis includes substantive coding, which establish theoretical constructs.

## **Participants**

Venture capitalists are experienced business professionals who make capital investments in companies in exchange for an equity ownership stake. Because such investments are inherently high risk, venture capital is usually managed through pooling of capital and associated investments. That is, a venture fund is raised from a pool of investors, and the fund then invests in a pool of companies. Venture capitalists manage this process, from the raising of the fund to the selection of companies to receive investment and ultimately to the liquidation of the investment in order to repay investors.

Participants are professional investors with significant experience evaluating early-stage ventures seeking external funding. General Partners at VC firms were targeted for inclusion in the sample. They run their VC firms and make investment decisions, and it is their criteria for selection that is of central interest. Because a convenience sampling process was employed, other

investor types have also been included in the sample, including Venture Partners, who share some of the responsibilities of GPs but on a deal-by-deal basis rather than firm-wide, independent investors, and "Angel" seed fund Partners.

### Sample

Convenience sampling has been the most common sampling strategy in venture capital studies because of the challenge of accessing this population (Smart, 1998). Given the large population of hard-to-reach and often socially and professionally connected potential participants, "snowball" sampling is generally considered to be the most appropriate, despite the threats of sampling bias (Babbie, 2016; Goodman, 1961; Rubin & Babbie; 2016). In fact, Stake argues that "sampling by attributes should not be the highest priority. Balance and variety are important; opportunity to learn is of primary importance" (1995, p.6).

Such convenience sampling is consistent with the purposive "theoretical" sampling commonly used in grounded theory (Robson, 2002) in which, "the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" (Glaser, 1978, p. 36). Both approaches to sampling lead to an emergent rather than intentional distribution of participants, which is appropriate for grounded theory since, "we are not comparing populations, we are comparing ideational characteristics of groups that in turn delineate behavioral and attitudinal patterns" (p. 44). Moreover, regardless of where data collection starts, the iteration between data collection and theory-building steers the sample toward the data needed.

Requests for interviews were sent to a total of 72 prospective participants who were identified with the help of the Center for Entrepreneurship at the Lundquist College of Business

58

at the University of Oregon (33), a business school professor at the Wharton School at the University of Pennsylvania (25), a professor at Claremont Graduate University (2), the researcher's personal network (4), and by asking participants to identify additional prospective interviewees (8). The target number of participants was 20, which is at the high end of sample sizes for similar research studies (Smart, 1999). A total of 16 interviews are included in the analysis, indicating a response rate of 22.2%. To simplify scheduling and language issues, only investors located in the United States were contacted.

### **Research Design Overview**

This research employs qualitative data collection and analysis described in more detail in the following sections. First, the method of data collection is described, including descriptions of the trial interviews that refined and validated the interview guide. Primary data collection was accomplished using web-based video conferences between the investigator and participants. The rationale for choosing interviews is provided, along with short descriptions of the logistics involved in arranging the interviews and collecting documentation and other supplementary information. Then, the analysis and synthesis is discussed.

In contrast to many other research methods, the qualitative analysis of interview responses is an iterative process often involving recursively moving from data collection to interpretation and analysis before returning to data collection and moving on to the next case. Decisions to modify the research process are judgment calls and never taken lightly. For example, in the course of interviewing participants, fruitful avenues of investigation varied by participant and the path of questioning correspondingly varied. This is consistent with qualitative research where the researcher may feel that some data are not contributing to the process as

59

expected and so should be excluded from the analysis (Roberts et al., 2014). Sticking blindly to language developed before interviews are underway does not serve the goal of understanding the phenomenon under investigation.

### **Process Overview**

Interaction with participants began with the cultivation of participation. Potential participants were contacted by email to describe the research project and their potential involvement. In some cases, an initial email exchange about the purpose and requirements of the study were conducted to secure participation. Once participation was agreed upon, the participant was emailed a link to an online consent form and the videoconference interview was scheduled. Following the interviews, participants received transcriptions of their interviews for validation. In one case, an interviewe asked for verification of specific phrases in transcript, which was validated by sharing a video clip of the relevant part of the interview. At the completion of the project, participants will receive an executive summary of the project and its findings and may request an additional short summary of how their responses compare to the sample.

### **Data-Collection Methods**

Grounded theory can be used on quantitative data, qualitative data, or a combination of both (Glaser, 1978), but like most grounded theory research (Robson, 2002), the study discussed herein relies on participant interviews. Data was collected via videoconference interviews. A videoconference interview guide was piloted with knowledgeable colleagues prior to administering it with participants.

**Videoconference Interview.** Interviews were open-ended conversations centered on the research questions. The aim is to minimize the influence of researcher preconceptions and focus

instead on what is important to the participant (Glaser, 2002; Simmons, 2011). Interviews began with a verbal introduction, time and date "stamp," a reminder of consent to participate, and a restatement of their consent to allow the interview to be recorded. The researcher reminded each participant of the context. Next, starting with the primary research questions, participants were asked questions intended to surface their general attitude toward human factors in selection, including what characteristics they look for, their confidence in their assessments, and the challenges they experience when evaluating human factors. Consistent with grounded theory development, individual interviews varied according to the topics raised by the interviewee and, in some cases, previous interviewees.

Interviews were conducted using a web-based video conferencing system and were recorded, allowing the researcher to focus on managing the discussion rather than on taking notes. Within 48 hours of conducting the interview, the researcher transcribed and annotated the videoconference recording (transcripts are available upon request). Following data transcription, participants were emailed the transcriptions and given the chance to review their interview data for accuracy (Thomas & Magilvy, 2011). Transcripts were then loaded into a qualitative data analysis software application (NVivo 12) for coding and theme identification.

**Piloting.** Pilot interviews with business professionals were conducted to refine the administrative procedures and interview guide. Specifically, two interviews with knowledgeable non-investors known to the researcher were conducted as a preliminary test of parts of the interview guide and general administrative procedures.

**Document Collection and Supplementary Data.** For contextualization, wherever possible documents such as firm web pages, fund prospectuses, and mission statements were

reviewed, along with participants' resumes and professional social media (e.g., LinkedIn pages). Online data sources Crunchbase and Pitchbook were used to compile additional background information on interviewees and their firms.

**Participation Incentives.** Participants are wealthy business experts, so monetary incentives were deemed unlikely to have much of a motivational effect. Instead, interviewees will receive an executive summary of the research findings and the option to receive a tailored description of how their responses compare to overall results. This intended to provide real value to the interviewees and is a common form of incentivization in market research and other professional data gathering processes.

### Data Analysis

Interviews were transcribed using Microsoft's Word word processing application. Transcription elements were organized into topics and themes using NVivo 12 qualiative software program and Braun and Clarke's (2006) six-phase thematic analysis. The NVivo 12 software was an integral research tool used for storing and recording this analysis, capturing the emerging themes, and historical log of progress completed.

**NVivo Background.** NVivo 12 is a qualitative research software application from Lumivero (formerly QSR International) and is one of the top analytical applications used by qualitative researchers. Australian computer scientist Tom Richards developed the precursor to NVivo (Non-numerical Unstructured Data Indexing, Searching and Theorizing; NUD\*IST) in 1981 to support the research of social scientist Lyn Richards. The pair formed QSR International in 1995 and released the first version of NVivo in 1999. **Data Entry and Management**. Transcription of interviews was completed by the researcher personally. Transcribing interviews afforded the chance to reflect on the interview and catch subtleties that may have been missed during the interview itself. The researcher created a Word file for each interview. All files are password protected and saved on the researcher's desktop computer to which only he has access.

**Analysis**. Analysis of interviews was an ongoing process and began with the transcription of interviews and the digitalization of interview notes. Conducting interviews and preliminary interpretations iteratively is desirable in qualitative research because it enables the researcher to make adjustments to the study as it moves along (Merriam, 1998) through consistent reflection on the data and attention to what the data are indicating (Glesne, 2016). Throughout the study, the researcher recorded process notes that are analytical and conceptual (versus descriptive; Strauss & Corbin, 1998) to provide an avenue for continuous reflection on the research process and the data it is generating (Emerson et al., 1995; Glaser & Strauss, 2017).

The study followed a multiple case study design where the data is initially analyzed caseby-case using thematic and content analysis; cross-case analysis then follows later (Stake, 2006). In other words, interviews, observations, supporting documents, and field notes were evaluated after each interview. Upon completion of data gathering, the themes and content insights at the case level were compared and contrasted to initiate cross-case analysis. For the thematic analysis, the researcher followed Braun and Clarke's (2006) steps: (1) data familiarization, (2) code generation, (3) data immersion, (4) theme revision, (5) theme definition and labelling, and (6) report writing. Stake (2006) describes three different cross case procedures for a multiple case study. For this qualitative study, the researcher followed a merging findings procedure. According to Stake, the researcher whose priority is to merge the findings across cases should use this particular method. This method also allows the researcher to make generalizations about the cases.

**Coding.** Grounded theory research calls for going through the data line-by-line, coding the data in a manner that is relevant and works (Glaser, 1978, p. 46). A codebook is an output not an input of the process, since at the outset researchers do not know what they are coding for. Since coding is an emergent process, researchers generally do their own coding based on what the data seems to be revealing and what it might indicate (Glaser, 1978). For example, a code used in this study was, "Talent Acquisition" that captured instances of investors citing the ability of founders to attract the right talent to their ventures as an important consideration.

**Sorting**. Later, similar codes are clustered together to form categories. For example, "Talent Acquisition" was clustered with codes such as "Articulate" and "Great Salesperson" to form the category, "Persuasive." Sorting and categorizing helps the research elevate out of a "tree-level" understanding of the phenomenon and instead see the "forest." It integrates the data into a higher level of aggregation that reveals a more coherent set of factors that scaffold an explanatory theory. Once sorting is complete, the categories outline the theory that has emerged from the data – a theory that is explanatory, grounded in data, and appropriate for implementation among practitioners.

### **Ethical Considerations**

Researchers employing qualitative case study methods carry a heightened burden with respect to the anticipation of ethical issues that may arise during the study (Creswell, 2009). This research called for participants to trust the investigator and the integrity of the research. As a

64

result, qualitative case study researchers have a particularly clear obligation to respect the rights, needs, values, and desires of the participants.

Target participants are generally well-educated, savvy business professionals experienced in delicate and confidential negotiations, so it is unlikely that they will inadvertently reveal any deleterious information. Even so, steps were taken to ensure the confidentiality of data collected. Participant names and responses will not be disseminated. Except where participants refer the researcher to potential interviewees, participants do not know the names of other respondents.

Participant privacy will be protected in all papers, books, talks, posts, or stories resulting from this study. Participant responses have been associated with an alias. All company and founder names we discuss will be anonymized in all papers, books, talks, posts, or stories resulting from this study. A key file associating participant names, aliases, and the actual names of companies or founders we discuss with their anonymized names will be maintained as a password-protected file on the researcher's password-protected computer and will not be shared with other researchers.

There are no identifiable risks associated with participating in this study, and precautions were taken to ensure that participants feel safe and comfortable. To this end, all participants will be treated in accordance to the ethical guidelines of the American Psychological Association and the Claremont Graduate University Institutional Review Board (CGU IRB). In accordance with CGU IRB protocols, all participants were provided with background information and signed an online consent form.

There was the possibility that professional investors could have been somewhat reluctant to discuss the personal biases that may shape the criteria they apply to selection; however,

participants were business veterans experienced in difficult, sometimes even confrontational discussions and negotiations. So, it seems unlikely that the interview process generated even the slightest discomfort. Moreover, it was communicated to participants that they have the freedom to withdraw from the study at any time. Participants are extremely busy, wealthy individuals, who are experienced at protecting their time, and it is expected that they would have freely used this option had the circumstance arisen.

### **Issues of Trustworthiness**

Whereas the trustworthiness of quantitative research can be assessed through wellestablished statistical measures of validity and reliability, the qualitative researcher must establish trustworthiness by providing evidence that descriptions and analysis reflect the reality of the underlying phenomena and participants and must employ a variety of validation techniques to build credibility and rigor (Creswell & Miller, 2000). For this study, credibility is established using a range of strategies, including triangulation, researcher reflexivity, thick rich description, and negative examples.

### **Researcher Background and Potential Biases**

The researcher's experience as a management consultant provides an extensive background in both the operational and analytical aspects of this research project. Coordinating and conducting interviews with experts was a regular part of the researcher's professional experience. Furthermore, analytically sound consulting is hypothesis-driven and shares many of the characteristics of academic research analytics. The researcher also gained no small amount of familiarity with the venture capital process during the eighteen months he served as project manager for the development of Harvard Business School's Venture Capital and Private Equity Simulation (VCPES; Rhodes-Kropf & Burbank, 2015). In the simulation, teams of students in a variety of Harvard Business School programs raise funds, search for companies to potentially invest in, complete deals, and manage their portfolios over several simulated years. Managing the development of VCPES required the researcher to learn about these and other aspects of the venture capital industry. All told, the researcher's professional experience should afford ready rapport with participants and an effective implementation of data gathering and analysis.

The advantages of the researcher's background are at least partially counterbalanced by potential biases, which the researcher monitored throughout the study. The same similarity of educational and practical business background shared between the researcher and participants that supports rapport-building could also have served as a blinder in some instances. Other social scientists less inculcated in business culture and venture capital in particular might pick up on nuances that the researcher could have overlooked. So, the researcher maintained vigilance while interviewing participants and transcribing interview notes. Questionable observations and interpretations were checked with the participant to ensure validity.

### **Overall Quality Assurance**

Stake (1995) has proposed a twenty-item checklist (p.131) to assess the quality of case study reports, and it serves as a guide for both reporting individual case studies and the overall project report.

- 1. Is the report easy to read?
- 2. Does it fit together, each sentence contributing to the whole?
- 3. Does the report have a conceptual structure (for example, themes or issues?)
- 4. Are its issues developed in a serious and scholarly way?

- 5. Is the case adequately defined?
- 6. Is there a sense of story to the presentation?
- 7. Is the reader provided with some vicarious experience?
- 8. Have quotations been used effectively?
- 9. Are headings, figures, artifacts, appendixes, and indexes used effectively?
- 10. Was it edited well, then again with a last-minute polish?
- 11. Has the writer made sound assertions, neither over-nor under-interpreting?
- 12. Has adequate attention been paid to various contexts?
- 13. Were sufficient raw data presented?
- 14. Were the data resources well-chosen and in sufficient number?
- 15. Do observations and interpretations appear to have been triangulated?
- 16. Are the role and point of view of the researcher nicely apparent?
- 17. Is the nature of the intended audience apparent?
- 18. Is empathy shown for all sides?
- 19. Are personal intentions examined?
- 20. Does it appear that individuals were put at risk?

### Credibility

Throughout the study, steps have been taken to promote accurate recording of

be assessed, and their subjective experiences in the evaluation of founders during an investment decision.

participants' beliefs about founder selection criteria, their perceptions of how these criteria can

### Participant Checks

Conversation transcripts were sent to participants for review and comment. At the conclusion of the project, participants will receive an executive summary of findings for the entire project as well as a comparison of their responses to the principle findings.

### Negative Examples

Rather than eliminating instances that fail to fit with the predominant pattern of data, negative examples will be treated as valuable learning opportunities and presented prominently.

### Dependability

The overall process and specific procedures employed in data collection and interpretation are documented and made available for review. Importing the information into NVivo 12, contributes to the security, reliability, transferability, and overall dependability of the data.

### Audit Trail

Raw data including transcripts will be made available to other researchers upon publication of the research findings. To maintain confidentiality, information that could potentially identify specific participants has been coded to prevent specific attribution. The code key along with the identifiable information will stored in a single file to be shared only on a very limited basis (i.e., in the event that knowledge of participant identity is warranted) and only after appropriate precautionary measures are taken (e.g., a non-disclosure agreement is signed)

### Transferability

The sampling described in the research methods section guided the interview list toward a diverse set of investors, spanning investment priorities, geographies, industry concentrations, and the like. The goal is to identify the human factors that practitioners are applying in their decision making. The full extent of use these factors is likely to require subsequent investigation. Moreover, the phenomenon under investigation is specific to third-party investments in early-stage ventures, and generalizability to other contexts is not a primary concern. That said, there are several related contexts where the research findings might apply. For example, international VCs often learn from the practices of the US VC community, and many are educated in US or US-style business schools. So, criteria uncovered in the proposed research may have application in international VC communities. Additionally, though private equity investors evaluate more established businesses, the criteria uncovered in the present research may well be factors in contemporary private equity assessment of management teams. To lay the foundation for any possible transferability, the researcher will strive to record "thick descriptions" (Denzin, 2001) that are both broad and detailed. Such descriptions will provide future researchers with an understanding of the research process and case context that is both holistic and descriptively rich.

### **Chapter 4: Results**

The purpose of this qualitative study is to explore the perceptions of venture capitalists as it relates to who in management they assess in the investment selection process and what criteria is most important in assessing venture management. The selection criteria used by venture capitalists to make investment decisions has been a line of inquiry for half a century (Ács & Audretsch, 2006; Barkham, 1994; Brandstätter, 2011; Roper, 1998; Unger et al., 2011; Van Ness & Seifert, 2016; Wells, 1974; Zhao & Seibert, 2006), and so has been a part of the very formalization of the field of entrepreneurship (Aldrich, 2012; Davidsson, 2016, 2017). Despite decades of research into the criteria used by venture capitalists to select ventures for investment, satisfaction with identified criteria and models remains low (Graves & Ringuest, 2018). Given the regularity with which venture management is reported to be the primary driver of selection, the lack of clear progress can be at least partly attributed to the lack of progress in understanding the "people" characteristics that matter. While organizational scientists have made significant strides in unpacking team and leadership effectiveness, the discussion of venture selection criteria seems mired in historically bound debates centered on human capital, such as whether education background or experience is more important (Streletzki & Schulte, 2013b). Together, this suggests that how human factors shape investment decisions remains a topic both worthy of research and essential to investors.

The following chapter provides a review of the findings of this study to include a description of the sample, data and analysis results, and a presentation of the themes identified for each research question. Qualitative data were collected from 16 professional investors in early-stage ventures so that thematic analysis of their responses could be conducted to identify

the major themes associated with each research question. The chapter concludes with a discussion of the overall findings.

### **Description of the Sample**

All study participants were conveniently sampled for inclusion in this research project. Before data collection, IRB approval was received to ensure that ethical practices when dealing with human subjects were followed. Seventy-two prospective participants were identified for recruitment into the study with the help of several universities, the researcher's network, and through snowball sampling once interviews began. A total of 16 early-stage venture investors were identified and recruited into the study, indicating a recruitment rate of 22%. All semistructured interviews were conducted virtually with each participant. All participants in the study consented to participation before conducting each interview.

As illustrated in Table 4, study participants were predominantly male (69%) in the partner role (44%). Most participants of this study earned a master's degree (69%) or higher, suggesting a well-educated sample. Participants' investment industries varied significantly, with 31% investing in information technology, 19% in healthcare, and 13% and multiple industries. Unfortunately, a total of 38% of the participants did not provide their industry of investment.

### Table 4

Participant Pseudonyms, Gender, Role, Education, and Primary Industry

Pseudonym	Gender	Role	Education	Primary Industry
VC001	F	HR Operating Partner	MBA BBA	N/A

VC002	М	EVP, Venture Acceleration & Investments	MS, Urban Planning, BS, Natural Sciences	Healthcare
VC003	Μ	Independent Venture Investor	N/A	Information Technology
VC004	F	Managing Director	EMBA, BS, Biomedical Engineering	Information Technology
VC005	М	General Partner	MBA, BBA	Healthcare
VC006	Μ	Managing Director	MBA, BBA, Finance	N/A
VC007	Μ	Investment Team Member	BBA, Finance	N/A
VC008	F	Founding Partner	MBA, MPA, BA	Mulitple
VC009	Μ	Independent Venture Investor	BS, Math/CIS	Mulitple
VC010	Μ	Managing Director	MBA, MS, Engineering, BS, Engineering	N/A
VC011	Μ	Founder	JD, MPhil, Criminology AB, Computer Music	Information Technology
VC012	F	Partner	MBA, BA	N/A
VC013	F	Venture Partner	BA	N/A
VC014	Μ	Operating Partner	JD, BS	Healthcare
VC015	Μ	Independent Venture Investor	MBA, BS	Information Technology
VC016	Μ	General Partner	BS, Design	Information Technology

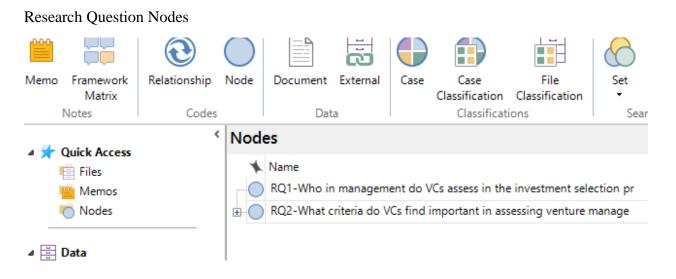
*Note*. Executive Vice President (EVP), Human Resource (HR), Masters in Business Administration (MBA), Bachelors in Business Administration (BBA), Masters of Science (MS), Bachelors of Science (BS), Executive Masters in Business Administration (EMBA), Masters of Public Administration (MPA), Bachelors of Arts (BA), Computer Information Systems (CIS), Juris Doctor (JD), Masters of Philosophy (MPhil), Bachelors of Arts in Criminal Justice (AB).

### **Data Analysis Results**

The following section provides a detailed account of how the data was processed and analyzed to identify emergent themes to answer each research question. Therefore, the following section describes how (a) the interviews were transcribed, (b) initial codes identified, (c) the initial codes were grouped into categories or emergent themes, and (d) the final themes were identified and defined. This detailed account aims to ensure transparency regarding how the data was analyzed to bolster the findings' trustworthiness.

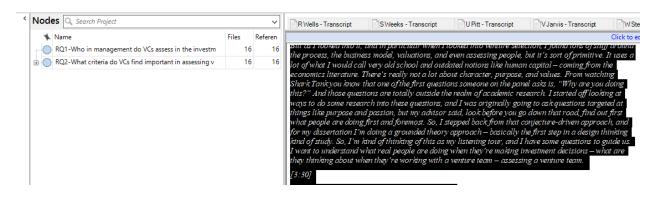
Braun and Clarke's (2006) six-phase thematic analysis was used to analyze the qualitative data collected in this study. More specifically, once participants' responses were transcribed using Microsoft Word, I read and re-read participants' interviews for familiarity while taking notes (Phase 1). I then uploaded the transcripts into NVivo 12 to help with the organization and analysis of the qualitative data. All analysis was manually conducted using the NVivo 12 program. Namely, the program was used to help with organizing the data and presenting the findings in this chapter. Once all participant transcripts were uploaded into the program, I created individual nodes for the two research questions guiding this study, as illustrated in Figure 2. Once the nodes were created for each research question, I then coded or assigned each of the participants' transcripts to the research questions, as illustrated in Figure 3. Once all 16 participants' transcripts were assigned to each interview question, I then began to read the transcripts in the NVivo 12 program to identify initial codes (Phase 2) in participants responses. While identifying initial codes, I continued to take notes while reading participants' responses in conjunction with each of the research questions. Once an initial theme was identified, I created a subnode under the corresponding research question and coded or assigned the participant's response that represented the initial code identified to the new subnode, as Illustrated in Figure 4.

## Figure 2



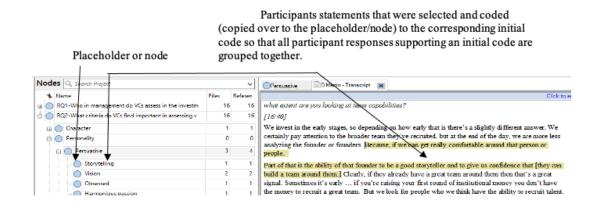
# Figure 3

Transcripts Coded to Each Research Question



### Figure 4

Participant Responses Assigned to Initial Codes



All participants' transcripts were reviewed, and initial codes were generated for each. As just illustrated in Figure 4, participants' responses supporting each identified initial code were assigned to that initial code so that all participants' responses identified as evidence for an initial code were grouped together in one place. Upon completion of initial coding, the third phase of Braun and Clarke's (2006) six-phase thematic analysis began, wherein I began to review the initial codes against the transcripts and each other to identify emergent themes (Phase 3). Therefore, I identified emergent themes based on the initial codes created using inductive reasoning while reviewing participants' interview responses and in conjunction with the research questions, as illustrated in Figure 5. Once emergent themes were identified, I then entered Phase 4 of the six-phase analysis and compared the themes against each other and participants' transcripts to identify any potential redundancies and eliminate ambiguity between the identified emergent themes. Once all themes were identified, and initial codes were categorized underneath each, I entered Phase 5 of Braun and Clarke's (2006) six-phase thematic analysis is to report the

### Figure 5

Initial Codes are Grouped into Emergent Themes

#### **Emergent Theme Initial codes** Nodes Q Search Project Referen \* Name Files Relationship with team 11 22 ÷-( Relationship with the VC 6 8 **⊡**-( Relationship with cofounders 3 5 5 Trust and like the founder 12 ٠ Founders reputation 1 1 Personality 16 72 Persuasive 15 57 È 8 Vision 🔸 10 10 Articulate 🔺 8 Talent acquisition 8 14 Great salesperson 6 10 2 Storytelling 3 1 Obsessed 1 C-----4 **c**

research findings. Therefore, I present the research findings in this chapter and the codebook in the Appendix.

The following section provides a review of the research findings. More specifically, the thematic findings are presented for each research question, and project maps and tables are used to display the findings. Once each research question is answered, and emerging themes are

identified, the chapter will conclude with a summary of the chapter and a forecast of what to expect in Chapter 5, the discussion.

### Research Question 1: Who in Management do VCs Assess in the Investment Selection Process?

The study participants stated that they predominantly assessed founders and leaders of the venture management teams. More specifically, 90% of the participants in the study mentioned assessing the startup teams as an important factor, while all participants suggested that the assessment of the founder was essential in their decision-making process. Participants' responses supporting the assessment of the team and startup founders are described in Table 5. *Research Question 2: What Criteria do VCs Find Important in Assessing Venture Management?* 

Participants' responses suggested five major themes regarding the criteria they felt were most important when assessing venture management. Namely, soft and hard skills, personality, character, and mindset or mental attitude were all important criteria in investor assessment of founders and management in early-stage ventures seeking funding. For this study, soft skills refer to the skills that founders or management team members develop that are broadly applicable across a wide range of contexts, including elements such as effective communication, teamwork, attributions of leadership, adaptability, and motivation. Hard skills are defined in the current study as those that are learned through experience, education, or training and are generally more context-specific. All study participants suggested that soft skills (n = 16; 100%) were essential when assessing venture management and making investment decisions. Personality (n = 15; 94%) was the second most important factor or criterion mentioned by participants, followed by

# Table 5

Participant Responses Regarding Who is Assessed in Management

Theme	Participants excerpt			
Founder	We certainly pay attention to the broader team they've recruited, but at the end of the day, we are more less analyzing the founder or founders (VC005).			
	So, it's important that the entrepreneur/startup team has the stamina to see the venture through to completion. Therefore, the entrepreneur's "Why?" is important (VC007).			
	What we have – and I can go into more specifics – but we try to rank these items out of 5 immediately after having the call with the founder. One of those is the team or the founder overall. (VC0012).			
	You're always going to consider the founder (VC008).			
	It is imperative that the founder is assessed. Their decisions affect the entire company (VC001).			
	Assessing the entrepreneur or startup founder is essential in our decision- making process VC014.			
Team	The risks associated with any team (e.g., disputes within the team) can arise, which would affect venture performance. Therefore it is important to assess the team and team managers' dynamics (VC007).			
	If you think about how a venture capitalist makes a decision, it's really (especially early stage): team, market, timing, and product (VC003).			
	We certainly pay attention to the broader team they've recruited (VC005).			
	So, I will start by saying if you had asked me for the first 10 or 15 years of my venture career what are my investment criteria, I would have said team, team, team. That's it, I have grown slightly more sophisticated, and now it is team, team, TAM, and team. Total Addressable Market matters (VC011).			
	So, it really highlighted the importance of the founding team and [has reinforced] where we want to focus our [pre-deal] conversation. Because a lot of these companies are so early, we know that the business model is going to evolve, it's going to change – maybe the product is going to change (VC012).			
	We are cognizant that a lot of startups fail because of HR and team issues and stuff – not just is your technology great – there are a lot of factors that go into it (VC008).			

character (n = 14; 88%). Finally, hard skills (n = 12; 67%) and mindset or mental attitude (n = 10; 63%) were identified as important. Each of these major themes and their sub-themes are discussed below.

### Soft Skills

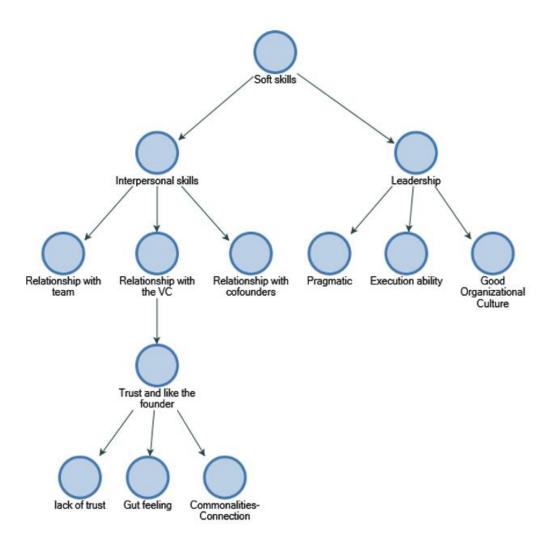
Participants of the study suggested interpersonal skills and leadership attributes as the major soft skills of interest to investors when selecting early-stage ventures to fund. Namely, all study participants mentioned interpersonal skills and leadership attributes or abilities as the most important criteria when assessing venture management soft skills. The NVivo 12 application allows the user to display a simple hierarchy among the previously specified themes and codes. In the case of soft skills, that hierarchy is shown in Figure 6. The following section reviews the two soft skills identified by investors participating in this study as important factors in the decision-making process.

**Interpersonal skills.** Interpersonal skills are "skills which one *needs* to communicate effectively with another person or a group of people" (Almahry et al., 2018, p. 3). Some research suggests that interpersonal skills consist of social insights or emotional intelligence, relationship building, often evident in professional networking, and communication skills of all types, including persuasion and negotiation skills (Reed et al., 2019). The following section reviews the findings relating to the interpersonal skills or factors investors suggest are important in their investment decision-making. Namely, an assessment of founders' interpersonal skills as evidenced by their relationship with their team (n = 11; 69%), the investor (n = 7; 44%), and co-founders (n = 3; 19%).

80

# Figure 6

Identified Soft Skills



*Relationship with Team*. Participants suggested that the founders' relationship with their team was a significant indicator of the overall viability of the venture. For example, VC0010 stated:

But later people realized through experience that the three things that really matter was the team, the team, and the team. Especially in a startup, I could tell that the individuals that we selected for early-stage [investment], they had to have a special character that really mattered for how to get through a startup.

Participants suggested that a more cohesive relationship between the founder and their

team suggested that the founder was a strong leader and was able to recruit the right talent to

help him or her advance their vision. For example, VC002 stated:

the understanding that is part of that is that they need to build a team - that they're going to have to create a climate of trust, of engagement, and of continuous improvement in the organization. So, that means they are going to have to recognize very early on that they can't do it all themselves, that they're going to need the help of others, and that they need to be thoughtful about how they go about acquiring those other human resources and empowering them to fulfill the roles and responsibilities they've identified – and hold them accountable for the authority that they've been given and the responsibilities within the business.

Further, VC009 stated:

One of the reasons we network in groups is because we want to see the team operate as a team. When the team can't operate as a team, then that's a signal. If you see a founder who's being very directive to their team, you already have a problem. When you see a team that has all the technical people standing in the corner not talking to each other, clearly - culturally - they haven't figured out what the game is that they're playing. So, you're looking for that team dynamics and how that works.

*Relationship with the VC*. Participants also suggested the importance of the founder's relationship with the investor (n = 6; 38%). The founder had to have good interpersonal skills, personality, and character to bolster the likelihood that the investor would like them, trust them, and want to have a long-term relationship with them. Investors suggested the importance of feeling a connection or finding commonalities (n = 3; 19%) with the founder and the importance of having a gut feeling (n = 2; 13%) that let them know this founder and venture were the right

choice. For example, VC003 stated, "that's a big, weighty question, you've got to like somebody, you've got to feel high levels of trust." Further, VC009 stated:

so, how does the investing process generate trust? And then, how does trust get translated into your mental model that you're trying to do it? Virtuousness and humility and all these things are important, but if I don't feel it, then I don't feel it, and I'm not investing.

Regarding the importance of commonalities which are conveyed through effective

interpersonal skills, VC015 stated:

as people first, and then as purveyors of this business or this opportunity second - because for me, if I can't get a connection with them as a person and understand what drives them as a person, then I don't feel real comfortable putting my money or my organization's money behind it.

In addition, VC004 stated, "you can look at their experience, but some of this comes down to just spending a lot of time talking to them and gut feeling."

*Relationship with the Co-founder*. Participants also suggested the importance of assessing the relationship between the founder and cofounder (n = 3; 19%). Although participants mentioned cofounders to a lesser extent, participant responses regarding the founder-cofounder relationship suggested the importance of the interpersonal relationship fostered by

interpersonal skills. For example, VC016 stated:

particularly with cofounders – it's like, those two work well together. They balance each other. [One's] like this; [One's] like this. What they're trying to do fits their skill set and background, the market they're going into – yeah, they're an investment.

Further, one participant suggested the importance of assessing the founder based on their

relationship with other cofounders is linked to perceptions of trustworthiness. VC003 stated,

"...and then there's the founder's relationship with other venture partners and the relationships

they build. That level of relationship-building and the high-level – is this somebody I trust?"

Finally, VC011 suggested that the founders' relationship with his cofounders was an important signal of whether the investment would work. Namely, VC011 stated, "human dynamics are how these things work, and I want to spend time with you in the context of your cofounders."

Leadership Attributes. Participants also suggested the importance of attributes of leadership. Although the term leadership was only used explicitly by a handful of participants, many of the descriptions of what participants were assessing encapsulated a good leader's actions or thought processes, as characterized by Kotter (1991) – that is, founders who are good at coping with rapid change. Numerous participant comments were initially coded as "pragmatic" or "execution ability" and are clearly aspects of the soft skills that some investors are looking for. For example, VC015 describes a CEO of a portfolio company as someone who "built solid relationships with everybody on the team, and everyone – even the people he had to let go – loved him." Sometimes, a venture can outgrow members of the team, and the CEO would sit them down for a frank conversation about the situation, then "help them find the right positions for them outside the company." VC015 never explicitly referred to "leadership" as a founder characteristics, but this participant's statement illustrates Kotter's leader who has learned how to cope with change. The example demonstrates a 'pragmatic' approach to leading the venture and was originally coded thusly. However, during the integration of themes it stood out as an example of Kotter's leadership task of aligning people — specifically, an exhibition of taking action when circumstances have created misalignment. Across the original codings of 'pragmatic,' 'execution ability,' and 'good organizational culture,' participant responses suggested the importance of Kotter's (1991) leadership tasks: setting direction, aligning people, providing motivation, and developing a culture of leadership. For example, VC012 stated:

The first one is the ability to recruit/hire/lead a team. A founder is nothing without their team, and are they able to understand what their core strengths are and their core weaknesses and hire accordingly – and do people want to work for this person? You generally have a sense when you're talking to someone whether or not – even if they're charismatic or not, that [charisma] we found is super irrelevant – it's more just, can this person run a team of people, because ultimately that's what they'll have to do. Or do they know how to hire the right people?

### Similarly, VC008 stated:

the company scaled from 22 to 50 or 60 people in like six months. So, you see that kind of thing. So, we're looking for people who are open to it. Not everyone takes the same path with that - it's more, are you doing something around that? Are you investing in yourself as a founder and your team's growth? Because we think that de-risks some of the stuff that you see happen in startups.

### In addition, VC002 stated:

that means they are going to have to recognize very early on that they can't do it all themselves, that they're going to need the help of others, and that they need to be thoughtful about how they go about acquiring those other human resources and empowering them to fulfill the roles and responsibilities they've identified – and hold them accountable for the authority that they've been given and the responsibilities within the business.

### Finally, VC004 stated:

Culture starts from the top. It starts from the very start of the company. So, it's a critical component. If you get the right leadership there – forget about us, the investors can't create culture. It has to come from folks building the company, and good culture leads to good outcomes. So, it's all tied together.

Perhaps as a result of the unique circumstances of an early-stage venture, compared to

those of the established organizations that Kotter's (1991) guidance was primarily aimed at,

some participant comments reflect that venture founders have to be more hands-on than Kotter's

leaders. In contrast to the examples above, some participants spoke of a relatively tactical

pragmatism and ability to execute. Again, these soft skills were only mentioned a couple of times

in participants' responses to the interview questions. However, participants implied the importance of both of these soft skills by mentioning aspects of pragmatism and the need for founders to be able to act at the right time and when it was necessary. Pragmatic is when a founder "deals with things sensibly and realistically in a way that is based on practical rather than theoretical considerations" (Hasa, 2016, p. 1). Leaders must be pragmatic and have to have the ability to make decisions and execute them. For example, VC015 stated:

The ability to actually execute - get shit done - that was actually on my due diligence checklist – 'gets shit done' - can they do that? GSD even if the opportunity itself didn't bear out. They showed that ability to execute. Those foundational things: being able to get the business off the ground, get the people around them to focus, and then execute to it were the key elements.

Regarding the importance of founders being able to execute, VC0013 stated:

The other really big piece around entrepreneurship is people who are really good executors. Being just an idea person is not enough. In entrepreneurship, you have nobody else. It's your execution. It's your track record of showing that you can have a vision, and you can make it happen.

Summary. Participants' responses suggested that they sought to assess founders'

interpersonal skills by observing their interactions in relationships with their teams, themselves (i.e., the participant), and cofounders. Participants' responses suggested that the founders' relationship with team members, the participant, and cofounders significantly influenced the participant's perceptions of their ability to trust the founder, which appeared to be partially based on the participants' perceptions of the commonalities or connections they felt when assessing the founder. Participants of the study also suggested the importance of having a "gut feeling" regarding founder stability. Select leadership attributes were amont the soft skills identified by participants that significantly influenced their investment decision-making. The study

participants referenced a number of leadership attributes consistent with Kotter's (1991) model: setting direction, aligning and motivating people, and coping with change. However, possibly reflecting the 'all hands on deck' circumstances typical of early-stage ventures, some participants were looking for founders with a pragmatic outlook and an ability to execute operationally.

### Personality

As illustrated in Figure 7, participants in the study suggested that persistence (n = 12; 75%) and persuasiveness (n = 8; 50%) were the two major personality traits they were most interested in when assessing a founder. When assessing a founder's persistence, study participants suggested the importance of assessing a founder's motivations, hardiness through the founders' past experiences, and adaptiveness. When assessing persuasiveness, participants suggested that founders needed to be great salespersons and articulate to share their vision and recruit talent. The following section reviews each of these sub-themes along with participants' excerpts providing support for the identified theme and subthemes.

**Persistence.** Participants of the study emphasized the difficulty of being a startup founder. For example, VC003 stated:

Building a business from 0 to something is really hard. Insanely difficult. Not just because the domain is hard, the science is hard, the technology is hard, or the people are hard. All of that's true. But it is emotionally taxing and draining on founders in those early days. Because on any given day or hour it could be the greatest thing since the ball point pen, or it could be everything coming down in pieces. That kind of almost elite athlete mentality – the ability to suffer the slings and arrows – to be in it, at the highs and the lows.

### Similarly, VC005 stated:

The one thing that I'll say is that it's well-documented that being a startup founder is physically taxing ... relatively unhealthy. I think that's true. We have to make sure that

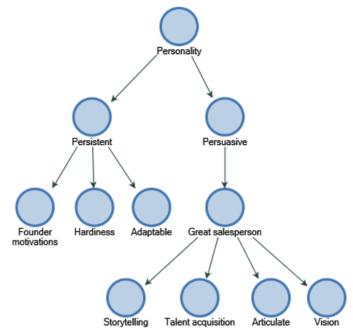
founders have the resources to maintain some type of healthy physical and mental balance.

Because the participants of this study's main focus as an investor is to identify those founders and early-stage ventures that can survive the first five years of existence, persistence (n = 12; 75%) was suggested to be a highly sought-after personality trait in startup founders. For example, VC009 stated, "we know that grit matters - that persistence matters. We know that when people hit a wall, and we know that when startups get weird - people will give up when they don't need to give up." Similarly, VC0013 stated:

The resilience piece. The resiliency of having to overcome really difficult things and being excited by the lack of structure and the likelihood of failure. There's a certain energy that you get from people that they're going to be OK in the boat in the ocean amongst the storms.

### Figure 7

Theme and Subthemes of Personality



*Founder Motivation*. As a result, participants of the study suggested that assessing startup founders' motivations (n = 8; 50%), hardiness (n = 4; 25%), and adaptability (n = 6; 38%) are essential. More specifically, participants suggested that founders' motivations significantly influence the likelihood that they will persist and is, therefore, a signal to the participant of venture's worthiness as an investment. Participants described the right motivations and the

wrong ones. For example, VC003 stated:

Because that is so hard, a commitment to the domain – somebody who is absolutely passionate about the problem they're trying to solve or the people they're trying to help – is critical. Because, as humans, if we're passionate about the people we're trying to help, that will outlast the choices or technical decisions we make to try to get there – because all the decisions you make as a startup founder in the first few years will be wrong, regardless of whether you've done it 9 times or not. So, if you're not committed to the people you want to help, there's nothing to keep you connected to it.

### In addition, VC011 stated:

Usually, you're trying to solve a problem that you've seen. You've found a hard problem, or you want to make some aspect of the planet better, or whatever. That doesn't mean you're doing something mission driven. It just means, like, oh, I'm really annoyed at how the dev-ops world works, and I think that git-hub is doing a bad job, and I want to create a better git-hub. Okay, great! That's interesting! Or, I'm trying to help small businesses be more efficient. Great! All those things make sense.

### Therefore, VC001 stated:

So, we look for people who have that passion. We're not looking for somebody who's just like, 'I'm going to do an app, and it's something that's quick and easy to do. You can get it up and running within two months, and you're making money off ad sales.' That doesn't interest us. They're passionate, there's purpose. There is a 'I'm out to prove them wrong. We are going to do something different. We're going to do it. We're going to release the antiquated way of doing things.' Kind of like the apple commercial where they came in and they threw the hammer. It's that type of energy and determination.

Regarding the wrong motivations, participants of the study suggested that money as a

motivator to start a venture is a bad signal suggesting that an investor should not invest. For

### example, VC0014 stated:

Those things hold consistent throughout the due diligence process, but you'll have more quantitative data to help assess that. You'll have things like salaries, and things like, 'hey, what do you want to pay yourself after you close this round?' Very blank slate questions. There are a few great ways to respond. One is, 'what should somebody like me get paid? What's the benchmark?' Or, they'll have a number, and you'll go, 'how did you get to that number?' And you'll have people say, 'well, I need to support my wife's veterinary practice and I need \$250K in the first year to make her capital contribution for it.' And then you're like, 'yeah, that's a little scary.'

### In addition, VC002 stated:

So it's a test question I have. When I talk to entrepreneurship classes I always ask, 'Who here wants to get rich?' If they raise their hands, then I'll say, 'Then I'll never invest in you.' And it's a shock because they're like, 'Wait a minute, aren't you in business to make money?' And I'll say, 'No. I'm in business to build great companies.' If you build a great company the exit takes care of itself. So, if your objective is to get rich, go get a job on Wall Street and be a trader. If you want to take other people's money to build a company, but your objective is to get rich, that tells me that you may be an 'ends justify the means kind of person' and I'm not interested in that.

### Similarly, VC012 stated:

One of the other ones that we ditched is whether the founder is "scrappy" and a good steward of capital. I think we got rid of that one because we kind of put it in the bucket of raising capital. It's definitely something you want to be aware of – we've turned down deals because we've seen that the founder is paying themselves some exorbitant sum of money, and it's a pre-seed [stage] and doesn't make sense.

Hardiness. Regarding hardiness, participants of the study suggested it was imperative to

assess startup founders' ability to withstand the challenges and difficulties associated with

growing a startup venture. For example, VC013 stated:

It's all about error in entrepreneurship. The honest truth is you fail forward, right? You run a set of experiments to try and figure out what works versus you steward a ship of what's proven to work. So, your ability to handle failure and drive insight from experimentation is most probably the single most important – not characteristic of

somebody – but task that you have to do. You have to see where things are working and then pour fuel on the fire – amongst a whole bunch of stuff that isn't working.

In addition, VC009 stated:

But when it comes down to it, the question is can these people be put under stress and have friendships endure through the stress? When they get pissed off at each other, do they have a resolution mechanism, or not? So, I recommend to people that they do startup weekends early with their team, and usually there's an 'oh shit' moment somewhere around 8:00 o'clock on Saturday night when they discover that the elephant that they're trying to create is not going to happen, and they have to build this toenail of a business model instead of the whole thing. So, then a whole bunch of stuff has to be thrown away, and they have to have this 'come to Jesus' moment and pick what they're going to do - and many teams don't survive that moment.

So, doing that early - it seems like a win, and building those relationships where they can survive that - and I cannot tell you a test that will tell me whether this group of people likes each other enough to get pissed off at each other and still be willing to have a conversation in the morning about what they were mad about. You're the professional at this, is there a test that will tell me that?

Finally, one participant suggested exploring a founder's childhood to identify if a founder

has the grit to endure the trials and tribulations associated with growing a startup venture. VC003

### stated:

people lie, so, it's really hard to know, and you have to look at past experience to see if this person has done something really hard in their life. Do they have experiences where it could be easier to quit than to persevere? Have they built that muscle memory? And sometimes it's deeply personal – they struggled as a kid, they had challenges in their home life, whatever – that stuff is great fodder for entrepreneurs, but it's also an anchor.

Adaptability. Finally, regarding adaptability, study participants pointed out that early-

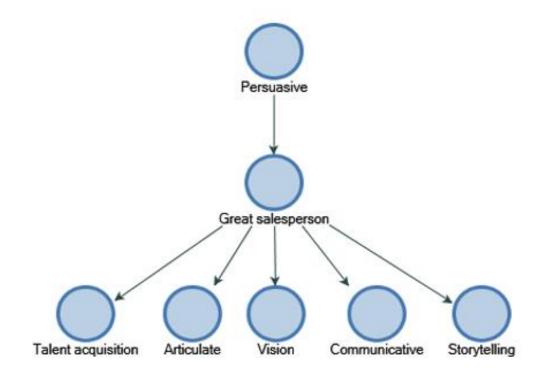
stage ventures frequently fail. Therefore, they suggested that entrepreneurs of new ventures needed to be able to adapt quickly to their environment and challenges. For example, VC006 stated, " most businesses, especially early-stage ones, will pivot multiple times, and that pivot could take them into really unusual places." Similarly, VC015 stated:

they went from almost going bust because the original vision got waylaid to a \$6 billion exit, and the reason they were to do that is because they had the wherewithal and the ability to redirect on the fly when that initial opportunity got taken out from under them. And that ability of a management team to be humble, in terms of saying, 'whatever happened, we got a problem here. We got to fix it. And we're not married to the original idea. Let's figure out what we can do. Let's be fleet of foot in terms of what we can do to carry this venture forward in an optimal way, and then execute to *that* opportunity.'

**Persuasiveness**. As illustrated in Figure 8, participants suggested that founders needed to persuasive (n = 8; 50%) and therefore great salespersons to include being communicative (n = 4; 25%), articulate (n = 7; 44%), able to sell their vision (n = 8; 50%), recruit talent (n = 8; 50%), and be a good storyteller (n = 2; 13%). Table 6 presents participants' responses supporting each subtheme.

### Figure 8

Theme and Subthemes of Persuasiveness



# Table 6

Participant Responses Supporting the Persuasiveness Theme and Subthemes

Subtheme	Subthemes	Participants excerpt
Great Salesperson	Articulate	For me, if I can find somebody who has a secret and has a way to communicate it that makes sense to actual human beings, then that feels like a winner at the early stage. (VC003).
		I'd say, in 9 out of 10 meetings, within the first 15 minutes, you have determined that this is not a person you will back. Now, why is that? The vast majority of the time, it is because they are not sufficiently articulate about the thing they are building to be a successful entrepreneur (VC011).
		What she didn't understand or succinctly articulate was who [the customer is] – Is it a working business professional? Someone who would otherwise be going to a salon. Is it that they don't go to a salon? How much are they spending? What's their income? What's their age bracket? Do they prefer the salon experience, or do they not? So, there were all these other things that we were unable to succinctly put together, and it was unclear to us what this offering ultimately was (VC012).
		I usually don't care about the product – the product is going to satisfy the customers in space, and I want to understand why the customers in space are going in that direction. So, I like to see people who can articulate that very, very well (VC016).
	Communicative	Asking real questions of entrepreneurs who are building things – entrepreneurs you want to back will happily embrace any question you ask. (VC011).
		We're going to date, and then we're going to get married. And if you don't like me in the dating, you're going to really not like me in the marriage. So, we better have a communication here (VC004).

Storyteller	We look for people who we think have the ability to recruit talent. A lot of that is storytelling and the ability to get people to buy into a vision (VC005).
Vision	If they can communicate the bigger vision, and a nuance to that is if they can communicate that clearly and succinctly. So, having a bigger vision as opposed to: we're solving for X right now. It's about how does that selling into X the open doors to do Y and Z ten years from now. (VC012).
	So, I tend to lean towards the founders that have that vision of what the future's going to be – maybe they can articulate it, but they usually can't. They're usually babbling but trying to find a way to describe what the future's going to be. The ones that are there are the ones that I get excited about (VC016)
	You could look at any of the big flameouts - whether it be Travis Kalanick at Uber, or Adam Neumann at WeWork - they had other problems as a business, but they raised a lot of money. They sold the vision (VC015).
	But in an ideal world, you're really trying to holistically check for the three things that they're going to have to do with your money. [1] Money begets money, so they need to attract more money to the business - whether that be revenue or debt or more equity financing. [2] Then you establish vision, product vision, and company vision (VC014).
Talent acquisition	The reality is that great entrepreneurs need to convince people to do all sorts of irrational things. They need to convince people to leave very steady and thoughtful jobs to come to join them in doing something risky and unlikely. (VC011).
	There is an ability to attract talent, and there is an ability to make talent decisions that are going to be hard. One, you have to inspire, and there are going to be people you inspire that are going to be 10X smarter than you. That could be 10X older than you. But having the respect and also inspiring them with your vision and your belief and

getting them to drink that Kool-Aid as well is another attribute (VC001). The first one is the ability to recruit / hire / lead a team. A founder is nothing without their team (VC012). In fact, often, it's about that entrepreneur's ability to hire people who will help lead – even if they're still the CEO – the team in place. VC013.

#### Character

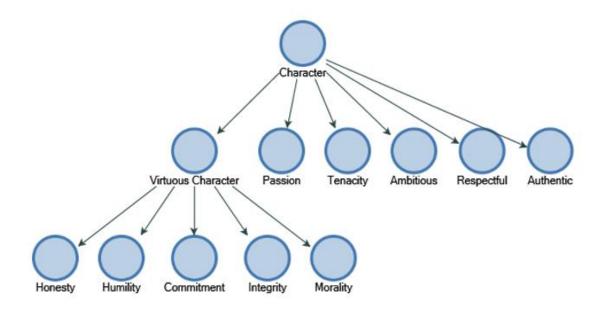
Study participants suggested that character was essential when assessing a founder of an early-stage venture. As illustrated in Figure 9, participants suggested that virtuous character (n = 9; 56%), including honesty (n = 4; 25%), humility (n = 4; 25%), commitment (n = 3; 19%), integrity (n = 1; 6%) and morality (n = 1; 6%) were desired character traits in startup founders. In addition, several participants suggested passion (n = 7; 44%) was an important factor, along with tenacity (n = 3; 19%), ambition (n = 3; 19%), respectfulness (n = 3; 19%), and authenticity (n = 2; 13%). Table 7 provides excerpts of participants' responses supporting each identified subtheme and overall theme.

#### Hard Skills

Participants of the study suggested that hard skills were also important to assess in a founder when deciding whether to invest in an early-stage venture. As illustrated in Figure 10, participants suggested that entrepreneurial experience relating to a startup founder's previous startup ventures (n = 7; 44%) was an important signal. In addition, participants suggested the importance of founders establishing a good product-market fit (n = 6; 38%), having domain expertise (n = 5; 31%), incentive alignment (n = 2; 13%), and a founder's ability to scale the company (n = 1; 6%) were considered important hard skills by founders. However, the degree to

# Figure 9

Theme and Subthemes of Character



# Table 7

Participant Responses Supporting the Character Theme and Subthemes

Subtheme	Subthemes	Participants excerpt
Virtuous	Honesty	The second version is someone answering the question
Character		intentionally lying. Intentionally saying a thing they don't
		know. Because there are unknowable things. I actually try
		to get to points where you say, I don't know the answer to
		that. I try to get to questions that are unknowable to figure
		out, are you someone who acknowledges you don't know.
		The people who never get to that point are terrible. Those
		are terrible entrepreneurs. And there are a lot of them –
		who think that it is a sign of weakness to say, oh, I actually
		don't know the answer to that. I won't back you if you
		don't. (VC011).
		So, first and foremost thing we probably are most
		interested in is intellectual honesty - that there is a

	willingness to be transparent and be open, to be able to acknowledge early when things aren't working, when things are working, and not to assume when things are working that they've got everything figured out. (VC002).
	You learn a lot about someone just by interacting with them, which means – are they trying to pull the wool over your eyes? Are they too clever? Are they really clear and transparent? (VC006).
	I got two different variants, and one had this other entity on it all of a sudden – it was a large holder, and I'm like, 'what is this?' And they were like, 'oh, well, you weren't supposed to see that.' I'm like, 'well, what's going on?' 'Well, we're exploring a potential merger.' And I'm like, 'well, that seems material!' (VC012).
Humility	There are also attributes of vulnerability and humbleness. You have entrepreneurs who have a total ego and swagger, and they should because there has to be confidence and conviction. At the same time, they need to accept help, and they need to surround themselves with people who can help them. (VC001).
	Virtuousness and humility and all these things are important, but if I don't feel it, then I don't feel it, and I'm not investing. (VC009).
Commitment	I think it's commitment to the people that you're trying to help, rather than to the problem or to the space. Most businesses, especially early-stage ones, will pivot multiple times, and that pivot could take them into really unusual places. If somebody is committed to a certain type of people they want to help, then that is bigger than the solution. (VC003).
Integrity	I personally value integrity, morality, humility - all those personal attributes - honesty and everything that fundamentally form you as a person (VC015).

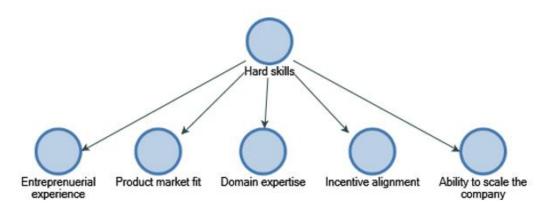
	Morality	I personally value integrity, morality, humility - all those personal attributes (VC015).
Passion		Being an entrepreneur is very hard, right? It really is a unique thing, and I'm looking for passion and conviction (VC013).
		What's your big secret? That gives me insight into whether they're passionate about building a business and making money, or about helping people. It tells me how much they truly know about the problems that these people could have, that they're trying to help (VC003).
		So, it's not a specific passion to solve an industry or solve a particular problem or [develop] a product, it's a general – 'I know I don't want that, so I'm going to run away from that and do something that looks really hard, because I'm passionate about doing something that is really hard, because my own sense of accomplishment drives me in that direction (VC016).
		So, certain things matter: tenacity, passion, and being really in love with what you want to do and why you want to do it. So, that was the criteria that evolved over time (VC010).
Tenacity		Will they run through walls and get things done. We use the term 'run through walls' because beyond just getting things done it's about taking it to that next level where they're so relentless – I think only when interacting with these types of founders – when I say that, you're like, "Oh yes, I totally know what you mean!" Sometimes you'll get off the phone with someone, and your mind will be blown, and you'll almost want to quit your job and invest all of your money in their business, because they've blown you away. You know, they started selling things off eBay when they were 12 years old or whatever – they have some crazy [good/cool] story (VC012).
		Which gets at this humility and tenacity thing. Generally, what you're looking for is people that want to be successful. This is how we work – versus having a win-

	lose mentality. I win - you lose. And you could argue that makes softer entrepreneurs, but if it's viewed as a zero-sum game – and there are entrepreneurs out there that do it that way – but they're not people we want to work with. We can generate the returns with the fund size we have and the strategy we have by finding people that are success- focused – not just for themselves, but for their shareholders, and for their employees (VC006).
Ambitious	But he's a small player in SMALL_CITY, and he could have built a nice little business there in terms of what he was doing. But he's always looking for 'what else could I bring to the table that would take us to the next level?" (VC015).
	We invest in people who we want to have them take risks. We invest in people who aren't fearful of taking risks. We invest in people who aren't fearful of making mistakes and learning and then changing (VC004).
Respectful	You've raised competition, and so another element is - we want to see people that actually respect their competition. That means understanding who their competitors are and not be so competitive - the characteristics you were describing earlier that were so fixated on destroying all the competition that they don't understand that for a market to really work you need multiple players (VC002).
	I come from a family that wasn't necessarily too privileged - a history of doing what people would consider grunt work and blue-collar work, and I had a perspective that said those people need to be respected too. So, I bring that chip on my shoulder whenever I'm assessing a management team or an entrepreneur in terms of the blue-collar people versus the white-collar people - there should be no color. It's all the same. You treat them the same - with respect (VC015).
Authentic	Correct, and humanizing, too. So, it's that connectedness to your customers, to your investors, to your employee base. And it's not that you have to have humility in every

interaction that you have with them, but being authentic and humility shows up, it can demonstrate some authenticity, and surface some authenticity - is important because data is going to present that, AI is going to present it. It's all going to come out, so just own it for who you are and yourself. And control that narrative instead of it being something that others create ... for you (VC001).

# Figure 10

Theme and Subthemes of Hard Skills



which these skills were important varied. For example, although several participants suggested

founders previous experience starting up a venture positively influenced their decision-making,

one VC015 stated:

What is it about that serial entrepreneur that makes him or her successful? And the only way I really knew that is if it was a serial entrepreneur that I invested in multiple times. Then I would know, and that would be a short circuit for me personally. Just because they were a serial entrepreneur in the wild and I'm making my first bet on them, I can't use that as a short circuit to make that decision. I've got to do that due diligence and ask, 'what are the attributes of that person and that team that makes them successful at the at the end of the day?'

Table 8 provides excerpts from participants' interviews supporting the theme and subthemes identified in this study.

# Table 8

Participant Responses Supporting the Hard Skills Theme and Subthemes

Theme	Participants excerpt
Entreprenuerial experience	Do they have actual expertise in the category? What's the experience that they're bringing to it? Two of the founders I work with closely, they have founded companies prior in the space – with different levels of success, but they have a commitment to the category they're building a company in – which is different from when you have someone who is a "tourist" to the category – who doesn't have the same level of knowledge or commitment to the company or category. (VC008).
	Do they have the skills, experience, or proven experience in another startup? (VC016).
	The next is, do they have relevant experience? Sometimes this is not as relevant, but it is definitely a bonus. If you score high here, then that's great, but often we are investing in college grads. That's not to say they can score a 5 out of 5 on everything else and 1 here. But generally, if they're a multi-time founder or if they've been through the motions and they know what it takes or they've had a couple of exits in the past, that certainly helps – or they have a core competency or interest in this space (VC012).
Product market fit	I look at a couple things. First, does the founder or founders have a sense of the market they're going into? I really want to see that they understand the market and the potential of the market. The founders that I really, really like – and what I like to see in early- stage founders - have a sense of the space and what it's going to be like over the next 5 to 10 years. A lot of times you'll see people who are pitching – like, an app idea – and they are addressing a problem for now. They see a problem, and they're solving it – which is great. Build an app – go ahead – make some money. If you're going to actually be building a company, it's going to take a while to build the company – you're going to be building into, ideally, a growing market or some market trend. So, having some idea of what that trend is, what the future state of whatever industry you're going into is going to be, and why

	<ul> <li>you're building into that space is usually the most compelling to me (VC016).</li> <li>A lot of startups come from product and engineering leaders, and so, they're relentlessly focused on the product and not lifting up their head to look out on the market. So, they build this amazing product because that's what they know and they're passionate about, but they don't necessarily (VC001).</li> </ul>
	What will happen a lot of times in startups is that really great people get caught short. Because if you started a company, and you've convinced investors you have the path forward, and there is no alignment between what you're building and what the market needs – you go and hire a VP of Sales that knows how to sell. There's this thing – product-market fit. You can have the most competent salesperson in the world that knows how to run a system and run a pipeline and run a team and whatever, but if it's not something that somebody wants or knew they needed – and then you're going to blame that VP of Sales for that right and churn them out after 12 months because they suck (VC006).
Domain expertise	Deep domain expertise is another one. Do you know something nobody else knows? I always ask my founders, who do you want to help? And what do you know that nobody else knows? What's your big secret? That gives me insight into whether they're passionate about building a business and making money, or about helping people. It tells me how much they truly know about the problems that these people could have, that they're trying to help (VC003). Do they have actual expertise in the category? (VC008)
Incentive alignment	So, if that's the primary qualifier and they're [also] mission- driven, great. For a lot of medical entrepreneurs this is like an important thing. But if I'm investing in you, my incentive is to see a 10X upside of my investment. So, there's incentive alignment (VC0014).

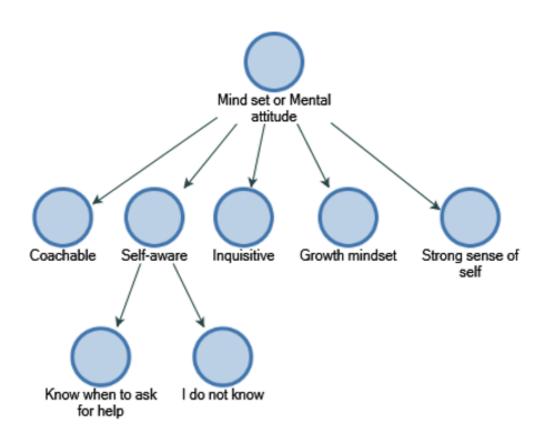
Ability to scale	Their ability to scale. I don't know if you've probably gone through this class. I learned this fairly recently, but there's a statistical distribution of CEOs relative to the size of their employee base. There's a threshold at 20, 100, and 1000. We're often assessing, do they have an innate ability to manage to change someone's role as an organization goes from 20 to 100 to 1000 - which usually means, when I hired you, I gave you the VP of Sales position. The company has now tripled in size - because of you. But we need to hire someone who can manage five VPs of Sales in each continent, and that person is now Chief Revenue Officer. You're going to be subordinate to them. That organizational change dynamics - you can usually assess that in the beginning by looking at how they scaled from 10 to 30 to 50. Depending on how they handle that - and this is usually done by talking to a few of those key individuals that have undergone that change - you can assess or make assumptions about their ability to scale the organization from 100 to 1000 employees, which is usually around the sweet spot that we're investing in (VC014).
------------------	--

# Mind Set or Mental Attitude

Study participants also suggested that mindset or mental attitude significantly influenced their decisions to invest in an early-stage venture. As diagrammed in Figure 11, participants suggested startup founders needed to be coachable (n = 7; 44%), self-aware (n = 6; 38%), inquisitive (n = 5; 31%), and to a lesser extent, have a growth mindset (n = 1; 6%), and a strong sense of self (n = 1; 6%). Table 9 reviews participants' responses that support each of the three major subthemes, coachable, self-aware, and inquisitive.

# Figure 11

Theme and Subthemes of Mind Set



# Table 9

Participant Responses Supporting the Mind Set Theme and Subthemes

Theme	Participants excerpt
Coachable	We are looking for coachability. We don't coach our founders ourselves, but we help them get connected with various coaches – recognizing that they are people who bring their own stuff to their company and they have different things in different parts of their lives. (VC008). When I look at the particular founder's behavior, I would like to say that
	coachability is key, and self-confidence is key (VC016).

	The ability to have a conversation where they admit what they know and what they don't know. What they're concerned about. What they're interested in. Looking to get feedback in terms of 'Have you seen this done before?' 'Can you help me understand and teach me? Mentor me?' (VC004).
Self-aware	I would say that the sweet spot is finding founders that are very good very talented and are self-aware enough to know where their blind spots are or where they really need some help – and you focus on that. They might say, we really need help scaling the culture, can you guys help us with that? Or we need help driving more organic growth from our acquisition and we really try to help them with that (VC005).
	Sure. So, first and foremost thing we probably are most interested in is intellectual honesty - that there is a willingness to be transparent and be open, to be able to acknowledge early when things aren't working, when things are working, and not to assume when things are working that they've got everything figured out (VC002).
	The ability of that entrepreneur or that early-stage founding team to be self-aware enough in terms of what they know, what they don't know, what they're concerned about, what their testing, what they're looking for, what they're challenging, asking questions about – you've got someone, whether it be me or someone else that they're talking to about funding, who sees a lot of shit. I am a resource (VC004).
Inquisitive	Curiosity is another. You don't know the answer – especially when you do early-stage investing. It's less about feeling they're expert - because they're actually not. It is impossible, usually, to be. But it's the curiosity and the ability to learn and this growth mindset that people talk about that really plays into great entrepreneurs (VC013).
	It was a multi-step process, and he said, 'I don't understand why you guys are doing it that way. Why isn't there just a single vacuum chamber with a single set of instruments?' And they said, 'trust us, if that existed, we'd have it.' So, FOUNDER designed and sold them four \$800,000 instruments before he ever built it. (VC002).
	Curiosity is another. You don't know the answer – especially when you do early-stage investing. It's less about feeling they're expert - because they're actually not. It is impossible, usually, to be. But it's the curiosity and the ability to learn and this growth mindset that people talk about that really plays into great entrepreneurs (VC013).

## Conclusion

A qualitative methodology was used to explore the perceptions of venture capitalists as it related to who in management they assess in the investment selection process and what criteria are most important in assessing venture management. All study participants stated that they assessed the startup founder, and 90% of the participants suggested the importance of assessing the startup team. Participants suggested several criteria are important when assessing a startup founder, which included soft skills, personality, character, hard skills, and mindset or mental attitude. More specifically, participants suggested that startup founders must have strong interpersonal and leadership skills to be considered investment worthy. Participants suggested interpersonal and leadership skills are exhibited by the founders' relationship with the team, the investor, and the cofounders. Regarding personality, participants stated that persistence and persuasion were extremely important personality traits in a desirable startup founder. In addition, a virtuous character and passion were suggested to also heavily influence investors' decisions to invest in an early-stage venture. Hard skills such as a startup founder's previous experience starting ventures, product-market fit, and domain expertise were suggested to be desirable hard skills. Finally, participants of the study suggested coachability, self-awareness, and inquisitiveness were the founder mindsets they were looking to invest in. The following chapter provides a review of these research findings and a discussion of the implication of these findings. In addition, the following chapter will review the limitations of the current study and recommendations for future research.

#### **Chapter 5: General Discussion**

In the wake of advancing ideas about leadership, including character, purpose, and passion, it is reasonable to assume that venture investors are assessing founders based on a broader set of criteria than the traditional range of human capital, its consequences, and its outcomes. The current study set out to understand two fundamental issues regarding early-stage investor assessments of venture teams: whom do they assess, and what criteria do they consider? This chapter discusses what the current study reveals about these issues, elaborates on what is known about the assessment criteria, and lays the groundwork for future research.

Although the current study's focus is the assessment of venture management, it is understood, and interviewees confirmed that broader aspects of the venture also figure prominently in venture investment decision-making. The current study is not intended to replace classic, broad-based research into the factors shaping investment decisions (e.g., Smart, 1999) but rather to unpack and update the criteria associated with venture founders and management teams. Several interviewees specifically highlight that human factors must be understood in conjunction with other business criteria. VC014 discusses a "triple qualifier" in evaluating an investment opportunity, "no matter what, the team is going to be an essential part of that Venn diagram." The other two qualifications are "adjustable levers" that vary according to circumstances and may include total addressable market, customer penetration, revenue growth, and other venture performance measures. Over time, some investors appreciate how human factors should be integrated into investment decision-making. Others, like VC011, grow to appreciate the importance of select non-human factors:

If you had asked me for the first 10 or 15 years of my venture career what are my investment criteria, I would have said team, team, team. That's it. I have grown slightly

more sophisticated, and now it is team, team, TAM, and team. Total Addressable Market matters. It's great to have a super smart team, but if they're not trying to address something big and interesting, then you can't drive the kinds of returns that a venture fund needs.

#### **Discussion of Research Questions**

The current study addresses two fundamental questions regarding professional investors' assessments of founders and venture team management.

#### Who in management do early-stage investors assess during the investment selection

#### process?

Most new ventures are founded and led by teams (Kamm et al., 1990; Klotz et al., 2014; Ruef, 2010; Ucbasaran et al., 2003), but not all are. Some Seed round investors may be facing a one-person operation venture, but by the time a venture reaches out for Series A financing, they are likely to have a team in place. So, it is essential to understand who investors assess before making an investment decision. Is it, the principle founder - who typically makes the "pitch"? The entire founder team? The whole management team? All employees? On the other hand, do they even consider the team at all prior to making an investment decision?

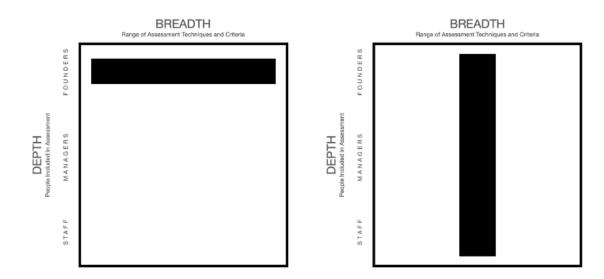
Investors from large funds whose strategies are to cover emerging technologies or opportunity spaces might not emphasize understanding the venture team as long as the venture occupies a unique and interesting space in the emerging landscape. For example, VC007 revealed, "we don't consider team-specific risks." Similarly, VC015's perspective is that:

In the venture world - regardless of what people tell you, they're chasing the opportunity and the idea, and the people are after the fact. They're part of the process but not the reason for the process, and you get into some challenges if you do that. In an environment like today's, you can chase the ideas and the opportunities, and you can get money, and things work out regardless of the quality of the people or the management teams. Significantly, even investors not particularly interested in team assessment recognize the role that team plays. "It would be good to know what individuals are bad at and how the team compensates," according to VC007. It is obviously possible to gather this "good" information. However, their strategy conveys little value in its gathering.

Other early-stage investors expressed the opposite because of the nature of early-stage investing. VC016, for example, said "in the earliest stages – pre-revenue – there's not really much to look at, so I look at the human factors – I mostly look at the teams." VC011, one of the sample's most experienced and successful investors, declares matter-of-factly, "I am a team investor." VC004, another seasoned investor, explains it this way, "I've never met anyone where one person can be successful. It is all about team." Moreover, while for some team focus is longstanding, others like VC010, "realized through experience that the three things that really matter was the team, the team, and the team."

Depth and Breadth of Management Assessment. With interviewees broadly reporting an emphasis on assessing venture teams, there naturally arose variation in how far into the venture such assessments go (depth) and how thorough the assessments are (breadth). The venture funding market in 2021 was atypical - sometimes requiring investment decisions to be made within a few days of meeting with the venture team. In more typical times, investors have the time and inclination to complete relative thorough due diligence on venture founders. If that were the extent of their management assessment, it could be considered a "broad" but "shallow" assessment (see Figure 12, left). Broad, because it spans a variety of assessment techniques and criteria. Shallow, because it only covers founders. VC005, for example, describes the approach his team applies this way, "we certainly pay attention to the broader team they've recruited, but at the end of the day, we are more less analyzing the founder or founders." This approach might appeal to investors who have or believe they have a good sense of the role of founders' individual differences and how to assess them.

## Figure 12



Assessment Breadth versus Depth

In contrast, management assessment can be relatively "narrow" but "deep" (see Figure 12, right). Narrow in the sense of looking at a reasonably small set of criteria. Deep in the sense of spanning the range of people associated with the venture. VC009, for example, describes a narrow but deep assessment, "we want to see the team operate as a team. When the team can't operate as a team, then that's a signal. If you see a founder being very directive to their team, you already have a problem." This approach might appeal to investors who appreciate the role of teams in ventures but less of an appreciation for or comfort with assessing individual differences. For example, VC008 describes a relatively narrow but deep approach that arises from the fact

that they "are cognizant that a lot of startups fail because of HR and team issues." VC009 pursues a narrow but deep approach based on operational and external considerations, saying, "I express two questions that I want a startup to be able to address. First, what's the evidence that the team can execute on the business? What's the evidence that the market cares that this team executes on this business?" It is an approach that broadly considers team dynamics and performance without delving deeply into team members' individual differences.

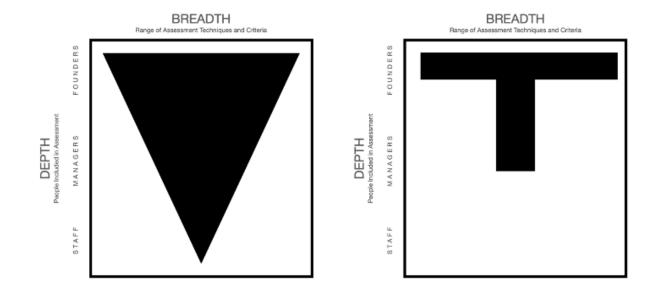
In practice, investors may assess venture management in ways that integrate breadth and depth. A comprehensively exhaustive assessment that is broad across every level of depth could be made. However, practical considerations make it more likely that such integrated assessments would either taper down in breadth as depth increases (see Figure 13, left) or be a simple combination of broad assessments of founders with some overall assessment of parts of the larger team (see Figure 13, right). Some investors, like VC015, find value in diving deep into venture organizations:

It's not just the management team or the worker bees. It is the administrative assistant. It's the janitor who's cleaning the bathroom. How do they interact? How do they treat people? Is it respectful? And you can get a good feel for that. But I've seen too many people they have one face when they're talking to me and a different face when they're talking to others. And I can't deal with multiple faces. I deal with one face.

VC015 elaborates that going deep into the venture team provides insight into team dynamics and performance and can reveal valuable insights into the founders:

When management restricts in some way your ability to talk to team members. Or they always want to be there when you're talking with the team member. Or they limit the type of information that's disclosed - those are all red flag, red flag, red flag. The best due diligence is to tell the entrepreneur, 'I want to talk to your team.' If they say, 'it's all yours, whoever, whatever, tell me when you're done,' then that tells me I'm onto something.

## Figure 13

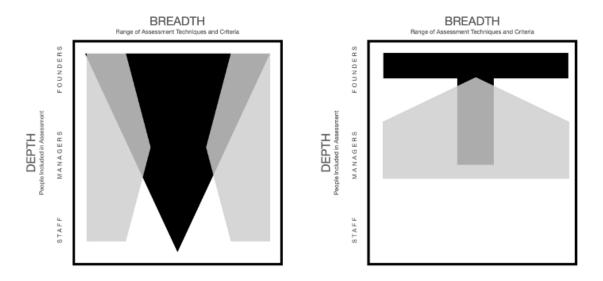


Assessments Combining Breadth and Depth

In practice, it is essential to distinguish between intended strategy and enacted strategy. An investor's desire to assess venture management may differ from what is actually carried out for several reasons. For example, there is evidence to indicate that venture investments are significantly influenced by macroeconomic factors and public market signals (Ning, et al., 2015). The venture investment market of 2021 heavily favored those seeking funds. Such an imbalance can affect the number of deals an investor funds, the average deal amount, and the stage where investments are focused, among other things (Ning, et al., 2015). The current study builds on this insight by revealing that contextual factors shape the criteria for assessing venture management. Interviewees reported having little time to complete their due diligence across all criteria financial, marketplace, technology - not just human factors. When faced with limited time for completing management assessments, there are generally two ways to narrow the focus to reach a decision sooner. One way is to narrow the breadth of assessment techniques and criteria (see Figure 14, left) and focus on only one or two signals that quickly provide insight into the management team. Another way is to limit the assessments' depth, focus only on the founder(s), and select other top managers (see Figure 14, right).

## Figure 14

Narrowing Assessment Breadth and Depth



Interviews suggest that the intensity of the imbalance in 2021 resulted in both of these narrowings were being used. A few people for any given venture were being evaluated, sometimes solely on interactions directly tied to the pitch meeting. Most reported dissatisfaction with the situation but felt compelled to act quickly or risk missing out on investment opportunities.

# What criteria do early-stage investors find important when assessing venture management?

Behavior is the product of context and individual traits. Although some researchers call into question the role of individual differences in the emergence of entrepreneurs (e.g., Baum et al., 2014; Walter & Heinrichs, 2015), others, including Lanivich and colleagues (2021) are pressing ahead to examine how context and individual traits affect entrepreneurial outcomes. For example, they show that core self-evaluation is a precursor to entrepreneurial performance and advise entrepreneurship coaches to look for indications of high core self-evaluation. More broadly, individual personality characteristics and experience are the criteria most valued by investors (Carlos Nunes et al., 2014). Current study findings are consistent with prior studies that have found character traits such as vision, honesty, and integrity to be important to investors (Carlos Nunes et al., 2014; Cassar & Friedman, 2009; Mishra et al., 2017).

**Soft Skills.** Soft skills are those that can be used across a wide range of contexts, including elements such as effective communication, teamwork, leadership attributes, adaptability, and motivation.

*Leadership Attributes.* Founders' work is more than just spotting an opportunity; it is also establishing goals and executing them (Bird, 1988; Blank, 2013; Hechavarria et al., 2012), and for founders seeking outside investment, it is creating an organization and leading it in the pursuit of organizational goals for exploiting the opportunity (Levie & Gimmon, 2008).

New ventures — especially those seeking outside investment — operate in an increasingly complex and global context that calls for a range of leadership skills previously demanded only of senior managers in multinational corporations (Bruneel et al., 2010; Jones & Casulli, 2014; Schwens et al., 2011). Contemporary entrepreneurship is also a social process (Harper, 2008). From the perspective of researchers and professional investors alike, the quintessential "lone wolf" is seen as an inventor or tinkerer, not an entrepreneur. Indeed,

entrepreneurs with personalities that render them unable to lead their ventures effectively can be "responsible for their own or their companies' failures" (Kets de Vries, 1985, p. 161).

New ventures do not have standard operating procedures or organizational structures unless the founder or founding team creates them (Bryant, 2004; Hmieleski & Ensley, 2007). Founders must motivate employees, set their goals, and establish reward structures to drive performance (Williamson, 2000). Unlike corporate managers, who generally have established goals and processes to guide them, entrepreneurs have no choice but to lead the development of such structure (Ensley et al., 2006). In addition to select operational leadership attributes, founders are also responsible for crafting the venture's vision and using that vision to attract the resources needed to deliver on it — including employees and the capital required to get to market (Baum et al., 1998).

Given the central role of founder leadership behaviors during a venture's development and performance, select operational leadership attributes should figure prominently in the assessment of founders during investment selection decision-making. Senior leader influence on work processes, innovation, and firm performance is well established in the strategic leadership literature (Carpenter et al., 2004; Hambrick & Finkelstein, 1987; Hambrick & Mason, 1984; Kanter, 1983; West et al., 2003; Yadav et al., 2007). Ensley et al. (2006) have shown that founders have a similar influence on their ventures, showing that leadership effectiveness is a predictor of venture performance. However, investment selection criteria research has primarily focused on the human capital framework and the associated criteria. Only relatively recently have process-oriented criteria associated with the opportunity creation view made their way into the selection criteria discussion. **Personality.** As already discussed, much of the literature about the entrepreneurial personality focuses on identifying personality traits associated with the decision to become an entrepreneur, and the role of personality in entrepreneurship is still a subject of some debate (Zhao et al., 2010). However, the current study reveals that investors are nonetheless interested in personality traits – primarily those associated with leading a venture to a successful exit. This finding, at least in part, might arise from a desire to avoid the problematic personalities described by Kets de Vries (1985) and the control-oriented founders described by Wasserman (2008). Such traits might not be the same ones that drove the founder pitching for investment to become an entrepreneur in the first place. From the investor perspective, what matters is whether and how the founder will lead the venture as it overcomes the obstacles to reaching scale. In this regard, contemporary perspectives on leadership personality offer a path for more rigorous assessment of founders. A prominent example of research into leadership personality is the so-called Big Two: warmth and competence.

*Social Cognition and Judgment: Leader Warmth and Competence.* Children are regularly taught not to judge a book by its cover. Even so, it has been shown that when meeting others, people make snap judgments all the time and that these instant assessments boil down to two fundamental dimensions: *warmth* and *competence* (Cuddy et al., 2008; Fiske et al., 2007; Judd et al., 2005; Wojciszke & Abele, 2008). These judgments are formed based on the day-today behaviors of the person being judged, and when that person is a leader, they have been shown to have significant associations with real and perceived effectiveness. Moreover, they provide valuable insight into how a person will lead and should therefore be a consideration during investment decisions. After a short description of the construct, VC001 responded affirmatively, like several other participants, "I like your Big Two - the warmth and competence model."

*Competence*. Of the two, *competence* was identified much earlier as a fundamental set of associated traits (e.g., clever, competent, efficient, foresighted, imaginative, industrious, intelligent, knowledgeable, persistent), and the label was settled on fairly early (Cuddy et al., 2007). *Competence* traits are associated with job performance (Offermann et al., 2004), and the Human Capital lens of founder contribution to ventures is essentially a *competence* view. However, competence is not enough wherever people work together towards a common goal. It is now widely acknowledged that emotional intelligence, communication, and other team skills are essential for a leader to be effective. This is where *warmth* comes in.

*Warmth.* "The *warmth* dimension captures traits that are related to perceived intent, including friendliness, helpfulness, sincerity, trustworthiness, and morality" (Fiske et al., 2007, p.77) and so are inherently related to interaction. An understanding of social dynamics is vital to decision-making and problem-solving (Ford & Gioia, 2000), both of which are, if anything, heightened in an entrepreneurial setting. Though small, the performance of entrepreneurial teams, where goals are shared, and collaboration is vital, are more in need of *warmth* in leadership (Offermann et al., 2004). Baron and Markman (2000) show that leader *warmth*-oriented capacities based on Social Intelligence and Emotional Intelligence (such as network building and self-management) may contribute to successful new venture creation and growth. So, it is clear that assessing founders through the Human Capital lens fails to capture essential swaths of leaders' contributions to venture performance since it ignores their relational and collaborative contributions — their *warmth*.

117

Warmth's relevance to founders seems to resonate with some investors. For example,

VC015 describes a founder who:

is masterful at this. He built solid relationships with everybody on the team, and even the people he had to let go - loved him - loved him till the day they died. Because, he said the conversation went like this: 'Bill/Bob/Judy, we've got a great relationship. I love you as a person. The business however has needs that you're not able to provide. It's a disservice to keep you on board because you're doing a disservice to yourself. You're trying to play a role that you can't play in this company. I need to put my company in a better position with the right person, and I need to help you find the right position for you - one where you can excel for you and your family.' And by the way, it sounds trite, but he was absolutely all-in on that. And he would help them find the right positions for them outside the company, and they would go to their grave [supporting this founder].

To the solo inventor, garage moonlighter, and others doing small-scale entrepreneurship, *warmth* may not be a significant factor in their success. However, for the entrepreneur who has built a venture to the point where outside investment is under consideration, *warmth* will affect the commitment and engagement of team members. Investors like VC001 realize the importance of warmth and anticipate some challenges ahead.

The founders who are fueling the next generation of entrepreneurship are digital natives. Their relationship management is with Snapchat, text and video. [They are used to communicating in] 240 characters or less. [And they can be, like] 'I gave you a thumbs up, that means I like you, so what more do you need from me?' So, some of the EQ is getting diluted as this next wave comes in. You know they're going to have competence - they're going to have tons of digital competence, no question about it. But the *warmth* is where there could be that missing component that needs development.

Moreover, founder *warmth* will also directly affect the selection process since the likability of *warm* founders is associated with higher "pitch" evaluations by venture capitalists.

Expanding the founder assessment frame to encompass the Big Two would capture a wider swath of founder traits that are likely to be important in venture investment selection.

First, *competence* encapsulates most of the founder characteristics that have previously been identified as important. It does not expressly capture Human Capital state variables such as years of education. However, competence does capture the behaviors and traits that arise from those states - often referred to as *human capital outcomes* (e.g., problem-solving ability). Moreover, many of the desirable founder traits identified in inductive studies or an ad hoc manner turn out to be *competence*-related. So, reframing these under the umbrella category of *competence* organizes them in the manner of experts in leadership.

Further, it studies how other competence traits and competence broadly relate to founders' contribution to ventures. Second, *warmth* captures many of the ad hoc traits that fall outside the *competence* category, and it legitimizes the study of founder interpersonal characteristics that may be too "soft" for some outside the leadership science field. Together, warmth and competence provide an enhanced perspective of founders as leaders that are widely accepted among leadership scholars.

To the extent that investors interviewed in the current study represent the broader population of venture investors, the standard Big Two labels should be relabeled for use with this population. *Warmth* and *competence* are value-laden terms that elicit strong responses in some investors, even when the theoretical construct applies. For example, reacting to a brief description of the Big Two, VC015 responds,

I've seen this way too many times - they come in with friends - they have relationships beyond the business - and it's hard for them to say, 'we need to take the business to the next level, and unfortunately you're not the person who's going to help me do that.' So, I have a connotation with warmth that says that makes it harder to do. While it is undoubtedly true that social ties can impede effective decision-making, as VC015 describes, social connectedness and strength of social ties is not integral element of the warmth construct. After further discussion, VC015 effectively reaches this same conclusion stating, "I would use *empathy* versus *warmth* by the way. You want people to be likable, but a leader who's too warm can't make dispassionate decisions about people." Empathy has too narrow of a meaning to be a good substitute for warmth, but VC015 effectively underscores the need to find a better practical label for the concept. The label competence has the potential for similar confusion since competence has many potential interpretations. Therefore, there might be practical value in applying unique, if somewhat technical labels such as task orientation for competence and people orientation for warmth.

*Potential Contribution to Selection.* Explicitly considering warmth and competence will promote scholarly and practical discussion of selection criteria in at least four ways. First, the construct is primary. Research in social cognition shows that judgments of warmth and competence are made automatically and quickly (Cuddy et al., 2007, 2008; Fiske et al., 2002, 2007), so VCs are assessing founders along these dimensions whether they are aware of it or not.

Second, the Big Two construct is expansive in that it widens the lens for human factors to consider as potential precursors for venture performance and thereby for assessment during investment decisions. Much of the extant research focuses on criteria that are precursors to a relatively narrow and often unstated range of competent behaviors. However, as the term is being used here, there are aspects of competence that prior research has not addressed.

Third, it is integrative. The Big Two construct provides a framework for discussing warmth and competence and is consistent with broader management and social science research.

As such, it invites exploration of findings that might seem somewhat isolated from broader social science findings, such as Higashide and Birley's (2002) discovery that task conflicts between VCs and venture teams are positively associated with venture performance, whereas relationship conflicts are negatively associated with venture performance. The Big Two offers a lens for unpacking this finding.

The last, but perhaps most important, contribution that the Big Two construct makes to the scholarly discussion of selection criteria is that it provides a behavioral, operational frame on founder contributions to their ventures. Warmth and competence indicate not only how well a founder will lead the venture but also how (i.e., the manner in which) a founder will lead the venture day-to-day.

Laundry lists of traits to look for based on beliefs, biases, and, at best, correlations with venture performance can only do so much. The next frontier in founder assessment for investment selection will be understanding the mechanisms of founder value contribution to the venture. Adopting the Big Two construct opens the door to a more precise and comprehensive understanding of how founders interact with others (e.g., their team, customers, investors) – a vital part of those mechanisms. Extant research provides a partial view of the mechanisms at work. Many of the desirable founder traits that have been identified in inductive and human capital studies are competence-related (MacMillan et al., 1985, 1987; Rakhman & Evans, 2005; Tyebjee & Bruno, 1984), and they point to implicit assumptions about how founders create value. However, they have surfaced through inductive and abductive means that beliefs and biases can substantially influence. This characterization is not a criticism – such approaches are often necessary for the early stages of theory formation. Instead, it is made to draw attention to

the fact that the criteria have generally not been identified through process analysis or other means associated with the mechanism of founder value contribution. For example, that leadership experts (Cuddy et al., 2007, 2008; Fiske et al., 2002, 2007) have argued that warmth is more important than competence in determining leader effectiveness.

Nevertheless, the selected literature has a relative dearth of warmth-related criteria. Are professional investors blind to the vital role of founder warmth in effective leadership of the venture? Or is the absence of warmth criteria an indication of a need for a more expansive and procedural framework for understanding selection as it stands today and how it might be improved?

*Purpose*. It has been said that "the two most important days in your life are the day you are born and the day you find out why," and research has backed it up with evidence. For professional investors understanding founder purpose offers keen insight into their motivation which in turn says something about how persistent they are likely to be in pursuit of venture success. Long-term, meaningful goals drive our desire to accomplish big things together, like launching a new venture, and are associated with better physical and mental health. Alignment of founder purpose and venture mission drives productivity and engagement. VCs who understand the purpose of the founders that come before them will have a clearer sense of what the founders' long-term goals are. Most participants (n = 12; 75%) expressed an interest in understanding whether a founder would have the persistence to overcome the obstacles that inevitably challenge a new venture, with half of all participants (n = 8, 50%) expressly pointing toward the founder's motivation as an important indicator. VC001, for example, discounts curiosity or operational ease as a basis for investing, "that doesn't interest us. [We're looking for

founders that are] passionate, [where] there's purpose." Posing it in the parlance common in the business media, VC007 says, "the entrepreneur's 'Why?' is important."

Entrepreneurs and the management teams they assemble are often purpose-driven people. Whether it is "to make a contribution to the world by making tools for the mind that advance humankind" (Jobs, 1980) or simply to make a lot of money, getting involved in a start-up usually involves sacrificing present reward for the promise of something greater in the future. Purpose is vital in an entrepreneurial setting for at least two reasons. First, it factors into the venture's business performance in demonstrable ways. Second, the relationship between outside investors and the founder will be fundamentally shaped by their purposes' alignment (or misalignment). Despite this, the role of founder purpose in venture performance and selection by investors remains scarcely investigated, if at all.

Potential Contribution to Selection. An assessment of founder purpose can inform investment selection in at least three ways. First, it factors into the venture's business performance in demonstrable ways (Bird & Jelinek, 1989; Low & MacMillan, 1988). Second, founders with purpose are oriented toward achieving their goals. Third, the relationship between outside investors and the founder will be fundamentally shaped by the alignment (or misalignment) of their purposes (Higashide & Birley, 2002; Panda & Dash, 2016; Steier & Greenwood, 1995; Turcan, 2008). So, professional investors would benefit from a clear understanding of their own purpose and a structured and consistently applied framework for assessing the purpose of founders that come before them.

123

## Character.

When we think about leadership we focus too much on what leaders do ... and we don't spend enough time on who leaders are — the character of leaders. -- Domenic Barton, Managing Director, McKinsey & Co. (2009 - 2018)

(Cited in Seijts et al., 2015)

The Big Two offer researchers a framework for categorizing founders' leadership styles based upon observable day-to-day behaviors. Judgments about competence and warmth are made quickly. What about aspects of style that manifest over longer periods? Participants in the current study confirm what prior research has shown – founder trustworthiness, integrity, and honesty are essential assessment criteria in investment selection. Such aspects of personal style often fall into the realm of character. Though slow to manifest, character deservedly plays an important role in founder assessments. VC015, for example, identifies character as the very starting point for assessing founders. Similarly, VC009 cites founder character as a critical element of the trustbuilding that precedes the decision to invest. "How does the investing process generate trust? Virtuousness and humility and all these things are important." However, VC009 goes on to say, "but if I don't feel it, then I don't feel it, and I'm not investing," which indicates how intuitive current character assessments are for some investors - even when character is seen as important. So, research into the role of character and leadership in founder assessment would contribute to both scholarly discussions and effective investor practice.

Character's centrality stems from the role it plays in getting things done. Sturm et al. (2017) distinguish between character and competence: competence is a person's ability to do something; character arises from that person's virtues and manifests in their habitual behaviors.

Goodwin (2015) separates warmth's sociability traits (e.g., friendliness, extraversion) from its character traits (e.g., kindness, sincerity, tolerance) to make a similar distinction. Thus, the sociability of competence and warmth indicates how a founder is likely to behave in the day-to-day execution of their role, while character indicates how they will lead over the longer term.

Character not only shapes how competence and sociability are employed to lead the venture, but it also plays an essential role in determining whether those traits are exercised at all (Hannah & Avolio, 2011a, 2011b). Founders' warmth and competence will indicate whether they can successfully launch the business (Cardon et al., 2013). Their character will be an indication of whether they will actually perform to their potential. Leadership requires character, competence, and warmth. A leader who had character without competence and warmth would be a good person, but not one who gets things done.

Character can tell investors a lot about how the founders of the ventures they are considering will run the venture, especially during difficult times. Character considerations can help investors anticipate what kind of partners founders will be and can shape the nature of the investment agreement. Das and Teng (1998) argue that in partnership settings, a good relationship (a product of warmth) and trust (a consequence of character) are more effective than control, so an understanding of founder character can fundamentally shape the investment decision. Unfortunately, while judgments about warmth and competence occur very quickly based on observable, short-term behaviors, character reveals itself only over time. However, there are ways to assess it — ways that some VCs might already be employing in their decision-making process.

125

*Potential Contribution to Selection.* A sophisticated understanding of founder character can inform investment selection in at least two ways. First, as a structure for understanding founders' behavioral tendencies, assessment of character provides insight into the base question of whether founders have what it takes to bring the venture to a successful exit. For example, investors can reasonably expect that a founder without courage is unlikely to disagree with them, even when the founder should, and decision-making could be adversely affected (Janis, 1982). Second, a rich understanding of founders' character would give VCs an indication of how founders will go about leading the venture. For example, founders with low courage, accountability, integrity, and humility are unlikely to establish cultures of constructive dissent (Seijts et al., 2015) and may become subject to groupthink. In neither case would such character assessments necessarily be "deal breakers" – though some individual VCs might consider them so. However, they are reasonable considerations, especially for VCs weighing several investment prospects closely.

For VCs who stay involved in their portfolio companies, assessing character during selection also can indicate the sort of coaching that founders will benefit from after investment. If the elements of character were fixed traits like those of personality, then coaching would be of little help. Even so, character assessment would at least guide such VCs in mitigating the potential weak points in founder character. However, the situation is more promising. Although some virtues are personality traits (e.g., conscientiousness, openness) and are therefore relatively stable aspects of a person's disposition (Bono & Judge, 2004), most virtues are not traits, and so there is a significant potential to develop character – meaning that the VC active in ventures post-investment can meaningfully coach founders on points of character.

*Passion*. Nearly half (n = 7; 44%) of participants mentioned founder passion as a factor in their investment decisions. As far back as Schumpeter (1934), passion has been a catch-all explanation for entrepreneurs' otherwise unexplainable behaviors (Cardon et al., 2009). However, until relatively recently, it has not received much research attention (Cardon et al., 2009). The past decade has seen that shortcoming addressed with scholarly interest growing in establishing empirical evidence of passion as a predictor of individual behavior and performance (Mueller et al., 2017). The evidence has been mounting that passion is an integral part of entrepreneurship (Baron, 2008; Bierly et al., 2000; Bird, 1988; Cardon et al., 2005, 2009, 2013; Chen et al., 2009; Goss, 2005; Morris et al., 2012; Murnieks et al., 2014; Smilor, 1997). Founders' passion is associated with greater engagement and perseverance in the face of the obstacles that inevitably impede a new venture (Cardon et al., 2005, 2009; Cardon & Kirk, 2015; Chen et al., 2009; Drnovsek et al., 2016; Foo et al., 2009; Vallerand et al., 2003), and thereby promotes venture success (Baum & Locke, 2004; Mueller et al., 2017).

*Views of Passion*. Even in a relatively small sample, there was a fair amount of variation in investor understanding of passion and how to think rigorously about it. This inconsistency might arise because, in general use, passion can refer to an emotional state, an affective display, or a profoundly personal objective and source of long-term motivation. All three have served as viewpoints on entrepreneurship, but the last one is most relevant to investment selection. Insight into the internal fire that drives an entrepreneur's pursuit of long-term goals would be valuable to investors concerned about founder commitment to the venture. By distinguishing between various types of passion a founder may bring to the venture, investors can anticipate how the founder will likely lead the exploitation of the opportunity, which can shape how an investment deal is structured or whether to invest at all.

One view of passion defines it as an emotional state consisting of positive and relatively strong feelings (Baum & Locke, 2004; Gielnik et al., 2015; Houlfort et al., 2013). Highly activated positive emotions such as passion cultivate creativity and pattern recognition — both critical in the entrepreneurial context (Baron, 2008).

Other researchers focus on the behavioral aspects of passion, defining it to be an affective display rather than an underlying emotion. Passionate displays are one of the more noteworthy aspects of entrepreneurs' behavior (Smilor, 1997) through animated facial expressions, energetic body movements, and rich body language (Chen et al., 2009). However, regular use of passionate displays can be counterproductive. Moreover, they have the potential to be more of an "act" than an indication of founders' authentic point of view. Therefore, a founder's affective display of passion problematic as a predictor of venture performance and is at present of limited value in founder assessment and venture selection.

In addition to the classic affective elements, Vallerand et al. (2003) establish passion as a motivational construct and define it as "a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy" (Vallerand et al., 2003: p. 757). Passion's framing as a motivational construct holds the greatest promise for informing investment selection. Although there does not yet appear to be consensus when it comes to motivational passion in entrepreneurship overall, the distinction helps to focus passion's motivational role in investment selection. Passionate motivation's tapping of character strengths,

128

however, could serve as an indicator of founder commitment and long-term behavior – which VCs should find valuable.

*Potential Contributions to Selection.* Merely differentiating a founder's passion to an emotional state, an affective display, or a source of long-term motivation may provide useful information for an investment decision. However, the scholarly interest in passion over the past decade has led to theoretical advances that offer VCs more pointed guidance. By distinguishing between various types of passion a founder may bring to the venture, investors can anticipate how the founder is likely to lead the exploitation of the opportunity, which can shape how an investment deal is structured or whether to invest at all.

#### Limitations of the Study

Like all research, this study faces limitations that need to be acknowledged and mitigated. The limitations described below encompass both limitations of qualitative research generally as well as specific limitations associated with the study.

#### Self-Selection Bias

The study was presented to prospective participants as an examination of the founder characteristics important during investment selection. Several investors declined to participate because they primarily focus on technology or business model considerations and do not weigh founder considerations particularly highly. On the other hand, several investors indicated that they wished to participate because they believe the matter of founder characteristics to be vital. Therefore, it is reasonable to conclude that the sample is not a representation of all professional investors but rather a representation of those investors that consider individual differences among founders to be important.

## **Investor Types**

Venture investors come in a wide variety of types. In some cases, interviews raised participants' general attitudes towards risk. However, they did not identify specific predispositions toward risk management (per MacMillan et al., 1985) or prioritization of risk factors (per Muzyka et al., 1996). Moreover, a host of other dimensions distinguishing investors are not addressed in this study. For example, there is a lot of variation in how VCs approach post-investment involvement in the venture. Studies employing such a process-oriented view of the decision reveal that some VCs place primary emphasis on the management team characteristics. In contrast, others focus mainly on the business considerations, and still others on the technology (Knockaert et al., 2010). Future research can address the implications of these differences in type, but they are not addressed in the current study.

## Venture Types

Ventures under consideration for outside investment have a wide variety of characteristics that shape investor interest in them and how they evaluate them. Common differences include:

- the industry (e.g., biotech, consumer banking, transportation),
- the market (e.g., business-to-business, business-to-consumer), and
- the technology (e.g., biotech, chemicals, software as a service).

In some cases, the differences in evaluation have been explicitly acknowledged by investors during the interview. However, there may also be differences in the evaluation process and criteria that are implicit, unstated, and unexplored in the interview. The sample was not steered to capture these differences, and their influence is not examined.

### Busy and Hard to Reach Population

The nature of the population under investigation is a driving factor in selecting a qualitative approach. Access is challenging, and there may be a sampling bias arising from the differences associated with those in the population who are willing to participate versus those who are unwilling or reluctant to participate. Namely several interviewees mentioned they were happy to participate because they believed the topic was important. Venture investors with a lesser interest in the matter of founder assessment were probably accordingly more likely to decline or ignore the invitation to participate in the study.

### Confidential Information and Conversational Avoidance

Because discussions of the decision-making process and criteria relate to actual investment decisions, interviewees may avoid topics that have the potential to reveal confidential information or may "spin" parts of conversations to avoid revealing specific information. Sometimes, interviewees called attention to their avoidance or simply glossed over it. However, as Smart (1998) observed, VC respondents "demonstrated high levels of candor and selfcriticism" (p.59), so *a priori* concerns were essentially unwarranted.

## Perceived Source of Competitive Advantage

Venture investors that believe human factors are of primary importance when selecting investments might consider the criteria they use to be a source of competitive advantage and could therefore be uninterested in sharing their expertise, even if confidentiality is guaranteed. Such investors likely declined or ignored invitations to participate and could be a source of sampling bias. Participating investors, however, were very generous in sharing their perspectives about the criteria they considered during assessment.

## Self-Reporting and Espoused vs Theories in Use

Anytime researchers record beliefs and perceptions, as opposed to observable behaviors, they must be concerned with the well-reported shortcomings of self-reporting (e.g., Stone et al., 1999). In addition, research has established differences between the theories VCs say they use and those they actually use when making investment decisions (Levie & Gimmon, 2008; Shepherd, 1999; Zacharakis & Meyer, 1998). It is a challenge inherent in the research method and can be addressed in the future through additional investigation using alternative methods.

# External Environment

This study was conducted during the global COVID-19 pandemic, which meant the study context was somewhat uncertain. For the most part, the upper echelons of the U.S. economy were relatively unaffected by the pandemic (e.g., based on the performance of equity markets, unemployment patterns) and anecdotal evidence indicates that venture investing was relatively unaffected as well.

Overall, the venture investment market in 2021 (when interviews were conducted) was extremely liquid. Most participants indicated that the market was very favorable to founders, with investors generally chasing opportunities and founders. The time between founder pitch and investor decisions has been severely compressed, and several investors indicated that they do not have time to complete the level of due diligence they would typically require.

Macroeconomic conditions changed dramatically in 2022. Concerns over inflation have led the Federal Reserve to raise interest rates on multiple occasions, which has in turn triggered concerns about economic recession. Higher interest rates have drawn money out of the venture investment market, cooling it substantially. This change in the market potentially amplifies the contribution of this study since interviewees reportedly de-prioritized founder assessment during the highly competitive market of 2020-2021. However, a control study to assess whether investors spend more time and effort evaluating founders under current market circumstances is needed to understand better the relationship between venture market conditions and investor assessment of founders..

### **Participant Yield**

This study's response rate (22.2%) is roughly half that of prior similar studies (e.g., Smart, 1999). It is hard to know with certainty the cause of this relatively low response rate, but a proximal contextual factor is the aforementioned asymmetry between available capital and ventures searching for funding. The situation created a pressure among many investors to operate at a fast tempo, which could have left them with little time for participating in research. At least eight investors expressed an initial willingness to participate but failed to follow up by scheduling a time or completing the online informed consent form. To the extent that the participation response rate was reduced due to this imbalance, it would be the relatively active investors who were most likely to either decline participation or abandon an initial interest in participating. Such an effect would skew the sample towards less active investors which has implications for interpretation of the findings. Such an effect might also amplify the self-selection bias previously described, since investor interest in the topic might mitigate the effect of the time pressure.

# Conclusion

The contribution of this paper to the discussion of how VCs assess founders during investment decision-making by linking founder selection criteria to established theories from the

broader management, leadership, and social science arenas. These are promising times for anyone interested in understanding the role founders play in the success of their ventures – a role that, if understood well, has much to say about the criteria outside investors should be looking for in the investment decision-making process. The promise arises from a considerable growth in interest in leadership theory and its application to entrepreneurship over the last dozen or so years (Kniffin et al., 2020; Walsh, 2020). Moreover, following calls from entrepreneurship scholars to broaden the lines of inquiry, experts from other fields of social science have been using behavioral and cognitive theories to understand the mechanisms by which founders lead their ventures and drive venture success, which is expanding the range of relevant human factors for assessment during selection. Venture capitalists are sophisticated professionals and may already be viewing entrepreneurs through this lens, although we do not know how widely or effectively investors use such criteria. However, the growing recognition that entrepreneurs are leaders, not just bundles of resources, points to the need for new insights into investment selection criteria generally, and founder criteria in particular.

## Significance of Research

Venture capitalists and founders are both well equipped to evaluate a venture's offer, market, and financial outlook. Theoretical and empirical advances fill the pages of scholarly journals. However, the earliest studies of venture capital identified that the founder matters more than these considerations — a fact that remains true today. As a venture capitalist with a decade of experience recently described, "we can fix technology, many times. We can refocus the market, often. We can't fix [bad] founders" (S. Broderick, personal communication, September 4, 2019). To understand the role of founders, experts have generally framed founder traits using either unstructured sets of characteristics or applied the unduly narrow lens of Human Capital. Both perspectives have advanced what is known about how founder characteristics factor into investment selection processes. However, while these perspectives may have once adequately captured how venture capitalists evaluate founders, today's investors are more sophisticated. The investor just mentioned confirmed that the leadership qualities described in this proposal are critical and that he was "not sure IQ or willingness to work long hours are the right set of criteria," (S. Broderick, personal communication, September 4, 2019) in response to a question about Human Capital-based criteria suggested in several peer-reviewed papers. This situation points to a major gap in our understanding of the investment selection process between the role of founders and what evidence-based research can say about their role. Pointing to the primacy of founders discovered in the earliest research fails to adequately underscore the effort, time, and money at stake. As another venture investor with more than a dozen years of experience described it, his greatest "pain point" is identifying founders who will be reliable strategic partners (D. Endicott, personal communication, February 12, 2018). Neither ad hoc criteria nor Human Capital metrics will do much to address his pain.

# References

- Ács, Z., & Audretsch, D. (Eds.). (2006). Handbook of entrepreneurship research: An interdisciplinary survey and introduction (Vol. 1). Springer Science & Business Media.
- Ahmed, S. U. (1985). nAch, risk-taking propensity, locus of control and entrepreneurship. *Personality and Individual Differences*, 6(6), 781-782. https://doi.org/10.1016/0191-8869(85)90092-3
- Ahmetoglu, G., Chamorro-Premuzic, T., Klinger, B., & Karcisky, T. (Eds.). (2017). *The wiley handbook of entrepreneurship*. John Wiley & Sons.
- Aldrich, H. E. (2012). The emergence of entrepreneurship as an academic field: a personal essay on institutional entrepreneurship. *Research Policy*, 41(7), 1240-1248. https://doi.org/10.1016/j.respol.2012.03.013
- Aldrich, H., Ruef, M., & Lippmann, S. (2020). Organizations evolving (Third). Edward Elgar Publishing Limited.
- Almahry, F. F., Sarea, A., & Hamdan, A. (2018). A review paper on entrepreneurship education and entrepreneurs' skills. *Journal of Entrepreneurship Education*, 21.
  https://www.researchgate.net/publication/330998647\_A\_review\_paper\_on\_entrepreneurs hip\_education\_and\_entrepreneurs'\_skills
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1-2), 11–26. https://doi.org/10.1002/sej.4
- Anderson, L. (1997). Argyris and Schön's theory on congruence and learning. *Resource papers in Action Research*. http://www.aral.com.au/resources/argyris.html

Aouni, B., Colapinto, C., & La Torre, D. (2014). A fuzzy goal programming model for venture capital investment decision making. *Infor: Information Systems and Operational Research*, 52(3), 138-146. https://doi.org/10.3138/infor.52.3.138

Appelhoff, D., Mauer, R., Collewaert, V., & Brettel, M. (2016). The conflict potential of the entrepreneur's decision-making style in the entrepreneur-investor relationship.
 *International Entrepreneurship and Management Journal*, *12*(2), 601-623.
 https://doi.org/10.1007/s11365-015-0357-4

- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18(1), 105-123. https://doi.org/10.1016/S0883-9026(01)00068-4
- Argyris, C., & Schön D. A. (1974). *Theory in practice: increasing professional effectiveness* (1st ed., Ser. Jossey-bass series in higher education). Jossey-Bass.
- Åstebro T., Herz, H., Nanda, R., & Weber, R. A. (2014). Seeking the roots of entrepreneurship: insights from behavioral economics. *The Journal of Economic Perspectives*, 28(3), 49– 69. https://doi.org/10.1257/jep.28.3.49
- Audia, P. G., Locke, E. A., & Smith, K. G. (2000). The paradox of success: an archival and a laboratory study of strategic persistence following radical environmental change. *The Academy of Management Journal*, 43(5), 837–853.

Babbie, E. R. (2016). The Practice of Social Research (Fourteenth). Cengage Learning.

Bachher, J. S., & Guild, P. D. (1996). Financing early stage technology based companies:
investment criteria used by investors. *Frontiers of Entrepreneurship Research*, 996, 363-76.

- Bacon-Gerasymenko, V. (2019). When do organisations learn from successful experiences? The case of venture capital firms. *International Small Business Journal*, 37(5), 450–472. https://doi.org/10.1177/0266242619833878
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: a meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217–254. https://doi.org/10.1111/etap.12095
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, *50*(3), 329-366.
- Balen, T., Tarakci, M., & Sood, A. (2019). Do disruptive visions pay off? The impact of disruptive entrepreneurial visions on venture funding. *Journal of Management Studies*, 56(2), 303–342. https://doi.org/10.1111/joms.12390
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*(3), 359-373.
- Bandura, A. (1991). Human agency: the rhetoric and the reality. American Psychologist, 46(2).
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management, 38*(1), 9–44. https://doi.org/10.1177/0149206311410606
- Barkham, R. J. (1994). Entrepreneurial characteristics and the size of the new firm: a model and an econometric test. *Small Business Economics : An International Journal*, 6(2), 117– 125. https://doi.org/10.1007/BF01065184

- Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: ten years after 1991. *Journal of Management*, 27(6), 625–641. https://doi.org/10.1177/014920630102700601
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *The Academy of Management Review*, *33*(2), 328-340.
- Baron, J. N., & Hannan, M. T. (2002). Organizational blueprints for success in high-tech startups: lessons from the stanford project on emerging companies. *California Management Review*, 44(3), 8–36. https://doi.org/10.2307/41166130
- Baron, R. A., & Markman, G. D. (2000). Beyond social capital: how social skills can enhance entrepreneurs' success. *The Academy of Management Executive (1993-2005), 14*(1), 106–116.
- Barry, C. B. (1994). New directions in research on venture capital finance. *Financial Management*, *23*(*3*), 3-15.
- Baum, J. A. C., & Silverman, B. S. (2004). Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing*, 19(3), 411–436. https://doi.org/10.1016/S0883-9026(03)00038-7
- Baum, J. R., Frese, M., & Baron, R. A. (2014). Born to be an entrepreneur? Revisiting the personality approach to entrepreneurship. In J. R. Baum, M. Frese, & R. A. Baron (Eds.) *The psychology of entrepreneurship* (pp. 73-98). L Erlbaum Associates.
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587-598.

- Baum, J. R., Locke, E. A., & Kirkpatrick, S. A. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83(1), 43-54.
- Baum, J. R., Locke, E. A., & Smith, K. G. (2001). A multidimensional model of venture growth. *The Academy of Management Journal*, 44(2), 292-303.
- Baumol, W. J. (1968). Entrepreneurship in economic theory. *The American Economic Review*, 58(2), 64-71.
- Baumol, W. J. (1993). Formal entrepreneurship theory in economics: existence and bounds. *Journal of Business Venturing*, 8(3), 197–210. https://doi.org/10.1016/0883-9026(93)90027-3
- Becker, G. S. (1993). *Human capital: a theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
- Bearse, P. J. (1982). A study of entrepreneurship by region and SMSA size. *Frontiers of Entrepreneurship Research*, 2(1), 78-112.
- Beckman, C. M., Burton, M. D., & O'Reilly, C. (2007). Early teams: the impact of team demography on vc financing and going public. *Journal of Business Venturing*, 22(2), 147–173. https://doi.org/10.1016/j.jbusvent.2006.02.001
- Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performence in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, 2(1), 79-93. https://doi.org/10.1016/0883-9026(87)90020-6
- Bengtsson, O., & Wang, F. (2010). What matters in venture capital? Evidence from entrepreneurs' stated preferences. *Financial Management*, *39*(4), 1367-1401.

- Bernstein, S., Giroud, X., & Townsend, R. R. (2016). The impact of venture capital monitoring. *The Journal of Finance*, *71*(4), 1591-1622.
- Bertoni, F., D'Adda, D., & Grilli, L. (2019). Self-selection of entrepreneurial firms in thin venture capital markets: theory and empirical evidence. *Strategic Entrepreneurship Journal*, 13(1), 47-74. https://doi.org/10.1002/sej.1280
- Bierly, P. E., Kessler, E. H., & Christensen, E. W. (2000). Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management*, 13, 595–618.
- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *The Academy of Management Review*, *13*(3), 442-453.
- Bird, B., & Jelinek, M. (1989). The operation of entrepreneurial intentions. *Entrepreneurship Theory and Practice*, *13*(2), 21-30. https://doi.org/10.1177/104225878801300205
- Bird, B. & Schjoedt, L. (2009). Entrepreneurial behavior: Its nature, scope, recent research, and agenda for future research. In A.L. Carsrud & M. Brännback (Eds.), Understanding the entrepreneurial mind (international studies in entrepreneurship) (pp. 327–358). New York: Springer.
- Black, B. S., & Gilson, R. J. (1998). Venture capital and the structure of capital markets: banks versus stock markets. *Journal of Financial Economics*, 47(3), 243-277.
- Blank, S. (2013). Why the lean start-up changes everything. 2013. *Harvard Business Review*, *91*(5).
- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: a meta-analysis. *Journal of Applied Psychology*, *89*(5), 901-910.

- Bouchouicha, R., & Vieider, F. M. (2019). Growth, entrepreneurship, and risk-tolerance: a riskincome paradox. *Journal of Economic Growth*, 24(3), 257-282. https://doi.org/10.1007/s10887-019-09168-0
- Box, T. M., Watts, L. R., & Hisrich, R. D. (1994). Manufacturing entrepreneurs: an empirical study of the correlates of employment growth in the tulsa msa and rural east texas. *Journal of Business Venturing*, 9(3), 261–270. https://doi.org/10.1016/0883-9026(94)90033-7
- Brandstätter, H. (1997). Becoming an entrepreneur a question of personality structure? Journal of Economic Psychology, 18(2), 157–177. https://doi.org/10.1016/S0167-4870(97)00003-2
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: a look at five meta-analyses. *Personality and Individual Differences*, 51(3), 222–230. https://doi.org/10.1016/j.paid.2010.07.007
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Bruneel, J., Yli-Renko, H., & Clarysse, B. (2010). Learning from experience and learning from others: how congenital and interorganizational learning substitute for experiential learning in young firm internationalization. *Strategic Entrepreneurship Journal*, 4(2), 164-182. https://doi.org/10.1002/sej.89
- Bruno, A. V., & Tyebjee, T. T. (1985). The entrepreneur's search for capital. *Journal of Business Venturing*, *1*(1), 61–74. https://doi.org/10.1016/0883-9026(85)90007-2

- Brush, C. G., Manolova, T. S., & Edelman, L. F. (2008). Separated by a common language?
  Entrepreneurship research across the atlantic. *Entrepreneurship Theory and Practice*, 32(2), 249–266. https://doi.org/10.1111/j.1540-6520.2007.00225.x
- Bryant, T. A. (2004). Entrepreneurship. In G. R. Goethals, G. J. Sorenson, & J. M. Burns (Eds.), *Encyclopedia of Leadership, Vol. 1* (pp. 442–448). Sage Publications.
- Burke, A. E., FitzRoy, F. R., & Nolan, M. A. (2000). When less is more: distinguishing between entrepreneurial choice and performance. *Oxford Bulletin of Economics and Statistics*, 62(5), 565–587. https://doi.org/10.1111/1468-0084.00190
- Bygrave, W. D., & Timmons, J. A. (1992). *Venture capital at the crossroads*. Harvard Business School Press.
- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2009). Risk attitudes of nascent entrepreneursnew evidence from an experimentally validated survey. *Small Business Economics : An Entrepreneurship Journal*, 32(2), 153–167. https://doi.org/10.1007/s11187-007-9078-6
- Caliendo, M., & Kritikos, A. S. (2008). Is entrepreneurial success predictable? An ex-ante analysis of the character-based approach. *Kyklos*, 61(2), 189–214. https://doi.org/10.1111/j.1467-6435.2008.00398.x
- Caliendo, M., & Kritikos, A. S. (2012). Searching for the entrepreneurial personality: new evidence and avenues for further research. *Journal of Economic Psychology*, *33*(2), 319–324. https://doi.org/10.1016/j.joep.2011.06.001
- Campbell, W. K., & Miller, J. D. (2011). The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatments. John Wiley & Sons. https://doi.org/10.1002/9781118093108

- Cannice, M. V., Allen, J. P., & Tarrazo, M. (2016). What do venture capitalists think of venture capital research? *Venture Capital: An International Journal of Entrepreneurial Finance*, 18(1), 1–20. https://doi.org/10.1080/13691066.2016.1102393
- Cantillon, R. (2010) [1755]. *An Essay on Economic Theory*. Ludwig von Mises Institute. ISBN 978-0-415-07577-0.
- Cardon, M. S., Glauser, M., & Murnieks, C. Y. (2017). Passion for what? Expanding the domains of entrepreneurial passion. *Journal of Business Venturing Insights*, 8, 24–32. https://doi.org/10.1016/j.jbvi.2017.05.004
- Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C. (2013). Measuring entrepreneurial passion: conceptual foundations and scale validation. *Journal of Business Venturing*, 28(3), 373–396. https://doi.org/10.1016/j.jbusvent.2012.03.003
- Cardon, M. S., & Kirk, C. P. (2015). Entrepreneurial passion as mediator of the self–efficacy to persistence relationship. *Entrepreneurship Theory and Practice*, 39(5), 1027-1050. https://doi.org/10.1111/etap.12089
- Cardon, M. S., Post, C., & Forster, W. R. (2017). Team entrepreneurial passion: its emergence and influence in new venture teams. *Academy of Management Review*, 42(2), 283-305.
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *The Academy of Management Review*, *34*(3), 511-532.
- Cardon, M. S., Zietsma, C., Saparito, P., Matherne, B. P., & Davis, C. (2005). A tale of passion: new insights into entrepreneurship from a parenthood metaphor. *Journal of Business Venturing*, 20(1), 23–45. https://doi.org/10.1016/j.jbusvent.2004.01.002

- Carland III, J. W., Carland Jr, J. W., Carland, J. A. C., & Pearce, J. W. (1995). Risk taking propensity among entrepreneurs, small business owners and managers. *Journal of Business and Entrepreneurship*, 7(1), 15.
- Carland, J. W., Jo, A. C. C., Hoy, F., & Boulton, W. R. (1984). Differentiating entrepreneurs from small business owners: a conceptualization. *The Academy of Management Review*, 9(2), 354–359.
- Carlos Nunes, J., Gomes Santana Félix, E., & Pacheco Pires, C. (2014). Which criteria matter most in the evaluation of venture capital investments? *Journal of Small Business and Enterprise Development*, 21(3), 505–527. https://doi.org/10.1108/JSBED-10-2013-0165
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6), 749–778. https://doi.org/10.1016/j.jm.2004.06.001
- Carter, N. M., Gartner, W. B., & Reynolds, P. D. (1996). Exploring start-up event sequences. Journal of Business Venturing, 11(3), 151–166. https://doi.org/10.1016/0883-9026(95)00129-8
- Carter, R., & Manaster, S. (1990). Initial public offerings and underwriter reputation. *Journal of Finance*, *45*(4), 1045-1067.
- Cassar, G., & Friedman, H. (2009). Does self-efficacy affect entrepreneurial investment? *Strategic Entrepreneurship Journal*, *3*(3), 241-260
- Casson, M. (2005). Entrepreneurship and the theory of the firm. *Journal of Economic Behavior* and Organization, 58(2), 327-348. https://doi.org/10.1016/j.jebo.2004.05.007

- Castille, C. M., Kuyumcu, D., & Bennett, R. J. (2017). Prevailing to the peers' detriment: organizational constraints motivate Machiavellians to undermine their peers. *Personality* and Individual Differences, 104, 29-36. https://doi.org/10.1016/j.paid.2016.07.026
- Chan, Y. S. (1983). On the positive role of financial intermediation in allocation of venture capital in a market with imperfect information. *The Journal of Finance*, 38(5), 1543-1568.
- Chandler, G. N., & Hanks, S. H. (1998). An examination of the substitutability of founders human and financial capital in emerging business ventures. *Journal of Business Venturing*, *13*(5), 353-369. https://doi.org/10.1016/S0883-9026(97)00034-7
- Chell, E. (2013). Review of skill and the entrepreneurial process. International Journal of Entrepreneurial Behavior & Research, 19(1), 6–31. https://doi.org/10.1108/13552551311299233
- Chen, X. P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: a persuasion analysis of venture capitalists' funding decisions. *The Academy of Management Journal*, 52(1), 199-214.
- Christie, R., & Geis, F. (1970). *Studies in Machiavellianism* (Ser. Social psychology). Academic Press.
- Ciavarella, M. A., Buchholtz, A. K., Riordan, C. M., Gatewood, R. D., & Stokes, G. S. (2004).
  The big five and venture survival: is there a linkage? *Journal of Business Venturing*, 19(4), 465–483. https://doi.org/10.1016/j.jbusvent.2003.03.001

- Cohen, B. D., & Dean, T. (2005). Information asymmetry and investor valuation of ipos: top management team legitimacy as a capital market signal. *Strategic Management Journal*, *Vol. 26 No. 7 (jul. 2005)*, *P683-690*.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, *35*(1), 128-152.
- Collins, J. (2009). Good to great (why some companies make the leap and others don't). *Nhrd Network Journal,* 2(7), 102–105. https://doi.org/10.1177/0974173920090719
- Colombo, M. G., & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: a competence-based view. *Research Policy*, 34(6), 795–816. https://doi.org/10.1016/j.respol.2005.03.010
- Colombo, M. G., & Grilli, L. (2010). On growth drivers of high-tech start-ups: exploring the role of founders' human capital and venture capital. *Journal of Business Venturing*, 25(6), 610–626. https://doi.org/10.1016/j.jbusvent.2009.01.005
- Cooper, A. C., Dunkelberg, W. C. and Woo, C. Y. (1988). Survival and failure: a longitudinal study. In B.A. Kirchhoff, W.A. Long, W.E. McMullen, K.H. Vesper, K.H. and W.E. Wetzel (Eds.), *Frontiers of Entrepreneurship Research* (pp. 225-237)
- Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing*, 9(5), 371–395. https://doi.org/10.1016/0883-9026(94)90013-2
- Corley, K. G. (2015). A commentary on "what grounded theory is ..." engaging a phenomenon from the perspective of those living it. *Organizational Research Methods*, 18(4), 600 -605.

- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, *34*(3), 42-49.
- Creswell, J. W. (2009). Editorial: mapping the field of mixed methods research. *Journal of Mixed Methods Research*, *3*(2), 95–108. https://doi.org/10.1177/1558689808330883
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.
- Cromie, S. (2000). Assessing entrepreneurial inclinations: some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*, 9(1), 7–30. https://doi.org/10.1080/135943200398030
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96(3), 443–456. https://doi.org/10.1037/a0022147
- Csikszentmihalyi, M. (1996). Creativity: flow and the psychology of discovery and innovation, decision making. *Journal of Management*, *26*(4), 705-732.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, 92(4), 631-648.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in Experimental Social Psychology*, 40, 61-149. https://doi.org/10.1016/S0065-2601(07)00002-0

- Das, T. K., & Teng, B. S. (1998). Between trust and control: developing confidence in partner cooperation in alliances. *The Academy of Management Review*, 23(3), 491-512.
- Davidsson, P. (2016). The field of entrepreneurship research: some significant developments. In
  D. Bögenhold, J. Bonnet, M. Dejardin, & D.G. Pérez de Lema (Eds.) *Contemporary Entrepreneurship* (pp. 17-28). Springer. https://doi.org/10.1007/978-3-319-28134-6\_2
- Davidsson, P. (2017). A future of entrepreneurship research: domain, data, theory, and impact. InG. Ahmetoglu, T. Chamorro-Premuzic, B. Klinger, & T. Karcisky (Eds.), *The WileyHandbook of Entrepreneurship* (pp. 1-23).
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331. https://doi.org/10.1016/S0883-9026(02)00097-6
- De Cock, R., Bruneel, J., & Bobelyn, A. (2020). Making the lean start-up method work: the role of prior market knowledge. *Journal of Small Business Management*, 58(5), 975-1002.
- De Leó E. D., & Guild, P. (2003). Using repertory grid to identify intangibles in business plans. *Venture Capital*, 5(2), 135–160. https://doi.org/10.1080/1369106032000097030
- De Noble, A. F., Jung, D., & Ehrlich, B. (1999). Entrepreneurial self-efficacy: the development of a measure and its relationship to entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, *18*(4), 63-77.
- Delmar Frédéric, & Shane, S. (2004). Legitimating first: organizing activities and the survival of new ventures. *Journal of Business Venturing*, 19(3), 385–410. https://doi.org/10.1016/S0883-9026(03)00037-5

- Denzin, N. K. (2001). *Interpretive interactionism* (2nd ed., Ser. Applied social research methods series, v.16). Sage Publications.
- Dhochak, M., & Sharma, A. K. (2016). Identification and prioritization of factors affecting venture capitalists' investment decision-making process: an analytical hierarchal process (ahp) approach. *Journal of Small Business and Enterprise Development*, 23(4), 964–983. https://doi.org/10.1108/JSBED-12-2015-0166
- Dimov, D. (2010). Nascent entrepreneurs and venture emergence: opportunity confidence, human capital, and early planning. *Journal of Management Studies*, 47(6), 1123–1153. https://doi.org/10.1111/j.1467-6486.2009.00874.x
- Dimov, D. (2017). Towards a qualitative understanding of human capital in entrepreneurship research. *International Journal of Entrepreneurial Behavior & Research*, 23(2), 210– 227. https://doi.org/10.1108/IJEBR-01-2016-0016
- Dimov, D. P., & Shepherd, D. A. (2005). Human capital theory and venture capital firms: exploring "home runs" and "strike outs." *Journal of Business Venturing*, 20(1), 1–21. https://doi.org/10.1016/j.jbusvent.2003.12.007
- Dimov, D., Shepherd, D. A., & Sutcliffe, K. M. (2007). Requisite expertise, firm reputation, and status in venture capital investment allocation decisions. *Journal of Business Venturing*, 22(4), 481–502. https://doi.org/10.1016/j.jbusvent.2006.05.001
- Drover, W., Busenitz, L., Matusik, S., Townsend, D., Anglin, A., & Dushnitsky, G. (2017). A review and road map of entrepreneurial equity financing research: venture capital, corporate venture capital, angel investment, crowdfunding, and accelerators. *Journal of Management, 43*(6), 1820–1853. https://doi.org/10.1177/0149206317690584

- Drucker, P. F. (1985). Entrepreneurial strategies. *California Management Review*, 27(2), 9–25. https://doi.org/10.2307/41165126
- Drucker, P. F. (1998). The discipline of innovation. *Leader to Leader*, 1998(9), 13–15. https://doi.org/10.1002/ltl.40619980906
- Drucker, P. F. (2002). The discipline of innovation. Harvard Business Review, 80, 95-104.
- Drucker, P. F. (2014). *Innovation and Entrepreneurship* (Ser. Routledge classics). Taylor and Francis.
- Dubini, P. (1989). The influence of motivations and environment on business start-ups: some hints for public policies. *Journal of Business Venturing*, 4(1), 11–26. https://doi.org/10.1016/0883-9026(89)90031-1
- Drnovsek, M., Cardon, M. S., & Patel, P. C. (2016). Direct and indirect effects of passion on growing technology ventures. *Strategic Entrepreneurship Journal*, 10(2), 194–213. https://doi.org/10.1002/sej.1213
- Ebbers, J. J., & Wijnberg, N. M. (2012). Nascent ventures competing for start-up capital: matching reputations and investors. *Journal of Business Venturing*, 27(3), 372–384. https://doi.org/10.1016/j.jbusvent.2011.02.001
- Edelman, P., & van Knippenberg, D. (2018). Emotional intelligence, management of subordinate's emotions, and leadership effectiveness. *Leadership & Organization Development Journal*, 39(5), 592–607.
- Elfenbein, H. A. (2007). 7 Emotion in organizations: a review and theoretical integration. *Academy of Management Annals: A Journal of the Academy of Management*, *1*(2007), 315-386.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. University of Chicago Press.

Ensley, M. D., Hmieleski, K. M., & Pearce, C. L. (2006). The importance of vertical and shared leadership within new venture top management teams: implications for the performance of startups. *The Leadership Quarterly*, *17*(3), 217–231. https://doi.org/10.1016/j.leaqua.2006.02.002

- Ensley, M. D., Pearson, A. W., & Amason, A. C. (2002). Understanding the dynamics of new venture top management teams: cohesion, conflict, and new venture performance. *Journal of Business Venturing*, *17*(4), 365–386. https://doi.org/10.1016/S0883-9026(00)00065-3
- Essers, C., Dey, P., & Tedmanson, D. (Eds.). (2017). Critical perspectives on entrepreneurship : challenging dominant discourses (1st ed., Ser. Routledge rethinking entrepreneurship research). Routledge.
- Ewens, M., Nanda, R., & Rhodes-Kropf, M. (2018). Cost of experimentation and the evolution of venture capital. *Journal of Financial Economics*, 128(3), 422–442. https://doi.org/10.1016/j.jfineco.2018.03.001
- Fairchild, R. (2011). An entrepreneur's choice of venture capitalist or angel-financing: a behavioral game-theoretic approach. *Journal of Business Venturing*, 26(3), 359–374. https://doi.org/10.1016/j.jbusvent.2009.09.003
- Falik, Y., Lahti, T., & Keinonen, H. (2016). Does startup experience matter? Venture capital selection criteria among israeli entrepreneurs. *Venture Capital*, 18(2), 149–174. https://doi.org/10.1080/13691066.2016.1164109

- Fay, D., & Frese, M. (2001). The concept of personal initiative: an overview of validity studies. *Human Performance*, 14(1), 97–124. https://doi.org/10.1207/S15327043HUP1401\_06
- Fayolle, A., Ramoglou, S., Karatas-Ozkan, M., & Nicolopoulou, K. (Eds.). (2018). *Philosophical reflexivity and entrepreneurship research: New directions in scholarship*. Routledge.
- Feeser, H. R., & Willard, G. E. (1990). Founding strategy and performance: a comparison of high and low growth high tech firms. *Strategic Management Journal*, 11(2), 87-98.
- Feld, B., & Mendelsohn, J. (2019). *Venture deals: Be smarter than your lawyer and venture capitalist*. John Wiley & Sons.
- Ferreira João J. M, Fernandes, C. I., & Kraus, S. (2019). Entrepreneurship research: mapping intellectual structures and research trends. *Review of Managerial Science*, 13(1), 181– 205. https://doi.org/10.1007/s11846-017-0242-3
- Fiedler, F. E. (1970). Leadership experience and leader performance—another hypothesis shot to hell. Organizational Behavior and Human Performance, 5(1), 1–14. https://doi.org/10.1016/0030-5073(70)90002-4
- Fiedler, F. E. (1972). The effects of leadership training and experience: a contingency model interpretation. *Administrative Science Quarterly*, *17*(4), 453-470.
- Fisher, G. (2012). Effectuation, causation, and bricolage: a behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory and Practice*, 36(5), 1019–1051. https://doi.org/10.1111/j.1540-6520.2012.00537.x
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77–83. https://doi.org/10.1016/j.tics.2006.11.005

- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878-902.
- Fletcher, D. E. (2006). Entrepreneurial processes and the social construction of opportunity. *Entrepreneurship & Regional Development*, 18(5), 421–440. https://doi.org/10.1080/08985620600861105
- Florin, J. (2005). Is venture capital worth it? Effects on firm performance and founder returns. *Journal of Business Venturing*, 20(1), 113–135. https://doi.org/10.1016/j.jbusvent.2003.12.006
- Florin, J., Lubatkin, M., & Schulze, W. (2003). A social capital model of high-growth ventures. *The Academy of Management Journal*, *46*(3), 374-384.
- Foo, M. D. (2011). Emotions and entrepreneurial opportunity evaluation. *Entrepreneurship Theory and Practice*, *35*(2), 375–393. https://doi.org/10.1111/j.1540-6520.2009.00357.x
- Foo, M.-D., Uy, M. A., & Baron, R. A. (2009). How do feelings influence effort? An empirical study of entrepreneurs' affect and venture effort. *Journal of Applied Psychology*, 94(4), 1086–1094. https://doi.org/10.1037/a0015599
- Ford, C. M., & Gioia, D. A. (2000). Factors influencing creativity in the domain of managerial decision making. *Journal of Management*, 26(4), 705–732. https://doi.org/10.1016/S0149-2063(00)00053-2
- Franke, N., Gruber, M., Harhoff, D., & Henkel, J. (2006). What you are is what you like similarity biases in venture capitalists' evaluations of start-up teams. *Journal of Business Venturing*, 21(6), 802–826. https://doi.org/10.1016/j.jbusvent.2005.07.001

- Fried, V. H., & Hisrich, R. D. (1994). Toward a model of venture capital investment decision making. *Financial Management*, 23(3), 28-37.
- Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *The Academy of Management Review*, *10*(4), 696-706.
- Gartner, W. B. (1989). Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship Theory and Practice*, *14*(1), 27-38.
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal* of Business Venturing, 5(1), 15–28. https://doi.org/10.1016/0883-9026(90)90023-M
- Gasse, Y. (1982). Elaborations on the psychology of the entrepreneur. In C.A. Kent, D.L.Sexton, & K.H. Vesper (Eds.), *Encyclopedia of Entrepreneurship* (pp. 57-71). Prentice-Hall.
- Gielnik, M. M., Spitzmuller, M., Schmitt, A., Klemann, D. K., & Frese, M. (2015). I put in effort, therefore I am passionate: investigating the path from effort to passion in entrepreneurship. *Academy of Management Journal*, 58(4), 1012-1031.
- Gimeno, J., Folta, T., Cooper, A., & Woo, C. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42(4), 750–783

Gladstone, D., & Gladstone, L. (2002). Venture Capital Handbook. Prendice-Hall.

- Glaser, B. G. (1978). *Theoretical sensitivity: advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of grounded theory: Strategies for qualitative research*. Routledge.

Glesne, C. (2016). Becoming qualitative researchers : an introduction (Fifth). Pearson.

- Gligor, D. M., Esmark, C. L., & Gölgeci, I. (2016). Building international business theory: A grounded theory approach. *Journal of International Business Studies*, 47, 93-111.
- Gompers, P. A., Gornall, W., Kaplan, S. N., & Strebulaev, I. A. (2020). How do venture capitalists make decisions? *Journal of Financial Economics*, 135(1), 169–190. https://doi.org/10.1016/j.jfineco.2019.06.011
- Gompers, P., Kovner, A., Lerner, J., & Scharfstein, D. (2010). Performance persistence in entrepreneurship. *Journal of Financial Economics*, 96(1), 18–32. https://doi.org/10.1016/j.jfineco.2009.11.001
- Gompers, P., & Lerner, J. (1998). Venture capital distributions: short-run and long-run reactions. *Journal of Finance*, *53*(6), 2161-2183.
- Gompers, P., & Lerner, J. (2001). The money of invention. Harvard Business School Press.
- Goodman, L. A. (1961). Snowball sampling. *The Annals of Mathematical Statistics*, 32(1), 148-170.
- Goodwin, G. P. (2015). Moral character in person perception. *Current Directions in Psychological Science*, 24(1), 38–44. https://doi.org/10.1177/0963721414550709
- Gorman, M., & Sahlman, W. A. (1989). What do venture capitalists do? *Journal of Business Venturing*, 4(4), 231–248. https://doi.org/10.1016/0883-9026(89)90014-1
- Goslin, L. N. & Barge, B. (1986). Entrepreneurial qualities considered in venture capital support.
   In R. Ronstadt, J.A. Hornaday, R. Petersen, & K.H. Vesper (Eds.), *Frontiers of entrepreneurship research* (pp. 366–377). Babson College.

- Goss, D. (2005). Entrepreneurship and 'the social': towards a deference-emotion theory. *Human Relations*, 58(5), 617–636. https://doi.org/10.1177/0018726705055965
- Graves, S. B., & Ringuest, J. (2018). Overconfidence and disappointment in venture capital decision making: an empirical examination. *Managerial and Decision Economics*, 39(5), 592–600. https://doi.org/10.1002/mde.2931
- Gulati, R., & Higgins, M. C. (2003). Which ties matter when? The contingent effects of interorganizational partnerships on ipo success. *Strategic Management Journal*, 24(2), 127–144. https://doi.org/10.1002/smj.287
- Hall, J., & Hofer, C. W. (1993). Venture capitalists' decision criteria in new venture evaluation.
  Journal of Business Venturing, 8(1), 25–42. https://doi.org/10.1016/0883-9026(93)90009-T
- Hambrick, D. C. (2007). The field of management's devotion to theory: too much of a good thing? *The Academy of Management Journal*, *50*(6), 1346-1352.
- Hambrick, D. C., & Finkelstein, S. (1987). Managerial discretion: a bridge between polar views of organizational outcomes. *Research in Organizational Behavior*, *9*, 369-406.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: the organization as a reflection of its top managers. *The Academy of Management Review*, *9*(2), 193-206.
- Hannah, S. T., & Avolio, B. J. (2011a). The locus of leader character. *The Leadership Quarterly*, 22(5), 979–983. https://doi.org/10.1016/j.leaqua.2011.07.016
- Hannah, S. T., & Avolio, B. J. (2011b). Leader character, ethos, and virtue: individual and collective considerations. *The Leadership Quarterly*, 22(5), 989–994. https://doi.org/10.1016/j.leaqua.2011.07.018

- Harper, D. A. (2008). Towards a theory of entrepreneurial teams. *Journal of business venturing*, 23(6), 613-626.
- Hasa. (2016). *Difference between pragmatic and practical*. Difference Between. https://www.differencebetween.com/difference-between-pragmatic-and-vs-practical

Haynes, K. T., & Hillman, A. (2010). The effect of board capital and ceo power on strategic change. *Strategic Management Journal*, 31(11), 1145–1163. https://doi.org/10.1002/smj.859

- Hechavarria, D. M., Renko, M., & Matthews, C. H. (2012). The nascent entrepreneurship hub: goals, entrepreneurial self-efficacy and start-up outcomes. *Small Business Economics*, 39(3), 685-701. https://doi.org/10.1007/s11187-011-9355-2
- Hellmann, T., & Puri, M. (2000). The interaction between product market and financing strategy: the role of venture capital. *The Review of Financial Studies*, *13*(4), 959-984.
- Herron, L., & Robinson, R. B. (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, 8(3), 281–294. https://doi.org/10.1016/0883-9026(93)90032-Z
- Heunks, F. J. (1998). Innovation, creativity and success. *Small Business Economics*, 10(3), 263-272.
- Higashide, H., & Birley, S. (2002). The consequences of conflict between the venture capitalist and the entrepreneurial team in the united kingdom from the perspective of the venture capitalist. *Journal of Business Venturing*, *17*(1), 59–81. https://doi.org/10.1016/S0883-9026(00)00057-4

- Hills, G. E., & Welsch, H. (1986). Entrepreneurship behavioral intentions and student independence, characteristics and experiences. In *Frontiers of Entrepreneurship Research: Proceedings of the Sixth Annual Babson College Entrepreneurship Research Conference* (pp. 173-186). Babson College.
- Hisrich, R. D., & Jankowicz, A. D. (1990). Intuition in venture capital decisions: an exploratory study using a new technique. *Journal of Business Venturing*, 5(1), 49–62. https://doi.org/10.1016/0883-9026(90)90026-P
- Hite, J. M., & Hesterly, W. S. (2001). The evolution of firm networks: from emergence to early growth of the firm. *Strategic Management Journal*, 22(3), 275–286. https://doi.org/10.1002/smj.156
- Hitt, M.A., Bierman, L., Shimizu, K. and Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: a resourcebased perspective. *The Academy of Management Journal*, 44(1), 13-28.
- Hmieleski, K.M. & Ensley, M.D. (2007). A contextual examination of new venture performance: entrepreneur leadership behavior, top management team heterogeneity, and environmental dynamism. *Journal of Organizational Behavior*, 28(7), 865–889.

Holland, J. L. (1973). Making vocational choices. Prentice Hall.

- Hornaday, J. A., & Aboud, J. (1971). Characteristics of successful entrepreneurs. *Personnel Psychology*, 24(2), 141–153. https://doi.org/10.1111/j.1744-6570.1971.tb02469.x
- Houlfort, N., L. Philippe, F., J. Vallerand, R., & Ménard, J. (2013). On passion and heavy work investment: personal and organizational outcomes. *Journal of Managerial Psychology*, 29(1), 25–45. https://doi.org/10.1108/JMP-06-2013-0155

- Hsu, D. H. (2007). Experienced entrepreneurial founders, organizational capital, and venture capital funding. *Research Policy*, 36(5), 722–741. https://doi.org/10.1016/j.respol.2007.02.022
- Huang, T. Y., Souitaris, V., & Barsade, S. G. (2019). Which matters more? Group fear versus hope in entrepreneurial escalation of commitment. *Strategic Management Journal*, 40(11), 1852–1881. https://doi.org/10.1002/smj.3051
- Hunter, J. E., & Schmidt, F. L. (2004). Methods of meta-analysis: correcting error and bias in research findings (2nd ed.). Sage.
- Hvide, H. K., & Panos, G. A. (2014). Risk tolerance and entrepreneurship. *Journal of Financial Economics*, 111(1), 200–223. https://doi.org/10.1016/j.jfineco.2013.06.001
- Jackson, D. N., Hourany, L., & Vidmar, N. J. (1972). A four-dimensional interpretation of risk taking. *Journal of Personality*, 40(3), 483–501. https://doi.org/10.1111/j.1467-6494.1972.tb00075.x
- Janis, I. L. (1982). Groupthink: Psychological studies of policy decisions and fiascoes (2nd Ed).Houghton Mifflin.
- Janney, J. J., & Folta, T. B. (2006). Moderating effects of investor experience on the signaling value of private equity placements. *Journal of Business Venturing*, 21(1), 27–44. https://doi.org/10.1016/j.jbusvent.2005.02.008
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *The Academy of Management Journal*, 55(6), 1264-1294.

- Jolink, A., & Niesten, E. (2016). The impact of venture capital on governance decisions in collaborations with start-ups. *Small Business Economics : An Entrepreneurship Journal*, 47(2), 331–344. https://doi.org/10.1007/s11187-016-9719-8
- Jonason, P. K., & Jackson, C. J. (2016). The dark triad traits through the lens of reinforcement sensitivity theory. *Personality and Individual Differences*, 90, 273–277. https://doi.org/10.1016/j.paid.2015.11.023
- Jones, M. V., & Casulli, L. (2014). International entrepreneurship: exploring the logic and utility of individual experience through comparative reasoning approaches. *Entrepreneurship Theory and Practice*, *38*(1), 45–69. https://doi.org/10.1111/etap.12060
- Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89(6), 899.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of Applied Psychology*, *87*(4), 765.
- Kamm, J. B., Shuman, J. C., Seeger, J. A., & Nurick, A. J. (1990). Entrepreneurial teams in new venture creation: a research agenda. *Entrepreneurship Theory and Practice*, 14(4), 7–17. https://doi.org/10.1177/104225879001400403
- Kanter, R. M. (1983). Frontiers for strategic human resource planning and management. *Human Resource Management*, 22(1-2), 9–21. https://doi.org/10.1002/hrm.3930220104
- Kaplan, S. N., Sensoy, B. A., & Strömberg, P. (2009). Should investors bet on the jockey or the horse? Evidence from the evolution of firms from early business plans to public companies. *Journal of Finance*, 64(1), 75–115.

- Kaplan, S. N., & Strömberg, P. (2004). Characteristics, contracts, and actions: evidence from venture capitalist analyses. *Journal of Finance*, 59(5), 2177–2210.
- Kato, M., Okamuro, H., & Honjo, Y. (2015). Does founders' human capital matter for innovation? Evidence from japanese start-ups. *Journal of Small Business Management*, 53(1), 114–128. https://doi.org/10.1111/jsbm.12094
- Kets de Vries, M. F. R. (1985). The dark side of entrepreneurship. *Harvard Business Review*, 63(6), 160–166.
- Khan, A. M. (1987). Assessing venture capital investments with noncompensatory behavioral decision models. *Journal of Business Venturing*, 2(3), 193–205. https://doi.org/10.1016/0883-9026(87)90008-5
- Khanin, D., & Turel, O. (2015). Conflicts and regrets in the venture capitalist-entrepreneur relationship. *Journal of Small Business Management*, 53(4), 949–969. https://doi.org/10.1111/jsbm.12114

Kilby, P. (1971). Entrepreneurship and economic development. Free Press.

- Kim, J., & Noh, Y. (2016). The effects of psychological capital and risk tolerance on service workers' internal motivation for firm performance and entrepreneurship. *International Entrepreneurship and Management Journal*, *12*(3), 681–696.
   https://doi.org/10.1007/s11365-015-0369-0
- Kirzner, I. M. (1971). Entrepreneurship and the market approach to development. *Toward Liberty*, 2, 194-208.

Kirzner, I. M. (1973). Competition and entrepreneurship. University of Chicago Press.

- Klepper, S. (2016). *Experimental capitalism: The nanoeconomics of American high-tech industries.* Princeton University Press.
- Klonowski, D. (2018). *The venture Capital Deformation : value destruction throughout the investment process*. Palgrave Macmillan.
- Klotz, A. C., Hmieleski, K. M., Bradley, B. H., & Busenitz, L. W. (2014). New venture teams: a review of the literature and roadmap for future research. *Journal of Management*, 40(1), 226–255. https://doi.org/10.1177/0149206313493325
- Kniffin, K. M., Detert, J. R., & Leroy, H. L. (2020). On leading and managing: synonyms or separate (and unequal)? *Academy of Management Discoveries*, 6(4), 544-571.

Knight, F. H. (1921) Risk, Uncertainty and Profit. Houghton Mifflin.

- Knight, G. A. (2001). Entrepreneurship and strategy in the international sme. Journal of International Management, 7(3), 155–171. https://doi.org/10.1016/S1075-4253(01)00042-4
- Knockaert, M., Clarysse, B., & Wright, M. (2010). The extent and nature of heterogeneity of venture capital selection behaviour in new technology-based firms. *R&D Management*, 40(4), 357–371. https://doi.org/10.1111/j.1467-9310.2010.00607.x
- Knockaert, M., & Vanacker, T. (2013). The association between venture capitalists' selection and value adding behavior: evidence from early stage high tech venture capitalists. *Small Business Economics*, 40(3), 493-509.
- Ko, E.-J., & McKelvie, A. (2018). Signaling for more money: the roles of founders' human capital and investor prominence in resource acquisition across different stages of firm

development. *Journal of Business Venturing*, *33*(4), 438–454. https://doi.org/10.1016/j.jbusvent.2018.03.001

- Kortum, S., & Lerner, J. (2000). Assessing the contribution of venture capital to innovation. *The Rand Journal of Economics*, *31*(4), 674-692.
- Kotter, J. P. (1991). Best of HBR. What Leaders Really Do. Harvard Business Review. Reprint R0111F.
- Kozmetsky, G., Gill, M. D., & Smilor, R. W. (1985). *Financing and managing fast-growth companies: the venture capital process.* Lexington Books.
- Lanivich, S. E., Lyons, L. M., & Wheeler, A. R. (2021). Nascent entrepreneur characteristic predictors of early-stage entrepreneurship outcomes. *Journal of Small Business and Enterprise Development*, 28(7), 1095–1116. https://doi.org/10.1108/JSBED-08-2019-0283
- Lee, B. (2019). Human capital and labor: the effect of entrepreneur characteristics on venture success. *International Journal of Entrepreneurial Behavior & Research*, 25(1), 29–49. https://doi.org/10.1108/IJEBR-10-2017-0384
- Lee, D. Y., & Tsang, E. W. K. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. *Journal of Management Studies*, 38(4), 583– 602. https://doi.org/10.1111/1467-6486.00250
- Leece, D., Berry, T., Miao, J., & Sweeting, R. (2012). The post-investment relationship between a venture capitalist and its investee companies. *International Journal of Entrepreneurial Behavior & Research, 18*(5), 587–602. https://doi.org/10.1108/13552551211253946

- Leibenstein, H. (1968). Entrepreneurship and development. *The American Economic Review*, 58(2), 72-83.
- Leleux, B., & Surlemont, B. (2003). Public versus private venture capital: seeding or crowding out? A pan-european analysis. *Journal of Business Venturing*, 18(1), 81–104. https://doi.org/10.1016/S0883-9026(01)00078-7
- Lerner, M., Brush, C., & Hisrich, R. (1997). Israeli women entrepreneurs: an examination of factors affecting performance. *Journal of Business Venturing*, 12(4), 315–339. https://doi.org/10.1016/S0883-9026(96)00061-4
- Levie, J., & Gimmon, E. (2008). Mixed signals: why investors may misjudge first time high technology venture founders. *Venture Capital*, 10(3), 233–256. https://doi.org/10.1080/13691060802151820
- Levine, R., & Rubinstein, Y. (2016). Smart and illicit: who becomes an entrepreneur and do they earn more? *The Quarterly Journal of Economics*, 132(2), 963–1018. https://doi.org/10.1093/qje/qjw044
- Lim, K., & Cu, B. (2012). The effects of social networks and contractual characteristics on the relationship between venture capitalists and entrepreneurs. *Asia Pacific Journal of Management*, 29(3), 573–596. https://doi.org/10.1007/s10490-010-9212-x
- Locke, E. A. (2007). The case for inductive theory building. *Journal of Management, 33*(6), 867–890. https://doi.org/10.1177/0149206307307636
- Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: past research and future challenges. *Journal of Management*, *14*(2), 139–161. https://doi.org/10.1177/014920638801400202

- Macmillan, I. C., Siegel, R., & Narasimha, P. N. S. (1985). Criteria used by venture capitalists to evaluate new venture proposals. *Journal of Business Venturing*, 1(1), 119–128. https://doi.org/10.1016/0883-9026(85)90011-4
- Macmillan, I. C., Zemann, L., & Narasimha, P. N. S. (1987). Criteria distinguishing successful from unsuccessful ventures in the venture screening process. *Journal of Business Venturing*, 2(2), 123–137. https://doi.org/10.1016/0883-9026(87)90003-6
- Manigart, S., Baeyens, K., & Van Hyfte, W. (2002). The survival of venture capital backed companies. *Venture Capital: An International Journal of Entrepreneurial Finance*, 4(2), 103–124. https://doi.org/10.1080/13691060110103233
- Manigart, S., Lockett, A., Meuleman, M., Wright, M., Landström Hans, Bruining, H., Desbrières Philippe, & Hommel, U. (2006). Venture capitalists' decision to syndicate. *Entrepreneurship Theory and Practice, 30*(2), 131–153. https://doi.org/10.1111/j.1540-6520.2006.00115.x
- Markman, G. D., Baron, R. A., & Balkin, D. B. (2005). Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking. *Journal of Organizational Behavior*, 26(1), 1-19.
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: a meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211–224. https://doi.org/10.1016/j.jbusvent.2012.03.002
- Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human capital and entrepreneurship research: a critical review and future directions. *Entrepreneurship Theory and Practice*, 40(3), 599–626. https://doi.org/10.1111/etap.12136

Maxwell, A. L., Jeffrey, S. A., & Lévesque, M. (2011). Business angel early stage decision making. *Journal of Business Venturing*, 26(2), 212–225. https://doi.org/10.1016/j.jbusvent.2009.09.002

McClelland, D. C. (1961). Achieving society. Public Domain.

- McClelland, D. C. (1965). N achievement and entrepreneurship: a longitudinal study. *Journal of Personality and Social Psychology*, 1(4), 389.
- McGrath, R. G., MacMillan, I. C., & Scheinberg, S. (1992). Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), 115–135. https://doi.org/10.1016/0883-9026(92)90008-F
- Mello, J., & Flint, D. J. (2009). A refined view of grounded theory and its application to logistics research. *Journal of Business Logistics*, *30*(1), 107-125.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (Second, Ser. Jossey-bass education series). Jossey-Bass.
- Miller, G. A. (1956). The magical number seven, plus or minus two: some limits on our capacity for processing information. *Psychological Review*, *63*(2), 81.
- Miner, J. B., Smith, N. R., & Bracker, J. S. (1989). Role of entrepreneurial task motivation in the growth of technologically innovative firms. *Journal of Applied Psychology*, 74(4), 554.
- Mishra, S., Bag, D., & Misra, S. (2017). Venture capital investment choice: multicriteria decision matrix. *The Journal of Private Equity*, 20(2), 52-68.

- Mitteness, C., Sudek, R., & Cardon, M. S. (2012). Angel investor characteristics that determine whether perceived passion leads to higher evaluations of funding potential. *Journal of Business Venturing*, 27(5), 592–606. https://doi.org/10.1016/j.jbusvent.2011.11.003
- Morris, M. H., Kuratko, D. F., Schindehutte, M., & Spivack, A. J. (2012). Framing the entrepreneurial experience. *Entrepreneurship Theory and Practice*, 36(1), 11–40. https://doi.org/10.1111/j.1540-6520.2011.00471.x
- Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: toward a unified perspective. *Journal of Business Research*, 58(6), 726–735. https://doi.org/10.1016/j.jbusres.2003.11.001
- Mosey, S., & Wright, M. (2007). From human capital to social capital: a longitudinal study of technology-based academic entrepreneurs. *Entrepreneurship Theory and Practice*, 31(6), 909–935. https://doi.org/10.1111/j.1540-6520.2007.00203.x
- Mueller, B. A., Wolfe, M. T., & Syed, I. (2017). Passion and grit: an exploration of the pathways leading to venture success. *Journal of Business Venturing*, 32(3), 260–279. https://doi.org/10.1016/j.jbusvent.2017.02.001
- Multon, K. D., & Brown, S. D. (1991). Relation of self-efficacy beliefs to academic outcomes: a meta-analytic investigation. *Journal of Counseling Psychology*, *38*(1).
- Murnieks, C. Y., Mosakowski, E., & Cardon, M. S. (2014). Pathways of passion: identity centrality, passion, and behavior among entrepreneurs. *Journal of Management*, 40(6), 1583–1606. https://doi.org/10.1177/0149206311433855
- Muzyka, D., Birley, S., & Leleux, B. (1996). Trade-offs in the investment decisions of european venture capitalists. *Journal of Business Venturing*, *11*(4), 273–288.

Ning, Y., Wang, W., & Yu, B. (2015). The driving forces of venture capital investments. Small Business Economics : An Entrepreneurship Journal, 44(2), 315–344. https://doi.org/10.1007/s11187-014-9591-3

Offermann, L. R., Bailey, J. R., Vasilopoulos, N. L., Seal, C., & Sass, M. (2004). The relative contribution of emotional competence and cognitive ability to individual and team performance. *Human Performance*, *17*(2), 219–243. https://doi.org/10.1207/s15327043hup1702\_5

- Palich, L. E., & Ray Bagby, D. (1995). Using cognitive theory to explain entrepreneurial risk-taking: challenging conventional wisdom. *Journal of Business Venturing*, 10(6), 425–438. https://doi.org/10.1016/0883-9026(95)00082-J
- Panda, S., & Dash, S. (2016). Exploring the venture capitalist entrepreneur relationship:
  evidence from india. *Journal of Small Business and Enterprise Development*, 23(1), 64–
  89. https://doi.org/10.1108/JSBED-05-2013-0071
- Paulhus, D. L., & Van Selst, M. (1990). The spheres of control scale: 10 yr of research. *Personality and Individual Differences*, 11(10), 1029–1036.
  https://doi.org/10.1016/0191-8869(90)90130-J
- Payne, G. T., Davis, J. L., Moore, C. B., & Bell, R. G. (2009). The deal structuring stage of the venture capitalist decision-making process: exploring confidence and control. *Journal of Small Business Management*, 47(2), 154–179. https://doi.org/10.1111/j.1540-627X.2009.00266.x

Phares, E. J. (1976). Locus of control in personality. General Learning Press.

- Pittaway, L., Aïssaoui, R., & Fox, J. (2018). Social constructionism and entrepreneurial opportunity. In A. Fayolle, S. Ramoglou, M. Karatas-Ozkan, & K. Nicolopoulou (Eds.) *Philosophical reflexivity and entrepreneurship research: New directions in scholarship.*Routledge.
- Pittaway, L., & Tunstall, R. (2016). Examining paradigms in historical entrepreneurship research. In H. Landström (Ed.), *Challenging entrepreneurship research*. Routledge.
- Plummer, L. A., Allison, T. H., & Connelly, B. L. (2016). Better together? Signaling interactions in new venture pursuit of initial external capital. *The Academy of Management Journal*, 59(5), 1585-1604.
- Poindexter, J. B. (1976). *The efficiency of financial markets: The venture capital case* (Order No. 7616857). Available from ProQuest Dissertations & Theses A&I. (288050526).
  Retrieved from:

http://libproxy.uoregon.edu/login?url=https://www.proquest.com/dissertationstheses/efficiency-financial-markets-venture-capital-case/docview/288050526/se-2

- Poon, J. M. L., Ainuddin, R. A., & Junit, S. O. H. (2006). Effects of self-concept traits and entrepreneurial orientation on firm performance. *International Small Business Journal*, 24(1), 61–82. https://doi.org/10.1177/0266242606059779
- Porter, M. E., Ketels, C. H. M., & Great Britain. Department of Trade and Industry. (2003). UK competitiveness : moving to the next stage (Ser. Dti economics paper, no. 2). Dept. of Trade and Industry.

- Poschke, M. (2013). Who becomes an entrepreneur? Labor market prospects and occupational choice. *Journal of Economic Dynamics and Control*, 37(3), 693–710. https://doi.org/10.1016/j.jedc.2012.11.003
- Pryor, C., Webb, J. W., Ireland, R. D., & Ketchen, J. D. J. (2016). Toward an integration of the behavioral and cognitive influences on the entrepreneurship process. *Strategic Entrepreneurship Journal*, 10(1), 21–42. https://doi.org/10.1002/sej.1204
- Quadrini, V. (2000). Entrepreneurship, saving, and social mobility. *Review of Economic Dynamics*, *3*(1), 1–40. https://doi.org/10.1006/redy.1999.0077
- Rakhman, A., & Evans, M. (2005). Enhancing venture capital investment evaluation: a survey of venture capitalists', investees' and entrepreneurs' perspectives [in south sulawesi province, indonesia.]. *Journal of Economic & Social Policy*, *10*(1), 7–44.
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: a meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, *16*(4), 353–385. https://doi.org/10.1080/13594320701595438
- Rea, R. H. (1989). Factors affecting success and failure of seed capital/start-up negotiations. *Journal of Business Venturing*, 4(2), 149–158. https://doi.org/10.1016/0883-9026(89)90028-1
- Reed, B. N., Klutts, A. M., & Mattingly, T. J. (2019). A systematic review of leadership definitions, competencies, and assessment methods in pharmacy education. *American Journal of Pharmaceutical Education*, *83*(9), 1873-1885.
  https://doi.org/10.5688/ajpe7520

- Rhodes-Kropf, M., & Burbank, N. (2015) Venture capital and private equity simulation administrators' guide. HBS No. 5-815-108. Harvard Business School Publishing.
- Riquelme, H., & Rickards, T. (1992). Hybrid conjoint analysis: an estimation probe in new venture decisions. *Journal of Business Venturing*, 7(6), 505–518. https://doi.org/10.1016/0883-9026(92)90022-J
- Riquelme, H., & Watson, J. (2002). Do venture capitalists' implicit theories on new business success/failure have empirical validity? *International Small Business Journal*, 20(4), 395–420. https://doi.org/10.1177/0266242602204002
- Ries, E. (2011). The lean startup: how today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Business.
- Roberts, M. E., Stewart, B. M., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S. K., Albertson, B., & Rand, D. G. (2014). Structural topic models for open-ended survey responses. *American Journal of Political Science*, 58(4), 1064–1082.
- Robinson, R. B. (1987). Emerging strategies in the venture capital industry. *Journal of Business Venturing*, 2(1), 53–77. https://doi.org/10.1016/0883-9026(87)90019-X
- Robson, C. (2002). *Real world research: A resource for social scientists and practitionerresearchers* (2<sup>nd</sup> ed.). Wiley-Blackwell.
- Roper, S. (1998). Entrepreneurial characteristics, strategic choice and small business performance. *Small Business Economics*, *11*(1), 11-24.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement (Ser. Psychological monographs, 80:1). American Psychological Association.

- Roure, J. B., & Keeley, R. H. (1990). Predictors of success in new technology based ventures. *Journal of Business Venturing*, 5(4), 201–220. https://doi.org/10.1016/0883-9026(90)90017-N
- Rubin, A., & Babbie, E. R. (2016). Essential research methods for social work (Fourth, Ser. Cengage learning empowerment series). Cengage Learning.
- Ruef, M. (2010). Entrepreneurial groups. In H. Landström & F. Lohrke (Eds.) *Historical Foundations of Entrepreneurial Research*.
- Rutjens, B. T., & Brandt, M. J. (Eds.). (2018). Belief systems and the perception of reality (1st ed.). Routledge. https://doi.org/10.4324/9781315114903
- Sahlman, W. A. (1990). The structure and governance of venture-capital organizations. *Journal* of Financial Economics, 27(2), 473–521. https://doi.org/10.1016/0304-405X(90)90065-8
- Sahlman, W. A. (1997). How to write a great business plan. *Harvard Business Review*, 75(4), 98-109.
- Salazar, M. R., Lant, T. K., Fiore, S. M., & Salas, E. (2012). Facilitating innovation in diverse science teams through integrative capacity. *Small Group Research*, 43(5), 527–558. https://doi.org/10.1177/1046496412453622
- Salazar, M. & Salas, E. (2013). Reflections of cross-cultural collaboration science. Journal of Organizational Behavior, 34(6), 910–917.
- Sandberg, W. R., & Hofer, C. W. (1987). Improving new venture performance: the role of strategy, industry structure, and the entrepreneur. *Journal of Business Venturing*, 2(1), 5– 28. https://doi.org/10.1016/0883-9026(87)90016-4

- Sandberg, W. R., Schweiger, D. M., & Hofer, C. W. (1989). The use of verbal protocols in determining venture capitalists' decision processes. *Entrepreneurship Theory and Practice*, 13(2), 8–20. https://doi.org/10.1177/104225878801300204
- Sapienza, H. J. (1992). When do venture capitalists add value? *Journal of Business Venturing*, 7(1), 9–27. https://doi.org/10.1016/0883-9026(92)90032-M
- Sapienza, H. J., Manigart, S., & Vermeir, W. (1996). Venture capitalist governance and value added in four countries. *Journal of Business Venturing*, 11(6), 439–469. https://doi.org/10.1016/S0883-9026(96)00052-3
- Sarasvathy, S. D. (2001). Effectual reasoning in entrepreneurial decision making: existence and bounds. In Academy of management proceedings, 2001(1), D1-D6. Academy of Management.
- Sarasvathy, S. D. (2004). The questions we ask and the questions we care about: reformulating some problems in entrepreneurship research. *Journal of Business Venturing*, 19(5), 707– 717. https://doi.org/10.1016/j.jbusvent.2003.09.006
- Savaya, R., & Gardner, F. (2012). Critical reflection to identify gaps between espoused theory and theory-in-use. *Social Work*, *57*(2), 145–154. https://doi.org/10.1093/sw/sws037
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, *51*(1), 1-17.
- Schumpeter, J. A. (1934). *The Theory of Economic Development*. Harvard University Press. Schumpeter, J. A. (2003). *Capitalism, Socialism and Democracy*. Routledge.

- Schwens, C., Isidor, R., Bierwerth, M., & Kabst, R. (2011). International entrepreneurship: a meta-analysis. In Academy of Management Proceedings, 2011(1), 1-5. Academy of Management.
- Seijts, G., Gandz, J., Crossan, M., & Reno, M. (2015). Character matters: character dimensions' impact on leader performance and outcomes. *Organizational Dynamics*, 44(1), 65–74. https://doi.org/10.1016/j.orgdyn.2014.11.008
- Semrau, T., & Werner, A. (2014). How exactly do network relationships pay off? The effects of network size and relationship quality on access to start-up resources. *Entrepreneurship Theory and Practice*, 38(3), 501–525. https://doi.org/10.1111/etap.12011
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, *11*(4), 448–469.
- Shane, S. A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus.* Edward Elgar Publishing.
- Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management Science*, *48*(3), 364-381.
- Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257-279.
- Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *The Academy of Management Review*, 25(1), 217-226.
- Shepherd, D. A. (1999). Venture capitalists' assessment of new venture survival. *Management Science*, 45(5), 621-632.

- Shepherd, D. A. (2015). Party on! A call for entrepreneurship research that is more interactive, activity based, cognitively hot, compassionate, and prosocial. *Journal of Business Venturing*, 30(4), 489–507. https://doi.org/10.1016/j.jbusvent.2015.02.001
- Shepherd, D. A., Ettenson, R., & Crouch, A. (2000). New venture strategy and profitability: a venture capitalist's assessment. *Journal of Business Venturing*, 15(5), 449–467. https://doi.org/10.1016/S0883-9026(98)00007-X
- Shepherd, D. A., & Patzelt, H. (2017). *Trailblazing in entrepreneurship: Creating new paths for understanding the field.* Springer Nature.
- Shir, N., Nikolaev, B. N., & Wincent, J. (2019). Entrepreneurship and well-being: the role of psychological autonomy, competence, and relatedness. *Journal of Business Venturing*, 34(5).
- Silva, J. (2004). Venture capitalists' decision-making in small equity markets: a case study using participant observation. *Venture Capital: An International Journal of Entrepreneurial Finance*, 6(2-3), 125–145. https://doi.org/10.1080/13691060410001675974
- Simmons, O. E. (2011). Why classic grounded theory. In V.B. Martin & A. Gynnild (Eds.), *Grounded theory: The philosophy, method, and work of Barney* Glaser (pp. 15-30).Brown Walker Press.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: breadth, depth, and life cycle effects. *Journal of Management*, 37(5), 1390–1412. https://doi.org/10.1177/0149206310385695
- Smart, G. H. (1998). *Management assessment methods in venture capital: Toward a theory of human capital valuation* (Order No. 9830364). Available from ProQuest Dissertations &

Theses A&I. (304428022). Retrieved from

http://libproxy.uoregon.edu/login?url=https://www.proquest.com/dissertationstheses/management-assessment-methods-venture-capital/docview/304428022/se-2

Smart, G. H. (1999). Management assessment methods in venture capital: an empirical analysis of human capital valuation. *Venture Capital*, 1(1), 59–82. https://doi.org/10.1080/136910699295992

- Smilor, R. W. (1997). Entrepreneurship: reflections on a subversive activity. *Journal of Business Venturing*, 12(5), 341-346.
- Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Flett, G. L., & Hewitt, P. L. (2016). Perfectionism and narcissism: a meta-analytic review. *Journal of Research in Personality*, 64, 90–101. https://doi.org/10.1016/j.jrp.2016.07.012
- Spence, M. A. (1974). *Market signaling: Informational transfer in hiring and related screening* processes. Harvard Business Press.

Stake, R. E. (1995). The art of case study research. Sage.

- Stake, R. E. (2006). *Multiple case study analysis*. Guilford Press.
- Stanworth, J., Stanworth, C., Granger, B., & Blyth, S. (1989). Who becomes an entrepreneur? *International Small Business Journal*, 8(1), 11–22. https://doi.org/10.1177/026624268900800101
- Starr, J. A., & MacMillan, I. C. (1990). Resource cooptation via social contracting: resource acquisition strategies for new ventures. *Strategic Management Journal*, *11*, 79-92.

- Steier, L., & Greenwood, R. (1995). Venture capitalist relationships in the deal structuring and post-investment stages of new firm creation. *Journal of Management Studies*, *32*(3), 337– 357. https://doi.org/10.1111/j.1467-6486.1995.tb00779.x
- Stewart Jr, W. H., & Roth, P. L. (2001). Risk propensity differences between entrepreneurs and managers: a meta-analytic review. *Journal of Applied Psychology*, *86*(1), 145-153.
- Stewart, W. H., & Roth, P. L. (2004). Data quality affects meta-analytic conclusions: a response to miner and raju (2004) concerning entrepreneurial risk propensity. *Journal of Applied Psychology*, 89, 14–21.
- Stewart, W. H., Watson, W. E., Carland, J. C., & Carland, J. W. (1999). A proclivity for entrepreneurship: a comparison of entrepreneurs, small business owners, and corporate managers. *Journal of Business Venturing*, 14(2), 189–214. https://doi.org/10.1016/S0883-9026(97)00070-0
- Stone, A. A., Bachrach, C. A., Jobe, J. B., Kurtzman, H. S., & Cain, V. S. (Eds.). (1999). The science of self-report: Implications for research and practice. Psychology Press.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research techniques. Sage publications.
- Streletzki, J.-G., & Schulte, R. (2013a). Start-up teams and venture capital exit performance in germany: venture capital firms are not selecting on the right criteria. *Journal of Small Business & Entrepreneurship*, 26(6), 601–622.

https://doi.org/10.1080/08276331.2014.892310

Streletzki, J.-G., & Schulte, R. (2013b). Which venture capital selection criteria distinguish highflyer investments? *Venture Capital: An International Journal of Entrepreneurial Finance, 15*(1), 29–52. https://doi.org/10.1080/13691066.2012.724232

- Sturm, R. E., Vera, D., & Crossan, M. (2017). The entanglement of leader character and leader competence and its impact on performance. *The Leadership Quarterly*, 28(3), 349–366. https://doi.org/10.1016/j.leaqua.2016.11.007
- Suddaby, R., Bruton, G. D., & Si, S. X. (2015). Entrepreneurship through a qualitative lens: insights on the construction and/or discovery of entrepreneurial opportunity. *Journal of Business Venturing*, 30(1), 1–10. https://doi.org/10.1016/j.jbusvent.2014.09.003
- Taormina, R. J., & Kin-Mei Lao, S. (2007). Measuring chinese entrepreneurial motivation. International Journal of Entrepreneurial Behavior & Research, 13(4), 200–221. https://doi.org/10.1108/13552550710759997
- Teece, D., & Pisano, G. (1994). The dynamic capabilities of firms: an introduction. *Industrial and Corporate Change*, *3*(3), 537-556.
- Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). Personality measures as predictors of job performance: a meta-analytic review. *Personnel Psychology*, 44(4), 703–742. https://doi.org/10.1111/j.1744-6570.1991.tb00696.x
- Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, 16(2), 151-155. https://psycnet.apa.org/doi/10.1111/j.1744-6155.2011.00283.x
- Timmons, J. A., Muzyka, D. F., Stevenson, H. H. and Bygrave, W. D. (1987). Opportunity recognition: the core of entrepreneurship. In D. Ndambuki (Ed.), *Frontiers of Entrepreneurship Research 1987: proceedings of the seventh annual Babson College Entrepreneurship Research Conference*, 2, 109-123.

- Timmons, J., & Spinelli, S. (2009). *New venture creation: Entrepreneurship for the 21st century*. Irwin.
- Turcan, R. (2008). Entrepreneur-venture capitalist relationships: mitigating post-investment dyadic tensions. *Venture Capital: An International Journal of Entrepreneurial Finance*, 10(3), 281–304. https://doi.org/10.1080/13691060802151960
- Tyabji, H., & Sathe, V. (2010). Venture capital firms in america: their caste system and other secrets.(industry overview). *Ivey Business Journal Reprints*.
- Tyebjee, T. T. & Bruno, A. V. (1981). Venture capital decision making: preliminary results from three empirical studies. In K.H. Vesper (Ed.), *Frontiers of Entrepreneurial Research* (pp. 281–320). Babson College.
- Tyebjee, T. T., & Bruno, A. V. (1984). A model of venture capitalist investment activity. *Management Science*, *30*(9), 1051–1066. https://doi.org/10.1287/mnsc.30.9.1051
- Tzabbar, D., & Margolis, J. (2017). Beyond the startup stage: the founding team's human capital, new venture's stage of life, founder-ceo duality, and breakthrough innovation. *Organization Science*, 28(5), 857–872. https://doi.org/10.1287/orsc.2017.1152
- Ucbasaran, D., Lockett, A., Wright, M., & Westhead, P. (2003). Entrepreneurial founder teams: factors associated with member entry and exit. *Entrepreneurship Theory and Practice*, 28(2), 107–128. https://doi.org/10.1046/j.1540-6520.2003.00034.x
- Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: a meta-analytical review. *Journal of Business Venturing*, 26(3), 341–358. https://doi.org/10.1016/j.jbusvent.2009.09.004

- Utsch, A., Rauch, A., Rothfufs, R., & Frese, M. (1999). Who becomes a small scale entrepreneur in a post-socialist environment: on the differences between entrepreneurs and managers in East Germany. *Journal of Small Business Management*, *37*(3), 31.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Leonard, M., Gagne,
  M., & Marsolais, J. (2003). Les passions de l'ame: on obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85, 756–767.
- van Gelderen, M. (2016). Entrepreneurial autonomy and its dynamics. *Applied Psychology*, 65(3), 541–567. https://doi.org/10.1111/apps.12066
- van Gelderen, M., & Jansen, P. (2006). Autonomy as a start-up motive. Journal of Small Business and Enterprise Development, 13(1), 23–32. https://doi.org/10.1108/14626000610645289
- van Ness, R. K., & Seifert, C. F. (2016). A theoretical analysis of the role of characteristics in entrepreneurial propensity. *Strategic Entrepreneurship Journal*, 10(1), 89–96. https://doi.org/10.1002/sej.1205
- Venkataraman, S., Sarasvathy, S. D., Dew, N., & Forster, W. R. (2012). Reflections on the 2010 AMR decade award: Whither the promise? Moving forward with entrepreneurship as a science of the artificial. *The Academy of Management Review*, 37(1), 21-33.
- Vera, D., & Rodriguez-Lopez, A. (2004). Strategic virtues: humility as a source of competitive advantage. Organizational Dynamics, 33(4), 393–408. https://doi.org/10.1016/j.orgdyn.2004.09.006

- Vinchur, A. J., Schippmann, J. S., Switzer, F. S., & Roth, P. L. (1998). A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology*, 83(4), 586–597.
- Vogel, P. (2017). From venture idea to venture opportunity. *Entrepreneurship Theory and Practice*, *41*(6), 943–971. https://doi.org/10.1111/etap.12234
- Walsh, I., Holton, J. A., Bailyn, L., Fernandez, W., Levina, N., & Glaser, B. (2015). What grounded theory is ... a critically reflective conversation among scholars.
- Walter, S. G., & Heinrichs, S. (2015). Who becomes an entrepreneur? A 30-years-review of individual-level research. *Journal of Small Business and Enterprise Development*, 22(2), 225–248. https://doi.org/10.1108/JSBED-09-2012-0106
- Wasserman, N. (2008). The founder's dilemma. Harvard business review, 86(2), 102-109.
- Wasserman, N. (2012). *The founder's dilemmas: Anticipating and avoiding the pitfalls that can sink a startup*. Princeton University Press.
- Wells, W.A. (1974) Venture Capital Decision-making (Order No. 7512505). Available from ProQuest Dissertations & Theses A&I. (302672329). Retrieved from http://libproxy.uoregon.edu/login?url=https://www.proquest.com/dissertationstheses/venture-capital-decision-making/docview/302672329/se-2
- West, M. A., Borrill, C. S., Dawson, J. F., Brodbeck, F., Shapiro, D. A., & Haward, B. (2003).
  Leadership clarity and team innovation in health care. *The Leadership Quarterly*, *14*(4), 393–410. https://doi.org/10.1016/S1048-9843(03)00044-4
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, *14*(4), 490-495.

- Wiklund, J., Patzelt, H., & Dimov, D. (2016). Entrepreneurship and psychological disorders: how adhd can be productively harnessed. *Journal of Business Venturing Insights*, 6, 14– 20. https://doi.org/10.1016/j.jbvi.2016.07.001
- Williamson, I. O. (2000). Employer legitimacy and recruitment success in small businesses. *Entrepreneurship Theory and Practice*, 25(1), 27–42. https://doi.org/10.1177/104225870002500104
- Wincent, J., & Örtqvist D. (2009). Role stress and entrepreneurship research. *International Entrepreneurship and Management Journal*, 5(1), 1–22. https://doi.org/10.1007/s11365-006-0017-9
- Wojciszke, B., & Abele, A. E. (2008). The primacy of communion over agency and its reversals in evaluations. *European Journal of Social Psychology*, 38(7), 1139–1147. https://doi.org/10.1002/ejsp.549
- Wood, M. S., & McKinley, W. (2010). The production of entrepreneurial opportunity: a constructivist perspective. *Strategic Entrepreneurship Journal*, 4(1), 66–84.
  https://doi.org/10.1002/sej.83
- Wooten, K. C., Timmerman, T. A., & Folger, R. (1999). The use of personality and the fivefactor model to predict new business ventures: from outplacement to start-up. *Journal of Vocational Behavior*, 54(1), 82–101. https://doi.org/10.1006/jvbe.1998.1654
- Wright, M., & Lockett, A. (2003). The structure and management of alliances: syndication in the venture capital industry. *Journal of Management Studies*, 40(8), 2073–2102. https://doi.org/10.1046/j.1467-6486.2003.00412.x

- Wu, S., & Dagher, G. K. (2007). Need for achievement, business goals, and entrepreneurial persistence. *Management Research News*, 30(12), 928–941. https://doi.org/10.1108/01409170710833358
- Yadav, M. S., Prabhu, J. C., & Chandy, R. K. (2007). Managing the future: CEO attention and innovation outcomes. *Journal of Marketing*, *71*(4), 84-101.
- Zacharakis, A. (2010). Venture capitalists decision making: an information processing perspective. In *Venture Capital: Investment Strategies, Structures, and Policies* (pp. 7-30). John Wiley & Sons. https://doi.org/10.1002/9781118266908.ch2
- Zacharakis, A. L., & Meyer, G. D. (1998). A lack of insight: do venture capitalists really understand their own decision process? *Journal of Business Venturing*, 13(1), 57–76. https://doi.org/10.1016/S0883-9026(97)00004-9
- Zacharakis, A. L., & Meyer, G. D. (2000). The potential of actuarial decision models: can they improve the venture capital investment decision? *Journal of Business Venturing*, 15(4), 323–346. https://doi.org/10.1016/S0883-9026(98)00016-0
- Zacharakis, A. L., & Shepherd, D. A. (2001). The nature of information and overconfidence on venture capitalists' decision making. *Journal of Business Venturing*, 16(4), 311–332. https://doi.org/10.1016/S0883-9026(99)00052-X
- Zhang, J. (2011). The advantage of experienced start-up founders in venture capital acquisition: evidence from serial entrepreneurs. *Small Business Economics : An Entrepreneurship Journal*, 36(2), 187–208. https://doi.org/10.1007/s11187-009-9216-4
- Zhang, X. (2012). Venture capital investment selection decision-making base on fuzzy theory. *Physics Procedia*, *25*, 1369–1375. https://doi.org/10.1016/j.phpro.2012.03.248

- Zhao, H., & Seibert, S. E. (2006). The big five personality dimensions and entrepreneurial status: a meta-analytical review. *Journal of Applied Psychology*, *91*(2), 259-271.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: a meta-analytic review. *Journal of Management*, 36(2), 381–404. https://doi.org/10.1177/0149206309335187
- Zhou, W., & Rosini, E. (2015). Entrepreneurial team diversity and performance: toward an integrated model. *Entrepreneurship Research Journal*, 5(1), 31–60. https://doi.org/10.1515/erj-2014-0005
- Zhou, W., Hu, H., & Zey, M. (2015). Team composition of new venture founding teams: does personality matter? *International Journal of Entrepreneurial Behavior & Research*, 21(5), 673–689. https://doi.org/10.1108/IJEBR-04-2014-0072
- Zott, C., & Huy, Q. N. (2007). How entrepreneurs use symbolic management to acquire resources. Administrative Science Quarterly, 52(1), 70-105. https://doi.org/10.2189/asqu.52.1.70

## Appendix: Codebook

## Nodes

Name	Description	Files	References
RQ1-Who in management do VCs assess in the investment selection process	Research Question #1	16	16
Start-up teams	The people the start-up founder works with to get the company off the ground	12	23
Experienced teams	VCs suggest that finding a team with experience in the start-up realm is important to picking a venture that will succeed	1	1
Team dynamics	Team dynamics are the behavioral relationships between members of any given team	3	4
Cohesive team	Being a cohesive team means that not only are group goals met but everyone feels like they have contributed to the overall success of the group. Individuals on a cohesive team tend to focus more on the entire group rather than their individual selves and are more motivated to work towards the team goal.	1	1
Start-up founder	An individual who establishes a new business	5	6

Name	Description	Files	References
RQ2-What criteria do VCs find important in assessing venture management	Whether investors are using criteria related to team performance and interpersonal skills, individual experience and capabilities, or a combination of both reveals the foundation of their beliefs about the role of venture management in venture success and fundamentally shapes the investments they will make.	16	16
Ability to scale the company	VCs suggest it is important to assess if the start-up founder can scale the company	1	1
Ambitious	Having or showing a strong desire and determination to succeed	3	5
Assessing the management of the venture	Factors or criteria important in assessing the management of the venture	6	9
Product market fit	VCs suggested that start-up founder's ability to correctly assess and manage their companies in line with product market fit is a key factor considered when making investment decisions.	6	9
Character	One or more attributes or traits that make up and distinguish an individual. Examples of character traits include intelligent, jealous, imaginative, tolerant, trustworthy, unkind, wise, creative, curious.	13	47
Grit	Courage and resolve; strength of character.	1	2
Passion	Strong and barely controllable emotion	8	9

Name	Description	Files	References
Passion wanes	Passion decreases in vigor, power, or extent; become weaker.	1	2
Tenacity	The quality or fact of being very determined; determination and persistent.	4	4
Virtuous character	Virtuous character is about character strengths (e.g., assertiveness, commitment, honesty, integrity, perseverance).	10	26
Commitment	The state or quality of being dedicated to a cause, activity	3	4
Honesty	The quality of being honest	5	8
Humility	A modest or low view of one's own importance; humbleness	4	6
Integrity	The quality of being honest and having strong moral principles; moral uprightness	2	3
Morality	Principles concerning the distinction between right and wrong or good and bad behavior	1	2
Coachable	Capable of being easily taught and trained to do something better	7	11
Cognitive state	A subject's cognitive state suggests when the subject is exploring the decision environment versus exploiting it, and decision performance classifies whether the subject is making optimal decisions.	6	13

Name	Description	Files	References
Growth mindset	A growth mindset means that you thrive on challenge, and don't see failure as a way to describe yourself but as a springboard for growth and developing your abilities	1	1
Self-aware	Having conscious knowledge of one's own character and feelings suggested it is important to find founders that are self-aware so that they know their own limitations and where they may need coaching or additional help from the investor.	6	9
I do not know	VCs suggest the importance of start-up founders being able to say they do not know the answer to something if they don't	2	2
Know when to ask for help	VCs suggested it is important for start-up founders to be aware of their shortcomings and willing to ask for help.	3	3
Strong sense of self	A strong sense of self may be defined by knowing your own goals, values and ideals and define feelings of self	1	2
Confidence	The state of feeling certain about the truth of something	1	3
Domain expertise	VCs suggested that it is important that founders have an expertise in their domain or know something no one else does	5	6
Entrepreneurial experience	VCs suggest that start-up founders experience as an entrepreneur is important to consider. New entrepreneurs are perceived as less prepared.	7	11

Name	Description	Files	References
Multi-time founders	Start-up founders that have started several or multiple ventures	4	5
Execution ability	What are execution skills? Execution skills are the abilities required to perform a certain task or complete company goals. These skills usually involve organization, motivation, and time management. Many managers or other leaders may use these skills to complete their duties and manage their team's duties	2	2
Incentive alignment	The structuring of incentive arrangements whereby managers are rewarded for doing what is in the shareholder's best interest	1	1
Inquisitive	Given to examination or investigation; inclined to ask questions	5	5
Interpersonal skills	Interpersonal skills are the behaviors and tactics a person uses to interact with others effectively	17	68
Founder's reputation	Reputation is the subjective qualitative belief a person has regarding the founder	1	1
Relationship with cofounders	VCs suggested the importance of observing the relationship between a start-up founder and their cofounders.	3	5
Relationship with team	VCs suggested the importance of observing how a founder interacts with their team and vice versa, this is a signal to the VCs of either positive or negative attributes of the founder.	11	22

Name	Description	Files	References
Diverse team	VCs suggest it is important to have diverse teams in order to drive innovation and bolster the likelihood that the product coming to market is viable.	2	2
Relationship with the VC	VCs suggested the relationship they formed with the start- up venture was important in their decision making.	6	8
Connect with the founder on a visceral level	VCs suggest overall they need to feel that they can connect with the founder on a visceral level.	1	1
If I don't feel it, I don't feel it	VCs suggest the importance of start-up founders conveying or selling them on their characteristics and personality that are perceived by the VC as positive.	1	1
Trust and like the founder	VCs suggested that it is important that they and the investors trust and like the founder.	5	12
Commonalities - connection	The state of sharing features or attributes	3	5
Gut feeling	VCs suggest making a decision is based on "gut feelings".	2	2
Lack of trust	VCs suggested that behaviors that indicate a start-up founder is being dishonest is a red flag.	1	1
Networking skills	The action or process of interacting with others to exchange information and develop professional or social contacts	2	2

Name	Description	Files	References
Pattern recognition	The ability to recognize patterns or trends that signal VCs whether to invest	2	3
Persistence	Firm or obstinate continuance in a course of action despite difficulty or opposition	12	98
Ability to fail and drive insight	VCs suggest it is important for start-up ventures to have the ability to fail repeatedly and drive insight from that failure, then keep going and move forward.	2	2
Adaptable	Able to be modified for a new use or purpose	3	3
Emotional and mental maturity	VCs suggested the importance of founders having the emotional and mental maturity to endue when challenges arise.	1	2
Founder motivations	VCs suggested the founders' motivations are important in determining if the venture is worth investing in.	8	22
Greedy	VCs suggest founders that want to pay themselves a ridiculous salary or not pay talent well are red flags to not invest.	2	2
The right motivation	VCs suggested that start-up founders need to have the right motivation to be considered a good investment option.	4	5
Committed to the people you're helping	VCs suggest that if a founder is committed to the people they want to help, they will be more persistent or resilient during the downtimes.	1	1
Grit	Courage and resolve; strength of character	12	50

Name	Description	Files	References
Persistence	Firm or obstinate continuance in a course of action despite difficulty or opposition	12	48
Ability to fail and drive insight	VCs suggest it is important for start-up ventures to have the ability to fail repeatedly and drive insight from that failure, then keep going and move forward.	2	2
Adaptable	Able to be modified for a new use or purpose	3	3
Emotional and mental maturity	VCs suggested the importance of founders having the emotional and mental maturity to endue when challenges arise.	1	2
Founder motivations	VCs suggested the founders' motivations are important in determining if the venture is worth investing in.	8	22
Greedy	VCs suggest founders that want to pay themselves a ridiculous salary or not pay talent well are red flags to not invest.	2	2
The right motivation	VCs suggested that start-up founders need to have the right motivation to be considered a good investment option.	4	5
Committed to the people you're helping	VCs suggest that if a founder is committed to the people they want to help, they will be more persistent or resilient during the downtimes.	1	1

Name	Description	Files	References
Hardiness	The ability to endure difficult conditions. VCs stated that starting a company is both physically and mentally taxing and that finding a start-up founder that appears to be able to withstand these taxing forces is a good sign that they will persist when needed.	4	9
Founders past experiences	VCs suggest founders past experiences are a signal or indicator as to whether they will have the hardiness to keep going.	1	1
Mental health	VCs suggested that start-up founders have a propensity for mental health challenges such as depression.	1	3
Middle of the road	VCs suggest a start-up founder that isn't too excitable is best to ensure they can withstand the highs and lows of having a start-up business.	1	1
Sensitive to environment	VCs suggested that it was important that start-up founders are sensitive to the market and social environment.	1	1
Hardiness	The ability to endure difficult conditions. VCs stated that starting a company is both physically and mentally taxing and that finding a start-up founder that appears to be able to withstand these taxing forces is a good sign that they will persist when needed.	4	9
Founders past experiences	VCs suggest founders past experiences are a signal or indicator as to whether they will have the hardiness to keep going.	1	1

Name	Description	Files	References
Mental health	VCs suggested that start-up founders have a propensity for mental health challenges such as depression.	1	3
Middle of the road	VCs suggest a start-up founder that isn't too excitable is best to ensure they can withstand the highs and lows of having a start-up business.	1	1
Sensitive to environment	VCs suggested that it was important that start-up founders are sensitive to the market and social environment.	1	1
Personality	Personality is more visible than character and defined as a relatively stable, consistent, and enduring internal characteristic that is inferred from a pattern of behaviors, attitudes, feelings, and habits in the individual.	16	72
Adaptable	Able to adjust to new conditions	3	3
Communicative	Ready to talk or impart information	4	5
Flexible	Able to be easily modified to respond to altered circumstances or conditions	1	1
Not seeking approval	VCs suggest it is important that start-up founders are not people that are seeking approval from their investors and are more interested in figuring out how to grow their business.	1	1
Open mindedness - Openness to experience	The personality trait that best reflects the lay concept of open-mindedness is called "openness to experience," or simply "openness." Open people tend to be intellectually	3	3

Name	Description	Files	References
	curious, creative, and imaginative. They are interested in art and are voracious consumers of music, books, and other fruits of culture.		
Multicultural awareness	Multicultural Awareness is the ability to understand and appreciate the history, life experiences and beliefs of diverse groups of people. Inevitably, greater cultural awareness and consideration fosters a better community.	3	4
Multidiscipline awareness	VCs suggested that it's important that start-up founders and team members can work in a multicultural and discipline environment.	1	1
Innovation	A new method, idea, product, etc.	1	1
Persuasive	Good at persuading someone to do or believe something through reasoning or the use of temptation	15	57
Articulate	Having or showing the ability to speak fluently and coherently	8	10
Great salesperson	Someone particularly effective at selling (products, services, ideas)	6	10
Obsessed	Preoccupy or fill the mind of (someone) continually, intrusively, and to a troubling extent.	1	1
Storytelling	Storytelling is identified as one of Matter's top soft skills that is linked to performance, development, and career success. Matter's definition of. Storytelling. Creates an	2	3

Name	Description	Files	References
	engaging oral or written message that contains a lesson via a narrative		
Talent acquisition	VCs suggest it is important that start-up founders are able to attract talent to ensure their company thrives.	8	14
Vision	The ability to think about or plan the future with imagination or wisdom	8	10
Pragmatic	Dealing with things sensibly and realistically in a way that is based on practical rather than theoretical considerations	2	5
Seeking good leaders	VCs suggest they are looking for good leaders.	5	7
Good organizational culture	VCs suggested they seek good leaders that will foster good organizational culture to drive performance.	2	3
Signals	Indications to the VC that the founder is a good "bet"	7	14
Authentic self	Your authentic self is who you truly are as a person, regardless of your occupation, regardless of the influence of others. It is an honest representation of you.	2	3
Diligent	Having or showing care and conscientiousness in one's work or duties	2	2
Past behavior	VCs suggested looking at a founder's past behaviors is an indication of their future behaviors.	1	2
Respectful	Feeling or showing deference and respect	3	3

Name	Description	Files	References
Surrounded by a great team	VCs suggested that if the founder is surrounded by a great team, that is a signal that the founder may be competent and a good bet.	2	2
VCs pre-existing schemas and bias	A schema is a mental structure that helps organize knowledge into categories and understand and interpret new information	4	8
Body language	The process of communicating nonverbally through conscious or unconscious gestures and movements	1	1
Ethnicity or race	Race refers to the concept of dividing people into groups based on various sets of physical characteristics and the process of ascribing social meaning to those groups. Ethnicity describes the culture of people in a given geographic region, including their language, heritage, religion and customs	2	2