Understanding Differences in Expectations in the Anticipatory Socialization Process between Angel Investors and Entrepreneurs in Extended Due Diligence

> A dissertation presented to the faculty of Ohio University

In partial fulfillment of the requirements for the degree Doctor of Philosophy

Joseph D. Fox

May 2019

© 2019 Joseph D. Fox. All Rights Reserved.

## This dissertation titled

Understanding Differences in Expectations in the Anticipatory Socialization Process between Angel Investors and Entrepreneurs in Extended Due Diligence

by

### JOSEPH D. FOX

has been approved for

the department of Educational Studies,

the department of Management,

and the Graduate College by

David R. Moore

Professor of Educational Studies

David Koonce

Interim Dean, Graduate College

#### Abstract

FOX, JOSEPH D, Ph.D., May 2019, Individual Interdisciplinary Program
Entrepreneurship and Instructional Technology
<u>Understanding Differences in Expectations in the Anticipatory Socialization Process</u>
<u>between Angel Investors and Entrepreneurs in Extended Due Diligence</u>
Director of Dissertation: David R. Moore

Angel investors provide billions of dollars in capital to entrepreneurs in the United States each year. The money provided to these early-stage companies is critical for growth and expansion of these young businesses with uncertain futures. As founders interact with angel investors and the groups they form to invest in such opportunities through due diligence, each party acts upon expectations generated from a process known as anticipatory socialization. This thesis investigates anticipatory socialization in the context of entrepreneurial learning from the perspectives of entrepreneurs and angel investors. Using a mix of interviews and a case study, this exploration of the social environment uncovers the various expectations guiding the due diligence process. A documentation analysis provides data on the stated criteria and goals that each angel investor group enters due diligence with. The result of these efforts produces comprehensive learning objectives useful to guide the development of an instructional device aimed at assisting students in better understanding the anticipatory socialization process in angel investing. Since due diligence and evaluation of founders begins much earlier than entrepreneurs expect, the entrepreneur should undertake their own due

diligence to discover more about the expectations of angel investors. They also must engage in self-reflection to understand their own position within the social space. Dedication

I dedicate this work to my wife, Alexa, and our son.

#### Acknowledgments

I would like to thank Dr. David Moore, Dr. Luke Pittaway, Dr. Ikenna Uzuegbunam, and Dr. Kamile Geist, for their tireless feedback and guidance during my program. I also owe a debt of gratitude to the angel investors, angel investor groups, entrepreneurs, and other entrepreneurial support groups that allowed me to discuss my ideas with them along the way. I would like to acknowledge the support and feedback provided by the faculty at Ohio University and The University of Akron. I would also like to thank my wife, Alexa, for all her support and encouragement during my doctoral studies. You and our son have kept me motivated through this process! Thank you to Dan, Judy, Jim, Karen, John, Christy, Emily, Erika, Mark, and Hazel for all your support in completing this work.

# **Table of Contents**

Abstract
Dedication5
Acknowledgments
List of Tables11
List of Figures12
Prologue
Chapter 1: Introduction14
Statement of Problem14
Purpose of the Study16
Theoretical Framework
Entrepreneurial learning and socialization18
Chapter 2: Literature Review27
Introduction27
Section 1: Angel Investing
Why angel investing?
Types of entrepreneurial financing
Angel investors
Entrepreneur expectations of angel investors44
Section 2: Entrepreneurial Learning46
Introduction to entrepreneurial learning46
Angel investors and entrepreneurial learning56
Section 3: Development of Learning Objectives
Introduction
Serious games64
Simulations
Revised taxonomy of educational objectives71
Chapter 3: Methodology76
Grounded Theory76
Philosophical Assumptions77
Ontological assumptions78

Epistemological assumptions.	80
Human nature	81
Research Design	82
Methods	83
Interviewing	83
Reflexivity	85
Self as researcher	86
Documentation analysis.	87
Sampling	89
Data Collection and Analysis Procedures	91
Data collection	91
Data analysis	92
Protection of human rights and risks to participants	94
Limitations	94
Chapter 4: Findings and Data	96
Data Collection and Coding	96
Interviews	96
Coding	98
First round – open coding	98
Findings – Angel Investors	102
Angel investors.	
Angel Expectations	116
Angel investor learning	116
Entrepreneur attitudes.	116
Entrepreneur behaviors	118
Entrepreneur beliefs	120
Entrepreneur norms	122
Entrepreneur values	123
Relationships.	125
Sources of socialization	126
Entrepreneur Expectations	
Entrepreneurs	129
Entrepreneur attitudes.	135

Entrepreneur behaviors	135
Entrepreneur beliefs.	136
Entrepreneur norms	138
Entrepreneur values	139
Entrepreneur sources of socialization.	139
Angel Investor Websites	140
Who conducts due diligence?	140
Screening and general criteria.	141
Amount requested.	143
Valuation.	144
Location	144
Management team.	145
Exit strategies	145
Competitive strategies.	146
Market opportunity and market validation.	146
Language Similarity	147
Similarity scores between entrepreneurs.	148
Similarity scores between angel investors	149
Similarity scores between angel investors and entrepreneurs	150
Similarity scores between websites.	151
Similarity scores between angel investors and websites	152
Word Similarity Results	154
Expectations	156
Factors listed by angel investors but not entrepreneurs	158
Factors listed by entrepreneurs but not angel investors	160
Process-based expectations.	161
Sources of socialization	162
Chapter 5: Analysis and Discussion	166
Speaking a Different Language	167
Generating Learning Objectives from Expectations	171
Universally agreed upon factors.	
Factors agreed upon by angels, research, and websites.	
Building trustworthiness	

Sources of socialization	200
Due Diligence Processes	204
Due Diligence Starting Point	207
A Framework for Entrepreneur Due Diligence	211
Conclusion	221
Policy implications	228
Future research directions.	228
Epilogue	230
References	232
Appendix A: Revised Taxonomy of Educational Objectives with Examples	270
Appendix B: General Interview Questions	271

# List of Tables

11

Table 1: Sources of Capital (modified from Robb and Robinson, 2010)	30
Table 2: Defining Characteristics of Angel Investor Groups	
Table 3: How Angel Investors are Analyzed	
Table 4: Revised Taxonomy of Educational Objectives	71
Table 5: Knowledge Types and the Angel Investing Process	73
Table 6: Participants based on their primary affiliation	90
Table 7: Angel Investors	97
Table 8: Entrepreneurs	98
Table 9: Primary and Secondary Themes	100
Table 10: Percentage of Themes Coded	102
Table 11: Maxwell's (2016) Synthesized Criteria for Entrepreneurs	143
Table 12: Investment Ranges	144
Table 13: Desired Valuations	144
Table 14: Personal Factors Listed	157
Table 15: Angel Investor Factors	159
Table 16: Entrepreneur Factors	161
Table 17: Process-Based Expectations	162
Table 18: Sources of Socialization	164
Table 19: Expectations Mapped to Knowledge Types and Learning Tasks	171
Table 20: Summary of Knowledge Types	176
Table 21: Summary of Learning Tasks	177
Table 22: Universally Agreed Upon Factors	178
Table 23: Factors Agreed up on by Angels, Research, and Websites	187
Table 24: Building Trust	197
Table 25: Key Findings	224

# List of Figures

12

Figure 1: Entrepreneurial Learning Framework with Anticipatory Socialization	18
Figure 2: Anticipatory Socialization Process	23
Figure 3: Anticipatory Socialization Process during Angel Investing	24
Figure 4: Steps toward Angel Investing	32
Figure 5: Angel Investor Learning Model	59
Figure 6: Percentage of investments returning each multiplier	61
Figure 7: Return funnel per 1000 investments	61
Figure 8: Percentage of Content Coded per Theme	99
Figure 9: Comparative Themes	101
Figure 10: Common Angel Criteria	142
Figure 11: Entrepreneur Word Similarity Scores	148
Figure 12: Angel Word Similarity Scores	149
Figure 13: Angel and Entrepreneur Word Similarity Scores	150
Figure 14: Website Word Similarity Scores	151
Figure 15: Angel and Website Word Similarity Scores	153
Figure 16: Overall Word Similarity Correlations	155
Figure 17: Word Similarity Correlations Revisited	168
Figure 18: Values and Behaviors	190
Figure 19: Google Search for Angel Investors Expectations	201
Figure 20: Due Diligence Process	207
Figure 21: First Step in Entrepreneur Due Diligence Model	213
Figure 22: Step 2 in Entrepreneur Due Diligence Model	215
Figure 23: Step 3 Entrepreneur Due Diligence Model	216
Figure 24: Step 4 Entrepreneur Due Diligence Model	218
Figure 25: Step 5 Entrepreneur Due Diligence Model	219
Figure 26: Expanded Entrepreneur Due Diligence Framework	220
Figure 27: Entrepreneurial Learning Revisited	222

#### Prologue

Entrepreneurs serve as one of the major growth engines of capitalism. I have been interested in running my own business since I was in grade school, watching my grandparents employ the entrepreneurial spirit while operating farms and my father starting an electronic manufacturing and technology company. Since cofounding a company in 2007 that ultimately failed, I have been intrigued by the means in which founders must secure resources to operate their businesses. There are many players in this ecosystem – angel investors, venture capitalists, incubators, governmental organizations, jobs programs, universities, high schools, and others. My curiosity surrounding angel investment was initially due to the organic nature in which I believed many angels made investment decisions. It was also due to the gravity of wealthy individuals taking risky bets on ambitious founders.

As someone who has participated in entrepreneurship education at the collegiate level, my perspective on understanding angel investors was limited. In many cases, it seemed that angel investors were lumped into broader discussions of entrepreneurial finance. Those educational resources may also have been heavily influenced by the culture of angel investors in their geographic area. These observations generated an interest to better understand sub-processes within angel investment and create better learning experiences for entrepreneurs and angel investors.

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

#### **Statement of Problem**

Many startup companies reach a point where they can no longer move forward without raising external capital. One type is informal capital, or angel investments, from wealthy individuals or groups (Morrissette, 2007). Access to such financing is not a guaranteed activity, yet it can be crucial to enable entrepreneurs in achieving scale for their businesses. Those entrepreneurs attempting to receive investment from angel investors must go through a thorough screening and due diligence process before any deal is complete.

The due diligence process remains an enigmatic part of the entrepreneur's journey to obtain financing as they are attempting to grow their business. While the body of research on angel investors is ever growing and increasing, little has been conducted around expectations prior to and during due diligence from the entrepreneurs' and angel investors' unique and individual perspectives. Previous studies have looked at what is included in the due diligence process, heuristics that investors use, what investment criteria are, as well as predictors of success in future financing decisions (Mason and Harrison, 1997; Landström, 1998; Feeney et al., 1999; Van Osanabrugge, 2000; Stedler and Peters, 2003; Haines et al., 2003; Mason and Harrison, 2003; Mason and Stark, 2004; Sudek, 2007; Paul et al., 2007; Clark, 2008; Smith et al., 2010; Maxwell et al., 2011; Brush et al., 2012; Mitteness et al., 2012a; Mitteness et al., 2012b; Hsu et al., 2014; Carpentier and Suret, 2015). While a rich body of literature exists on these decisionmaking processes and criteria, few studies consider the social environment that surrounds

the investing process and precedes due diligence. Carpentier and Suret (2015) provide a detailed look at the decision process and reasons why angel investors reject startups through an innovative analysis of data in a deal flow management platform, yet key pieces of contextual information from the perspective of the angel investors and entrepreneurs involved are absent. They also summarize previous investigations in decision-making criteria, along with research objectives, showing how most studies do not necessarily include a sample of entrepreneurs nor a focus on the socialization process (Carpentier and Suret, 2015). Angel investing generally does not occur as a simple interaction between one entrepreneur and one angel investor in a vacuum (Gaston, 1989; Morrissette, 2007). This reality lends credence to explore the complex social processes entailing the interactions between angel investors and entrepreneurs looking to raise capital from groups and individual investors. The social nature of investing also entails a consideration of the expectations held by both the entrepreneur and the angel investor as they prepare to engage in a potential investment. Such expectations are a product of preparedness, and preparedness is a function of the entrepreneurial learning process and reflection (Cope, 2005). Anticipatory socialization is part of preparedness and serves as the method in which individuals forecast what they are facing in a future situation and rehearse for that potential future (Muljadi, 2005). Through the culmination of personal experiences, entrepreneurs forecast what they need to do in order to be successful (Cope, 2005; Pittaway and Thorpe, 2012; Muljadi, 2005), while angel investors perform the same task from their role in the investment process.

Many studies in this space are explorations of acceptance and rejection criteria from the perspective of the angel investor. Such studies largely consider the decisions that angel investors are making once a startup is in the traditional due diligence funnel, as well as concrete information about the startup. This study differs from the norm by using open-ended methods to capture the situated view of the investor and the entrepreneur. Rigid criteria used by angel investor groups describe a more objective measure with subjective decisions made about that element under consideration. An example of an objective criterion might be which industry a business operates in. Expectations may include *other* factors, such as information about the environment, mechanics of the relationship, norms, and values from the perspective of the individual. Inherently, this is not an investigation on why a simple yes/no decision passes a startup to the next stage of consideration. It is an exploration of the anticipatory socialization process undergone by each participant in this interactive, social environment. Part of that process is answering the question: What are the expectations of the participants involved? Such open-ended inquiry also allows for the further collection of information pertinent to the research questions. The next section introduces the purpose of the study in more detail.

#### **Purpose of the Study**

The purpose of this study is to investigate the anticipatory socialization processes enacted by entrepreneurs and angel investors as they interact within the angel financing process. The research investigates this dynamic environment by leveraging an understanding of the process of anticipatory socialization, which is how individuals prepare themselves to take on a new role (Stott, 2010). The purpose of this research is

to develop an understanding of how the anticipatory socialization process generates expectations and how those expectations impact the entrepreneur and angel investors as they prepare for engagement in the due diligence process. If the formulation of expectations is part of the anticipatory socialization process, which itself is a facet of entrepreneurial learning, then there are three key areas to uncover or describe based on the literature: entrepreneurial expectations (uncovered through research), angel investor expectations (uncovered through research) and angel investor expectations described in the literature. The process of due diligence is where most of the literature has described what homogeneous expectations angel investors have of entrepreneurs (Morrissette, 2007; Carpentier and Suret, 2015). Due diligence also can produce various expectations and subsequent behaviors on the side of the entrepreneur as they progress through the process. Considering the angel financing process from a perspective of due diligence also helps frame important research questions due to the differences in behavior which may be present at each individual stage. In this case, the stage of the process changes the focal point of the anticipatory socialization process, as the entrepreneur has a new temporal point to generate potential realities to act upon in the future. This point also highlights the importance of generally held expectations that are stage independent.

The remainder of this thesis proceeds as follows. First, I provide information regarding the research questions guiding the study. Next, I explore important terms, theoretical frameworks, and philosophical underpinnings as they pertain to the study. Then, a literature review provides a foundation of previous research. Next, I provide a description of the methodology and methods used in the study. The final sections of this manuscript include reporting and analysis of results, and a discussion of findings.

## **Theoretical Framework**

This section provides an overview of the theories and frameworks guiding the research questions in this study. I discuss entrepreneurial learning, followed by a discussion of socialization processes that help give the background and context necessary to explain anticipatory socialization.

**Entrepreneurial learning and socialization.** The entrepreneurial learning framework developed by Cope (Pittaway and Thorpe, 2012) offers a holistic picture capturing the complex mechanisms involved in entrepreneurial learning.

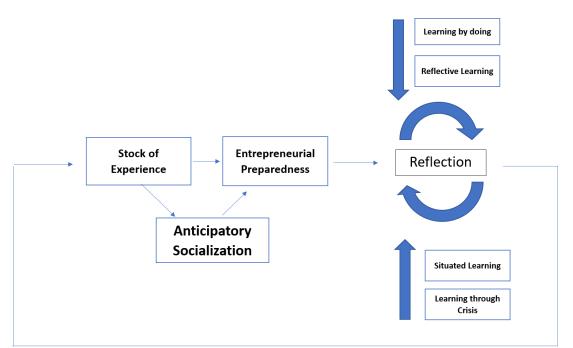


Figure 1: Entrepreneurial Learning Framework with Anticipatory Socialization \*Adapted from Pittaway and Cope (2012)

As such, this framework is applicable to situations that an entrepreneur is about to experience, is experiencing, or has experienced in the past. The ability of such a framework to explore different temporal aspects of entrepreneurial phenomena gives it robustness and flexibility to explore various concepts included in the framework. Entrepreneurial learning also has components that depend on critical events that occur in the entrepreneur's lifetime (Cope, 2003). Facets of the learning process change based on the experience that the entrepreneur is having or based on various cognitive processes after an event has occurred. The reflection and various learning types give way to a synthesis of the information taken in as well as an understanding of factors related to the situation, the actors, as well as other internal processes, which may be ongoing (Cope, 2003). The result of these processes influences the preparedness of the entrepreneur as they prepare to experience new things.

The preparedness variable encompasses a variety of concepts, and many researchers have explored it within the domain (Pittaway and Thorpe, 2012). Much of the existing research considers preparedness as a cumulative stock of experience (Reuber and Fischer, 1999), or the skills and abilities obtained over time (Harvey and Evans, 1995) as part of a cognitive process (Chen, Yao, and Kotha, 2009). As the stock of experience provides a present-time snapshot of the knowledge, skills, and abilities an entrepreneur has or believes he/she has, the concept of anticipatory socialization incorporates this preparedness and projects that onto expected factors surrounding a future situation. The entrepreneur perceives their preparedness at a level that may be different from that of angel investors and other evaluators. The anticipatory socialization process enables entrepreneurs to "mentally rehearse" their interaction with these future elements (Muljadi, 2005) according to their anticipation of what the expectations are. Anticipatory socialization summarizes the information included in one's stock of experience and projects that onto a new potential scenario to develop their own expectations about a situation.

Researchers have abstained from in-depth exploration of anticipatory socialization in the entrepreneurship literature, and management researchers generally focus on the process as it applies to new employees joining a company (Bauer et al., 2007; Berger and Berger, 1979). The management literature includes a number of studies about organizational socialization and the processes, context, and approaches that both firms and individuals take to facilitate socialization processes of new hires (Griffin, Coella and Goparaju, 2000). Many of these approaches consider the point after a new hire has joined a firm, thus providing a common standard to develop additional research questions. As such, models have been built to explore what explicit strategies leveraged by new hires are effective at gathering information depending on their type. Morrison (1995) highlights that new hires seek out technical, referent, social, feedback, normative, organizational, and political information throughout the socialization process.

Starr and Fondas (1992) consider anticipatory socialization in the entrepreneurial paradigm as relating to socialization processes occurring before an individual decides to start a company, and new venture socialization occurring after such a decision. Based on current research in entrepreneurship, the definition provided by Starr and Fondas (1992) is not robust enough to apply to the wide variety of situations related to the entrepreneurial condition. Anticipatory socialization, in general, does not end once an entrepreneur has decided to start a business, and it is entirely possible that some entrepreneurs are still probing whether they should pursue an opportunity when they attempt to raise financing. Such a definition is too limited in scope. For instance, a new entrepreneur looking for financing will find himself/herself going through this process to adjust to a new situation and use such a process to reduce uncertainty (Bauer et al., 2007; Berger and Berger, 1979), entry shock (Paulson and Baker, 1999), disillusionment (Carcello et al, 1991), anxiety, helplessness, and surprise (Louis, 1980). As a result, the current understanding of anticipatory socialization in the literature appears static.

When entrepreneurs seek funding from angel investors, it entails an evaluative process for both parties involved, and their expectations thereof, which may differ. Typical socialization processes include influence from family, friends, mentors, education, experience, those who attract disproportionate media attention compared to the average person, and others that one may interact with (Jablin, 2001; Bird, 1986). The process of becoming part of a social group also has typical characteristics of success. These include attitudinal measures like satisfaction and commitment, perceived self-confidence, longevity in a role, or even evaluation of others in the social group (Fisher, 1986). The anticipatory socialization process ultimately produces expectations of how a situation may occur, regardless of the actors involved. In general, expectations may include the following elements discussed by Black and Mendenhall (1991) which include:

• Factors about the organization

- Factors about the job
- Congruence between skills and abilities
- Congruence of needs and values

These elements above describe how, for instance, a new hire might enter a new organization. The assumption behind this also implies that the hire already has a job; therefore, the attitude of those that are "helping" along the way may be vastly different from those found in the angel investor environment. Herein lies part of the issue under exploration. A product of this research can help develop a modified set of expectations between angel investors and entrepreneurs to offer a contextually rich picture of the underlying occurrences.

The following two figures show the anticipatory socialization process combined with the angel investing process and show current understanding of how they it together. Figure 2 shows how findings in the mainstream management literature map to anticipatory socialization in terms of what to expect and how it changes based on interactions with social groups (angel investors):

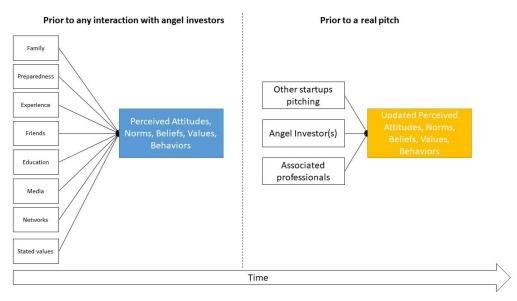


Figure 2: Anticipatory Socialization Process

Figure 3 shows how those factors may change based on the due diligence stage. This also shows the collision between entrepreneur expectations and angel investor expectations near funding decisions. Most importantly, this figure establishes the importance of baseline expectations:

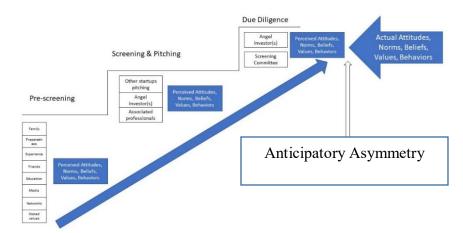


Figure 3: Anticipatory Socialization Process during Angel Investing

Figure 3 also shows some potential issues that might occur during this interaction. The first issue is that entrepreneurs may never go through the complete process and adjust their expectations to meet that of an angel investor. The second issue is that these expectations may be different based on the stage of the investment process. While due diligence occurs from screening until either a company is funded or they are rejected, a rejection could occur at any part of this stage including pre-screening. At this point, a sensemaking process occurs to reconcile differences between expectations and the constructed reality (Weick, 1995), regardless of the stage entrepreneurs are experiencing. While the anticipatory socialization process is one that constantly updates beliefs as to what should be happening, there will come a time when the perceived items the entrepreneur holds as true will meet the actual items the angel investor group operates by. A mismatch between these items has been coined anticipatory asymmetry as the anticipated items that the entrepreneur highly values may not be the same as the angel investor on the other side of the transaction between these two parties. This mismatch is comparable to expectation asymmetry described by Liggio (1974) regarding differences in expectations between auditors and the audited firms (Füredi-Fülöp, 2017). The point of showing this trajectory is to show that this anticipatory asymmetry may occur at any time along the path of the entrepreneur. The research propositions are as follows:

- RP1: What are the expectations of entrepreneurs before they engage with angel investors?
- RP2: What are the expectations of angel investors before they engage with entrepreneurs?

These open-ended research propositions allow for proper exploration of the differences in expectations.

Upon completion of the research phase collecting data about the anticipatory socialization process, the research develops learning objectives to give learners a better understanding of what they must do to navigate the anticipatory socialization process when pursuing startup financing. Classroom instruction, serious games, and computer simulations can use these objectives. This aligns with Aram and Noble's (1999) criticism that many learning methods are not set up to deal with ambiguity in the business world. In the case of this research, ambiguity lies within the difference between expectations built during an anticipatory socialization process and those expectations of the other party involved in making important decisions. Therefore, the third and final research proposition follows:

• RP3: What are the primary focal points to build curriculum to model anticipatory socialization processes in the angel investment process?

The next section offers a detailed literature review of the most relevant literature for the current study.

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

#### Introduction

In 1995, Howard Feldman published an article entitled "Computer-Based Simulation Games: A Viable Technique for Entrepreneurship Classes?" seeking to answer whether students can learn the concepts necessary to become an entrepreneur. The purpose of this research ponders the same question, albeit at a more granular level – is it possible to use a computer simulation to improve anticipatory socialization and expectations within entrepreneurs and investors as they prepare to start the angel investing process? Angel investors are wealthy individuals who invest their own money in companies (Benjamin and Margulis, 2000). Anticipatory socialization describes the way that individuals prepare themselves to take on new roles (Stott, 2010). Entrepreneurs and angel investors coexist in an economic system mutually dependent on each other, as entrepreneurs require a steady flow of capital to survive and angel investors need a certain threshold of opportunities to reach the desired return. In fact, many angel investors are self-made entrepreneurs (Mason and Harrison, 2002) and are driven by a multitude of intrinsic motivations (Morrissette, 2007). Some estimates indicate that there was over \$4.5 billion in angel funding given to startup companies in 2015.<sup>1</sup> Furthermore, Van Osnabrugge and Robinson (2000) report global angel financing to be in excess of \$25 billion each year, emphasizing the importance of this financing type. Although there is a motivated flow of capital dedicated to entrepreneurial efforts, 95% of businesses still fail to raise capital at any stage (Riding et al., 1993), and Mason and Harrison (2002) find

<sup>&</sup>lt;sup>1</sup>Accessed at <u>https://techcrunch.com/2016/09/07/crunchbase-sees-rise-in-average-seed-round-in-2016/</u>

that 31% of startup companies engaging with angel investors lack enough substantial information to proceed to the next step of serious consideration for financing. A critical aspect of this research is to explore the reasons behind 31% of founders lacking substantial information and develop corresponding learning objectives from these shortfalls to guide future educational devices such as serious games and simulations.

To accomplish the research agenda discussed in the introduction, a literature review is prepared to cover various concepts and constructs within the domain of interest. The literature review includes an in-depth exploration of the phenomenon of angel investors, the groups they coalesce around to finance startup companies, the criteria they use to approach startup evaluation, and other factors related to the financing process. Next, a review of entrepreneurial learning explores the processes in which entrepreneurs and angels use to adapt and learn from dynamic startup environments. Within the discussion of entrepreneurial learning, I devote attention to preparedness (Chen et al., 2009) and anticipatory socialization processes leveraged by learners as they approach new situations. The aim of the review is to expose the gap in understanding between factors that entrepreneurs believe to be true about their interaction with angel investors and the actual process as it occurs.

#### Section 1: Angel Investing

Why angel investing? Angel investors serve as a conduit for financing which helps power startup companies past the seed stage and should enable them to elicit funding from venture capital (VC) firms (Fenn et. al, 1998; Hellmann and Thiele, 2015; Ibrahim, 2008). These investments are reportedly small, from \$500,000 to \$2 million (Denis, 2004; Sohl and Sommer, 2002). While angel investors vary in terms of their quality, the individuals and groups offering capital and resources to founders fill a void that many others ignore (Mason, Botelho, and Harrison, 2016). Angel investors provide over \$25 billion in capital to startup markets each year (Van Osnabrugge and Robinson, 2000), especially toward early-stage companies, yet still syndicate with other investors as a company grows.

The next section offers an overview of entrepreneurial financing methods, followed by a deeper dive into the angel investing process. It explores the definition of angel investors, angel investor groups, as well the various criteria and processes that angel investors use to evaluate a business. Finally, I outline other characteristics of the angel investor interaction and experience as part of this review.

**Types of entrepreneurial financing.** Access to capital is one of the most critical issues in entrepreneurial finance (Denis, 2004). Capital is available to founders using debt-instruments or equity arrangements, from sources like traditional bank financing, crowdfunding, grants, friends and family investments, personal investment, as well as other creative options (Robb and Robinson, 2010). A summary and description of these methods can be found in Table 1 based on the work by Robb and Robinson (2010), who

analyze data on thousands of startup firms to differentiate between debt and equity methods of finance, as well as who might be involved in the financing method.

	Owner	Insider (Personal)	Outsider
			(Professional)
Debt	Credit Cards,	Personal loan from	Business bank loan,
	Loans	family, friends,	personal bank loan,
		owners, others	credit lines, other
			loans
Equity		Parent, Spouse,	Angel investors, VC,
		Family and Friends	business equity,
		Equity	government equity,
			crowdfunding, ICO*
Other			Philanthropic sources

Table 1: Sources of Capital (modified from Robb and Robinson, 2010)

\*ICOs, or Initial Coin Offerings, are an understudied phenomenon in the capital raising literature. This refers to the use of cryptocurrencies modeling an initial public offering to finance a venture.

Some founders use their own cash to self-fund their business (Bhide, 1992; Robb and Robinson, 2010). Another common strategy is to receive funding from family members or friends interested in helping start the business, through unofficial loans or in return for an equity stake (Robb and Robinson, 2010). Crowdfunding depends on gaining small amounts of money from many users, typically with the promise of some item in the

future (Mollick, 2014). These items may include a beta-product or other company-related materials. Traditional bank financing includes short-term loans backed by assets, and these banks could be involved with loan programs supported by the Small Business Association (SBA). Given the lack of tangible assets within young enterprises, traditional debt financing is not always an option for new founders as they build their business, thus turning their attention to equity financing methods (Denis, 2004). The primary sources of equity financing include corporate investors, venture capitalists, and angel investors (Denis, 2004). Wong et al. (2009) report that angel investors play an important role linking new firms with venture capitalists for further investment, but also suggests they provide little beyond financing, and Shane (2008) cautions generalizations of angel investors en masse providing the same benefits. While angel investors and VCs frequently work together, they also compete to provide resources to promising new ventures (Hellman and Thiele, 2015). If an entrepreneur chooses to solicit capital from angel investors, they follow a general process to meet that objective. A caveat, however, is that not all groups operate the same. Angel investors have the latitude to invest on the spot. Reportedly, Marissa Mayer once invested a substantial sum of money into a company after meeting the founder for 12 minutes.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Accessed at <u>http://fortune.com/2012/07/30/yahoo-ceo-mayers-quickest-investment-the-12-minute-pitch/</u>

Angel investing lacks a standard process ubiquitously used across individuals and groups. The Angel Capital Association (ACA), with over 13,000 members, lists the stages generally found in the process<sup>3</sup> as shown in Figure 3:



Figure 4: Steps toward Angel Investing

Adherence to these stages may depend on the nature of the investor group that a founder is interacting with. Most angel groups allow their members to decide whether they will join an investment opportunity, or democratically direct capital from a fund towards a startup (Mason and Harrison, 2008). Most studies treat angel investor groups as a collection of independent-acting individuals rather than an investigation into a cohesive group operating to meet shared objectives, per a review of seminal research in the field summarized in Tables 2 and 3. This may be rightfully so, as there are many groups that tend to allow individual investment from angels sharing access to deal flow. Few studies consider the process of how entrepreneurs prepare to elicit financing from angel investors in comparison to the attention provided to VC firms. With angel investors being the

<sup>&</sup>lt;sup>3</sup> Accessed at https://www.angelcapitalassociation.org/faqs/#When\_should\_I\_approach\_an\_angel\_group

principal source of capital for many startup companies (Baty and Sommer, 2002), it is important to study the process of how entrepreneurs engage with angel investor groups.

The next section reviews individual angel investors, their characteristics, and their motivations to be part of the startup financing process.

Angel investors. Roach (2010) describes the origin of angel investors hearkening from wealthy individuals financing risky shows on Broadway in New York in the early 1900s. Contemporary research identifies such individuals as angel investors, informal investors, or business angels (Morrissette, 2007). The definition of angel investor varies based on the approach undertaken by the researcher. Some define angel investors simply as individuals that have a high net-worth and provide capital to entrepreneurs seeking funding for their business (Lange, Leleux, and Surlemont, 2003). Many studies also adopt the SEC definition of an "accredited investor," someone who has a net worth of over \$1 million in assets and makes over \$250,000 per year. The term "informal" also implies a wider net than only including high net-worth individuals, as this excludes deals done at a smaller scale or the impact of crowdfunding on startup financing. Benjamin and Margulis (2000) broadly capture these individuals by defining angel investors as those who invest their own money into a venture.

Morrissette (2007), Van Osnabrugge and Robinson (2000), Benjamin and Margulis (2001), Hill and Power (2002a), Gaston (1989), and many other authors have studied the general characteristics of angel investors. Benjamin and Margulis (2001) find that most of these investors are millionaires, while Gaston (1989) does note that a large percentage of these investors are not. While many angel investors were once entrepreneurs themselves (Sullivan, 1991; Gaston, 1989; Van Osanabrugge and Robinson, 2000; Aram, 1989), the distribution of industry experience is wide and varied (Sullivan, 1991). Angels also tend to invest between \$50,000 and \$150,000 per transaction they are involved in (Van Osnabrugge and Robinson, 2000). While this is an average distribution amount, it may vary based on the number of deals and the type of angel investor making the decision. Angel investors typically utilize their personal wealth to fund businesses, which puts them at risk of losses that could eliminate investment opportunities in the future (Ibrahim, 2008).

*Angel motivations.* Angel investors are motivated by factors such as ROI (Van Osnabrugge, 2000), consumption (Morrissette, 2007), fun (Van Osnabrugge and Robinson, 2000; Sullivan, 1991), psychic income or compensation (Freear, Sohl and Wetzel, 1995; Hill and Power, 2002b), thrill of starting a new company (Hill and Power, 2002), local economic stimulation (Sullivan and Miller, 1990), and other non-financial factors (Morrissette, 2007). Ibrahim (2008) calls these non-financial factors part of the "for-profit philanthropy" that angel investors want to be a part of as they may miss the "rush" of being a part of the new venture creation process. The variety of factors outline an interesting problem for researchers; no angel investors are *exactly* alike. This indicates that part of the system is dynamic.

The great differences in these motivations create a unique environment for entrepreneurs. Furthermore, angel investors prefer to invest together (Morrissette, 2007), and these investments may occur with investors of differing goals and motivations. This creates dynamic interactions between angels as they join to form informal investor groups, also known as angel groups or business angel networks (BANs), to pool capital for larger investments in startup companies. It also highlights the importance of lead investors to shepherd founders through the due diligence process if they are more interested in a venture than their contemporaries (Freear, Sohl, and Wetzel, 1995). The gravitational pull guiding angels to invest together leads to the formation of informal investor groups.

*Informal investor groups.* Angel investors are increasingly joining groups to access improved deal flow and the opportunity to share costs and benefits of the investing process (Mason, Botelho, and Harrison, 2016; Mason and Botelho, 2014). Membership in a group may also help individuals become more passive, yet still be part of the process (Mason, Botelho, and Harrison, 2016).

Many studies in this domain conduct research on angel investors that are part of an investment group because they make investments individually. Attempts to explain the various actions of angel investors is rendered difficult due to differences that may be irreconcilable between investors (Mitteness, Sudek, and Cardon, 2012). While some studies have considered how individual interest carries through the group evaluation process of angel groups (Kerr et al., 2011), many have not explored the differences between group structures and the influence of the overall actions and beliefs of the group on the investment decision. While the individual angels can make the investment decision themselves, it is not always a simple individual decision. Angels wishing to invest together may form an individual LLC simply to create a vehicle for investment with other angels for one company. Furthermore, investment groups are not all the same – while most allow individuals to choose to invest on their own, they may also have specific funds or semi-strict rules to dictate what kind of companies received investments based on blanket criteria in the screening process.

*A typology of informal investor groups.* Some taxonomies exist to describe differences in angel investor groups. Cable (2010) describes differences between angel investment groups upon the following items in Table 2:

Item	Nature of item
Investment Decisions	Individual or collective
Funding Sources	Investments made individually or collectively
Management of the Group	Professional or not
Legal Structure	Organizational structure (nonprofit, LLC, corporations, informal affiliation)

Table 2: Defining Characteristics of Angel Investor Groups

Cable's (2010) analysis of angel investment groups explores legal cases involving such investors, especially in relation to Rule 506 of Regulation D from the Securities Act of 1933 (Securities Exchange Commission, 1933). Rule 506 provides angel investors the exemption from registering the investment with the SEC, and the only filing required is a

short form<sup>4</sup>. There also must not be any general or public solicitation for investment (Cable, 2010) and must be offered to qualified investors. While the contrast helps inform some of the key differences between different types of informal investor groups, this typology is not definitive. A review of many studies that include angel investor groups lacks descriptive data, generally, on some of the important differences between different angel groups because they focus on categorizing angel groups based on individual investment vehicles rather than committee-based funds. Payne and Macarty (2002) note the difference between angel networks and angel funds is a way to differentiate between groups, with networks individually investing and funds operating more like a venture capital group with their investment function.

Table 3 synthesizes some of the most popular studies performed with angel investors who are part of a group with special attention paid to whether the group utilized a pooled fund or an individual method:

<sup>&</sup>lt;sup>4</sup> Available at https://seraf-investor.com/compass/article/what-angels-need-know-about-sec-rule-506c

Table 3: How Angel Investors are Analyzed

Study	Groups or	Funding	Sample	Research	
	Individuals	Decision: Fund	Size	Method	
		or Individual			
Mitteness, Baucus,	Same Group	Individual	57	Survey	
Sudek (2012)					
Mason and Stark (2004)	Mixed	Individual	4	Verbal	
				Protocol	
Mason and Harrison	Same Group	Individual	74	Survey	
(2002)					
Feeney et al. (1999)	Unknown	Unknown	194	Survey,	
				Interviews	
Van Osnabrugge (2000)	Unknown	Unknown	143	Survey	
Paul et al. (2007)	Same Group	Unknown	30	Survey	
Sudek (2006)	Same Group	Individual	173	Survey	
Mason and Harrison	Same Group	Fund	1	Case	
(1996)				Study	

Based on this analysis, the most common factor described in each study is the funding method. This method even has difficulties because individual angel investors attending group events may choose to invest by themselves regardless of what the group decides. The lack of descriptive data linked to the group each angel prohibits the creation of a more comprehensive taxonomy of angel groups. This element is important as authors question the growing similarity between venture capitalists and more formalized angel groups (Mason, Botelho, and Harrison, 2016). One such area is due diligence as cohesive angel groups band together to mitigate risk when investing.

*Due diligence.* Angel investors make decisions based on their gut and a little bit of financial analysis (Van Osnabrugge and Robinson, 2000). Regardless of the role of intuition, the remainder of the analysis falls primarily within two distinct stages: screening and due diligence that takes place in an evaluation stage (Tyebjee and Bruno, 1984). While the stages are distinct from the overarching model of angel investing, they are related back to the overarching theme to address concerns by Haines et al. (2003), Feeney et al. (1999), and Paul et al. (2007) about isolated research approaches that do not fully integrate the investment stage with the larger model of angel investing.

*Screening*. The primary task of importance in the screening process is, prior to any business submission, to determine whether the company in question meets the criteria established by the group. Criteria vary based on the group and who is a part of it, but such criteria are general guidelines to filter out strong candidates for further consideration. "Gatekeepers" performing the screening process within groups would have much influence on the rest of the group investment process (Mason and Bothelho, 2017) as they must attempt to manage their own expectations with that of the other group members. There are no clear mandates on what criteria must exist and they vary based on the group. An individual may also hold different screening criteria than that of the group. There is a general pull to include items such as geography, industry, or business stage as requirements (Morrissette, 2007). Geographic items have historically been important, especially as investors seek to visit spaces to engage with a founding team. However, the rise of digital platforms has enabled angel investors to look outside of their traditional boundaries for increased deal flow.

It is also critical to identify how companies get involved with the group and who is the one considering each business initially. While this may be an angel or group of angels, it also could be someone affiliated with assisting the group from an administrative level. Regardless of who is completing this step, there clearly are gatekeepers that influence the opportunities passed onto the rest of the group for consideration. Answering the question of "Who" gatekeepers are may also affect the entrepreneur's perceptions of who they may interact with to solicit capital.

*Criteria from the research*. Investors rely on intuition to make decisions on funding for a startup (Dominguez, 1974; Sudek, 2006), but they also apply other cognitive processes as well. There is a large body of literature on startup investor criteria in general, as well as insights into angels. Multiple authors have observed evidence of angels considering items such as: domain expertise, entrepreneur experience, commitment, passion, on both cognitive and affective levels, trustworthiness of the founder, market growth and potential, revenue potential, competitive position, exit prospects, founder readiness, personal fit, gut feeling and intuition, as well as people factors such as work ethic, integrity, honesty, and openness (Tyebjee and Bruno, 1984; MacMillan, Siegel, and Subba Narasimha, 1985; Carter and Van Auken, 1992; Riding et al., 1993; Mason and Rogers, 1996; 1997; Haar, Starr, and MacMillan, 1988; Hurry, Miller, and Bowman, 1992; Van Osnabrugge, 1998; Jensen, 2002; Haines et al., 2003; Sudek, 2006; Paul et al., 2007; Wiltbank, Sudek, and Read, 2009; Cardon et al., 2009; Mitteness et al., 2012; Hsu et al., 2014; Maxwell et al., 2011).

Some of the latter elements relate to founders and the evaluation of those individuals or teams in the case of co-founders. Passion has been an extremely important factor for evaluation, yet there are multiple dimensions to consider. Passion consists of cognitive and behavioral elements (Baron, 2008; Chen et al., 2009), yet also can be represented in an affective manner generally displayed as positive emotions (Cardon et al., 2009). The affective component of passion can serve as a signal to angel investors for the time and effort one might spend with a startup (Bierly et al., 2000; Bird, 1989) as well as what potential contagion effect it may have on the rest of a team (Cardon, et al., 2009). This signal also is the first impression, which may guide subsequent decisions when a startup is under evaluation for funding (Zajone, 1980).

Mentoring ability of the founder is an important evaluative factor for angel investors (Berscheid, 1994; Young and Perrewe, 2000; Chen et al., 2009). Mentoring potential can be a difficult item to assess, and, at times, it takes providing advice to see if a founder will act upon it (Cardon et al., 2009). Coaching falls within a similar vein.

While many criteria considered focus on external items that the angel may deem verifiable, there are also factors that influence the decision maker when considering these issues. Investors rely on their social perception skills to assess the affective cues they are observing, as well as recognition of softer skills displayed by a founder (Baron and Markman, 2003; Mitteness et al., 2012). In addition to the "gut feeling" or intuition related to social perception, cognitive styles dictate the individual behavior of the investor (Sadler-Smith and Badger, 1998; Mitteness et al., 2012). Cognitive styles dictate how one might process information (Riding and Rayner, 2013; Streufert and Nogami, 1989), and many people fall on a continuum between adaptive and innovative styles (Kirton, 1976; Kirton, 2003). Those on the innovative side of the continuum tend to leverage experiential processing based on social perceptions or intuition, and this openended approach to information processing also leverages emotions much more than the other side (Allinson and Hayes, 1996; Kirton, 2003; Slovic et al., 2002; Mitteness et al., 2012). The other side of the continuum contains those who use adaptive processing to consider information (Kirton, 2003). Adaptive processing adopts an approach based on rational and logical thought, more structured mental reasoning than those who are truly open-minded (Kirton, 2003; Mitteness et al., 2012). These individuals are also far more analytical in nature (Mitteness et al., 2012) and may depend more on verifiable criteria when considering an investment.

Personality is a construct that has been heavily researched in the entrepreneurship domain, and it certainly has an influence on investor decisions (Mitteness et al., 2012). Personality relates to the wide variety of motivations driving an investor to participate in the first place. While the return on investment is a motivator for investors, it is not always a concrete requirement like venture capitalists (Baty, 1991). Angel investors also tend to provide support to startups that are close to their geographic location, due to the potential for economic impacts (Paul et al., 2007), and this leads to the creation of economic benefits for that locality. Freear, Sohl, and Wetzel (1995) call this psychic income, as this assistance towards others creates a feeling of gratification within the investor. In addition to economic performance which will provide a financial return to the investor and the region, angel investors see their role as an opportunity to mentor, share wisdom, and experiences to help a new generation of founders (Mitteness et al., 2012; Benjamin and Marguilis, 2000; Van Osnabrugge and Robinson, 2000). Morrissette (2007) also compares the behavior of some angel investors to a collector of fine art, noting consumption plays a role when the investors immerse themselves in a business they are funding. Some investors also find the process fun and enjoyable (Sullivan, 1991; Van Osnabrugge and Robinson, 2000), thus relaxing some of the motivations related strictly to financial performance. Along these same lines, Linde et al. (2000) note enjoyment of the process, keeping up to date with trends in an industry, as well as the overall challenge as other drivers to invest.

Feeney et al. (1999) attribute past failures as drivers of future angel investor decisions based on compensatory and non-compensatory strategies to cope with letdowns in the past. While not alone a complete explanatory variable for participation in investing, past failures and the acquired knowledge from those experiences can explain behavior when angels are investing. Ibrahim (2008) notes how successful exits are a signal to angels themselves and other angels continue "playing the game."

Common deficiencies in startup submissions. A focus on criteria alone would exclude additional factors and cognitive processes that angels leverage when considering the choice to fund a business. Mason and Harrison (2002) offer significant evidence on what angel investors perceive as deficiencies related to the opportunities they are evaluating. The top two items mentioned are unrealistic assumptions in the business plan or the lack of credible information (43% of all opportunities evaluated) or issues with the credibility of the founder or management team (42%). The third item on the list relates to entrepreneurs providing insufficient amounts of information to the angel investor (31%). Other items include exit route issues and vision (20%), business plan needing further development (24%), or even an insufficient amount of effort from the entrepreneur (12%). Many of these items link to missteps that the founder may take during the process or information that they submit. For instance, the omission of key information may be due to differing expectations on submission requirements or differing expectations what the group finds most important. This omission is a key component of this research agenda and the next section details what entrepreneurs may be expecting to create a mismatch.

**Entrepreneur expectations of angel investors.** Missing from the literature is a thorough analysis of what entrepreneurs expect from the transaction between their startup and angel investors prior to investment other than the most obvious factors (capital, networking). Researchers find that trust is a factor in the performance of the venture once it is part of the angel group portfolio (Bammens and Collewaert, 2012), but this occurs

after the entry process is complete. Explorations of trust also exist, and such research explores the established relationship between investors and founders (Bammens and Collewaert, 2012) as well as legitimacy-seeking behaviors that entrepreneurs act upon (O'Neil and Ucbasaran, 2016). A review of screening and due diligence criteria generally exposes the side of the angel investor group expectations for the founder or startup rather than the founders' expectations of the angel investor group. These "expectations" are also linked generally to decision criteria, which are highly subject to respondents providing the socially desirable criteria rather than what they really may look for (Mason and Botelho, 2017; Landström, 1998). Expectations also guide the socialization process (Stott, 2010). The perceived values, norms, attitudes, and behaviors an entrepreneur believes will help them in the angel investment process may not align with the reality held by the angel investor groups. This gap, described later as the "anticipatory asymmetry," highlights a requirement for further research to understand what may fuel such a mismatch. These differing expectations may be a result of limited knowledge from the side of the entrepreneur, reflected in large percentages of deals thrown out of consideration due to avoidable mistakes. Encounters with these gaps may also trigger a sensemaking experience as described by Weick (1995).

The exploration of various expectations built by founders and angel investors requires an investigation into the learning processes employed by both groups to understand the establishment of knowledge held at the start of a transaction. Construction of such expectations is the culmination of experience added to the knowledge and preconceived notions held before entering into any transaction. Theoretical understanding of preparedness within the entrepreneurial learning context sheds some light on how entrepreneurs get themselves ready for the process-at-large. As the goal of this research is to simulate mechanisms within the angel investment process, understanding the framework of entrepreneurial learning provides the necessary structure and strategies to evaluate how entrepreneurs and angel investors learn and form beliefs about the situations they are about to encounter. The next section provides a review of this literature and discusses how this is important in the angel investment process.

## **Section 2: Entrepreneurial Learning**

Introduction to entrepreneurial learning. Understanding the way that entrepreneurs learn provides important insights into how entrepreneurs may develop various expectations to pursue financing from angel investors. Entrepreneurial learning is an increasingly important topic within the domain of entrepreneurship (Gibb, 1997; Deakins and Freel, 1998; Cope and Watts, 2000; Rae, 2000; Cope, 2003, Hamilton, 2004). Entrepreneurial learning describes the learning process that occurs before, during, and after the new venture creation process (Pittaway and Cope, 2007). A hallmark of entrepreneurial learning is how founders deal with opportunities and what they do when faced with problems as they start a business (Reuber and Fischer, 1993; 1999; Young and Sexton, 1997; Minniti and Bygrave, 2001). Research in this area continues to investigate topics related to the risks that entrepreneurs undertake related to the social networks they interface with and the relationships they involve with a venture (Pittaway and Thorpe, 2012). One of these problems is how entrepreneurs prepare to solicit funding from sources like angel investors. A better understanding of the entrepreneurial learning process can help explain what may be going on with entrepreneurs as they interact with angel investor groups to receive capital.

Pittaway and Thorpe (2012) provide a synthesized model of Jason Cope's work on entrepreneurial learning, including several distinct temporal phases: dynamic phases, interrelated learning processes, and characteristics of entrepreneurial learning (Cope, 2005; Pittaway and Thorpe, 2012). Different interrelated learning processes occur throughout these phases like learning by doing, learning through crisis, situated learning, and reflective learning (Pittaway and Thorpe, 2012). A visual depiction of such a model is in Appendix 1.

The purpose of this section is to explore the mechanisms in which entrepreneurs learn to relate that to the angel investing process. This section also seeks to determine the optimal learning theories to create a learning simulation for entrepreneurs and angel investors to use, especially those that may be helpful leading up to an initial interaction with an angel investor group.

*Learning by doing and reflective learning.* Reflective learning and learning by doing are mutually supportive processes that can occur simultaneously (Pittaway and Thorpe, 2012), as the entrepreneur must reflect on the various experiences they have just gone through to derive deeper meaning. Learning by doing is rooted in Kolb's (1984) experiential learning theory (ELT), and this combined with reflective learning explains how experience by itself does not guarantee success in future entrepreneurial endeavors (Politis and Gabrielsson, 2015). Kolb (1984) describes experiential learning (ELT) as for how individuals generate knowledge from personal experiences. This transformation of

experiences into knowledge does not mean a simple assent of information within the experience – it requires a recognition of concrete experiences for reflection and observation as well as abstract concepts that result from these ideas (Kolb, 1984). Concrete experiences that occur are stored in memory for future reflection (Cope, 2003).

Reflective learning describes the process in which entrepreneurs think about the problem, incident, or crisis but do not necessarily experience simultaneously (Burgoyne and Hodgson, 1983; Cope and Watts, 2000; Pittaway and Thorpe, 2012). This retrospective of individual experiences is a major driver of significant learning (Cope and Watts, 2000). Reflection also forces the individual to challenge the assumptions and hard-truths held prior to experiencing an incident spurring such reflection (Cope, 2003). Individuals moving through the reflection experience may look inward at their own attitudes, actions, and emotions as well as outwards at their interactions with others as part of a social group (Cope, 2003). The process of reflection may also be forward facing and backward looking in time, dictating how previous experiences may affect choices and actions in the future (Minniti and Bygrave, 2001).

Direct experiences also enable learners to take on more ownership of the problems they are facing (Reynolds, 1999) as they navigate ambiguous elements of entrepreneurship (Pittaway and Cope, 2007), including uncertainty. Reflection on such experiences enables individuals to construct meaning (Handal, 1990). Since individuals are not learning in isolation, interaction with people or entities in a community of practice can help socially validate such meaning once reflection occurs (Garrison, 1992; Holman, Pavlica, and Thorpe, 1997). Entrepreneurs and angel investors both operate in highly social environments and their success depends greatly on interactions. Reflection also helps create a level of preparedness to face new situations.

Entrepreneurial preparedness is a widely researched concept within the domain (Pittaway and Thorpe, 2012). The experiences and skills that one brings to the beginning of any entrepreneurial process are critically important to how learning occurs (Reuber and Fischer, 1999; Harvey and Evans, 1995). Traditionally, preparedness is a stock of experience (Rueber and Fischer, 1999), as well as the range of skills and abilities that one has accumulated over time (Harvey and Evans, 1995). Key to the idea of entrepreneurial preparedness is the idea of experience, conceptualized as a stock of experience in the entrepreneurial learning framework (Pittaway and Thorpe, 2012; Cope, 2003; Rueber and Fischer, 1999). Stock of experience rolls up the knowledge that an entrepreneur has built at a specific point in time, and updates as entrepreneurs learn. The accumulation of such experience occurs over time but is also summarized into short-term memory for accessibility and decision-making. Stock of experience is also a contributing factor to the creation and realization of factors influencing a potential opportunity. Baron (2006) states that entrepreneurs use pattern recognition to make sense of the world around them in identifiable ways. Stock of experience also contains some of the patterns that might be important to individual entrepreneurs. Stock of knowledge will contain knowledge about various markets, industries, technologies, consumer groups, as well as other intimate factors that one might acquire through direct interaction (Baron, 2006) and through acquisition through other means. Such knowledge could also be broken into categories such as technical rationality and professional artistry (Schon, 1983); with technical

knowledge being the factual elements of a situation and professional artistry describing the intuitive knowledge one may obtain over time through reflection. Cope (2003) frames the idea of preparedness as a dynamic process that acknowledges the complex learning processes and accumulated information that one may bring into the new venture creation process while paralleling this process with anticipatory socialization (Dyer, 1994; Starr and Fondas, 1992). Anticipatory socialization helps individuals "rehearse" anticipated future processes to understand factors related to a new endeavor (Muljadi, 2005). In the case of the entrepreneur, this represents an accumulation of prior experiences, learning, and skills that will shape actions in the new venture (Starr and Fondas, 1992; Cope, 2003).

Anticipatory socialization is the process that prepares individuals for future roles, which includes imagining, rehearsal, and other tasks (Stott, 2010). This encompasses prior attitudes, beliefs, abilities, and knowledge related to an expected role (Merton and Kitt, 1950; Starr and Fondas, 1992; Ostroff and Kozlowski, 1992). This process assists individuals in reducing uncertainty related to the role they must perform in a social group or setting (Bauer et al., 2007; Berger, 1979). Anticipatory socialization is a useful function to prevent "entry shock" (Paulson and Baker, 1999) as an individual enters a new situation. This shock could include disillusionment (Carcello et al., 1991), anxiety, helplessness, and surprise (Louis, 1980).

Starr and Fondas (1992) differentiate between anticipatory socialization, characterized as occurring prior to the decision of starting a company, and new venture socialization, which occurs once an entrepreneur has decided to start a company. Starr and Fondas' (1992) contextualization of the new venture socialization process highlights the role of networks on the formation of a new venture (Aldrich and Zimmer, 1986; Larson and Starr, 1993) and the variety of agents that make up this network. Angel investors and other financers can act as agents, presenting information to entrepreneurs related to norms, values, behaviors, and skills that are valued by such investors (Starr and Fondas, 1992). According to Fisher (1986), the power and influence of any agent is a function of their tangible reward power, the frequency of contact, perceived legitimacy, expertise, expectations, as well as the balance between individual and agent expectations. Sources of socialization include family, friends, education, experience, and the media (Jablin, 2001), and partners, employees, spouses, and work-related networks are critical to the socialization of entrepreneurs (Bird, 1986) as they form a business.

Work-related attitudes (satisfaction and commitment), self-evaluation of performance (perceived self-confidence), longevity in a role, or evaluation from others within an organization (Fisher, 1986) characterize successful socialization. Successful new venture socialization relates to the formation of a business (Starr and Fondas, 1992). In contrast, a failed socialization process will result in the entrepreneur ceasing activities that further the venture (Starr and Fondas, 1992). Outside of business research, Lazarsfeld and Merson (1972) suggest that there is a connection between anticipatory socialization and success in each environment.

The distinction between anticipatory socialization and new venture socialization fails to capture other important processes novice entrepreneurs pursuing financing may encounter. Furthermore, it may also exclude a "softer" version of failure that does not describe the complete cessation of business activities. Studies on anticipatory socialization in the organizational context typically describe this stage as the culmination of expectations prior to the actual encounter with an experience one was preparing for (Feldman, 1981). Novice entrepreneurs, especially those that have not raised capital previously, still must undergo a process of anticipatory socialization as they attempt to raise capital from investors. Under Starr and Fondas' (1992) distinction, as a technicality, angel investing would be part of the new venture socialization process. While this may be true for serial or experienced entrepreneurs, anticipatory socialization still exists for those novice entrepreneurs that have not yet raised capital and may still be at an early start of the venture formation.

Like their entrepreneurial counterparts on the opposite side of a term sheet, angel investors undergo a socialization process to become more familiar with the informal group of investors they have joined (Gupta and Govindarajan, 2000). This mirrors the vicarious learning processes utilized by novice angel investors who are part of a group (Smith, Harrison and Mason, 2010).

Much of the socialization literature regarding entrepreneurship explores the process from the perspective of building a venture, thus limiting the anticipatory socialization process to precede the decision of business formation only (Starr and Fondas, 1992). While previous literature briefly includes financiers as a group that has an impact on entrepreneurs in the startup process, the socialization literature does not investigate how entrepreneurs leverage anticipatory socialization in their exploration of capital from angel investor groups, let alone any of the expectations they have other than the obvious infusion of capital. Situated learning and learning through crises offer additional ways for learners to become more familiar with the structures they are interacting with in new environments.

*Learning through crisis and situated learning*. Situated learning offers entrepreneurs the chance to learn from the social context and conflicts that surround the learning scenario (Pittaway and Cope, 2007; Gibb, 1997; Jones et al., 2010; Taylor and Thorpe, 2004; Rae, 2002; Hamilton, 2004; Cope, 2005). Some of these experiences may be surrounding a "crisis" (Cope, 2003) or incident in time that occurs out of a normal pattern of operations and forces the entrepreneur to make decisions outside of the norm. Such instances also provide an opportunity for transformative learning as the moment in time disrupts normal routine (Daudelin, 1996; Appelbaum and Goransson, 1997; Kleiner and Roth, 1997). Rae (2002) notes the importance of a highly engaged social community to help the learner frame what they are acquiring through the experience. This logically follows the fact that most entrepreneurial activity does not occur in a vacuum, but as part of a team (Zhang, Jones, and Macpherson, 2006) or a community at large to confirm opportunity existence and legitimize it (Dubini and Aldrich, 1991; Wood and McKinley, 2010).

The participation of an entrepreneur in a community of practice enables forms of collaborative learning to occur (Hamilton, 2004) through action-based learning dependent on reflection of shared experiences (Wagner and Ip, 2009; Raelin, 1997; DeFillipi, 2001). Furthermore, action-based learning presents learners with problems that do not have a definite solution, and this process assists the development of processes applied to future

issues (Marsick and O'Neil, 1999; McLaughlin and Thorpe, 1993; Mumford, 1994; Pittaway and Cope, 2007). Ambiguity is an expectation in these situations (Raelin, 1997), yet interactions with other participants who possess knowledge of the community of practice can help learners acquire more authentic processes, practices, and the language of the environment (Pedler, 1996; Marsick and O'Neil, 1999).

The nature of situated learning experiences and crises are difficult to simulate in a learning environment because they are grounded in reality (Thorpe et al., 2008; Gold et al., 2010; Pittaway and Cope, 2007, Pittaway et al., 2011; Pittaway and Thorpe, 2012). Furthermore, situated learning experiences may vary in the topic as the entrepreneur must understand the environment they are learning in (Gibb, 1997; Cope, 2005) and other types of knowledge relevant to the community of practice. While many angels rely heavily on previous experiences to determine their future investment decisions (Mason and Harrison, 2002), angels also learn vicariously through their interactions with other individuals that are part of the group (Smith, Harrison and Mason, 2010).

Situated learning experiences generally center on a crisis and trying to work through it. Other situations arise when individuals fail to work through the crisis and ultimately experience a failure scoping from a project issue to the closure of a business.

*Learning from failure.* The definition of failure in the literature is diverse (Ucbasaran et al., 2013). These definitions cover the discontinuity of ownership of a business (Ucbasaran et al., 2013; Singh et al., 2007; Watson and Everett, 1996), bankruptcy (Haynie and Shepherd, 2011; Zacharakis et al., 1999; Ucbasaran et al., 2013), insolvency (Shepherd, 2003), or poor economic performance relative to founder expectations (Coelho and McClure, 2005; Shepherd, 2003; Ucbasaran et al., 2010). In the scope of the entrepreneurial condition, however, these definitions disallow smaller instances of learning from critical events (Cope, 2003; Shepherd, 2003).

Shepherd (2003) describes an oscillating process in which entrepreneurs learn from a failure event. This process encompasses aftermath after the occurrence of an event, recovery from that event, followed by a re-emergence to push forward (Shepherd, 2003; Cope, 2011; Pittaway and Thorpe, 2012). As mentioned above, this process cannot be limited to just monumental failure events – it also lends credence to smaller instances of failure on the side of the entrepreneur akin to Shepherd's (2003) definition of failure that is not limited to catastrophic instances only.

Relating back to time, all these processes refer to occurrences after a failure event has happened. The aftermath process describes the initial stage of grief which both Shepherd (2003) and Cope (2011) outline. This entails an entrepreneur taking a hiatus (Mezirow, 1991) to take stock of what happened and begin to recover from the negative aspects of the event that occurred. Cope (2011) reports that entrepreneurs also generally could not perform a complete reflection on the failure event as the negative aspects may be too raw so close to the failure. This also marks the start of a recovery process where the entrepreneur begins to make sense of the failure event (Shepherd, 2003). Entrance to this stage signals a beginning of the oscillation approach which Shepherd (2003) describes the entrepreneur moves between grieving and recovery orientations, attempting to reflect on the past and learn how to avoid, deal or improve those situations if they occur in the future. Successful transitions in this stage lead to the re-emergence of the entrepreneur to take on the next part of life, whether that is involved with an entrepreneurial venture or not.

The grief recovery process is critical to entrepreneurial learning as failure events have both positive and negative outcomes (Shepherd, 2003). Failure may not affect each entrepreneur in the same way (Shepherd, 2003); serial entrepreneurs may be able to move through this process quicker and avoid some of the emotional pitfalls that befall many first-time founders. While learning from failure is not an absolute *necessity* for entrepreneurs to learn, it plays an important role in updating an entrepreneur's stock of experience, preparedness, and ultimately forces a founder to take the time to reflect on what decisions they may make differently in future endeavors (Pittaway and Thorpe, 2012; Shepherd, 2003). Learning from failure is also critical to the financing of a startup organization, as it will most likely take multiple attempts to raise the capital necessary for sustained growth.

Angel investors and entrepreneurial learning. Funding cycles ensure part of the angel experience includes the opportunity to reflect, as well as feedback loops if the group chooses to assess and evaluate their investment decisions. The importance of feedback and the knowledge of outcomes based on decisions is important when making future decisions (Annett, 1969). The relationship between feedback loops and learning is highly dependent on the motivations and cognitive actions of the learner (Garris, Ahlers, and Driskell, 2002). Experience alone does not guarantee an automatic acquisition of knowledge, skills, or the foresight to avoid a future obstacle. Especially in the investment process, this highlights the need for reflection on the actions taken early on combined with recognizing patterns surrounding a set of potential decisions. Feedback is useful by the individual to regulate various behaviors through a process of comparing the situation that occurred with the desired standard (Garris, Ahlers, and Driskell, 2002).

This view of a feedback loop contains several assumptions about the nature of the investment process. Powers (1973) offers a simple model of how (negative) feedback works within a system using the components of a decision, the consequences of that decision manifesting in the real world, as well as the information feedback produced from those outcomes. Within this loop, individuals utilize any information from a process to inform decisions on how to reach a desired state from the current state. Learning in this space appears to follow a "double-loop" (Kofman, 1994; Argyris, 1985) with individuals updating mental models of what should happen in the real world, as well as what strategies they could potentially take to address future situations.

The double-loop model allows for an explanation of individual perceptions of what *should* happen as well as their interpretation of the outcomes of their actions (Argyris, 1985). In a complex process like angel investing where outcomes have long stretches of time before transformational information may arise, there are barriers to this learning process that angel investors must cope with to become successful. Furthermore, some research suggests that angels use preset investing processes that are more resistant to updates and changes (Smith, Harrison and Mason, 2010). Mason and Rogers (1996) also find that most investors approach the initial investment decision condition with a negative mindset, consistent with literature finding high amounts of rejection rates amongst angels. Failed investments are also assumed to contain major learning

opportunities for angel investors (Smith, Harrison, and Mason, 2010; Cope, 2003). Clearly, failure is a major epoch with the potential to release information important to investor decision making, akin to Shepherd's (2003) entrepreneurial failure framework and Cope's (2005) consideration of critical instances that have the power to be formidable and transformative learning exercises.

Smith, Harrison, and Mason (2010) note the power of vicarious learning processes that angel investors leverage to learn from others in situated environments. This theory, based on communities of practice (Wenger, 1991), has shown promise in other broad areas like workplace learning (Boud and Middleton, 2003). Boud and Middleton (2003) design a study that uses geographically-similar teams with face-to-face interactions in a formal organization. While the learning is informal in this setting, angel investor groups operate on a different set of cohesive rules depending on the nature of each group.

Shackle's (1979) work on human choices illuminates how some angels may generate information that is useful for feedback loops and refine information that is useful for the best possible decision in the future. According to Shackle, individuals face the future by generating an unlimited series of potential outcomes that may occur. Furthermore, they assign a pseudo-probability based on personal weight to each of the "imagined futures" (Shackle, 1979) that they have generated in their mind. Actions and behaviors are dictated by identifying the "most suitable" future of the imagined set and further making decisions and choices that assist the individual in reaching that outcome. These "imagined futures" are constructed using the meaning interpreted through other experiences and socially validated objects (Holman, Pavlica, and Thorpe, 1997). The updated feedback loop appears something like Figure 5 below. This concept is similar to Argyris' (1985) description of mental models and the updating of information around such, yet it incorporates Shackle's discussion on the multiple possibilities that exist and how the individual chooses such.

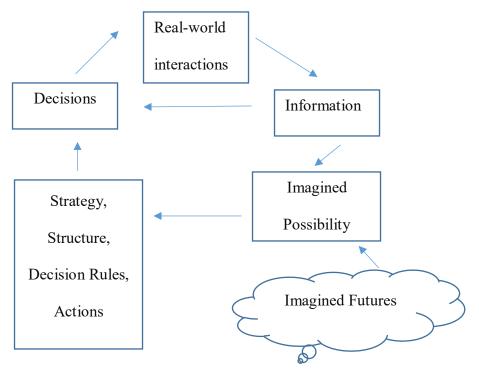


Figure 5: Angel Investor Learning Model

This display of a feedback loop works on an individual yet does not succinctly explain the impact that external forces have on the investor. Interactions with the greater community of practice influence the various imagined possibilities generated by individuals, as well as help, validated what might be a suitable method to proceed forward in pursuit of the "right" path. In an angel group, this community generally contains highly experienced entrepreneurs with many resources, including capital and expertise. Even though angels are part of a group, this does not mean that they intimately collaborate to complete due diligence or even reflect on failed investments. The simple fact that a failed investment does not guarantee the investors will not follow down that same path since individual investors generally hold the power to make choices themselves.

The evidence for such resides within an analysis of the guiding frameworks of the organized groups as well as the documentation that exists guiding angel investors throughout the process. There are mitigating factors that might affect this as well – one angel may be more motivated than another may, or they have completely different motivations. When angels within a group do interact, learning generally takes place if one of the investors is less experienced (Smith, Harrison and Mason, 2010). The caveat is that the novice investor is interested in learning and updating the process that they are familiar with to invest.

Third-party return data still suggests a major portion of angel investments end with a return less than 1x, consistent with the literature. Letting a feedback measure be related to an outcome of return expressed as a percentage, a feedback cycle can be constructed by keeping track of successful encounters with startup companies. The most recent information from the Halo Report (Angel Resource Institute, 2017) states that 70% of all angel investments garner less than a 1x return. The distribution of returns is shown in Figure 6.



Figure 6: Percentage of investments returning each multiplier

While longitudinal information is necessary to determine how these rates have changed over time, these percentages also include co-investment opportunities with other angels, VCs, or other groups. Riding et al. (1993) indicates that many companies that have received funding will fail, and ultimately 97% of the companies that solicit angel funding end up failing. A more upbeat estimate on investment rates is 8% reported by Mason and Harrison (2002). Combining these two numbers give a funnel that looks like Figure 7 per 1000 companies that submit for investment consideration:

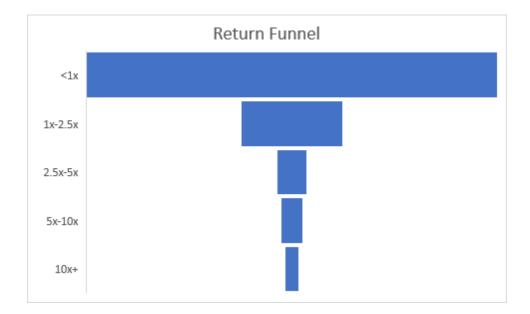


Figure 7: Return funnel per 1000 investments

If the above funnel is accurate, then angel investor groups logically make sense as a method to manage deal flow issues that arise when a critical volume of applicants are not received by investors. Angels note that up to 66% or more of their investment opportunities arise out of joining informal investor groups (Mason and Harrison, 2002). Most angel investor groups are *not* making 30 deals per year, thus increasing the amount of uncertainty in the potential of higher returns. The variability of returns is much higher for the firms that are considering fewer deals within their pipeline.

With the great variability in returns, it appears there is a disconnect in the learning process of current and new angel investors as the success rates have not necessarily improved over time. Unicorns and other massive outliers tend to skew return results in datasets as well, thus masking the impact of the lay-investor on the entrepreneurial ecosystem. Such low rates of return also suggest a reevaluation of the process from the

perspective of the angel investor and the entrepreneur. Alternatively, there may be issues in the pre-due diligence process that prevent the angel investors in a group access to the best possible opportunities that align with their investment criteria.

The seemingly low rate of startup companies generating a return over 1x, combined with figures like 31% of submitted business plans lack key information, describe a scenario calling for better onboarding for new entrepreneurs and novice investors.

Parallel to the process of angel investors approaching a situation is the process in which entrepreneurs are preparing for angel investor interactions. While entrepreneurs are most likely paying special attention to few angel groups at a time, angel investors are paying little attention to many startup companies at any given time. To further the discussion, if angel investors are resistant to changes to their system (Smith, Harrison and Mason, 2010), it suggests that entrepreneurs may fail after an initial pitch or interaction, and then learn something about that experience to increase their chances with that same group by pivoting or remedying the problems pointed out the first time around. The question remains, though, as to how entrepreneurs typically prepare themselves to make a decision about startup financing in general, then specifically what happens once they have selected angel investors as a route to gain capital. Based on learning frameworks within the literature, as well as research conducted on anticipatory socialization, Figure 5 proposes a framework combining multiple constructs to present the current state of how anticipatory socialization works within the angel investing context.

The next section begins to synthesize the literature reviewed to outline what issues may exist. Then, I review learning simulations to determine their effectiveness and address some of the uncovered problems in the literature.

## Section 3: Development of Learning Objectives

**Introduction.** Anticipatory socialization, and the process of familiarizing oneself with the angel capital landscape, appears to provide a logical lens for understanding and addressing the common rejection issues outlined by angel investors. One way to help new founders throughout this process is to push them through the financing environment to get real experience. Other learning mediums afford learners a way to lower the cost of entering such a taxing situation. Computer simulations are one of these examples, and I analyze these serious games to describe the benefits to learners within the angel-investing context.

**Serious games.** Serious games are computer-based, interactive programs that help learners engage in tasks that help increase their knowledge, build competencies, and meet the learning objectives defined by an instructor (Prensky, 2001). They do not exist strictly for entertainment purposes, rather focus on problem-solving through experiences that mirror uncertainty in the real world (Prensky, 2001; Susi, Johannesson, and Backlund, 2007). Fun is one of the major components of a serious game (Prensky, 2001). Yet the outcomes are still educational in nature as each game will include interactivity and play, problem-solving opportunities, conflicts, which force players into making decisions, and be dictated by a set of rules to reach win states and various outcomes (Prensky, 2001).

Simulations. Simulations generally help prepare individuals and groups for complex situations that they may be a part of in the future (Kriz, 2003). These simulations are serious games (Presnky, 2001) in that they include characteristics such as fun, play, rules, goals, interactivity, outcomes, feedback, adaptation, win states, competition, and problem-solving. Simulations deliver the opportunity to experience a model of reality and understand cause and effect relationships without as much risk as the "real thing" (Feldman, 1995). They can effectively distill complex concepts and relationships in a controlled environment to assist learning about the subject of interest (Kriz, 1998, 2003) while effectively introducing learners to imperfect interactions of social systems in the real world (Susi, Johannesson, and Backlund, 2007). They are valuable learning tools as they can connect abstract concepts learned by players to tangible actions applying that knowledge (Garris et al., 2002). Simulations built properly are created to include actors, rules, resources, and points of interactivity that a player can control (Klabbers, 1999), as the game simulates a dynamic social system (Kriz, 2003). The point of playing the game is to help users understand the consequences of decisions they may make in that system (Kriz, 2003). In the angel investor context, it is important for angels to understand how their due diligence decisions inform their decisions on further investments now and in the future.

Fidelity, validity, and verification characterize good simulations (Feinstein and Cannon, 2002). Fidelity considers the realism of the simulation (Pellegrino and Scott, 2004). Current research points out that while an "adequate suspension of disbelief" (Hindle, 2002, p. 238) is required for players in a business simulation; lower amounts of

fidelity can help improve the learning process (Billhardt, 2004). Vogel et al. (2006) find that low amounts of fidelity do not necessarily have a negative impact on the learning process. Therefore, this constraint can be relaxed to create a rich and engaging experience while helping entrepreneurs avoid the pain of real lessons surrounding a venture (Low, Venkatamaran, and Srivatsan, 1994).

Verification describes the technical reliability that is critical to engage players in a game (Hindle, 2002). If control elements frustrate players, for instance, it is likely that their learning experience will be negatively impacted (Low et al., 1994). Verification and fidelity criteria related to simulations play a major role in guiding the player on the correct learning path – it is important to keep these elements in balance as the third element is considered: validation.

Validation defines how closely a process matches that in the real world (Pegden et al., 1995). This may be the most difficult criterion to address in light of the major uncertainty fueling the entrepreneurial ecosystem. In the angel investing process, intuition is also a difficult process to model in a simulation. This highlights the importance of understanding different expectations and criteria that may exist while considering the perspectives of both investor and entrepreneur.

Simulations also must be judged in a different manner than other educational methods, as it is important to grasp how the simulation functions in addition to the results that are provided (Kriz and Auchter, 2016; Bedwell et al., 2012; Hense, Kriz and Wolfe, 2009; Wilson et al., 2009). This review looked at the evidence for competence in running a startup or management of a business, motivation towards running a startup or business,

the effect on knowledge and skills about startups, business plans, and other assessment items. Some work may suggest that while students playing such a simulation saw the value in playing, there was a decrease in motivation in wanting to start a business. Kriz and Auchter also find evidence for an increase in startups amongst participants in such a game, yet this number may be skewed based on the unknown portion of students selfselecting to be in such a program to begin with.

Greco, Baldissin, and Nonino (2013) use Katz's (1974) work to suggest that students who play business games can gain soft skills, conceptual skills, as well as hard skills. These elements provide learners the chance to get a jump-start on the socialization process, focusing their anticipatory socialization on the mechanics of the game prior to rolling that knowledge into the real-world experience represented in the simulation. Simulations alone are reportedly not enough to provide instructor-mediated skills (Snow, 1976). Timmons (1990) identifies the ability to distinguish good and bad ideas as a defining characteristic of an entrepreneur, and this encompasses evaluation skills that can be difficult to test (Feldman, 1995). While these skills and abilities relate to the entrepreneur, angel investors face a similar issue as they consider which entrepreneur to provide capital and resources. These issues also highlight the extensive opportunities educational developers have access to through agents in the simulation. Agents can be both computer-controlled or player-controlled throughout interactions within a simulation. This provides a unique opportunity to develop simulations that also model collaborative and vicarious learning processes using player-controlled and non-playercontrolled agents.

## Current research involving entrepreneurship and simulations. While

entrepreneurship is not a very popular concept for education game scholars and researchers, many games include a model of the entrepreneurship experience within a game. Previous research has uncovered a multitude of games related to topics like startup companies, entrepreneurship, and innovation, yet many of these games have a similar flaw – they do not necessarily simulate what they intend to and instead simulate small business management (Fox, Pittaway, and Uzeugbunam, 2018).

Feldman (1995) argues that simulations specifically help students learn about entrepreneurship in the areas of practicing complex skills and analyses, exposure to different stages about building a startup, as well as a better understanding of the various attitudes and behaviors an entrepreneur must possess to be successful. Wolfe and Chanin (1993) further explain that the use of such simulations as a teaching device is valid depending on the purpose of its use, highlighting the important tie-in with both educational objectives and the potential tasks within the simulation.

Kriz and Auchter (2016) provide the most summative overview on the effectiveness of entrepreneur simulations used on the market with a 10-year longitudinal study. They find that student-participation in startup simulations generally result in a feeling of increased entrepreneurial competencies and knowledge (Kriz and Auchter, 2016). Their study finds increased confidence in player abilities to build business plans and player knowledge about business in general (Kriz and Auchter, 2016). These studies focus on the overarching experience and competencies related to entrepreneurship as a whole rather than the skills necessary to advance the venture past different stages of growth. The few simulations that exist likely include financing as a cursory portion of the entrepreneur condition rather than the life-support that sustains founders as they grow their business.

*Simulation rules.* Simulation games with rigid rules provide players with clear instructions on what they can do and the problem that they need to solve in contrast to games that are more open, where players help co-create the system they are part of (Kriz, 2003). Regardless of the type of rules, simulations typically help players understand the skills they are acquiring through debrief or reflection sessions to consolidate the experience (Kriz, 2003). Users may even contrast reality with the simulated reality created in the gaming environment (Kriz, 2003).

One can quickly see that uncertainty is a hallmark of simulations that are more open. This hallmark of entrepreneurship is largely absent from entrepreneurship simulations in place now – most of the games do have a reflective component, yet there are little uncertainty and efforts to simulate the challenges of building an entrepreneurial company (Fox, Pittaway, and Uzuegbunam, 2018). This presents an immense challenge to the creators of such simulations, as they must find a way to model uncertainty while still meeting educational objectives and outcomes, yet a potential solution may exist through the suggested application of action-based experiential learning within a simulation by Pittaway and Cope (2007).

There are inherent issues that games face when dealing with uncertainty. Games must have win states and generally include some narrative that speeds the game along. These two items appear to exist in contradiction with uncertainty – the narrative assumes the means to the end of the story is known, and too much uncertainty may make the win state unattainable or unknown. An example of the chaos of uncertainty in the playergame interaction is an in-game bug. Bugs are best described as instances within a game that are not intended to occur, thus being unexpected when they do occur. Bugs may help the player accomplish a goal, like skipping approximately 30% of the Rainbow Road course in Mario Kart 64. They can also render the game unwinnable, as many players of the popular console game Castlevania have frustratingly found.<sup>5</sup>

While bugs will exist on some level in any game, players are generally illequipped to deal with game-destroying bugs. These bugs can represent a type of uncertainty, as the game developer also does not expect this to exist within the game to impede the player. When the bug prevents the game from completing, players are frustrated and may never actually win or finish the game. A subset of bugs may also be the order in which completed tasks relate to winning the game. There are times when sequence matters, yet there are times when it does not. This sequencing may have major impacts on players as they attempt to complete a game.

To better deal with uncertainty, it is important to break down the types of knowledge that angel investors and entrepreneurs must understand to model the correct phenomena in a simulation. Ben-Zvi (2010) provides a framework to follow when considering the usefulness of business games and how they can impact different types of knowledge most effectively.

<sup>&</sup>lt;sup>5</sup> Accessed at http://tvtropes.org/pmwiki/pmwiki.php/Main/GameBreakingBug

**Revised taxonomy of educational objectives.** Ben-Zvi (2010) explores the usefulness of business-type games and how they relate to experiential learning processes by modifying Bloom's (1956) Taxonomy of Educational Objectives to include a matrix displaying the relationship between cognitive processes and knowledge types. Table 4 displays the types of knowledge and cognitive processes suggested by Ben-Zvi (2010). An expanded table in the appendix provides sample examples of each in the angel investing process.

Knowledge	Cognitive Process Dimension							
Dimension								
	Remember	Understand	Apply	Analyze	Evaluate	Create		
Factual Knowledge								
Conceptual								
Knowledge								
Procedural Knowledge								
Meta-cognitive								
knowledge								

Table 4: Revised Taxonomy of Educational Objectives

These cognitive processes and knowledge types require some explanation to fit with the ideas espoused by entrepreneurial learning. For instance, the Create dimension encapsulates the synthesis of old knowledge and creating new meaning with acquired information based on generative learning (Wittrock, 1974; Wittrock, 1989; Krathwohl and Anderson, 2010).

Properties of knowledge include generic/general, domain-specific, formal and informal, concrete and abstract, conceptual, procedural, elaborated, compiled, structured, unstructured, situated, strategic, knowledge acquisition knowledge and metaknowledge (De Jong and Ferguson-Hessler, 1996). In the Revised Taxonomy, declarative and procedural dimensions make up the knowledge dimensions, with declarative knowledge represented as factual or conceptual (Anderson and Krathwohl, 2010). Metacognitive knowledge also represents knowledge about strategy, tasks and the person (Anderson and Krathwohl, 2010). This also makes up some of the ideas related to problem-solving knowledge, which is typically made of situational knowledge, conceptual knowledge, procedural knowledge, and strategic knowledge (De Jong and Ferguson-Hessler, 1996).

Cannon and Feinstein (2014) offer a blueprint that helps to synthesize the ideas of the revised taxonomy with experiential learning strategies. They first define and consider how the knowledge dimensions and cognitive process dimensions are adapted to general experiential experiences related to businesses. I follow the same technique in Table 5 but replace the business content with information specific to angel investors.

Table 5: Knowledge Types and the Angel Investing ProcessTerms and DefinitionsExam Examples Factual Knowledge Terminology Term sheets, screening, burn rate, equity Specific details about a topic Size of the potential investment market, founder work history, previous capital raised **Conceptual Knowledge** Classifications of various Stages of investments, intellectual property ramifications, industry elements competitiveness Principles and axioms Startup success rates, ROI, funding sizes Theories, models, structures, Disruptive innovation, mentorship of new founders relationships **Procedural Knowledge** Subject-specific skills How to analyze a balance sheet and cash flow projections, how to complete a term sheet, Subject-specific techniques and How to speak with customers, how to interview founders and teams, methods how to understand how teams work together, how to value a company. When to apply appropriate When is there too much due diligence? How should you handle procedures involvement with other investors and syndicates? Metacognitive Knowledge Strategic knowledge Lean launch strategies, chances of follow-up financing, bootstrapping. Cognitive tasks, Knowledge of how to run a startup company, knowledge of how to be contextualization a leader. Self-knowledge When to ask other angel investors for help, when to trust the founder, when to pay for outside legal opinion, overreliance on intuition.

\*Table adapted from Cannon and Feinstein (2014) as well as Anderson and Krathwohl (2001)

The cognitive process continuum guides the design of educational experiences based on how concrete or abstract the knowledge capture should be. Furthermore, the continuum can be used to better understand the selected mechanisms inside of a learning medium and how they impact various cognitive processes. This continuum offers a beneficial framework to break the due diligence task into different educational efforts that best describe the information that angel investors and entrepreneurs need to understand.

Cannon and Feinstein (2014) offer guidance on how to create learning objectives using this new taxonomy as well, and that is centered on the verbs expanding to the right of the table. Regarding investor learning opportunities, an example might state: *"Students will analyze 10 different angel investor groups and determine which they would like to submit their startup pitch to."* 

Creation of actionable objectives enables both the instructor and learners to work together on building an understanding of the topic. In the condition of entrepreneurs preparing themselves to join the angel investing process, I expect that the anticipatory socialization process will play a crucial role in an individual's success, thus highlighting the importance of creating learning objectives that mirror the process and environmental variables surrounding such socialization. Construction of such objectives enables learners to build socialization knowledge about specific components of the angel investor process, thus lifting the learner's perceived knowledge about a topical area. In addition to the environment, socialization processes also help to boost to the self-confidence of individuals entering a situation. In the case of situated learning through simulation, entrepreneurs and angel investors can feel as if they have completed this process before.

Curriculum surrounding the angel investing process will likely need to meet some of the criteria for building instruction for situated learning, as the social process involved in angel investing is a complex one. Gherardi, Nicolini, and Odella (1998) and Young (1993) describe four tasks to create situated learning experiences. The first is the selection of the proper situation (Shaw et al., 1982). Next is the necessary scaffolding which enables novices and experts to work in the same type of generated environment (Bruner, 1986), followed by the teacher acting more as a coach than a facilitator (Collins, 1991). Finally, the creation of an assessment that offers meaning and guidance on what abilities may be acquired wraps up the process. The research process provides the foundational pieces to help generate situations to focus on in the angel investing environment, as well as the specific sets of skills, abilities, and processes that may be important to the learner. Furthermore, learning objectives that help guide any instructional devices also provides context for the appropriate activity and assessment.

Creating learning objectives around the anticipatory socialization process requires exploration from multiple voices in the angel investing process. There are many wellknown criteria that angel investors use to evaluate startup companies, especially related to objective factors like the industry a company competes in or if a founder has specific domain expertise. Social situations are complex, and this creates a difficulty in generating concrete criteria that work each time. In the next section, I describe the methodology used to describe anticipatory socialization in angel investing.

### **Chapter 3: Methodology**

#### **Grounded Theory**

This section addresses the methodological approach to the current study utilizing Grounded Theory. Glaser and Strauss (1967) first introduced grounded theory as a way to build theory or conceptual frameworks out of systematically collected data combined with qualitative analysis (Glaser and Strauss, 1967; Strauss, 1987; Jabareen, 2009). This methodology is rooted in the ideas of theoretical sampling and constant comparison of the data collected (Glaser and Strauss, 1967; Suddaby, 2006). The use of grounded theory in research is appropriate in a variety of situations, especially for studying minute details related to a situation (Douglas, 2017). It also considers the interconnectedness of events in the world and their lack of isolation (Glaser, 1996). Grounded theory does not presuppose a theory and proves that with data. Instead, it generates theory through the data (Glaser and Strauss, 1967; Cohen, Manion and Morrison, 2013) as categories are constructed (Charmaz, 2008). While alternate methodological approaches like phenomenology also approach situations to capture lived experiences, grounded theory is more commonly used when describing the knowledge within social situations (Starks and Brown Trinidad, 2007).

Glaser and Strauss (1967) outline criteria that grounded theory is based on, including the fitness, understanding, generality, and control. Fitness describes how theory must emerge from observations and keen control of researcher involvement in the study (Pittaway, 2000). Understanding refers to the applicability of findings from such a study, while generality addresses scoping issues when carrying out the study (Pittaway, 2000). Finally, control describes the appropriateness of theory generated to use for the target population (Glaser and Strauss, 1967; Pittaway, 2000). Charmaz (2008) further details that those approaching grounded theory through a social constructionist lens must treat the research process as something that is being constructed, think through research decisions, improvise as the study is underway, as well as collect enough data to form how participants view the world. The outcomes of grounded theory help describe socially relative concepts from observations made by the research team (Pittaway, 2000). The approach in this research is from a social constructionist position, which allows for incorporation of prior knowledge in the research process as opposed to the strict original look at grounded theory, which prohibited such (Charmaz, 2008).

I detail the philosophical underpinnings of Grounded Theory in the following section.

#### **Philosophical Assumptions**

Pittaway and Tunstall (2016) offer sage advice when conducting research in the challenging area of entrepreneurship, such as reflecting on the philosophical underpinnings of the viewpoints leveraged to conduct research (Gartner, 2001; Pittaway et al., 2014). Furthermore, Pittaway and Tunstall (2016) offer common traps to avoid when conducting entrepreneurship research, including:

- A focus on normative science and strict realism
- Ignorance of social context, structures, and institutions
- The assumption that entrepreneurship is about special individuals

Following these adages, the present section outlines the philosophical assumptions necessary to conduct this study.

**Ontological assumptions.** Ontological decisions detail assumptions regarding the nature of being, reality and how each person may perceive that reality (Burrell and Morgan, 1979; Pittaway, 2000). Founders of startup companies construct their vision of the future related to both social and economic conditions (Chell, 2007) denotes that entrepreneurship is about the "social construction of reality through envisioning of possible futures that are both social and economic." Knowledge is therefore constructed through a process of labeling and categorizing of thoughts, feelings, and experiences (Chell, 1997). This is the result of interactions with reality, split into three dimensions. The subjective reality describes the way an individual interprets their contexts (Berger and Luckmann, 1979; Pittaway, 2000). The objective reality describes the reality that exists outside of the individual, comprising of objects, people, and embodiment (Berger and Luckmann, 1979; Pittaway, 2000), while a shared reality describes the way we share interpretations through language (Pittaway, 2000). Further adding to the dimensions of reality are the ideas of time and space (Shackle, 1955; Bird and West, 1998; Fischer et al., 1997; West and Meyer, 1997; Pittaway, 2000). Both of these dimensions have an impact on how an individual constructs a reality (Bird, 1992; Butler, 1995). The existence of a 'common-sense' reality imposing itself on everyday life proposed by Berger and Luckmann (1967) describes the experienced reality someone interacts with that contains meanings that might be taken for granted (Pittaway, 2000).

Adopting this subjective position posits that individuals interacting with social groups and environments construct their version of what is real. Many researchers leveraging grounded theory take this subjective approach; however, it is not the only way to continue forward with inquiry in entrepreneurship research. An overarching suggestion in current entrepreneurship research recommends a move away from realist ontological positions and a slide towards relativism (Pittaway and Tunstall, 2016; Chell, 1997; Fletcher, 2006; Blenker et al., 2010; Korsgaard and Neergaard, 2010). Doing so would help to better account for the social phenomenon under study related to the entrepreneur, considering the individual accounts as each constructs reality as part of societal interaction. As the second pitfall above challenges researchers to do more to incorporate the context of individuals into the research, critical realist perspectives are suggested to assist (Pittaway and Tunstall, 2016; Mole and Mole, 2010) yet may go too far towards a deterministic viewpoint of the world. The largest criticism of strong social constructionism is that there is nothing we can know about the world because everything becomes a social construction (Elder-Vass, 2012). I seek to remedy some of the perceived issues within strong social constructionist ideas. A solipsistic view of the world leaves research empty as there is little basis to test theoretical ideas for practical means (Schwandt, 2000; MacDonald and Schrieber, 2001; Schumacher and Gortner, 1992; Stajduhar et al., 2001; Lomborg and Kirkevold, 2003). Like Lomborg and Kirkevold (2003), this explanation of philosophical underpinnings seeks to acknowledge the status of knowledge as socially constructed while retaining objective pieces of the environment where the social interaction occurs. As suggested by Edley (2001), there remains a

relaxation of relativistic claims that deny the existence of any objective reality outside of discourse. This dissertation follows preexisting ideas in social constructionism considering the individual interpretation of their own reality interacting with elements of an objective reality (Pittaway, 2000). Chell (1997) supports this notion in entrepreneurship research as she discusses the subjective social reality from each individual viewpoint that can combine with objective congruence through labeling (Pittaway, 2000).

**Epistemological assumptions.** Epistemological assumptions refer to those ideas underpinning the nature of knowledge and how it is communicated (Pittaway, 2000). An interpretivist approach allows for full exploration of the concepts in question from the perspective of the individual, incorporating their unique viewpoints and formative experiences to construct reality mediated by context (Pittaway and Tunstall, 2016). The goal of research relying on the interpretivist paradigm is to explore social behavior while describing and explaining it (Pittaway, 2000) for a better understanding of such behavior (Gioia and Pitre, 1990).

The social constructionist perspective focuses on how knowledge is constructed through a shared reality (Berger and Luckmann, 1967; Weick, 1969; Weick, 1995; Pittaway, 2000) and transferred through language. Effective use of language and enough social interaction regarding meaning can ensure that observations can become part of the information that is taken for granted as part of a "common-sense" reality (Isabella, 1990; Pittaway, 2000). Encapsulation of knowledge as part of language enables meaning to move beyond time and space (Schutz, 1967; Isabella, 1990; Pittaway, 2000). Knowledge that is part of a group-reinforced reality is under a constant barrage of change and dynamism from the social use of language and individual significations that communicate subjective feelings (Isabella, 1990; Chell and Pittaway, 1998; Pittaway, 2000).

Human nature. Assumptions about human nature or behavior help define the complex relationship between individual human beings and their social, dynamic environments (Pittaway, 2000). Voluntarism describes the process in which people exercise their own free will. This idea is in line with the concepts of how individuals construct meaning based on their interaction with others and the environment around them. This is an appropriate lens to use in order to consider the complex social phenomenon that is occurring, especially given the context involved and unique backgrounds of the individuals taking part. There is no contention that there is a *universal* way to match the expectations between angel investors and entrepreneurs. Each social group is different, and viewpoints change over time. A mechanistic look would chain entrepreneurial activity as a function as only competing agents in economic systems and would *not* provide any compelling explanation for certain investments. There are situations that merit the exploration of the "common-sense" reality held by a group, and an individual vying to become a part of that group.

One assumption that is implicit about human nature in this lens is the idea that language holds the expectations of a given social group (Pittaway, 2000). Given this assumption, the current study explores how an established social group like an angel investor group has different expectations than that of an individual trying to receive funding from them. Thus, the language used by angel investors and entrepreneurs at a higher level helps provide insights into the similarity or differences between each group.

### **Research Design**

This research uses multiple methods to understand the phenomena at hand. The following section provides a general outline of the research methods that employed to collect the data necessary to answer the research questions.

One of the aims of performing qualitative research is to develop an understanding of "social phenomena in a natural setting" (Neergaard and Ulhøi, 2007, page 4) while also incorporating individual viewpoints. Qualitative research is the use of multiple methods to investigate various phenomena from a naturalistic approach and an interpretive stance (Denzin and Lincoln, 2005; Neergard and Ulhøi, 2007). Bygrave (2007) contends that many great research discoveries and scientific findings have been accomplished using grounded research instead of "flimsy theories." As such, I conducted the current study using grounded theory, overarching frameworks, and research performed in the field (Bygrave, 2007) combined with current understandings of such processes in the literature.

Until now, anticipatory socialization was a blanket statement to cover all processes and the focus of preparation for a given situation. While this describes the process, it misses important factors in the minds of the entrepreneur and the angel investors participating in such an occasion. The assumption at this point is that investors are expecting a company seeking funding to answer questions proactively about their company, especially questions that confirm the startup conforms to the angel group's investment criteria. While this is a safe assumption, it is only a partial piece of the puzzle.

Based on Denzin and Lincoln's (2003) work on the various paradigms to approach research questions, this research takes on the assumptions aligned with the social constructionist-interpretive paradigm to enable flexible perspective-taking useful to such research. Such subjective approach can allow for a more complete and nuanced exploration of the social divide between entrepreneurs and angel investors in this process. **Methods** 

The use of grounded theory as a methodology enables the researcher to use a variety of qualitative research methods to investigate a research question (Symon and Cassel, 1998; Pittaway, 2000). One such method is the use of interviewing to capture the viewpoint from the participant in a situation. This section includes the explanation of how I used these methods and how they captured the necessary information to answer the research questions.

**Interviewing.** Interviews consist of a series of questions followed by a series of answers given by a participant (Neergaard and Ulhøi, 2007). Such interviews may be conducted in-person, over the phone, or through virtual means. Interviews may be structured or unstructured, with unstructured interviews being more appropriate for uncovering detailed information about a social situation (Neergaard and Ulhøi, 2007). Such unstructured interactions may also increase candid responses from participants necessary to analyze.

Neergaard and Ulhøi (2007) stress that interview questions must be understood in a similar way for all participants, and that the fruit of such questions results in reliable indicators of the subject being researched. While structured interviews may offer solutions to these issues, semi-structured interviews can encourage the right kind of information by following the suggestions by Zorn (2001). Following institutional research protocols set forth by IRB enabled me to address many of the suggestions by Zorn before performing the study. This included planning and writing of interview topics, explaining the purpose of the research, and obtaining permission to record such data in an anonymous fashion.

The interviews included a series of background questions for the participant. These questions provided useful information for analysis, but they also prepared the participant for answering more in-depth questions (Zorn, 2001). Next, a series of broad questions allowed the participant to answer in an open-ended way. During answers, the interviewer used probing questions when necessary (Zorn, 2001). I used probing questions to uncover deeper information. Examples included "could you please give me an example of that?" or "what did you feel at that moment?" I captured information from entrepreneurs and angel investors about the process, the environment, the people, and the overall social process they are interacting. Participants discussed their experiences in the due diligence process as well as their perceptions of what the "other side" may be bringing to the table for a given interaction. The open-ended questions yielded expectations and insights about the anticipatory socialization process that each interviewee undergoes in the financing process. To wrap up the interview, the interviewer asked participant if they had anything further to add (Zorn, 2001) and then recorded impressions in a journal to help adjust how the interviewer's expectations may influence the perception of the interview.

The nature of the questions asked varied. Questions included descriptive, structural, and contrasting questions to clarify various statements made by the participant (Neergaard and Ulhø, 2007). Specifically, questions focused on the environmental factors, thoughts, processes, emotions, and cognitive processes that participants have or experience as they prepare to engage with angel investors.

I interpreted the information received from these interviews as described in the findings, analysis and discussion sections. Before this, I discuss reflexivity to describe how personal thoughts may creep into the analysis of such data.

**Reflexivity.** Qualitative research methods require interaction with participants, through interviewing and other techniques, thus some account must be made for their presence in the process. To address reflexivity and the issues it may bring into the interview process, the researcher provides an account of personal background, biases, and preconceptions about the subject of inquiry, thus providing more legitimacy to the data reported (Brewer, 2000). I provide the descriptive framing of the research process, as well as how information is collected and analyzed to help balance personal conjecture in research findings and conclusions. For instance, I have an extensive history in academic and professional engagements related to entrepreneurship. I have been involved with a variety of startup companies, founded my own, and have attempted to raise money for a startup company on different occasions. My academic pursuits include a Master of

Business Administration with a focus in Entrepreneurship, thus also including more formalized frameworks in how I view the entrepreneurial environment. This bias includes an overall positive view on the filtering mechanism angel investors use to root out poor opportunities for growth, thus potentially preventing resources from being directed to a startup company with little chances for success. The bias also includes a curiosity on why there are not additional support systems throughout the angel investing process for promising startup teams that do not make it through initial stages of potential financing. Proper education may help these founders be more successful in raising capital in the future.

**Self as researcher.** There are issues related to the researcher's preconceived notions and biases prior to entering an interview setting with participants (Moustakas, 1994). Allowance of such notions to creep into the interview setting may cause unintended effects on the findings of a study. In order to prevent such activity, bridling (Dahlberg, 2006) is the recommended way to acknowledge personal beliefs so one is aware of their impact on the study (Wolfe, 2018). Bridling refers to the reflective posturing that helps researchers interpret the data collected more openly (Dahlberg, 2006; Meleau-Ponty, 2013). This is a mindset the researcher must maintain to successfully interpret the data while staying open enough for any novel discoveries. The researcher has experience as an entrepreneur pursuing financial resources from angel investors and such experience has provided a foundational basis for understanding the language and terminology used in the startup ecosystem.

The next section covers the documentation analysis used to better understand stated information that angel investor groups make public to entrepreneurs soliciting funds from them. This contextual information is important as it provides additional information that may influence the anticipatory socialization processes of both entrepreneurs and angel investors as this information is publicly available.

**Documentation analysis.** Under strict rules in grounded theory, the researcher does not typically use existing information to guide the research process. In this case, I followed rules for grounded theory dictated by ideas in social constructionism that enables the use of external data to help frame the research, advice on sampling procedures, and assist in triangulation. As such, the documentation analysis method provides a way to collect information on standardized criteria that angel investors use during the investment decision process (Maxwell et al., 2011). Most informal investor groups have a presence on the internet in some way, most hosting their own website or a presence on popular channels to connect entrepreneurs and angel investors. These websites provide documentation *about* the due diligence process, as well as the criteria and expectations the group uses throughout the process. Carrying out a documentation analysis requires the researcher to follow a set of well-defined steps outlined by Jonassen et al., (1998) in order to complete the analysis. A description of the stages follows:

1. Determine if the content is stable and comprehensive enough for documentation review.

The researcher must decide whether there is enough information available to carry out the analysis. While it is highly likely that angel investors do not make all of their information about this process public, I generally had access to the same amount of information that a novice entrepreneur may have access to in preparation to engage with an angel investor group. As such, this supportive analysis seeks to gain as much information as possible from the web presence of angel investors groups in the United States. The Angel Capital Association (ACA) host a large membership of angel investor groups and provides a directory to their websites used in this study.

2. Select the right documentation to complete the analysis.

The documentation used in this analysis provides supporting information for the main method of inquiry in this paper. As such, descriptive information is rich to provide contextual clues about the environment and what may be helping frame the perspective of individual entrepreneurs as they engage with a group for funding. Many of the websites and subsequent documents vary in nature, as they may range from a list of bullet points for criteria to a large document providing a step by step method of analysis in due diligence.

3. Obtain and gather the specified documentation.

Gathering the documentation requires the researcher to navigate to each website and search for pieces of information giving clues about the due diligence process. The researcher visited each website from the ACA directory and gathered information that is publicly available regarding the angel investor group. I downloaded documentation into NVivo 12 to allow the researcher to visit the source of the information and read the information quickly.

4. Decide if there is enough information to support the analysis.

The documentation gathered must support the purpose of the initial analysis aims. In this case, as the analysis provides supporting information, any amount of information helps provide data useful to the study.

5. Read through the documentation.

This stage entails the researcher reading all of the gathered information. I conducted multiple read-throughs, thus highlighting the importance for the researcher to keep a strict record of where the content resides.

6. Organize the information from the review.

I used a mixture of descriptive information and loose codes to organize the data collected. The final step in the process is to test the analysis. I tested this analysis by using the collected information to triangulate findings from interview data and research findings.

The methods selected accommodate the researcher to capture how entrepreneurs and angel investors perceive the reality that they are experiencing. Grounded theory allows for such data collection and capture, thus ensuring the social constructionist viewpoint is preserved. A rich description of the environment, interactions, and processes provides a better understanding of what is occurring in the due diligence process.

**Sampling.** Sampling procedures are an essential part of grounded theory (Brown et al., 2002). Instead of the original theoretical sampling procedures outlined by Glaser (1978), this research leveraged selective sampling based on the body of research and supporting knowledge about entrepreneurs and angel investors. Selective sampling implies that the researcher arranges for participants to take part in the study using preset

ideas or criteria (Glaser, 1978). Several types of participants were included as shown in Table 6.

Entrepreneurs	Angel Investors
Novice	Novice Investors
Experienced	Serial Investors

Table 6: Participants based on their primary affiliation

There are four different types of participants. Novice entrepreneurs are entrepreneurs who are "new" to the process and have never started another venture before. Experienced entrepreneurs have started a company before their current endeavor. Angel investors are those that have the capital to invest in startup companies, with novice investors being relatively new to the process and serial investors are more seasoned. Collectively, those affiliated with the angel investor side of the transaction are part of the angel investor group, even if their affiliation is unofficial as they may not meet the SEC standard for accreditation to invest in firms.

Sampling for both the interviews and case studies primarily leveraged local angel investor group networks in the Midwest region. Investors, entrepreneurs, and other supporting parties that are interested in entrepreneurs populate these networks. The researcher asked participants if there were other individuals potentially interested in being a part of such a study. This enabled a saturation to occur as the researcher canvased the network of the local angels in the area. Inclusion of angel investors and entrepreneurs from the same general geographic area help better match potential dyads between parties that may work together in the future or already have. The weakness of this approach may be a self-referential problem that arises as angel investor groups create programming to create investable entrepreneurs. Entrepreneurs interviewed may have been involved with programming that was influenced by local angel investor groups, thus already socializing them in some way.

The documentation analysis requires the researcher to find angel investor groups on the internet and record characteristics about them. As described in the method overview, the researcher used the websites from groups listed as part of the Angel Capital Association to better understand the due diligence process in general. The researcher analyzed these websites to search for the relevant information related to due diligence.

#### **Data Collection and Analysis Procedures**

**Data collection.** As there are several different methods employed in this study, it is important to highlight information about each collection procedure. This study gathered information hosted on websites, from interviewees, and notes. The Institutional Review Board (IRB) approved this study on February 2, 2018.

I recorded data for this study with an audio recording device or on a mobile phone with the appropriate application. I also obtained participant consent. During the semistructured interviews, the researcher lead the discussion, asking follow-up and probing questions, as well as recording details that are not evident in the audio recording of the conversation. After the conversation completed, the researcher immediately recorded any observations about the session in detail to avoid issues related to primacy and recency effects.

In order to record relevant data for case studies, the researcher used a mixture of written data, audio recordings, and supporting documentation. The researcher transcribed the audio recordings and digitized any field notes taken. These files and recordings were stored in a secure, encrypted, password-protected location accessible only to the researcher. I deleted files in a timely manner when the study and further analysis was completed.

**Data analysis.** To ensure a rigorous interpretive approach to the data analysis, I provide descriptions to how interpretations were formulated based on data, quotations, and other supporting information (Rice and Ezzy, 1999) to ensure increased credibility of research findings (Patton, 2002; Fereday and Muir-Cochrane, 2006). This process also includes the production of concepts, elaboration on findings, and relating data with categories (Makela and Turcan, 2007). The researcher analyzed data using a thematic approach to uncover themes that emerge from the data (Daly, Kellehear, and Gliksman, 1997). I used the popular program NVivo to complete this step of the research. Coding themes within the data give rise to the pieces of information analyzed further (Fereday and Muir-Cochrane, 2006). Strauss and Corbin (1998) also recommend steps to complete this coding exercise. In order to complete this step, I transcribed all audio recordings so there is a standardized method of analyzing the information. I transcribed and coded, the thematic analysis produced information describing the anticipatory

socialization process with angel investors. This data can be used to create a description of the process occurring, which then further informs events in the subsequent case study created.

I also utilized the similarity score functionality that NVivo affords to researchers comparing text. Language similarity scores are akin to correlation scores and offer a high-level view on the overall similarity or differences between different text documents. In this case, I compare the interview content as well as the information downloaded from the websites that were analyzed.

To address criticism of the subjective nature of the qualitative methods utilized, I used triangulation of methods to examine this social phenomenon (Denzin, 2017) and reduce bias in the study (Jonsen and Jehn, 2009). This research leverages both method triangulation and data triangulation to increase the credibility of findings (Patton, 1990). Triangulation using multiple data sources could potentially lead to convergence on the findings in this study (Wakkee, 2004). As such, I combined the data uncovered in the interview and observational process with the information collected in the documentation analysis. Furthermore, the researcher combined the data with robust information from both academic and practical sources. For example, the Angel Capital Association released a descriptive statistic set of information about angel investors in the United States, which may provide supplemental data to support findings. Such corroboration reduces uncertainties in the data collected to provide a more comprehensive picture of influences on participants (Makela and Turcan, 2007. **Protection of human rights and risks to participants.** The information was collected anonymously. Those that interview or are part of this study were not able to be identified through any personal information, and aliases were created when necessary. There were no risks involved with this study and participation was voluntary. The researcher obtained permission to interview and record information prior to a participant providing any information for the study. Furthermore, it was abundantly clear when the researcher recorded a conversation and a notification was provided to signal that was occurring. All recordings used for this research were destroyed by the specified date outlined in the form submitted to the Institutional Review Board (IRB).

**Limitations.** There are several limitations related to the method chosen for this study. Data analysis should commence as soon as possible after data collection to prevent issues in managing the data, credibility, and interpretation (Bickman and Rog, 2008). At the suggestion of my advisors, I took the approach of analyzing the data as the interviewers were collected to address this issue.

Sample procedures may also produce biased samples (Bodgan and Biklen, 2006). Angel investors are predominantly male (Morrissette, 2007). While gender differences are not focal to this study, there are future research implications to consider how this may impact the anticipatory socialization process. The sampling procedure leverage referrals from one interview to the next. While this injected randomness in the participants involved, more purposeful sampling may help alleviate any of these sampling bias issues in the future. The nature of the sample interviewed is also constrained from a time perspective, so following up for additional interviews are difficult to achieve. This study did not use follow-up interviews to generate another round of insights based off the initial findings.

My own worldview may also influence the results and the interpretation of the data (Kolb, 2012). To address this issue, I have included a personal reflection of my viewpoints and attitudes as I conducted the study.

Despite such limitations, this study on anticipatory socialization in the angel investing process provides a unique foundation for future research.

## **Chapter 4: Findings and Data**

## **Data Collection and Coding**

This chapter describes the procedure carried out to collet and analyze the data. The first portion described details interviews.

## Interviews

Twelve angel investors and nine entrepreneurs participated in interviews for the current study. Both groups were made up of individuals from across the United States, with the majority living in the Midwest. Two of the nine entrepreneurs were serial entrepreneurs. The angel investors who participated in this study were of diverse backgrounds.

Participant	Locations	Former	Туре	Novice/Serial
		Entrepreneur?		
Angel 1	Midwest		Syndicate/Individual	Serial
Angel 2	Midwest,	x	Syndicate/Individual	Serial
	Northeast			
Angel 3	Midwest	X	Syndicate/Individual	Serial
Angel 5	Midwest, South	X	Syndicate/Individual	Serial
Angel 6	Midwest	X	Syndicate/Individual	Serial
Angel 7	Midwest	X	Syndicate/Individual	Serial
Angel 8	Midwest	x	Syndicate/Individual	Serial
Angel 9	Midwest, West		Syndicate/Individual	Serial
	Coast			
Angel 10	Midwest, South		Syndicate/Individual	Serial
Angel 11	Midwest		Syndicate/Individual	Serial
Angel 12	Midwest, West		Syndicate/Individual	Serial
	Coast			
Angel 13	Midwest		Syndicate/Individual	Serial

Table 7: Angel Investors

The entrepreneurs who participated in the study are also described below in Table

Midwaat		
Midwest	No	Searching
Midwest	Yes	Searching
Midwest	No	Searching
Midwest	Yes	Searching
West Coast	Yes	Searching
Midwest	No	Not actively searching
Midwest	No	Searching
Midwest/Global	No	Not actively searching
South	No	Searching
	Midwest         Midwest         West Coast         Midwest         Midwest         Midwest         Midwest/Global	MidwestNoMidwestYesWest CoastYesMidwestNoMidwestNoMidwest/GlobalNo

#### Table 8: Entrepreneurs

8.

### Coding

A verbatim transcript of each interview conducted excluded any information that could identify participants. The word "angel" and a number denote the participants who are angel investors. The word "entrepreneur" and a number denote the participants who are entrepreneurs. Audio files that contained interviews were deleted.

**First round – open coding.** Open coding is a useful technique that allows researchers to consider a holistic entry prior to considering topics that are more granular (Giorgi, 2012). A thematic analysis using NVivo 12 enabled the researcher to establish general themes in the first round of review. During the first round, I attempted to analyze

the information by coding words that might align with various themes. Given how situated some of the answers were, however, this forced me to expand my examination into entire phrases to ensure I considered the right context with the themes coded. For instance, a value could be expressed in a single word. The sentiment around that value, or a different theme like a belief, generally requires a look at adjacent words to ensure I captured context provided during the interview. This round of coding yielded 9 major themes in the data as seen in Figure 8.

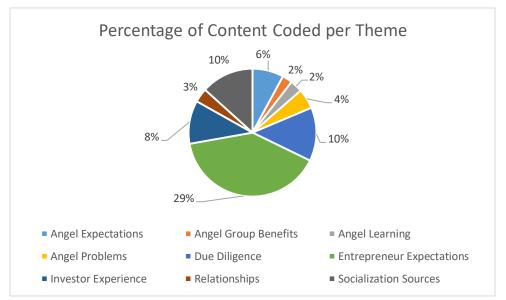


Figure 8: Percentage of Content Coded per Theme

A second round of coding following the first round revealed an additional 20 themes as shown in Table 9.

Table 9: Primary and Secondary Themes

Primary Theme	Secondary Themes	
Angel Expectations	Assessing Coachability	
	Company Factors	
	Entrepreneur Attitudes	.53%
	Entrepreneur Behaviors	1.12%
	Entrepreneur Beliefs	1.07%
	Entrepreneur Norms	.48%
	Entrepreneur Values	.51%
	Expectations about VCs	2.11%
	Investor Motivations	3.41%
	Socialization Sources	1.51%
Angel Group Benefits		1.88%
Angel Learning		2.31%
Angel Problems		3.73%
Due Diligence	After the No	1.18%
Entrepreneur Expectations	Entrepreneur Attitudes	.73%
	Entrepreneur Behaviors	2.81%
	Entrepreneur Beliefs	14.89%
	Entrepreneur Norms	1.08%
	Entrepreneur Values	1.66%
	Socialization Sources	8.29%
Investor Experience	Angel Entrepreneurial Experience	2.57%
Relationships	Building Relationships	2.71%
	Entrepreneurial Due Diligence	2.59%
Socialization Sources	Accelerators	.62%

Using the second set of themes generated from the text, the next stage of coding was to analyze the websites of angel investor groups to determine if there is a similarity in terminology expressing such desires from entrepreneurs. The use of the NCapture Chrome extension from NVivo allowed the researcher to analyze and code the text from specific webpages regarding applications. One hundred and forty-seven pages were included in the analysis.

Figure 9 shows the breakdown of the comparative size of themes:



Figure 9: Comparative Themes

Table 10 shows the percentage of coding coverage for each theme, the number of files each theme was mentioned in, as well as the total number of references related to each theme.

Angel Investors	Coverage %	Files	References
Attitudes	0.53%	7	14
Behaviors	1.12%	10	39
Beliefs	1.07%	8	15
Norms	0.48%	5	7
Values	0.51%	7	15
VCs	2.11%	2	2
Investor Motivations	3.41%	1	4
Socialization Sources	1.51%	12	67
Angel Group Benefits	1.88%	5	7
Angel Learning	2.31%	11	28
Angel Problems	3.73%	10	46
Angel Website Expectations	0.00%	74	194
Due Diligence	9.99%	5	20
Entrepreneur			
Attitudes	0.73%	4	21
Behaviors	2.81%	6	32
Beliefs	14.89%	6	105
Norms	1.08%	3	3
Values	1.66%	6	30
Socialization Sources	8.29%	5	10

 Table 10: Percentage of Themes Coded

# **Findings – Angel Investors**

I present findings from lived experiences described by angel investors in this chapter. In the current study, angel investors presented their beliefs, understanding, and experiences that support their opinions on socialization in the ecosystem. There were 12 angel investors participating in the study. The major of angel investors interviewed were male. The angel investors were active in angel networks that were located in different geographic regions, including the Midwest, Southeastern, Northeastern, and West Coast areas of the United States. Several angel investors also mentioned they were involved in online syndicate groups that do not necessarily have a specific locale. All angel investors were involved with at least one organized group of angel investors.

#### Angel investors.

Angel 1. Angel 1 had their first experience with angel investors while fundraising for a business venture, and this interaction with wealthy individuals led them to consider investing later in life. Angel 1 described a combination of learning through experience and joining a group of angels to learn more about investment decisions. They indicated that they "made a couple [investments] before they joined the group and had my shirt handed to me." Angel 1 indicated avoidance of attitudes that accompany entrepreneurs who ask questions like, "How soon can I get the money?" when they are engaging with angel investors. Angel 1 strongly considered how entrepreneurs perform under pressure as an indicator of whether they might successfully operate a company. Angel 1 also looked for behavioral indicators, like mentioning specific information from the group website, in early conversations with entrepreneurs. This alludes to an underlying set of actions that help prepare the entrepreneur to engage. Angel 1 discussed the concept of alignment between entrepreneur and angel investor and further discussed the role of beliefs. They see issues when entrepreneurs believe that they will try to tell the angel investor or group what their process should be in decision-making and that the group

should alter to fit criteria (not the entrepreneur). Angel 1 mentioned honesty, especially when it comes to making an "honest try" at running the startup. They also mentioned alignment as a value, which alludes to the fit between an angel investor and entrepreneur on a variety of characteristics. Angel 1 listed people who have means and websites as two major sources of information about angel investors. They also discussed programming put on by the angel investor group and its partners that may provide opportunities to learn for entrepreneurs. Angel 1 observed that many groups do not have a formal onboarding process for new members.

Angel 2. Angel 2 was a former entrepreneur that had experience operating companies with many different types of investors. They entered the angel investing space through a friend's referral, initially observing a group and then deciding they wanted to join the group. Prior to joining, Angel 2 made several investments by themselves to apply their skills in evaluating companies. They also attended two to three sessions on formal education in the angel investing space, covering topics such as cap tables and due diligence. Angel 2 joined several additional angel investor groups, and actively was involved in the entire investing process from the first meeting to screening, due diligence, investment decision, and helping coach the startup company. Angel 2 enjoyed the coaching process in the investing space, looking for coachable entrepreneurs that have a "willingness to listen and learn," as well as a willingness to surround themselves with a good team. Their attitudes should also include a positive proclivity to business in general. They also discussed providing suggestions to see what the entrepreneur does with the advice. Angel 2 saw an issue with some entrepreneurs when they believe that an investment is "free money" and they can do whatever they want with it. Angel 2 also considered characteristics like accountability, passion, and commitment when making an investment decision. Angel 2 mentioned the fuzziness that occurs for novice entrepreneurs as they try to understand when and how investors will see a return. They also echoed previous sentiments that an investment also means a board and others who have a say in the company decision-making even though they may not want the perceived interference from the outside.

Angel 3. Angel 3 is a philanthropic investor driven by compelling stories and a desire to give back to the community. They preferred to invest in entrepreneurs who had passion, a big idea, and vision, especially one powered by an enabling technology. They see the commonality in some of the issues that entrepreneurs have around what angel investors are looking for. This included a lack of traction, no team built around the startup, no business, and no value proposition. They also mentioned many entrepreneurs fail to conduct the right kind of research into what their customers want. They mentioned that they are different from many other angel investors, especially in their focus on people more than technical details about the opportunity. They saw themselves as a mentor to startup founders, looking for those entrepreneurs that knew their role in the company. Specific topics that entrepreneurs need to be mentored on include their own personal growth, understanding a career path, as well as developing a vision. Angel 3 mentioned that they felt many novice entrepreneurs needed advice and permission to move forward with their ideas. Sometimes they felt they needed to protect entrepreneurs from bad advice provided by other sources, including issues on how to divide equity in a

firm. These sources could be other investors, professional services, or executives in residence. Entrepreneurs do not do a good job of reviewing whom they get advice. Angel 3 also noted the importance of building strong relationships to receive angel funding, but also to get additional information about their potential investors. Angel 3 noted that "this is all about people."

Angel 5. Angel 5 was an entrepreneur and executive at a successful company prior to an exit event. Following this exit, an attorney referred Angel 5 to a local angel investor group and suggested they may be interested in being involved in some way. Angel 5 joined an angel group and immediately volunteered to be part of screening groups, outreach to entrepreneurs, and due diligence committees to learn vicariously and through experience. Angel 5 looks for entrepreneurs that can present themselves in an articulate manner and open-minded. Angel 5 described the misconception that many entrepreneurs have related to their own level of being investable. Many entrepreneurs misattribute how investable they are, basing it on their idea alone, and think that wealthy individuals will just write them a check if they have a good idea. Angel 5 provided insights on some misconceptions about angel investors, specifically that they are not just there to open the checkbook and just hope things go well after they make an investment. These misconceptions arise from sources of socialization, like the TV show Shark Tank, which resides in another section. Angel 5 outlined the dynamic between founders, their teams, and angel investors. This dynamic must be healthy and centers on the ability of the founder to navigate any conflicts between the parties as well as address concerns that angel investors may have. Angel 5 talked about web channels, TV shows, web searches,

and college as major sources of information about angel investors. Angel 5 urged new angel investors to be patient and seek as much education as possible to understand the funding process as well as how to evaluate a company.

Angel 6. Angel 6 was an entrepreneur who experienced a successful exit and subsequently joined an angel investor group. Angel 6 described the group learning process that the investor group approached, calling it a "continuous improvement process." Angel 6 looked for entrepreneurs with attitudes indicating a willingness to listen and someone who is receptive to feedback. Angel 6 tells of the role of respect, and especially of the mutual respect that should reside between entrepreneur and angel investor working together. Angel 6 summarized that inexperienced entrepreneurs, overall, "do not have a clue what to expect." They also may, unfortunately, think that angel investors are out there to hurt their business and the relationship between an angel investor and entrepreneur is adversarial. While this does not describe the majority of investors, others are not nice. This may cause entrepreneurs to act protective of their information and develop an adversarial relationship. Angel 6 detailed the importance of listening to input, but also adds the process on what they expect entrepreneurs should do upon receiving advice. This includes the ability to take input, "analyze it, and not necessarily always act on it, but certainly always consider it." This behavior links directly in with strong communication skills and engaging with resources early in the startup process. Angel 6 also discussed the surprise from first-time entrepreneurs on the value-added services angel investor groups provide in addition to cash. Angel 6 related an investment to marriage in the sense that you are looking for financial linkage over many

years and a requirement to get along for a long time. If the marriage is an investment, then the socialization portion of a raise is like dating in the sense that you are seeking to gauge a potential long-term future based on how comfortable things are now. Angel 6 noted that websites and other entrepreneurs are a source of information, but they may be ones with bad experiences. Angel 6 also talked about referral partners like legal services and accounting firms. These partners may have varying levels of understanding about how angel investing works. Angel 6 stated that a trial-and-error approach is especially important to utilize for those just getting started in the environment. They also stressed a continuous learning process and adopting a mindset to take in information from experience and external sources to develop new approaches. Mentorship and working together is a key focus of this continuous learning process as well.

*Angel* 7. Angel 7 ran a successful startup company prior to investing in earlystage companies. They were familiar with some of the questions that angel investors face as they are established standard operating procedures as part of a group. Angel 7 detailed the sentiment that drives many angel investors to join a group or network, which is the feeling of uncertainty around deal flow. Angel 7 also stressed the importance of a portfolio approach while investing. Angel 7 stressed a continuous learning process that incorporated information from current deals, previous deals, and external information from other angel investors.

When making investments, Angel 7 noted the importance of relationships between the investors and the founder they are considering. This has to be a two-way street, with entrepreneurs who are willing and able to listen, while communicating and

interacting in a mutually respectful way. They also look for coachable entrepreneurs who consider their input. They also consider the exit strategy that the entrepreneur in mind and how that might impact the opportunity. Angel 7 places their first impression as a significant event in evaluating an entrepreneur. From the very first conversation, Angel 7 is looking at factors like receptivity, openness to input, their curiosity, ability to explain a complex concept, as well as their personal values. They see interactions as a way to provide feedback and see how the entrepreneur responds. This helps avoid know-it-all personalities that are generally not a good fit. Angel 7 relates the relationship to a marriage, in that it is a long-term commitment with both parties committed and comfortable. They note that many entrepreneurs initially have the misconception that angel investors are out to screw them over, and this causes entrepreneurs to be overprotective with their information. They hope that many entrepreneurs can see that one or two "bad" angel investors in an ecosystem do not ruin the reputation of an entire group and the role that word of mouth (WOM) plays amongst entrepreneurs. Angel 7 especially is excited about entrepreneurs who recognize the value of experience and the rest of the angel investors in a network. Angel 7 thought that entrepreneurs should engage with angel investors very early, "long before they think they need money to fully understand the process," investors, and steps along the way. The more entrepreneurs understand about angel investing, the more prepared they are and the more likely they are to be successful.

*Angel 8.* Angel 8 described himself as an entrepreneur turned investor after successfully exiting a company. They jumped into angel investing with an openness to

return to a startup at some point in the future. They considered themselves very active when it came to supporting investments. They stressed the role of many conversations and interactions in an effort to build strong relationships with entrepreneurs at any stage. They do not get involved in projects unless they really believe in it. If they engage with a founder, they do not believe in, they will not introduce that startup to the broader angel investor group they belong. They mentioned that many startups that fail to attract funding have glaring flaws that other investors will pick up under evaluation. Angel 8 said that many entrepreneurs are surprised at the level of involvement many interested angel investors as well as the value-adding activities. They look for entrepreneurs that are open to a coach, a mentor, and someone to help them in problem-solving. They look for entrepreneurs that are willing to communicate the good and the bad proactively, as well as pitfalls that they forecast could be an issue. Angel 8 echoed the sentiment of other angel investors, saying that networking and building early relationships is optimal. Entrepreneurs can get information through events, incubators, accelerators, and many other players in the ecosystem. They also see external service providers as a way to get information about angel investors, including law firms and accountants. They are looking for entrepreneurs that listen, learn, are collaborative, and "not know-it-alls". They look for honest entrepreneurs who want to build close relationships with investors, not just those that want investors at an arms-length. Entrepreneurs have to do due diligence on the investor. This can help assess fit and build a good trusting relationship.

*Angel 9.* Angel 9 called their learning process a "trial by fire" with little formal training and discusses the naivety that entrepreneurs experience when going from idea to selling to customers.

Angel 9 became an angel investor after they successfully exited a startup company. They were looking for something to engage them on a regular basis and a friend recommended they try the local angel investor group. They learned about the investor process through the internet as well as vicarious learning opportunities with other angel investors. Angel 9 recognized the randomness of people in the investing process, even though they are arguably the most important factor in the decision. "It depends a lot on the jockey" is the sentiment they use to consider opportunities. They stated they felt many investors and entrepreneurs are stuck in a world where everything is uniformly distributed, while simultaneously presenting the difficulty in finding investments that would be larger than a 10x return. Some of the personal factors they consider is the personality, coachability, prior success, as well as commitment. Personality conflicts between angel investors and founders may be deal killers or may cause friction after investments are complete. They noted the importance of intangible factors, yet how difficult this is to assess in due diligence periods. They also use an experimental approach to assess things like coachability, providing suggestions and seeing what they will do with it. Angel 9 also stated the information that entrepreneurs get about angel investors is of mixed value, since some of that information is from networking with other individuals and some from the internet, lawyers, or accountants.

Angel 9 wants to get the whole story about an entrepreneur, not just the information presented in a due diligence packet.

Angel 10. Angel 10 was another angel investor that successfully exited a startup company. They started to be involved with an angel investor group after the founder of one presented at a conference. They learned the process of angel investing from mentors already involved in the group. Angel 10 talked about the feeling of apprehension that many entrepreneurs have because they perceive angels to be older without technology experience. They look for entrepreneurs that can simply pitch a complex idea. They look for the general ability of the entrepreneur and previous experience in a field. They will only invest in coachable entrepreneurs who are reliable. They also warn that some entrepreneurs are "coached to appear coachable," which fools some investors throughout the process. This also includes a careful watch for defensiveness and condescension when answering questions. Angel 10 finds that many entrepreneurs find information from the internet, local programming, as well as local economic development centers. Angel 10 looked for this preparedness and evidence that they were prepared for the conversation and the undertaking of receiving an investment. Angel 10 describes an overconfidence that may occur in entrepreneurs that have been told they have a great company, which in turn can lead to issues in expectations on the valuation of a company. Mismatched expectations on valuation can quickly become a sticking point on term sheets down the road if a deal arises.

*Angel 11.* Angel 11 was retired and serving on several boards when they first began angel investing. They were an observer before formally joining the group. Angel

11 discussed the difficulty in assessing entrepreneurs as they are not made to "fit in a cookie-cutter environment," which causes an unpredictability about their future actions and behaviors. Angel 11 has enjoyed building individual relationships the most as an investor, noting that this process is the key in building a successful company. People tend to invest in others that they like, and this idea centers on building trust in that relationship. Angel 11 mentioned that most of their investments build off strong relationships, although sometimes opportunities do not relate to strong relationships. They looked for entrepreneurs who are keen networkers but also know how to build a lasting relationship. This includes updates on company milestones and letting investors understand what is happening in the life of the venture. They would never invest in a "jerk", but someone that would be good to have a 7-8 year relationship. Interpersonal skills are key, even from the first impression. They see that many novice entrepreneurs have misconceptions on the speed at which a deal is complete. This fuzzy timeline can cause friction in a deal. This and other false sets of expectations may be a result of the sources of socialization that entrepreneurs interacted with prior to their application for funding. From an intangible perspective, Angel 11 wants to know what set of standards that an entrepreneur lives by. They want to see evidence that this is something that they follow, have character, and a will to succeed. These people are rare to find, according to Angel 11.

*Angel 12.* Angel 12 started to be involved with angel investing during retirement after a friend suggested they evaluate if such activities were of interest. Angel 12 had a background in the corporate world as an executive. They were very self-driven in the

pursuit of knowledge about the angel investing space, consuming information from books, internet resources, as well as other angel investors. They also stressed the importance of learning by doing and the fact that the angel investor process is a continuous loop of learning. They looked for passionate entrepreneurs who are willing to listen and learn, and ones who are curious. They have to be willing to surround themselves with the right people to pursue an opportunity. Some of these factors are assessable by watching what the entrepreneur does. Entrepreneurs who "know-it-all" are ones to avoid. Entrepreneurs should also be open to coaching and mentorship while acting on advice dispensed by angel investors. Sometimes entrepreneurs are only looking for cash and not value-added services. This causes mistaken expectations in the returns angel investors are looking to get with their investments. Angel 12 compared finding the right investor with dating in that you are looking for someone with shared interests and values to make a relationship work. This must start with a shared optimism, openness, and honesty. Entrepreneurs should take advantage of classes, boot camps, office hours, and other events put on by angel investor groups. This allows them to meet investors as well as other entrepreneurs that can assist them in achieving their goals. Entrepreneurs have to put themselves out there. Angel 12 mentioned that one of the largest changes entrepreneurs go through in due diligence is a focused mindset. Initially, this starts as something disparate and converges on the vision as they move along the process. They mentioned that one of the issues prior to due diligence is establishing a pool of "investable entrepreneurs" to feed the deal flow pipeline.

Angel 13. Angel 13 became an angel investor after a friend referred them to join a group. They used their experience evaluating companies for mergers and acquisitions to jumpstart their involvement in the angel investor group once they joined. Angel 13 lists boot camps, mentoring programs, accelerators, angel investors, the internet, angel office hours, college, school, talking to other entrepreneurs, incubators, and other educational sessions that provide an overview of the startup process. They also mention how customers may even influence unrealistic expectations about the fundraising process. Angel 13 mentioned the use of "post-mortems" to glean insights and lessons for future action. They discussed the value of culture in a startup to see how things are working on the inside. Many factors are important when evaluating companies, like product-market fit, as well as innovation in a market. Many angel investors also look at the difference between the idea presented and the team presenting it. For the person presenting, they also consider previous success, previous experience, and the belief that the person can carry an idea through to success. Angel 13 acknowledged the value of accelerators and incubators in the ecosystem but stressed that entrepreneurs have to understand how to operate their company outside of that protected culture. Many entrepreneurs may have issues in building a sales and marketing plan. They may also have an overdependence on 1-2 customers. Angel 13 advised that startup companies preparing to pitch for financing should find out every piece of information they can about successful portfolio companies. Coachability and mentorship are also common themes for ideal founders.

## **Angel Expectations**

Next, I present summarized information from each theme coded from the angel investor interviews. First, I present a short description of some of the learning procedures angel investors participated in when learning to be an angel investor. Then, I discuss some of the specific expectations angel investors have and the sources of socialization that entrepreneurs leverage to seek these.

Angel investor learning. Angel investors clearly subscribe to the tenants of experiential learning, as well as the value of vicarious learning through the mentorship of other angel investors. Notably, many of the investors did not focus on structured programming for learning how to be an angel investor. While this does not negate the availability of programming, the opinions of angel investors clearly point to the value in doing. Mentions of mentorship and participating in angel group activities begins to set the stage for the highly social environment that dictates much of the behavior in the angel investor environment.

**Entrepreneur attitudes.** As much as answers might provide something that investors are looking for, many answers included what angel investors are *not* looking for in terms of attitudes. Entrepreneurs should not be a "jerk" or a "know-it-all." "*If you think you know everything, I don't want anything to do with that [business].*" – *Angel 10* 

The attitudes described by angel investors spanned multiple categories. The above quote encapsulates a view that many angel investors have about a "know-it-all" attitude and how this is very off-putting. This attitude also matches behavior that is a negative signal for many angel investors, being defensive. This kind of attitude does not allow a strong relationship to form between investor and entrepreneur. Instead, angel investors look for those entrepreneurs that have a positive attitude towards listening and learning.

"They [entrepreneurs] must be willing to listen and learn." – Angel 12

*"They have to be willing to listen and be receptive to feedback." – Angel 6* Entrepreneurs must be *"willing to listen." – Angel 7* 

The willingness to listen and take feedback reflects on a positive attitude towards learning and a demeanor that accepts feedback, even when critical. These quotes from angel investors indicate an interest in those entrepreneurs who can successfully navigate the entrepreneurial learning process, being able to acquire additional information from a critical event to roll that into their stock of experience.

Entrepreneurs must be "*interested in business.*" (Angel 2). There are some entrepreneurs that are interested in running hobbyist businesses, and that may indicate they will not bring suitable returns to the angel investor. If not interested in business, entrepreneurs may be considering the wrong type of financing. This kind of business may not be suitable for scaling based on the person in charge.

A respectful attitude also desired by angel investors. Closely mirroring the avoidance of those entrepreneurs disinterested in feedback, respect may be shown in behaviors and general disposition. Such entrepreneurs may ask the wrong types of questions during interactions. One such occasion might be a desire only to get cash. *"Some say 'how soon can you get me the money?" Angel 1.* Some entrepreneurs may also appear disrespectful due to the age gap between many entrepreneurs and angel investors. The average age of angel investors in the United States is a bit older than 57

(Angel Capital Association, 2018). The average age of entrepreneurs in the United States is between 29 and 45 depending on the sector and study (Azoulay et al., 2018). Not all entrepreneurs successfully bridge this age gap. One angel describes this kind of situation: *"You are in your twenties and you look at a guy in his seventies and say what has he done?"* 

This disrespect may be due to inexperience or the thought that the expertise of the investor is no longer relevant. Many younger entrepreneurs have the misconception that they hold a superior understanding of a technology, where in reality some of the investors may have laid the foundation for futuristic technology.

Many attitudes link to explicit behaviors. The next section describes some of the behaviors mentioned by angel investors.

Entrepreneur behaviors. Entrepreneurs are generally "not made to fit in the cookie-cutter environment" (Angel 11). This may lend credibility to perceived behaviors some observers would say are "unpredictable" (Angel 11), yet they may show the entrepreneurs is able to be "fluid" (Angel 10) in their ability to "perform under pressure" (Angel 1), and showing how they "do things from gut rather than [always] a lot of thought and study" (Angel 1). This unorthodox behavior is only part of the equation and links to angel investors desiring to see behaviors that mark a "curious" (Angel 12) flexible person able to operate in uncertain environments. Many of these quotes deal with actions that help mitigate uncertainty. Even the specific pitching environment necessitates the entrepreneur "feeling the room and responding to changes" (Angel 10) to adjust on the fly and away from what may have been planned.

This kind of behavior, while seemingly erratic, requires "planning and ability" (Angel 10) as entrepreneurs must have a masterful "understanding of their customers" (Angel 11), business, and the operating environment. Entrepreneurs are able to display their preparedness through their superior domain knowledge of their business and the external factors surrounding it. While these actions may show preparedness in relation to the objective factors related to a company's operations, showing preparedness relates to the social side of the interactions. Angel investors also mention behaviors related to communication frequently. This could be factors like being "articulate" (Angel 5) and those that "communicate well" (Angel 6). This also relates to the creation of a relationship built on "trust" (Angel 11). Entrepreneurial actions and behaviors build or destroy trust. Angel investors look for behaviors that indicate whether the "person is full of crap or not" (Angel 10). Entrepreneurs that "engage very early before they think they need money" (Angel 6) open up the communication lines to receive feedback and provide angel investors with an understanding of who they are from a longitudinal perspective. This also provides entrepreneurs with opportunities to "educate themselves" to "fully understand" (Angel 6) the angel investing process. It also helps avoid situations where they only ask for money. One angel investor even commented on whether or not entrepreneurs mention they are "interested in free legal services, etc." (Angel 1) only mentioned on the website. Engaging early with angel investor groups provide time for entrepreneurs to socialize in the environment. Angel investors and the groups they operate in are all different, yet many provide public opportunities to engage. Workshops and other social events made available to local entrepreneurs open up

Behaviors that reflect respect or, at the very least, being "able to listen and willing to learn" (Angel 6) is a minimum criterion. This requires the entrepreneur to avoid being "condescending" (Angel 10) and to "be open to input" (Angel 10). Condescending behaviors may include appearing defensive when feedback is given, and this is not aligning with a desire to find "coachable" (Angel 2) entrepreneurs. Some investors assess coachability on behavioral observation. One angel says after giving feedback, "you have to watch and see what they do with the input that they get. Do they put it to use and act on it, or are they just going through the motions, humoring the investor, or, in some cases, that they really do not know how to implement the advice you give them." Again, this reinforces the importance of early engagement prior to official consideration for financing. This provides the entrepreneur with precious time to build this relationship and provide concrete examples of stated behaviors. Extra time to show behaviors may be advantageous in overcoming the risk of limited impressions driving the entire relationship and interaction.

There are obviously more behaviors that angel investors expect out of entrepreneurs. Some of these behaviors are prevalent in other themes as they may show an entrepreneur's thoughts or feelings about a situation. The next section discusses the various beliefs that angel investors expect out of entrepreneurs.

**Entrepreneur beliefs.** Beliefs are a more difficult subject to verify. The angel investors shared some of their thoughts on what the typical beliefs of entrepreneurs may be surrounding the angel investor process. Many of the interviewees shared some of the misconceptions they believed entrepreneurs had or beliefs that are faulty about angel

investors. One relates to alignment between the angel investor and the entrepreneur. Entrepreneurs "telling us how to do our process and what should be altered to fit what they do" display a belief that they hold more power and authority in the relationship than they actually might. There are many reasons that this might occur, but some responsibility may be rooted in novice entrepreneur misunderstandings about the general role of angel investors. Some entrepreneurs believe "angel investors are a gift from heaven to the startup community to provide capital without any recourse." Others may also belief that with "a great idea you are automatically investable. You know all you need to do is sit down with somebody who's got a high net worth and [they'll] write you a check." Entrepreneurs may have "unrealistic expectations on valuations." Overestimating the value of the company may give rise to beliefs like "this is free money and I can do what I want with it," ignoring the advisory position that many angel

investors desire to take in a company and not "*understanding the angel investor or venture capital perspective*." This perspective includes realistic returns as this is not a grant, but an investment where angel investors have the expectation to receive a return on their investment.

In addition to a general misunderstanding, there might also be a mismatch in timetables to invest. "*There is a big difference in the young entrepreneur timetable and investor timetable*." If an entrepreneur expects this to be faster than an angel does, this might cause impatient friction between the two parties. Building a relationship requires time and effort. Entrepreneurs are generally short on time as burn rates dictate the survival or demise of the company. However, this still points back to a requirement for entrepreneurs to engage early and before they need any capital to survive.

There are times when entrepreneurs believe and angel investor or group is not qualified to understand the technology in their startup. Some *"tech founders are apprehensive to present to other angel investor groups because they fear there is a lack of knowledge for their particular app or technology."* Entrepreneurs with these beliefs may not have done their homework assessing the backgrounds and portfolio companies of previous investments. Even if there is a revolutionary new technology enabling an innovative startup company, fearing a specific knowledge in an investor groups generally have a variety of members with experience across areas helpful to startups, from finance and accounting to human resources. It is likely that angel investor groups also have experience launching innovations in spaces they are familiar. If an entrepreneur fails to recognize the residual benefits of the group and just sees the relationship as capital-infusement, they dampen their ability to build a relationship and acquire the resources they need to grow.

Entrepreneur beliefs about angel investors make way for a wide variety of misconceptions. The norms they believe to be true may also do the same.

Entrepreneur norms. The most common norm coded relates to the construction of a relationship between an entrepreneur and an angel investor group. This relationship *"has to be a two-way street"* and must be robust enough to face the friction created when the entrepreneur realizes they *"now have a board of directors."* Angel investors note the

long-term normalcy of the relationship-building process. "*Interpersonal skills are very* key as far as I'm concerned, especially if you are building a 7-8 year relationship."

Many of the norms coded also overlap with other sections of the analysis, including beliefs, behaviors, and values. Angel investors discussed a variety of factors related to values.

**Entrepreneur values.** Values are critical to the selection of entrepreneurs from the side of angel investors. Some values have already been discussed, especially when they have obvious behaviors or attitudes linked towards them. Some of the values deduct from a behavior. If an entrepreneur is "*going to make an honest try*," we can see the value of responsibility or commitment to an activity in the face of adversity.

Angel investors look for founders who value relationships. Ultimately, building a strong relationship relates to "*seeking someone with shared interests*" and those with an "*alignment*." A shared interest might be scaling startup companies, a specific industry, or even a particular technology. Shared interests can also lead to "*mutual respect*" between parties. Building a strong relationship also involves trust between parties. Without trust, a deal is unlikely to happen. To build a strong relationship, entrepreneurs have to be "*open, honest, accountable, passionate, and truly committed*." Previous sections have discussed concepts like openness. This openness includes the ability to take feedback, but also the ability to try things that advisors are suggesting even if you do not know the outcomes. Honesty is a widely held value to uphold across society; it is no surprise that angel investors value honesty. Entrepreneurs may be dishonest when it comes to the

performance of their companies or the health of their business. Exaggeration or embellishment may also border on dishonest behavior.

Passionate entrepreneurs should have great energy around their business. This passion may be reflected in their presentations, but it also may be interpreted from a founder's overall demeanor when approaching their business. Passion and commitment relate to each other, as entrepreneurs must be committed with a focus on the startup at hand. A lack of commitment may be present when entrepreneurs take on too much. One concept, known as "scouting," may indicate a lack of commitment. Twitter user and seed stage investor, @hunterwalk, defines a scout program as: ..."signing up to deploy other people's money at official/unofficial cadence and personal reputation at stake."<sup>6</sup> Entrepreneurs in this same conversation discuss a feeling of gratitude that entices them to "send deals" towards the investor that initially helped them.<sup>7</sup> We can label such discussion as "scouting" where founders of a business engage in this type of behavior, either officially or unofficially referring potential startup companies to investors. Scouting takes time away from the startup company.

Some investors are interested in indicators that show the development of a value set. Investors look for entrepreneurs that *"have a character."* One investor wondered if an entrepreneur "has a set of standards in their life that gave them character?" This set of standards might originate from a positive or negative family situation, adherence to a religion, participation in a socially respected activity, a time of struggle and difficulty in

<sup>&</sup>lt;sup>6</sup> Accessed at <u>https://twitter.com/hunterwalk/status/956273665783443457</u>

<sup>&</sup>lt;sup>7</sup> Accessed at <u>https://twitter.com/RMB/status/956301806916788225</u>

life, or through other methods. Long-term participation may show who the entrepreneur really is and how they behave in their social and professional activities.

In the case of attitudes, beliefs, norms, and values, there are certainly cases where one may fit in a variety of categories. While each item was coded to fit in a section depending on the context it was used in, subsequent analysis relaxes some of the coding to allow me to compare the various factors mentioned by angel investors with factors mentioned by entrepreneurs. This approach will allow for the comparison to include the website data as well, resulting in a strong approach in detailing the top factors of importance in each area and how an entrepreneur may most appropriate prepare for that situation.

**Relationships.** The theme of relationships is part of the previous themes and weaves throughout the entire process. Relationships also highlight the social aspect of raising capital, as well as frame the foundations of a culture in the ecosystem where entrepreneurs and angels reside. As one angel put, the "*individual relationships is where I have enjoyed it [angel investing] the most.*" Networking is an important way that entrepreneurs can socialize in the environment and build up connections with individual angel investors. One interaction does not establish a close relationship, but multiple interactions over a period of time are helpful. Paradoxically, a level of comfort must also be established relatively fast with individual investors. "*If things aren't comfortable to begin with, and we cannot get comfortable pretty quickly, we are going to move on.*" Relationship building activities may include seeking shared interests, as well as expressing optimism about a similar topic related to the startup company. Many angel

investors, and even some entrepreneurs mentioned the importance of building up such a relationship even if there was no concrete timeline to ask for resources. Entrepreneurs can share emails, documents, and other updates with angel investors to keep them up to speed on what is happening. This also serves as an exemplar the communication and interpersonal skills that an entrepreneur possess *a priori* an investment or official engagement. If an entrepreneur is willing to communicate some of their successes and challenges before they are obligated, this might also be reflective of their commitment to seek resources to move their startup company towards a more successful position.

Relationship building is also important outside of the entrepreneur-investor context. Relationships between entrepreneurs, their founding teams, as well as those relationships built with outside parties (suppliers, vendors, partners, customers) are part of the equation.

**Sources of socialization.** In general, sources of information about socialization into new environments include family, friends, education, experience, and the media (Jablin, 2001). Entrepreneurs forming a business also take advantage of partners, employees, spouses, and work-related networks to build up this information (Bird, 1986). This study asked the question on both sides as to where entrepreneurs seek out information about angel investors as they are socializing in the environment. Angel investors thought that entrepreneurs obtained information from a wide variety of resources. One might be the entrepreneur's "*previous experience*," especially in the case of serial entrepreneurs. The internet, represented through "*websites*" and "*web searches*", was common among respondents. Other media includes "*watching TV*", "*Shark Tank*," and "books." Many groups also have a variety of "programming, boot camps, and other events" to connect and educate entrepreneurs. Such experiences are great ways for entrepreneurs to socialize with a specific group of angel investors and to "engage early."

Outside of the angel groups, "accelerators, incubators, lawyers, accountants, and other referral partners." Many of these, especially ones that work with the investors, "get it, but there are a ton out there that do not get it." "Local investment centers" also appeared as a governmental approach to connected entrepreneurs with resources, and this might also include "local programs that connect [entrepreneurs] with angel groups." These sources outside the control of angel investor groups may have an extreme variety of "what to do" when engaging angel investors. "Personality variants" of those instructing entrepreneurs will result in "totally different information" passed along. "Some people emphasize financials, some emphasize the marketing." Other groups may try to over-prepare entrepreneurs, which may cause a defensive posture from the entrepreneur during questioning. Despite this, many accelerators help prepare entrepreneurs with the local investors they may work with in the future.

"Schools," "business schools," "universities," and their "executives in residence" are sources of information for entrepreneurs regarding angel investors. The same constraint about personality variants apply here – the instructor may have different opinions on how to approach such groups. Outside of the academic environment, "people with means" relay information to entrepreneurs. Such individuals may or may not be angel investors. Even if they are, this bears no information about whether or not they are successful angel investors. Entrepreneurs may reach these individuals through *"networking*," and this networking also is another method of information acquisition. *"Other entrepreneurs*" are common sources of information for founders. This may include founders that are part of portfolio companies or those that have had previous interactions with investors. Many investors hope that these entrepreneurs have the discernment ability to glean fact from fiction from *"other entrepreneurs who have had a bad experience."* 

While there are other sources of socialization, these probably represent the most common ways to collect information about angel investor groups and what to expect. The next section explores a description of the entrepreneur-side of the results.

## **Entrepreneur Expectations**

I interviewed a set of entrepreneurs as part of the current study. Most of the entrepreneurs recruited were novice entrepreneurs, with only one classified as a serial entrepreneur. The entrepreneurs who took part in this study were from a diverse set of industries, with the most being concentrated on working on an idea backed by some form of enabling technology. In general, this technology was some type of software.

I completed each interview with the entrepreneurs over the phone. By employing open-ended interview questions, I was able to allow the entrepreneur to explain things in their own words. This provided a rich perspective on elements deemed important. The situated nature of the answers provided also enables context to be included in answers. This, as well as the neutral position and tone when conducting the interview, is beneficial in getting answers that provide one's notions on the topic at hand. I asked questions to the entrepreneurs similar to the ones that I asked angel investors. I directed the questions asked on expectations that entrepreneurs thought angel investors might have towards them. This approach provided the allowance necessary to explore thoughts on a myriad of topics that the entrepreneur selected to discuss. If the entrepreneur reached the end of a thought, I continued further with probing questions to uncover some of those elements that are included in anticipatory socialization processes. I also asked each entrepreneur to share a little information about their background, as well as what kind of projects they were currently working on. One additional question I asked the entrepreneurs was where they received information about angel investors and where they thought they should go for the right data about an individual angel or a group that might provide them with resources.

## **Entrepreneurs.**

*Entrepreneur 1.* Entrepreneur 1 was a first-time entrepreneur with an idea. They had not yet developed a prototype or a business plan, but simply had an idea that they were working with. They expressed that they were engaged in networking, but were skeptical in talking with too many people because they feared someone would take their idea. They did not understand what protections they would have in a conversation with a potential investor but sought to find an angel investor. One angel investor had expressed interest in talking more about their potential solution after a chance meeting at dinner. Entrepreneur 1 believed that angel investors are steadfast in the equity that they seek out. They were looking for an investor that they could build a trusting relationship. They would not consider pitching to angel investors that they do not personally know due to

their mistrust. They viewed the best-case scenario as one where they have no investors. They expected an angel investor to be nationally-known and a former executive of a large company. They expressed that they had problems with a member of their potential team early on. They thought that angel investors sought out an investment opportunity, not something to be hands-on. They think that angel investors look for entrepreneurs with drive and want to benefit from the income generated from a startup. They also perceived angel investors to all be older.

*Entrepreneur 3.* Entrepreneur 3 found that many angel investors were conservative with their investments, causing them to potentially overvalue firms in the domains they have most experience in. This entrepreneur also perceived that angel investor groups not only have their own set of criteria but may be influenced by other entrepreneur support groups they work with in the greater region. Entrepreneur 3 highlighted the existence of angel investors that served as filtering mechanisms in the prescreening of opportunities. These gatekeepers are a major factor in whether or not a startup company receives funding from any resources. They may take into consideration the pedigree of the entrepreneur, especially in their previous experience running entrepreneurial ventures. They expressed that a successful investment will also include the creation of a strong relationship between entrepreneur and angel investor, and that there is some level of comfort between the parties when interacting with each other.

*Entrepreneur 4.* Entrepreneur 4 indicated that entrepreneurs should have positive attitudes towards the sharing of information. They believed that angel investors think entrepreneurs should be passionate with a positive disposition towards work.

Entrepreneur 4 believes that angel investors are looking at how entrepreneurs evaluate the tension in the relationship while operating a company that has received funding. This entails a close look at the reactions that an entrepreneur has to suggestions from their Board of Directors, as well as ensuring they stay focused instead of being all over the place. Entrepreneur 4 believes that angel investors help entrepreneurs grow startup companies in a variety of ways, especially through operational expertise. This may occur even when the angel investor has no domain expertise in the area that a company operates in, but knowledge about other aspects of running a business successfully. Entrepreneur 4 said that entrepreneurs should have some "skin in the game," indicating that they were willing to accept some of the risks. This reveals some underlying understanding of self-worth.

*Entrepreneur 5.* Entrepreneur 5 also described some of the behaviors that might be detrimental, like saying yes to everything, changing pitches too many times depending on the audience, and setting up differing expectations amongst those outside the company. They also mentioned that some investors expect entrepreneurs to dress and look a certain way. Entrepreneur 5 believes that most angel investors have made their money outside of technology, and many experienced some kind of exit from their career at least a decade or two ago. They believe that angels are attracted to the potential returns as well as the excitement from being around a new company. They usually have a "personal reason to like what you are doing' as an entrepreneur. Entrepreneur 5 also raised the issue that certain types of angel investors may inhibit your ability to raise funding in the future, and they may be price sensitive in ways that future, larger investors

are not. Entrepreneur 5 mentioned that some angel investors might expect entrepreneurs to go to them for advice, wisdom, and even specific instructions even if they do not have the domain experience in the industry. They believe a specific culture is present, and entrepreneurs that do not follow that culture will have a lessor chance at receiving financing. Several entrepreneurs noted that there might be some feeling of "coolness" that drive angel investors to invest in cutting-edge technology firms. Entrepreneur 5 went on to describe the values of many younger entrepreneurs that are from a different generation than many angel investors. They see a difference in how both parties value success, especially in terms of finances, wealth, and general impact.

*Entrepreneur 6.* Entrepreneur 6 believes that angel investors look for behaviors that show the entrepreneur has invested in their own company, both in time and capital. They also consider what habits entrepreneurs have, and what they do on weekends. Angel investors may avoid when entrepreneurs are drinking every weekend to the point of being intoxicated. Angel investors also consider those entrepreneurs who go out of their way to meet people and communicate strongly. Part of this communication is keeping an investor in the loop related to milestones that you may be accomplishing as your company grows. Entrepreneur 6 believes that angels should trust you as an entrepreneur. They also believe in brutal honesty about the potentialities a company may be facing and the role of investors in delivering information even if it is painful for entrepreneurs to hear. They also believe that angel investors are always willing to answer your questions in some way. Entrepreneur 6 thought that the fundraising process was going to be quicker than it turned out to be, and noted that the route to being successful is a journey.

Entrepreneur 6 believes that many investors look mainly at the entrepreneur when deciding on an investment. This includes keen attention to previous behavior and followthrough of the entrepreneur. Entrepreneur 6 also believes in the value of practicing a pitch presentation to appear polished to a group of investors. Entrepreneur 6 highlighted the importance of follow-through and commitment. They also mentioned "skin in the game" like some of the other entrepreneurs. This entrepreneur talked about how ethics must play a key role in one's life, as well as accountability.

Entrepreneur 7. Entrepreneur 7 describes the hungriness entrepreneurs should possess, especially with an attitude towards achieving success. Entrepreneur 7 discussed how entrepreneurs present themselves in public and to angel investors. This entrepreneur also discussed how entrepreneurs should show they are interested in improving themselves and their business. Entrepreneur 7 believes that all angel investors must have achieved some level of success in their life. They are looking for companies that are able to grow, and the people that are willing to put the time into companies to make them grow. Entrepreneurs should have passion and be genuinely excited about their ideas. Entrepreneur 7 also discussed previous accolades of the entrepreneur under consideration. They also believe that "failure is part of success," and showing that you can persevere can go a long way to proving to angel investors that you are worthy of investment. They discuss the value of personal connection between entrepreneurs and angel investors, and the value of learning from other people's mistakes instead of only your own. Entrepreneur 7 was concerned that some, but not all, angel investors might have a general disposition towards the current generation of young adults because they

are stereotyped as lazy or lacking experience. This might also cause a lack of perceived credibility. Entrepreneur 7 discussed the role of knowledge and how a deep commitment to understanding the business is a driving force for successful entrepreneurs.

*Entrepreneur 8.* Entrepreneur 8 is a novice entrepreneur that does not yet have a business concept but would like to be a startup founder. They believed that angel investors look for confidence in entrepreneurs, as well as someone that they can trust. They stressed the need for an innovative solution to be paired with the entrepreneur. They believed that the equity stake that an investor must hold in a business is substantial. They think that angel investors look for entrepreneurs who are motivated and full of energy, as well as those who are open to new ideas. They also believed in the importance of a back-up plan in case the startup does not go well. They think that narrow-minded entrepreneurs are not successful in raising capital. They also discussed the value of a team.

Entrepreneur 8 discussed how entrepreneurs must be guided by ethical and innovative principles. They also thought creativity was a major factor in the assessment from angel investors. They also believed that strong relationships can be the key to a successful funding opportunity.

*Entrepreneur 9.* Entrepreneur 9 noted that norms are hard to know unless you are in the relationship with an angel investor and that some of the commonly held notions were a result of publicized relationships. Entrepreneur 9 talked about ambition, the ability to commit to projects and remain dedicated to those commitments, and confidence. They also discussed the value of being fiscally conservative, even if politically one is not conservative, as well as a drive to consider sustainability. Entrepreneur 9 also talked about being a lifelong learner, the innate desire to "do good," and looking after the well-being of others.

Entrepreneur attitudes. Entrepreneurs should have an attitude that reflects openness in "sharing information and surprises" to angel investors can be on the same page. This also implies that entrepreneurs should avoid mentality likening the relationship between "Hatfields and McCoys which it sometimes appears to be in a boardroom." The initial entry discussing an openness and sharing of information was from the serial entrepreneur that took part in this study. A strong relationship may require a "patient" attitude combined with a "hunger to make things work" from the side of the entrepreneur. This "hunger" may lead to new things, and entrepreneurs must "be willing to get out of their comfort zone." Such attitudes towards ambiguity mirror some of the sayings from the investor side as well. Other attitudes that entrepreneurs mentioned are important include being "motivated" and having "drive." Drive may also include a "fire" or "cockiness" to match interest in success. One entrepreneur stressed the ability to show your attitude towards succeeding no matter what, in showing "how bad you want it, you know, push, push, and push your company forward" towards succeeds.

Many of the attitudes that entrepreneurs mention relate to success, especially when respondents were novice entrepreneurs.

**Entrepreneur behaviors.** One entrepreneur thought they should "dress a certain way." Entrepreneurs need to "get along with the Board of Directors" in their companies. Activities outside of the venture were important. One entrepreneur thought angels would wonder about "their habits, what they are doing on the weekend. I wouldn't want

someone getting hammered every single weekend." These kind of activities might be evident based on social media postings of the entrepreneur or other means. This does not necessarily mean founders have no life outside of the company. In fact, some entrepreneurs noted the importance of "going out of their way to meet people" as this helps in networking and communication skills. These communication skills help in "how entrepreneurs present themselves." Investors "need to see that confidence" and can tell by "the way you walk into a room." Entrepreneurs handling themselves extends from initial conversations to when questions are asked to the startup. The "best founders can handle questions like a pro." One entrepreneur thought it was good to change their pitch "depending on who was listening to it" to get cash as fast as possible.

Entrepreneurs should show that they are open to "doing new stuff" and "different kinds of ideas." This also aligns with a streak of "creativity and thinking outside of the box." They also need to consider how they show research about their startup and proof of their previous activities and traits.

Entrepreneur beliefs. Entrepreneurial beliefs vary and touch a wide number of points. One entrepreneur believes that angel investors generally have "made their money outside of tech, whether it's through like a doctor or lawyer, like maybe selling some business that wasn't on the tech business, or even in the tech business, but it was 20 years ago." Another thought that angel investors "must have deep knowledge of the space you are going into" and "experience doing that in a previous life." Many angel investors are "looking to invest in a space that interests him that he connect take to market." Angel investors are "attracted to returns," the "excitement of being around a new company,"

and have "a personal reason to like what you are doing." They even might "want to feel cool" investing in a hot new technology startup. They are "attracted to returns" yet still are looking for entrepreneurs "who are fiscally conservative" because "they tend to be price-sensitive."

The serial entrepreneur involved mentioned the importance of "building a longterm relationship" with angel investors. Several other entrepreneurs mentioned the importance of relationships with angel investors. One said, "it's a personal connection" when discussing that relationship, and you "have to have a similar mindset" to find a good angel investor to work with. "An angel investor is a partner and can be someone to learn together with." Not all the entrepreneurs interviewed had the exact same sentiment.

"I think they're all pretty much older, obviously older than me, you know, from a different generation. I think a lot of people look at, you know, my generation and think that we're lazy, and stuff like that. I'm not saying that all angel investors or older generations think that, but maybe they just don't respect us as much."

The entrepreneur may be concerned about a generational gap, and this gap may contribute to an overall mistrust of angel investors. Such skepticism about respect is contrary to the relationship building mentioned previously. This potential mistrust may also be the reason some other sentiments, like the overall usefulness for angel investors, arise. Angel investors are useful in "*making introductions*." As one entrepreneur put it, "*there is no such thing as bad money*" when receiving an investment from an angel. However, angel investors may "*not help in raising money in future rounds*." A different entrepreneur though that angel investors "have more information than a typical VC would around what you are doing."

As far as what angel investors look for in entrepreneurs, there is a mix of information. They might "mostly just look at the entrepreneur," or "what they've done in the past" and their "previous accolades." Investors are looking for "someone that follows through," "is passionate and excited about their business idea," and "is full of energy." This ideal person should be "someone willing to make that [startup] grow." Investors avoid people who "have ideas but never take them anywhere." One entrepreneur said "show-me-the-money presentation skill" is necessary for successful investment. Another said that investment depends on "just how much effort you put into it [the startup]." Some interviewees stated the importance of entrepreneurs adhering to a culture setup by angel investors. This culture includes everything from the look that an entrepreneur has, in what they are wearing, as well as expectations to "look to [the angel] for wisdom for advice and instruction" even if they have no experience in the field the startup operates in. On the other hand, another entrepreneur thought "I should only reach out [to an investor] when I really need to" once an investment has occurred. Another entrepreneur also thought that founders should "have a backup plan" when engaging with investors. At least one entrepreneur believes that a "tension exists keeping you on your toes" between themselves and angel investors.

**Entrepreneur norms.** Some of the themes characterized as norms in the relationship between angel investors and entrepreneurs include the relationship as well as what kind of business plan is most optimal for angels to review. The thought is a business

plan that focuses on financials can be beneficial in soliciting investment. Many of the entrepreneurs found this question difficult to answer and instead provided attributes appropriate for other sections.

Entrepreneur values. Entrepreneurs believe that they should have "passion and drive." This must be matched with "ethical" behaviors and an entrepreneur who acts with "accountability and responsibility." This means that entrepreneurs must behave in an upstanding way without blemish and can be trusted. Entrepreneurs also saw values such as "dedication and commitment" being important to angel investors. Such focus also includes the ability to "be a lifelong learner" to build the "knowledge and business acumen" necessary to be successful in a domain.

Some of the entrepreneurs are more interested in "*being rock stars*" than just the money. This might also include a "*desire to do good*" and a want "*to look at the well-being of others*." Other entrepreneurs mentioned "*ambition*" as a value, coupled with "*innovativeness*." Ambition might be at odds with some of the entrepreneurs that are more socially focused in their ventures.

**Entrepreneur sources of socialization.** Entrepreneurs mentioned fewer sources than angel investors did. These included podcasts, professional service firms, books, networking, friends, and other entrepreneurs.

Some angel investors are able to make a discernable impact on entrepreneurs prior to investment is made through suggestions. Several investors mentioned that they look to make suggestions in getting to know the entrepreneur in order to test how they listen and how coachable they may be. In one instance, a potential angel investor suggested that a team of cofounders ensure their ownership equity resided amongst dedicated team members instead of "dead weight." The entrepreneurs saw this advice as welcomed, and the investor, in turn, can consume this signal as a representation of their influence.

First-time entrepreneurs focus on the capital outcomes of engaging with angel investors while placing less weight on the additional services. Previous entrepreneurs had a baseline idea on how to go about the process, as they may have been a part of an investment in their own career.

Following the interview data is information collected and coded from angel investor websites. Given the grounded method used in the present study, it was appropriate to first interview the angel investors as to not introduce too many additional artifacts. The data collected is from 147 angel investor websites around the United States and Canada. Website data that includes stated expectations from angel investor groups is an important "third datapoint" to compare the angel and entrepreneur expectations. The website data provides descriptive information about the angel investor landscape and, alongside previous research, helps triangulate the most important expectant factors.

## **Angel Investor Websites**

I analyzed one-hundred and forty-seven websites for documentation related to the due diligence process and general expectations for entrepreneurs that are engaging with the groups. This stage of the analysis provides additional background information. The following areas emerged through analysis of the websites.

Who conducts due diligence? The most common participants in the due diligence process are the informal investors themselves, as it is noted that they do not

always have the resources to hire external firms. Much of the documentation reviewed emphasized the major role of the founder in due diligence procedures. Many websites noted the absolute importance for founders to provide anything requested in a timely manner. While this would include any documentation, this also includes the ability to meet with various parts of the management team. Failure to do so obviously has an impact on the speed with which each stage is completed but the impact of founder negligence and noncompliance on how investors check the legitimacy of what founders provide was unclear.

Standardized platforms for documentation collection help mitigate lax entrepreneur participation. Gust and ProSeeder are the most popular apparatuses to request this information, to the point that many informal groups will not accept documentation delivered in any other way than via these platforms. The rise of adoption of these platforms also comes with an attempt to standardize due diligence and screening across different angel groups. The impact and use of such platforms is yet to be seen, although the developers of such platforms claim major improvements to deal flow and the reduction of inefficiencies in the process because of their adoption.

Screening and general criteria. Multiple parties conduct screening, from angel investors to executive directors, involved with informal groups. More structured groups tend to employ pre-screening expertise to help filter opportunities prior to the more detailed consideration of investments. The screening process is brutal, and attrition rates for entrepreneurs to proceed past this point are high with some reporting less than 3% of submissions passing the screening process. This low acceptance rate highlights the important role, and a potential disconnect, between screeners and those conducting more detailed due diligence. The screening process, therefore, adds a layer of basic due diligence applied to the submitting company prior to investment consideration. As pointed out by Harrison and Mason (2000) this renders the screening process a crucial part of due diligence. Screening processes may be directed by staff employed by investor groups or by committees of investors themselves. Screening criteria are often established to ensure that businesses being assessed for full due diligence fit the focus of the group's overall funding interests.

When downloading the information into NVivo, I coded any criteria used to judge a startup on 88 of the websites considered. As shown in Figure 10, the following items were identified and a description is included.

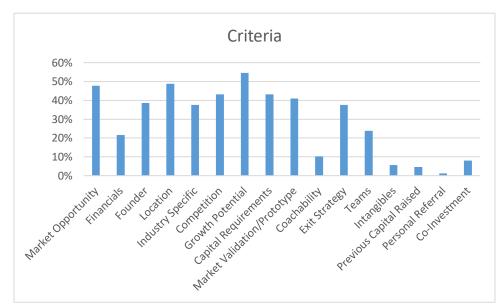


Figure 10: Common Angel Criteria

The most prevalent item mentioned was the growth potential of the firm, which might be considered a subjective measure, yet incredibly important for any angel evaluating a startup. Location was the next most included item, followed by market opportunity, capital requirements, market validation, and competition. Market opportunity related to the opportunity that was being presented by a founding company. Forty-eighty percent of the groups analyzed mentioned the market opportunity as being very important. Other interesting inclusions were items like "coachability" of the founder or team, with 10% of angel investors groups listing this as an important screening criterion. While these elements do not represent all items discovered in the analysis, I update Maxwell's (2016) synthesized table of criteria to provide evidence for stated criteria used, as well as new elements that are less focused on in the literature as shown in Table 11 specifically for the entrepreneur characteristics.

Entrepreneur	Industry Experience	
	Track Record	
	Passion	
	Integrity/Trustworthiness	
	Technology Knowledge	
	Behavioral Analysis/CEO Volatility	
	Coachability	

Table 11: Maxwell's (2016) Synthesized Criteria for Entrepreneurs

\*modified from Maxwell (2016).

**Amount requested.** A simple screening piece of the puzzle is the amount requested by the entrepreneur. The median low investment request that informal groups tend to consider is \$200,000, while the high median is \$1.3 million. There is great

variation in this range, especially due to the differing size and focus for these groups. This amount may also be highly dictated by the organization of the group, whether investments are made as sidecar investments or through an established fund.

Table 12: Investment Ranges

	Low	High	Median
Investment	\$25,000	\$5 million	\$600 <i>,</i> 000

Valuation. One of the most difficult topics in any investment is the valuation of the organization that will be receiving resources. Valuations of organizations differ greatly, depending on scale potential and industry. The median pre-investment valuation informal groups look for is \$30 million. Valuations are very fluid numbers, especially related to early-stage companies, but they can show the potential growth and scale of an opportunity.

Table 13: Desired Valuations

	Low	High	Median
Valuation	\$5 million	\$100 million	\$30 million

Location. Geographic locality is stated in almost every angel group's criteria. Some ranges are larger than others, but most focus on a metro area or regions of a specific state in the country. This is a logically sound conclusion, especially given the strong local ties that many individuals have with a given region. Today's technologyfocused landscape necessitates the need for groups to look further than their own geographic centers of influence. The location criteria is also usually two-fold: not only should the company originate from that area, but the plan should also be able to generate long-term jobs for the location.

**Management team.** The startup's management team is generally expected to cumulatively possess reasonable experience to help power the company to where it needs to be. The word "reasonable" is vague – this is a word that enables informal groups to take a risk on a young entrepreneur, or strictly look for individuals who have been through the process previously. It is notable that the onus is not completely on the founder, but also on the entire team that they have working with them. Screeners are looking for weak links in the chain or potential candidates for replacement after a cash infusion has been made. Entrepreneurs are wise to carefully consider the team members that they bring onboard and the skills that they possess. In the screening process, startup teams are probably limited to experiences that are listed on resumes or CVs.

**Exit strategies.** It should be no surprise to see that many investors would like to clearly understand a potential exit strategy should they choose to move forward with a company. Exit strategies are standard in term sheets to describe a proposed deal. Many informal groups are interested in future syndication, so it also should be noted that these exit strategies may be intertwined with board seats for angel investment as well as an understanding of how syndication could happen in the future.

Exit strategies come in many shapes and sizes and they also change based on the leadership that may be part of an investment. Syndicates, groups, and networks of individuals may all have different expectations on potential exits. Some of the groups stated their goals with an exit in terms of return, while others even indicated the importance of preparing a company for further syndicated investments with other partiers in the future.

**Competitive strategies.** One category that is lumped together is the competitive strategy employed by a startup to protect value. This includes any legal protections (patents, trademarks, etc.), as well as specific tactics and assets which render the competition slower to attract market share. Many groups use words such as "dominate the competition" to describe what they are looking for, and it is also common to see Barney's (1991) terminology around sustainable competitive advantages as an adage used to describe what many groups are searching for.

**Market opportunity and market validation.** Not every informal group clearly requires a validated product or service for investment. While the market opportunity is implied in any investment, validation refers to sales and display of a working prototype sought by a target market. Validation typically accompanies sales of some kind but does not always have to be as it may just be a list of commitments or some measure of interest.

The information from the angel investor websites provides a wealth of information to supplement that data collected from interviews. Combining the text data from the websites with interviewee text allows for a comparison of the vernacular used to discuss selection and due diligence in the angel investor process. Comparing the interview data with information from websites also provides a look at a comparison between objective criteria and subjective factors important to the socialization of new entrepreneurs engaging with angel investors. The next section utilizes the cluster analysis features in NVivo 12 to note the relationships between various comparison groups, specifically comparing the words that they are using to describe important features in the due diligence and selection process.

### Language Similarity

In this section, I analyze the information collected during interviews. The analysis includes word similarity scores as a measure of congruence, specifically looking at the language used by different parties about the same process. Congruence is an important factor related to anticipatory socialization, especially as it relates to needs, values, skills, and abilities (Black and Mendenhall, 1991). Given the social construction of language in a given group, this might be an important proxy for understanding congruence between expectations and reality within the group. A cluster analysis of the transcribed responses of angel investors and entrepreneurs shows the congruence between the words used by each group. I use Pearson's correlation to detect similarity. The results of the cluster analyses offer insights on how similar or different words, phrases, and sentences are for each group. This is assistive in better understanding the social construction of various constructs in the due diligence process.

Each section includes a discussion on similarity scores. These scores represent the correlation between words used between two comparison groups. This score is represented as Pearson's coefficient and is generated in a range from -1 to +1. Negative scores represent inversely correlated data. Scores that are zero show data not correlated. Data with low correlations are less than .3, while between .3 and .5 means the data has a medium correlation, and above .5 as a high correlation (Taylor, 1990). The three levels of

low, medium, and high represent the commonality of words that are used between the various groups.

Similarity scores between entrepreneurs. Similarity scores for the mix of words used by entrepreneurs range from .17 to .76. Forty-two percent had a low correlation as indicated by  $r \le 3>0$ . Forty-two percent of all pairs had a medium correlation with  $r \ge 3$  and  $r \le 5$ , and 17% of pairs showed a high correlation between words where  $r \ge 5$ .

All scores were positive, indicating a trend towards more similarity between entrepreneurs in this study. The histogram below shows the distribution of such scores across participant pairs:

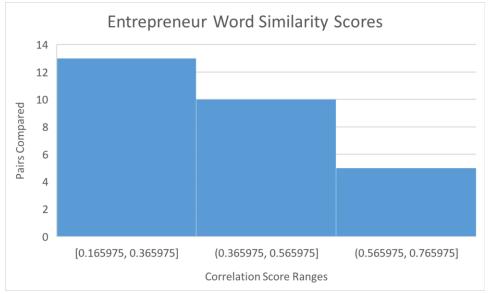


Figure 11: Entrepreneur Word Similarity Scores

These scores show that in general, entrepreneurs have some overlap in the language that they use. This correlation is small to medium in general. This would be consistent with the widely variable background of entrepreneurs and their lack of common sources of socialization.

Similarity scores between angel investors. Similarity scores for the mix of words used by angel investors range from .24 to .82. All scores were positive, indicating *more* similarity than not between angel investors in this study. 1.5% had a low correlation as indicated by r <= .3 > 0.45% of all pairs had a medium correlation with r >= .3 and r < .5, and 53% of pairs showed a high correlation between words where r > .5. The histogram below shows the distribution of such scores across participant pairs:

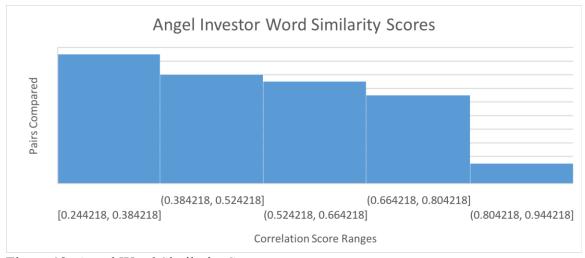


Figure 12: Angel Word Similarity Scores

The relatively large amount of correlation between angel investors suggests a closer relationship than that of entrepreneurs. While angel investors do not necessarily share a similar background, those in groups have been working with other angel investors and are bound to pick up some of the language shared in the social situation. This event

may also suggest the influence of the angel investor group on the individual angel investor vernacular, as well as the influence of outside sources such as the Angel Capital Association standardizing some of the lexica of the space.

**Similarity scores between angel investors and entrepreneurs.** A comparison between angel investors and entrepreneurs shows a wide range of similarity scores from .19 to .86. The histogram below shows the distribution of such scores across participant pairs:

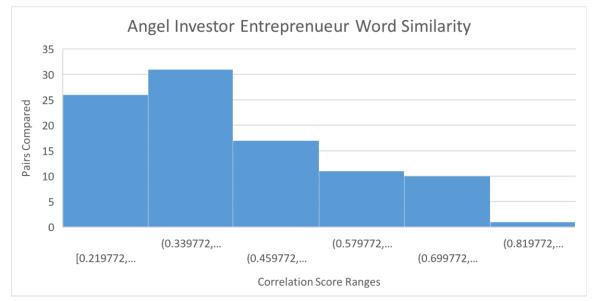


Figure 13: Angel and Entrepreneur Word Similarity Scores

Thirty percent of the pairs show low correlations (measured at .3 or lower), 42% show medium correlations (measured at .5 and lower), while the remaining 29% scores show a high correlation between the words used to discuss the topic. Only 1.0% score over r=.82.

The majority of randomly paired entrepreneurs and angel investors showed low to medium correlation of the words that they used in the interviews. Twenty-nine percent of the pairs analyzed were highly correlated, suggesting some overlap in the potential socialization sources. These results show that angel investors and entrepreneurs share some language. This is not a surprise as entrepreneurs and angel investors operate in similar circles. However, the 29% that share a high correlation of words used may be involved in the same ecosystem, or entrepreneurs have learned something from the angel investors themselves. Angel investor groups hosting workshops for entrepreneurs are common. This would be a great opportunity for budding founders to understand the terminology used in the discussion.

**Similarity scores between websites.** I also checked the similarity between words used on websites. The histogram below shows the distribution of data:

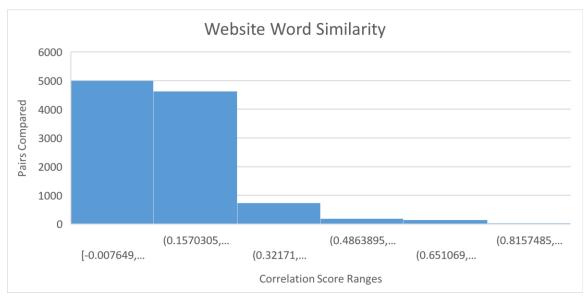


Figure 14: Website Word Similarity Scores

The data showed a negative correlation in 4.8% of all website pairs. It also showed that 82.5% had a low correlation as indicated by r <= .3 > 0.9.6% of all pairs had a medium correlation with r >= .3 and r < .5, and only 3.2% of pairs showed a high correlation between words where r > .5.

The difference between the various websites is not surprising. Each investor group has its own set of investment criteria and details about due diligence. Furthermore, each group has their own tolerance of the amount of information posted about that process. This would explain many of the difference in words.

**Similarity scores between angel investors and websites.** Next, the similarity between words used in interviews and words on angel investors' webpages about the selection of entrepreneurs. The histogram below shows the distribution of such scores across pairs of angel investors and websites:

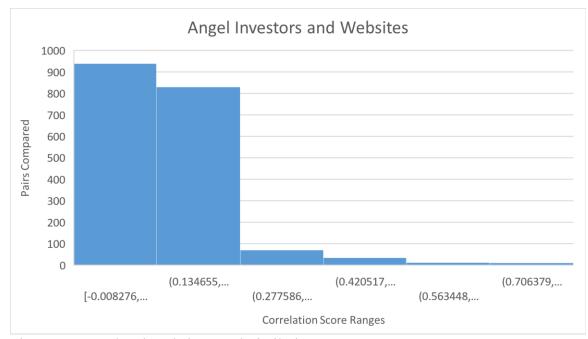


Figure 15: Angel and Website Word Similarity Scores

Ninety percent of pairs showed a low correlation with  $r \le 3>0$ . Five percent of compared pairs showed an inverse correlation where r < 0. Four percent of pairs showed a medium correlation where  $r \ge 3$  and r < 5, and only 2% of pairs showed a high correlation between words where  $r \ge 5$ . There are major limitations to this kind of analysis, including the non-standardization of pages as well as the difference in mediums used for comparison, so there is no surprise that such a large number has a low correlation.

There was little similarity between the angel investors interviewed and the investor websites. This might be in relation to the nature of the study versus the objective information posted from the group perspective. Many of the interviews covered subjective factors, where websites may be more focused on placing harder criteria for consideration in due diligence.

## Word Similarity Results

The similarity of words is a good origin point to uncover the meaning behind them through the expressions of participants. Positive correlations between all files analyzed show promising overlap in the terminology used to talk about the phenomenon, especially since this sample encompasses novice entrepreneurs, serial entrepreneurs, and experienced investors.

After analyzing each separately, the percentage comparison of correlation strength between the groups is evident. Entrepreneurs have the most balanced set of words used. Angel investors share a large amount of vocabulary on the topics they chose to discuss. This suggests that there are some common elements important in the anticipatory socialization process. Contrasting this with entrepreneur-angel investor pairs, we can see that there is some overlap and some divergence. Figure 16 shows a comparison of each analysis:

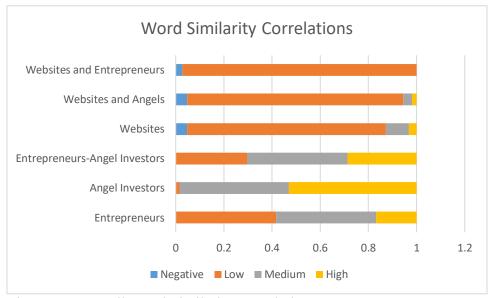


Figure 16: Overall Word Similarity Correlations

While there appears to be slight evidence towards convergence of shared vernacular, there may be multiple meanings to the words given. One such area is coachability – this discrepancy especially is evident in synonymous usage between this and mentorship, as well as methods of assessing this characteristic. The comparison of broad sets of vocabulary provides a starting point on how to investigate the differences in the lexicon. As I have confirmed there is some similarity and overlap in the overall set of words and phrases from angel investors and entrepreneurs, I now move to investigate the specific differences in expectations. The thematic coding provided a superior method of organizing the various attributes related to expectations in the anticipatory socialization process.

The next section seeks to explore the overall expectations that were stated by angel investors and entrepreneurs. This section also explores where the similarity and differences lie between the answers of angel investors and entrepreneurs.

## **Expectations**

The structure of the research questions considers baseline expectations that entrepreneurs and angel investors see important. The outset of such research questions are exploratory in nature to uncover some of the pressing characteristics of entrepreneurs that are important, especially ones related to socialization. Naturally, the point of organizational socialization practices is to help enable a greater employee-company fit. Both parties, for instance, mention fit and alignment. Previous research in works from Hisrich and Jancowicz, 1990; Fried and Hisrich, 1994; Mitteness, Sudek, and Cardon, 2012, support this.

Eighty-six separate factors were identified by angel investors and entrepreneurs regarding the personal characteristics of entrepreneurs that are of importance. While the factors were part of a larger coding scheme, it is valuable to look at the entirety of such personal factors due to the difference in meaning that might be assigned to items such as attitudes, values, norms, and beliefs. The factors listed may also include a negative in front of a factor, in Taleb's (2012) style of "*via negative*." This phrase is useful in dynamic situations when there is not necessary an objectively correct and perfect solution, but there are items to avoid. Such an approach helps describe an ideal state for a factor in a dynamic system and provide a richer description of how to survive such systems. These factors represent the expectations of angel investors and what entrepreneurs think are expectations. We begin to consider the similarities (congruence) between the differing parties, as Black and Mendenhall (1991) describe factors and congruence to culturally held-elements as important to successfully socializing in the

target environment. Table 14 shows the 15 personal factors mentioned by each type of participant:

Personal Factors	Angel	Entrepreneur	
EQ	Х	Х	Cardon et al., 2012
Accountability	X	Х	
Committed	X	Х	Benjamin and Margulis, 2000
Willing to ask for help	X	Х	
			Van Osnabrugge, 1998; Sudek, 2006;
Trustworthy	Х	Х	Maxwell and Levesque, 2014
Previous Success	Х	Х	Sudek, 2006
Vision	X	Х	Benjamin and Margulis, 2000
Previous Experience	Х	Х	Sudek, 2006
			Bierly et al., 2000; Bird, 1989; Cardon,
Burn to succeed/Drive	Х	Х	Sudek, and Mitteness 2009
			Chen, Yao, Kotha, 2009; Cardon, Sudek,
Passionate	X	Х	and Mitteness 2009; Cardon et al., 2009
Willing to learn	Х	Х	
Not a know-it-all	Х	Х	
Not defensive	X	Х	
Strong communicator			
of success and failures	x	Х	
Open to			Mitteness, Sudek, and Cardon, 2012
input/Mentoring	Х	Х	

Table 14: Personal Factors Listed

For a factor to be included in this table, an angel investor and an entrepreneur had to suggest it separately. Given the qualitative nature of this inquiry, I attempted to preserve the words of the participants and not condense or collapse words into too many categories. Such activities may lose the meaning of the underlying word. EQ stands for the emotional intelligence that entrepreneurs should possess, not to be confused with the Entrepreneurial Quotient developed by Northwestern Mutual Life Insurance Company (1985).

**Factors listed by angel investors but not entrepreneurs.** The research questions that guide this study surround the expectations that angel investors have of entrepreneurs and what expectations entrepreneurs hold about the situation they are about to encounter. A mismatch in expectations may result in an overall negative experience for the entrepreneur, especially if they do not meet the expectations of the group they are about to engage in. Angel investors listed 41 factors that entrepreneurs did not mention, as shown below in Table 15.

Table 15: Angel Investor Factors

Personal Factors	Angel	Entrepreneur
Not a popularity Contest	Х	
Make an honest try	Х	
Reactions under pressure	х	
Not about just money	Х	
IQ	Х	
Simple Pitch	Х	
Ability	Х	
Experience	Х	
Reliability	Х	
Likeable	Х	
Empathetic	Х	
Values	Х	
Curious	Х	
Inquisitive	Х	
Separate of idea and personsurvivorship	Х	
Authenticity	Х	
Strings attached to money	Х	
Understand one's role	Х	
Analysis skills	Х	
Respectful	Х	
Prepared	Х	
Engaging early	Х	
Relationship with previous investors	Х	
Expectations on Timing	Х	
Focused	Х	
Interested in business	Х	
Not condescending	Х	
Not made for cookie-cutter environment	Х	
Unpredictable	Х	
Gut versus overstudy	Х	
Dreams	Х	
Investable	Х	
Leadership	Х	
Character	Х	
Honest	Х	
Not a jerk	Х	
Able to read a room	х	
Personality	Х	

Table 15 (continued)		
First Impression	x	
Collaborative	x	
Coachable	x	

It is possible that some of the 41 factors relate to another term in the dataset. Again, I preserve the words of the participants to show the contrast in language to describe various attributes and factors of importance. Previous findings confirm that many of these factors are important to angel investors. Given this is one of few studies to seek out what open-ended expectations entrepreneurs have, it is important to note the contrast of what entrepreneurs do not include in this list. While there are broad factors listed, such as "ability," there are also specific factors like being "able to read a room."

**Factors listed by entrepreneurs but not angel investors.** Table 16 lists the 31 factors mentioned by entrepreneurs but those left out by angel investors. These include skills, behaviors, and other attributes assigned to an individual.

Table 16: Entrepreneur Factors

Personal Factors	Angel	Entrepreneur
Business Acumen		Х
Urgency		Х
Grit		Х
Fast-moving		Х
Results Oriented		Х
Resourceful		Х
Wear Many Hats		Х
Storytelling Skills		Х
High Energy		Х
Patient		Х
Willing to leave comfort zone		Х
Motivated		Х
Cocky		Х
Healthy Tension		Х
Presentation of self		Х
Not a partier		Х
Outgoing		Х
Well-researched		Х
Innovative		Х
Mature		Х
Creative		Х
Confident		Х
Honor culture		Х
Practiced		Х
Only reach out when need to		Х
Backup plan		Х
Ethical		Х
Long-term focus		Х
Skin in the game		Х
Deferent		Х

**Process-based expectations.** Next, I consider factors that were more processbased. Process-based expectations are directly related to the due diligence and relationship-building process in some way. The process-based expectations are shown in Table 17.

Process	Angel	Entrepreneur
Slow investment process	1	
Fast investment process		1
Competitive investing		1
Misconception that Angel should adjust to		
entrepreneur	1	
Misconception that tech is too advanced for older		
angels	1	
Unrealistic valuations	1	
Over complication of everything	1	
Misconception this is free money	1	
Misconception about great idea = money	1	
Misconception that each pitch is different		1
Misconception on cap tables	1	1
Misconception on financial reports	1	
Misconception on marketing plan	1	
Misconception on sales plan	1	
Don't know what to do next		1
Angel may limit ability to raise money in the future		1
Good versus bad money		1
Misconception that all money is good		1
Entrepreneur must take all wisdom		1
Entrepreneur must take all advice		1

Table 17: Process-Based Expectations

Many of the process-based expectations link to specific behaviors. These behaviors often overlap with other expectations in the overall list. Next, I discuss the overlap between socialization sources described.

**Sources of socialization.** Sources of socialization showed some overlap, yet there were items that both group mentioned the other did not. Table 18 below shows the difference in items mentioned related to sources of socialization. For instance, angel

investors talked about the internet, group events, college, wealthy individuals, accelerators, incubators, angel investor office hours, customers, entrepreneurship boot camps, local government investment centers, mentoring programs, specialty programs meant to connect entrepreneurs and angel investors, as well as TV shows while none of these were specifically mentioned by entrepreneurs. On the other hand, entrepreneurs mentioned podcasts and friends as two sources that they would go to for information. Both groups mentioned professional service providers, like attorneys and accountants, books, and the general practice of networking. Both the entrepreneurs and angel investors identified entrepreneurs as a source of information about many of these topics. The table below categorizes each factor by aligning it to what Jablin (2001) or Bird (1986) discovered was important for socialization.

Table 18: Sources of Socialization	Table	18:	Sources	of Soc	vialization
------------------------------------	-------	-----	---------	--------	-------------

	Angel		
	Investors	Entrepreneurs	
Internet			Media
Angel Group Events			Work-related Networks
College			Education
Wealthy People			Work-related Networks
Accelerators	]		Work-related Networks
Angel Investor Office Hours	]		Work-related Networks
Customers			Work-related Networks
Entrepreneurship			Work-related Networks
Bootcamps			
Incubators			Work-related Networks
Local Investment Centers			Work-related Networks
Mentoring Programs			Work-related Networks
Specialty Programs			Work-related Networks
TV Shows			Media
Podcasts			Media
Professional Services			Work-related Networks
Books			Media
Networking			Work-related Networks
Friends			Friends
Entrepreneurs			Work-related Networks

Investors clearly described many more socialization sources than entrepreneurs. Many of the additional sources described were work-related networks. It is entirely possible that entrepreneurs are not acutely aware of the situated role of incubators, accelerators, and other programs. Some may feel like they are the same programs with just another name, and these are not intended to connect them with angel investors. Entrepreneurs may also have included these sources in broader terms, like "networking."

The lack of mentioning investor group events could suggest a marketing issue. It appeared that many of the entrepreneurs interviewed were not familiar with such events, perhaps due to a lack of marketing, the non-existence of these events, or even their exclusivity. Exclusivity may be perceived; entrepreneurs that do not have a concrete idea may avoid interactions as they feel they are not ready for funding, missing the other benefits of engaging angel investors.

The data collected resulted in many overall expectations. These expectations varied in their topical importance, but also in the frequency of their appearance. The next analysis section aims to provide a richer description of the information through triangulation of data from previous research and websites.

#### **Chapter 5: Analysis and Discussion**

In this section, I analyze the information collected during interviews to address the research questions. A major portion of this study was concerned with uncovering the differences in expectations between entrepreneurs and angel investors as part of anticipatory socialization. First, I provide a discussion on all factors uncovered from the interview process and related them to knowledge types and learning tasks. Next, I discuss the use of data triangulation to reduce the list of important factors to 25 overarching elements. I use the interviews of angel investors, entrepreneurs, the angel investor websites, and the literature to narrow the factor list, as well as discuss the role each plays in the angel-investing environment. Each discussion on factors includes a set of learning objectives that highlight important outcomes. These expectations generate learning objectives that represent the factors uncovered. In addition to the learning objectives, I also relate the factors uncovered to Maxwell and Levesque's (2014) Behavioral Trust Schema. This framework shows what kind of behaviors build, violate, and damage trust. Through this framework, I discuss specific activities related to the learning objectives to help prepare novice entrepreneurs to interact with angel investors.

Following the discussion on overarching learning objectives, I discuss the role of socialization sources in building expectations for entrepreneurs. I move from here to introduce an "entrepreneur due diligence" framework useful in reducing the anticipatory asymmetry in the anticipatory socialization process. Finally, I provide practical steps on how entrepreneurs may employ such a framework to increase their chances of receiving angel investment.

## Speaking a Different Language

The results of this study suggest that there are differences in expectations, or at least, differences in the ways that such expectations manifest. The difference in expectations is a result of their social construction. Angel investors and serial entrepreneurs build and support the expectations that exist in each social group and it is difficult to assess homogeneity across angel investors in what they are looking for, and how they communicate those desires. Looking at the Word Similarity Correlations provides us with a snapshot of general language overlap. There are several major takeaways from this analysis, the first being the overlap of language between angel investors interviewed. Most of the angel investor pairs compared against each other shared a high correlation in spoken responses, followed by a large number of medium correlated pairs. This high correlation provides evidence that there is some commonality in the group as well as variance. It also provides insights on how entrepreneurs should consider moving forward to uncover these expectations by using a mix of socialization sources. The next closest group of pairs are entrepreneurs and angel investors in terms of overlap of words. This is positive and shows some highly correlated pairs of entrepreneurs and angel investors, with the remainder splitting between medium and low correlations. When we look at entrepreneurs by themselves, we find a high amount of variability and few highly-correlated pairs within the group.

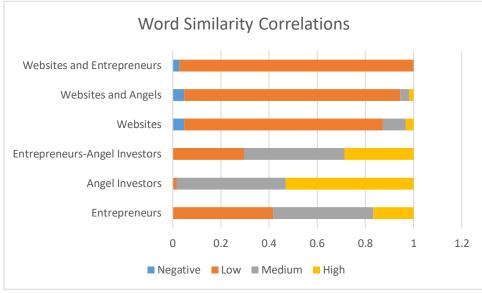


Figure 17: Word Similarity Correlations Revisited

These differences suggest that there is no universal language used to describe the factors expected in the anticipatory socialization environment. Anticipatory socialization requires individuals to mentally rehearse for the situation that they are about to enter. But it is also important to understand what exactly you are mentally preparing for and what the culture holds as valuable. What the results show is also a very diverse set of ideas that make up an "ideal entrepreneur" to invest in, or even invite to be a part of further consideration. Each angel investor group socially constructs the ideal entrepreneur. Individual investors in those groups may have their own construction of such an entrepreneur as well, deviating even from what is being stated as a priority. With this being the case for entrepreneurs, there are several items up for consideration. The first is a way to assess who might be an ideal entrepreneur to engage with in the first place. One avenue is to consider how to identify entrepreneurs who are "antifragile."

While the participants in this study have described a search for an entrepreneur open to coaching, mentoring, advice, feedback, and other factors, the lack of common definition leads to exploration of other alternatives. The concept of antifragility explains the very entrepreneur that angel investors are looking to build relationships. Things that are antifragile gain in times of disorder (Taleb, 2012). If disorder is any reaction to an event, entrepreneurs are better off if they are antifragile. It appears that investors are looking for the antifragility of two things: The entrepreneur and the company that they are operating. Antifragile entrepreneurs do not always run antifragile companies, however most antifragile companies are likely run by antifragile entrepreneurs. This essentially means that the complexity-driven individual, full of intangibles, and their ability to be antifragile have massive effects on the antifragility on a nascent firm. As we know, the entrepreneurial learning process includes reflection and progress after critical instances. Such an instance may be stated as a point in time when what the entrepreneur predicted happening did not happen in the way they thought. Such difference is the error, and the error contains valuable information (Taleb, 2012). Scale plays a moderating role, but I do not discuss scale in the current study. When we apply concepts of antifragility to individuals, we also look for elements like their skin in the game, and, more importantly, their soul in the game (Taleb, 2012). Entrepreneurs with skin in the game (their money and resources) and soul in the game (their passion, drive, curiosity, vision) appear to meet investment criteria while also satisfying heuristics.

What does the concept of soul in the game have to do with angel investing? Taleb (2012) introduces the two concepts in a groundbreaking discussion on developing an

antifragile mindset. Ascertaining if someone is a talker or a doer may depend on the angel investor's ability to discern between someone with it or without it. The game, in this case, is the venture the entrepreneur is trying to operate. Skin might be personal investment, personal assets, or other collateral that would bear some harm if the venture were to cease operations. Soul in the game, on the other hand, refers to pouring one's self into a venture, satisfying more than just the pursuit of financial success. Skin in the game is easy to show with personal investment – soul in the game is not that simple. As an entrepreneur, one can tell others how much of their personal assets have been input into one's company. It can be much more difficult to inform people that one is trustworthy – actions of an individual can more accurately tell the tale.

The antifragile approach to entrepreneurship encapsulates a method of approaching uncertain situations and seeking out those options with maximum upside through a process known as "convex tinkering" (Taleb, 2012). This puts the entrepreneur in the position to go through small experiments to find the best options moving forward. Antifragile entrepreneurs that practice convex tinkering are likely to reduce the uncertainty in the situations they face. This highlights the importance of entrepreneurs donning an antifragile mindset.

Reflective indicators of an "antifragile" mindset are dependent on the expectations of importance related to investors. The next section synthesizes all the expectations, explains each of the factors, and uses triangulation to reduce the list into the most important expectations. Then, learning objectives are constructed from their identification.

# **Generating Learning Objectives from Expectations**

Thus far, 147 individual factors were uncovered from the interviews conducted from angel investors and entrepreneurs. Using Ben-Zvi's revised taxonomy, I categorize each factor by knowledge type: Factual, Conceptual, Procedural, or Metacognitive. Table 18 shows each item with its correct categorization. Table 18 also shows the various learning tasks from Pittaway and Cope's Entrepreneurial Learning Framework to show that explicit tasks in the process will enhance each knowledge type.

Characteristics	Knowledge Type	Learning Tasks
Accountable	Metacognitive	Learning about oneself
Trustworthy	Metacognitive	Learning about oneself
Committed	Metacognitive	Learning about oneself
Passionate	Metacognitive	Learning about oneself
Reliable	Metacognitive	Learning about oneself
Likeable	Metacognitive	Learning about oneself
Empathetic	Metacognitive	Learning about oneself
Curious	Metacognitive	Learning about oneself
Inquisitive	Metacognitive	Learning about oneself
Authentic	Metacognitive	Learning about oneself
Respectful	Metacognitive	Learning about oneself
Prepared	Metacognitive	Learning about oneself
Focused	Metacognitive	Learning about oneself
Leader	Metacognitive	Learning about oneself
Collaborative	Metacognitive	Learning about oneself
Coachable	Metacognitive	Learning about oneself
Honest	Metacognitive	Learning about oneself
EQ	Conceptual	Learning about oneself
Vision	Conceptual	Learning about oneself
Investable	Conceptual	Learning about oneself

Table 19: Expectations Mapped to Knowledge Types and Learning Tasks

Table 19 (continued)

Table 19 (continued)		
Character	Conceptual	Learning about oneself
Values	Conceptual	Learning about oneself
Willing to ask for help	Metacognitive	Learning about relationships
Willing to learn	Metacognitive	Learning about relationships
Open to input/Mentoring	Metacognitive	Learning about relationships
Burn to succeed/Drive	Metacognitive	Learning about oneself
		Learning about venture
Previous Success	Factual	creation/management
Previous Experience	Factual	Learning about venture creation/management
Domain Experience	Factual	Learning about the venture
Not a know-it-all	Metacognitive	Learning about oneself
Not defensive Strong communicator of success	Metacognitive	Learning about oneself
and failures	Procedural	Learning about relationships
Not a popularity Contest	Metacognitive	Learning about investing process
Make an honest try	Metacognitive	Learning about oneself
Reactions under pressure	Procedural	Learning about oneself
Not about just money	Metacognitive	Learning about oneself
IQ	Conceptual	Learning about oneself
Simple Pitch	Procedural	Learning about investing process
Ability	Metacognitive	Learning about oneself
Separate of idea and		
personsurvivorship of business	Conceptual	Learning about investing process
Strings attached to money	Conceptual	Learning about investing process
Understand one's role	Procedural	Learning about the venture
Analysis skills	Procedural	Learning about oneself
Engaging early	Procedural	Learning about investing process
Relationship with previous		
investors	Conceptual	Learning about relationships
Expectations on Timing	Procedural	Learning about investing process
Interested in business	Metacognitive	Learning about oneself
Not condescending	Metacognitive	Learning about relationships
Not made for cookie-cutter		
environment	Metacognitive	Learning about oneself
Unpredictable	Metacognitive	Learning about oneself
Gut versus overstudy	Metacognitive	Learning about investing process
Dreams	Metacognitive	Learning about oneself
Not a jerk	Metacognitive	Learning about oneself
Able to read a room	Conceptual	Learning about investing process

Table 19 (continued)

Table 19 (continued)		
Personality	Metacognitive	Learning about oneself
First Impression	Conceptual	Learning about investing process
		Learning about venture
Business Acumen	Factual	creation/management
Urgency	Procedural	Learning about investing process
Grit	Metacognitive	Learning about oneself
Fast-moving	Procedural	Learning about investing process
Results Oriented	Conceptual	Learning about oneself
Resourceful	Metacognitive	Learning about oneself
Wear Many Hats	Conceptual	Learning about oneself
Storytelling Skills	Conceptual	Learning about investing process
High Energy	Metacognitive	Learning about oneself
Patient	Metacognitive	Learning about investing process
Willing to leave comfort zone	Metacognitive	Learning about oneself
Motivated	Metacognitive	Learning about oneself
Cocky	Metacognitive	Learning about oneself
Healthy Tension	Conceptual	Learning about relationships
Presentation of self	Metacognitive	Learning about relationships
Not a partier	Metacognitive	Learning about oneself
Outgoing	Metacognitive	Learning about oneself
Only reach out when need to	Procedural	Learning about relationships
		Learning about venture
Backup plan	Procedural	creation/managemnt
Ethical	Metacognitive	Learning about oneself
Long torm focus	Dracadural	Learning about venture
Long-term focus Skin in the game	Procedural Conceptual	creation/management
		Learning about investing process
Deferent	Metacognitive	Learning about relationships
Well-researched	Procedural	Learning about investing process
Innovative	Conceptual	Learning about oneself
Mature	Metacognitive	Learning about oneself
Creative	Conceptual	Learning about oneself
Confident	Metacognitive	Learning about oneself
Honor culture	Conceptual	Learning about relationships
Practiced	Procedural	Learning about investing process
Angel Intrinsic Factors		
Someone want to see succeed	Conceptual	Learning about investing process
Enjoy watching them grow	Conceptual	Learning about investing process

Table 19 (c	ontinued)
-------------	-----------

Enjoy helping them	Conceptual	Learning about investing process
Probability they will succeed	Conceptual	Learning about investing process
Fit	Metacognitive	Learning about investing process
Alignment	Metacognitive	Learning about investing process
Invest in cool things	Conceptual	Learning about investing process
Build relationships	Conceptual	Learning about relationships
Doesn't want to be hands on	Conceptual	Learning about investing process
Healthy Return	Factual	Learning about investing process
Expertise	Conceptual	Learning about investing process
Excitement being around new things	Conceptual	Learning about investing process
Personal Reasons	Conceptual	Learning about investing process
Want to feel cool	Conceptual	Learning about investing process
Looking for a partner	Conceptual	Learning about investing process
Company Factors		
Size of market	Factual	Learning about investing process
Competition	Factual	Learning about investing process
Lean startup methodology	Factual	Learning about investing process
Customers	Factual	Learning about investing process
Market Area	Factual	Learning about investing process
Market Fit	Factual	Learning about investing process
Culture	Conceptual	Learning about investing process
Reactions to change	Procedural	Learning about investing process
Intellectual property	Factual	Learning about investing process
Marketing Plan	Factual	Learning about investing process
Correct Valuation	Factual	Learning about investing process
Exit Strategy	Factual	Learning about investing process
Traction	Factual	Learning about investing process
Team	Factual	Learning about investing process
Value Proposition	Factual	Learning about investing process
Enabling Technology	Factual	Learning about investing process
Research	Factual	Learning about investing process
Validated	Factual	Learning about investing process
Idea	Conceptual	Learning about investing process
Financial Plan	Factual	Learning about investing process
Business Model	Factual	Learning about investing process
Scalable	Conceptual	Learning about investing process

Table 19 (continued)

Table 19 (continued)				
Angel				
Older	Conceptual	Learning about investing process		
Ideally younger	Conceptual	Learning about investing process		
Made money in tech	Conceptual	Learning about investing process		
Tech expertise	Conceptual	Learning about investing process		
Process				
Slow investment process	Procedural	Learning about investing process		
Fast investment process	Procedural	Learning about investing process		
Competitive investing	Procedural	Learning about investing process		
Misconception that Angel should adjust to entrepreneur	Conceptual	Learning about investing process		
Misconception that tech is too advanced for older angels	Conceptual	Learning about investing process		
Unrealistic valuations	Procedural	Learning about investing process		
Over complication of everything	Conceptual	Learning about investing process		
Misconception this is free money	Conceptual	Learning about investing process		
Misconception about great idea = money	Conceptual	Learning about investing process		
Misconception that each pitch is different	Procedural	Learning about investing process		
Misconception on cap tables	Procedural	Learning about investing process		
Misconception on financial reports	Factual	Learning about investing process		
Misconception on marketing plan	Conceptual	Learning about investing process		
Misconception on sales plan	Conceptual	Learning about investing process		
Don't know what to do next	Procedural	Learning about investing process		
Angel may limit ability to raise money in the future	Procedural	Learning about investing process		
Good versus bad money	Conceptual	Learning about investing process		
Misconception that all money is good	Conceptual	Learning about investing process		
Entrepreneur must take all wisdom	Procedural	Learning about investing process		
Entrepreneur must take all advise	Procedural	Learning about investing process		

Items from both angel investors and entrepreneurs are included in the table, whether they are "right" or "wrong" because they reveal underlying elements that need to be considered in the learning process. While entrepreneurs may have the wrong idea about a factor in their socialization, it is critical that they learn the correct facts, concepts, approaches, and ways to think about themselves in each situation. In some cases, it may be most optimal to help entrepreneurs what *not* to do. I also added another item in the learning task category: Learning about [the] investing process. This describes some of the unique factors related to raising capital from angel investors, and possibly venture capitalists, but may not fit easily in some of the existing learning task categorizations for information about new ventures.

Metacognitive knowledge and conceptual knowledge dominate the different types of knowledge represented by these factors, as seen in Table 20:

Table 20: Summary of Knowledge Types

Factual	24
Conceptual	47
Procedural	25
Metacognitive	51

Metacognitive knowledge may include strategic knowledge, cognitive tasks, contextualization, self-knowledge, and more. Many factors listed would be an exercise in self-knowledge for the entrepreneur. The next most prevalent were conceptual knowledge types. These include classification of elements, principles, axioms, theories, models, structures, and relationships. Much of this conceptual knowledge may be understood as defined concepts, which require someone to learn about other concepts to gain understanding (Moore and Hsiao, 2012). Procedural knowledge includes subject-specific skills, techniques, methods, and when to apply appropriate procedures. Learning about the investing process was the most prevalent learning task followed by learning about oneself.

Learning about oneself	52
Learning about the venture	2
Learning about relationships	12
Learning about venture creation/management	5
Learning about investing process	76

Table 21: Summary of Learning Tasks

The major amount of information that entrepreneurs understand about themselves highlights the importance of reflection and introspection in learning as an entrepreneur. Indeed, the results of this study show that self-awareness of personal qualities remains an important factor on the radar of angel investors. This is not to diminish the overall importance of company-related factors. The present study is about socialization, and harder company factors were included in this analysis because angel investors and entrepreneurs mentioned them as they discussed optimal criteria. The presence of factors *not* necessarily related to technical factors pertaining to socialization and process-based issues. The large number of factors related to the "self" correlate with the questions asked in this study. The interview questions were not necessarily seeking answers to the harder, investment criteria, yet more of the softer factors related to entrepreneurs.

Universally agreed upon factors. Angel investors, entrepreneurs, previous research, and websites all supported nine of the factors uncovered in the present study. Table 22 shows these factors:

Trustworthy	1	2
Committed	1	2
Passionate	2	3
EQ	1	1
Vision	1	1
Open to input/Mentoring	8	1
Burn to succeed/Drive	2	8
Previous Success	1	2
Previous Experience	2	2

Table 22: Universally Agreed Upon Factors

*Trustworthiness.* Trustworthiness of the entrepreneur is foundational in many investigations of factors that angel investors assess as they consider investing (Van Osnabrugge, 1998; Van Osnabrugge and Robinson, 2000; Sudek, 2006; Maxwell and Levesque, 2014). Van Osnabrugge and Robinson (2000) find that trustworthiness was one of two top criteria angel investors use to evaluate an opportunity. Sudek (2006) investigated trust from the perspective of angel investors and finds that interactions serve as unique opportunities to strengthen or reduce trust in the relationship. Not only is trust considered a top factor, but also lack of trust might cause angel investors to "cancel out" other strong factors the opportunity possesses (Sudek, 2006). Maxwell and Levesque (2014) take the role of trust one-step further and outline the dimensions of trust and a schema that shows their manifestations throughout entrepreneurs' interactions with an angel. Being trustworthy is summative of behaviors that display consistency, benevolence, and alignment in a relationship (Maxwell and Levesque, 2014; Whitener et al., 1998; Lewicki et al., 2006). Entrepreneurs can show consistency through activities that confirm their ability to follow up on a promise or earlier statement (Maxwell and

Levesque, 2014), while inconsistencies here or a failure to deliver on promises might damage perception of one's trustworthiness. Benevolence is a show of care towards others, and alignment refers to a sharing of values and objectives (Maxwell and Levesque, 2014). One of the other nine factors listed, being open to mentorship and input, is included in Maxwell and Levesque's (2014) schema, labeled as receptiveness, which can build trust between two parties. This receptiveness, combined with a willingness to change tactics and efforts, is a trust-building activity in stark contrast of behaviors that may damage or violate trust, such as making excuses for failures, postponing implementation of new ideas, refuting feedback, and blaming others for failure (Maxwell and Levesque, 2014; Butler, 1999; Levie and Gimmons, 2008).

Learning Objectives:

- Entrepreneurs should demonstrate their ability to take input from the outside and show a willingness to change.
- Entrepreneurs should show care towards others: Their customers, employees, investors, and others.
- Entrepreneurs need to have values and need to understand the values of angel investors. Furthermore, entrepreneurs must show congruence between stated values and actions.

*Commitment, passion, burn to succeed, and EQ.* Commitment of the entrepreneur may be a predictor of success (Timmons and Spinelli, 2004), an indicator of passion (Cardon et al., 2009), or a positive signal for angel investors to evaluate (Sudek, 2006; Benjamin and Margulis, 2000). It is important to note the difference between

commitment and behavioral commitment, which reveals itself based on actions by the entrepreneur (Cardon et al. 2009). An example of this might be investing in one's own company (Cardon et al., 2009). The link between passion and commitment also follow this same logic, as there is a difference between displayed passion, perceived passion, and experienced passion (Cardon, 2008). Previous work generally discusses perceived and displayed passion in relation to pitches and presentations, but some note the role such a display plays at each stage (Cardon et al., 2009). Entrepreneurs should be aware of the concern that angel investors may have in being "fooled" by someone displaying too much passion, suggesting a balanced approach across stages of investment (Cardon et al., 2009). Entrepreneurs must carry this awareness as they prepare to engage with investors, especially for risk of appearing naïve or failing to display emotions that an angel investor finds authentic (Cardon, 2008). It is critical for entrepreneurs to show that they have a burning desire to succeed and the drive to follow through with their actions (Bierly et al., 2000; Bird, 1989; Cardon, Sudek, and Mitteness 2009). Such positive emotions may lead to higher levels of persuasiveness (Baron, 2008), and a display of the EQ that might be helpful in building successful companies (Cross and Travaglione, 2003). Empathy can also be a successful tactic to practice in the customer discovery process as well as how leaders treat their employees (Cross and Travaglione, 2003). Emotions that entrepreneurs are feeling may be different than what is displayed (Cardon et al., 2009) and regulation of such emotions might be beneficial in gathering successful outcomes (Rafaeli and Sutton, 1987; Dasborough and Ashkansay, 2002). In showing such emotions, entrepreneurs should be cautious to keep the right balance so that they do not come across as unrealistic

(Cardon et al., 2009). Assessing authenticity at one stage of the investment process may be difficult for investors to complete, especially if they are suspicious of entrepreneurs deploying their emotions to further their own means, or outright lying. It can pay off to be honest in this situation, and honesty has a positive impact on the success of entrepreneurs in the long run (Makhbul and Hasun, 2010). While some research suggests entrepreneurs can recover from a lie (Pollack and Bosse, 2014), the initial lie carries an inordinate of downside risk not worth the limited upside. It is possible that angel investors take a holistic look at the authenticity of an entrepreneur, starting from the time that they meet through the investment decision.

Learning Objectives:

- Entrepreneurs must seek to gain an understanding on how people perceive them, their emotions and behaviors.
- Entrepreneurs must evaluate their ability to display passion and positive emotions.
- Authenticity matters and behaviors help reveal authenticity over time.
- Entrepreneurs should consider what behaviors exemplify their commitment to the startup in question.
- Disputed impacts of assessing important criteria at each stage suggest entrepreneurs grasp a holistic approach of due diligence where angel investors start making observations from the beginning.

*Vision, open to input/mentorship.* Based on previous research by Mason and Harrison (2001; 2002), we know that entrepreneurs with a lack of vision are less likely to attract financing from angel investors. Some angel investors see the presence of vision as

being a desirable characteristic in displaying passionate commitment to a venture (Benjamin and Margulis, 2002). A literature search does not yield a substantial amount of information specifically about the role of vision in the angel investor decision-making process outside of these articles. Vision may be a factor that is of increasing importance the deeper a relationship grows between investor and entrepreneur. Porter and Spriggs (2013) provide ancillary evidence of how angel investors may even consider vision over a long span of time, especially as the entrepreneur grows from having no vision to an operating company. Collewaert (2012) suggests that angel investors see their job as helping entrepreneurs decide on a vision, which was also mentioned by one of the investors in this study.

Novice entrepreneurs, especially those that use effectual logic (lacking a predetermined vision of outcomes (Sarasvathy, 2001)), may have no vision of what it is they would like to build. However, an investor may note different characteristics, traits, and behaviors that exist despite the lack of vision. It is highly likely that the inclusion of vision is stage-dependent when evaluating an entrepreneur's likelihood of success. Vision may be more accurately labeled as the "venture vision," thus pegging the vision in relation to a specific venture. This would also help novice entrepreneurs understand that part of the value-add of angel investors is to assist in constructing vision (Politis, 2008). Such a strategy could also help entrepreneurs separate the vision of the startup, the temporary venture, apart from their personal goals.

Entrepreneurs should not ignore the fact that angel investors are looking to provide input, mentorship, and coaching as part of their value-added services.

Balachandra et al. (2014) find that many investors at the pitching stage are more likely to invest in entrepreneurs that they perceive to be open to mentorship and coaching. Their research uses Social Identity theory to explain the attraction investors feel towards certain entrepreneurs, especially if they share similarities. Social desirability theory may also describe the pull some investors may feel when one angel investor introduces an entrepreneur into their group and a potential desire to mentor them (Balachandra et al., 2014). Angel investors may also consider an entrepreneur's receptivity to such a mentorprotégé relationship during a pitch and use that as a factor in decision-making (Balachandra et al. 2014). Not all entrepreneurs had a favorable view of this type of relationship. At least one entrepreneur mentioned some angel investors expected all input to be acted upon by the entrepreneur, making this relationship less about mentorship and coaching and more about a manager-subordinate relationship. Receptivity to this type of relationship is not as easy as simple observation of one pitch performance. Instead, angel investors employ in early interactions with entrepreneurs a process of assessment.

Coaching occurs when an individual who wants to improve their skills accepts assistance from another (Bacon, 2003). Definitions of entrepreneurship have explored the concept with the assumption that the coach knows the business that an entrepreneur is seeking help in (Audet and Couteret, 2012). Coaches themselves do not provide direct answers to problems (Katz and Miller, 1996). Coaching is situated in contrast to mentoring as mentoring helps entrepreneurs widen their personal horizons (Thompson and Downing, 2007; Audet and Couteret, 2012). Consultants provide answers to direct questions (Kilburg, 1996), reap a financial reward for their efforts working with a founder (Audet and Couteret, 2012), where coaches ask more questions to help entrepreneurs find a solution.

Many angel investors discussed the notion of coaching and its importance, as a coachable entrepreneur will be more likely to be investable. Terms related to coaching are used interchangeably with mentorship. However, angel investors discussing coaching discuss how they assess such a factor, and in many cases, this entails a process of providing input and observing the actions and outcomes of an entrepreneur before their next engagement. For the entrepreneur, the trial and error approach of acting upon the fruits of a conversation and learning from the outcome help increase the preparedness one feels towards their situation. Such a process will not be without pain, awkwardness, or adversity. This hormetic process enables entrepreneurs to build up some semblance of antifragility as part of their makeup (Taleb, 2012).

Learning Objectives:

- Entrepreneurs should analyze what cues they are sending related to their receptivity of mentorship, coaching, and their openness to input.
- Entrepreneurs must increase their willingness to be coached.
- Entrepreneurs must develop a vision over time and show this growth.
- Entrepreneurs should separate their personal vision from the vision of their venture.
- The pitch process is *not* the only time to prove these factors.

*Previous success, previous experience.* Previous experience is a factor for consideration for many entrepreneurs attempting to receive angel capital (Mason and

Stark, 2004). The same study finds mixed results for the role of previous success on raising capital from angel investors, especially when individual investors put a high amount of weight on the entrepreneur.

Experience may refer to experience in an industry, a domain in general, running a startup, or even interacting with investors. The variety of experience types may show more than just a summation time at a given career. Experience may also indicate what kind of life experiences the entrepreneur has, shedding information on the values and deep-rooted convictions that guide the entrepreneur in their decision-making. Given Cardon et al.'s (2009) observations on the authenticity of entrepreneurs as they interact with investors, experiences that support the narrative entrepreneurs are portraying may be helpful. In the anticipatory socialization process, entrepreneurs may be "guessing" what expectations angel investors have for them as they prepare to engage. While the entrepreneur might get some of these characteristics correct, they may also lack the support of previous experiences supporting their presentation of themselves. Compromising this may cause turbulence if the relationship continues, but it is also possible that it will lead investors to pass on the opportunity.

Previous success is not the same thing as previous failure. The entrepreneurial culture of today espouses a "fail-fast, fail-often" mentality, touting failure as a badge of courage.

### Angel 9 "Coachability as always, is one thing, having prior success is another."

Entrepreneurs must carefully consider what their previous failures are and how angel investors could perceive this as a lack of success rather than a courageous attempt to try something. The overall role of failure in the life of the entrepreneur is still important, as discussed earlier; failure is a critical part of the entrepreneurial learning process. Entrepreneurs must have the ability to move forward from unsuccessful experiences. Reflection on such failures will help entrepreneurs update their levels of preparedness (Pittaway and Cope, 2009). This learning process is the true holder of value, not the failure itself. Failure without learning is failure.

Learning Objectives:

- Entrepreneurs must build up a portfolio of experiences to support the project of their persona.
- Previous experiences play an important role in anticipatory socialization. As entrepreneurs predict what angel investors are looking for, they may also prepare to present their previous experiences as evidence of desired characteristics.
- Entrepreneurs must reflect on failures and communicate what they learned from such events.

The next section details the factors agreed upon by angels, research, and websites. This generated an additional 16 factors for analysis. I analyze and discuss each of the additional factors and offer commentary on their usefulness in the process.

**Factors agreed upon by angels, research, and websites.** In addition to the nine factors that all four areas agreed upon, I analyzed which factors were present across angel investors, research, and websites. This process uncovered an additional 16 factors.

10010 2011 000010 118100	1	
Reliability		
Empathetic		
Curious		
Inquisitive		
Authenticity		
Respectful		
Prepared		
Leadership		
Coachable		
Honest		
Values		
IQ		
Simple Pitch		
Ability		
Personality		
First Impression		

Table 23: Factors Agreed up on by Angels, Research, and Websites

*Reliability.* Entrepreneurs need to be reliable people (Aernoudt, 1999). One angel investor in this study noted the importance of showing how one is reliable as this characteristic is difficult to quantify. Action and behaviors are the best way to show such reliability. A heuristic to answer whether someone is reliable is to ask the question: "Can I depend on this person no matter what the situation?" If the answer is a resounding yes, the person is more than likely going to be reliable and "someone you can count on."

*Ability, IQ.* The assessment of IQ is a difficult topic for quantification in fixed criteria. IQ is a complex variable, and it may be more optimal to measure such a variable across multiple types of intelligence as most are only looking for a basic threshold of general intelligence (Sternberg, 2004). Once entrepreneurs reach this general threshold of intelligence, they are in the company of many other founders vying for resources as well. At a minimum, founders must demonstrate they have this threshold-level of intelligence

to interact in this environment. In this case, IQ and EQ may collide. It is unclear how angel investors measure each factor outside of intuitive perception, so entrepreneurs should clearly understand the role these may play in their evaluation.

Ability and the capabilities that entrepreneurs have are critical factors for entrepreneurs to communicate to angel investors (Mason and Stark, 2004). Angel investors are looking for those that can carry out the vision that they are communicating. One might view the entire investing process as an entrepreneur presenting a lucrative plan, with the angel investor taking a bet on the ability of the entrepreneur to carry out said plan. It is of no surprise that ability is listed as a factor across the respondents. However, entrepreneurs did not mention this as a potential factor for consideration. The implication is that novice entrepreneurs may have a more difficult time showing this ability.

The discussion on ability also highlights the progression of evaluation that might occur over time. Angel investors may have a much different impression of a quality like ability when comparing the first impression with that of an entrepreneur deeper in due diligence. In fact, there might even be a greater value attributable to the successful display of change in a positive manner. It may be best for entrepreneurs to try to engage very early with angel investors groups they intend to approach for resources. Learning Objectives:

- Entrepreneurs must show a threshold level of intelligence, both at cognitive and emotional levels.
- Some factors are difficult to show on paper and in one fixed increment.

Entrepreneurs should engage early with angel investors and the groups they are a part of to help show a positive progression in such factors over time.

*Values.* A guiding framework of this research is considering anticipatory socialization in due diligence. Part of anticipatory socialization is to consider what values are held by the organization one is about to be socialized into. Values describe such conduct standards that influence our behavior (Meglino and Ravlin, 1998). Personal values influence motivation and drive behaviors in the entrepreneurial process (Hemingway, 2005; Schwartz, 2011). Figure 18 shows the relationship between values, motivations, and behaviors. It also interjects the process of angel investor perceptions on each stage:



Angel investor perception of values Angel Investor interpretation of actions and behaviors

Figure 18: Values and Behaviors

Personal values may change when an individual encounters a predominant culture (Fischer, 2006; Fayolle et al., 2014). It can be difficult to claim ubiquity of values in the angel investors-entrepreneur relationship. Some of the factors that are listed could easily

be related to values, including reliability, honesty, curiosity, and empathy. Many of these factors, however, did not appear as ones mentioned by entrepreneurs as well as the other sources. The absence of such values may suggest a fundamental disconnect in those areas between angel investors and entrepreneurs. Entrepreneurs did mention factors such as accountability (not significantly discussed in the literature) and resourcefulness (not mentioned by angel investors).

Learning Objectives:

- Entrepreneurs should consider how honesty, reliability, curiosity, empathy, and other values drive their behavior.
- Values are drivers of motivation, which directly affects actions and behaviors taken by entrepreneurs. Angels may evaluate values at face value, or interpret values based on the behaviors and actions exhibited when interacting with investors or others.

Why might entrepreneurs be leaving out these factors in their discussion? The first reason may be axiomatic. Some factors, such as honesty or respect, might be taken as a given in the general format of a relationship. These are prerequisites to any trusting relationship.

*Curiosity, inquisitiveness.* The appearance of inquisitiveness in the factors listed required a deeper investigation, especially as curiosity is also a value. Angel investors might find value in curiosity of entrepreneurs as it might reflect effectuation behavior (Dyer et al., 2008). Effectuation behaviors suggest an orientation towards building up a future using the resources on-hand, while also taking stock of potential pathways to build

towards an opportunity. How might one show curiosity? Entrepreneurial curiosity concerns a personal interest in understanding the function of systems, as well as how to use knowledge of systematic function to further a venture (Jeraj, 2012).

# Angel 8 "First of all, you know, I value entrepreneurs who are curious, who asked questions, who want to learn..."

As shown in the quote from Angel 8, curiosity is revealed through asking questions and showing a willingness to learn. Entrepreneurs have multiple opportunities to ask question in the investing process, so it is best to utilize that time wisely. Curiosity may also hedge against coming across as a "know-it-all" by pondering questions larger than the venture itself. A curious entrepreneur may also be more likely to participate in "tinkering." Tinkering is an uncertainty-reduction strategy to build antifragile properties into companies, as well as displaying a certain amount of antifragility in an entrepreneur (Taleb, 2014). Those that tinker engage in activities with much to gain yet little to lose. Tinkering is largely experimental, including an attempt at new messaging, varying the sales process, varying attributes of the product/service, or other activities.

Learning Objectives:

- Entrepreneurs should show they are curious about their business, the space it operates in, and other factors of the problem space.
- Tinkering is an activity that shows both curiosity and an ability to take actions to decrease thick tail risk and uncertainty.

*Leadership, simple pitch.* Angel investors include evaluations of leadership as part of their decision-criteria (MacMillan et al., 1985; Zacharakis et al., 2007). The concept of leadership covers a wide variety of topics, including the ability to distill

complex concepts into something simple (McGrath and MacMillan, 2000). Since leadership is another quality that might be difficult to assess based on limited interaction, being able to simply communicate might be a strong indicator for the qualities of leadership needed in a successful entrepreneurs. Other activities might show evidence of being a leader, including previous management experience and leadership roles in previous startup companies.

Learning Objectives:

- Entrepreneurs should practice their ability to simplify complex concepts, in and out of pitching environments.
- Entrepreneurs should show evidence of past leadership capabilities.

*Personality.* Conflicting personalities are one reason that startups fail to raise capital from angel investors (Feeney et al., 1999; Collewaert, 2012). The personalities of major contributors in a startup team has major impacts on investor decisions (Murnieks et al., 2015). Angel investors may assess personality based on perception, as well as through information transferred through trusted references (Bian, 1997). The impact of personality by stage is unclear.

*First impressions.* First impressions are pivotal for entrepreneurs to master when pitching their business concept. These interactions are also a signal to other individuals and investors downstream after an entrepreneur meets someone (Zajonc, 1980). You only have one opportunity to make a first impression (Harris and Garris, 2008). They are part of an overall show of social competence when interacting with angel investors (Wayne and Kacmar, 1991; Hoen-Weiss et al., 2004). An impression is a cognitive representation

an evaluator formulates after interactions with an individual (Hamilton et al., 1980). Angel investors experience first impressions on many items, including the founder and the business opportunity that they are discussing. Cursory evidence exists that angels consider the founder and opportunity as distinct at times (Mitteness et al., 2012). *Angel 13 "…how that would that idea survive under different people?"* If entrepreneurs are engaging early enough that they have no concrete opportunity under

pursuit, their personal representation will be under evaluation.

Learning Objectives:

- Making a good first impression is critical from a personal and venture perspective.
- First impressions may be a result of intuitive cues and cognition.

Each section of expectations included some sample learning objectives useful for guidance of entrepreneurs. Below, I expand upon the base takeaways above and create sample learning objectives using Ben-Zvi's (2010) framework and action verbs. Entrepreneurs interacting with angel investors should:

- Understand how anticipatory socialization prepares them for upcoming roles in social groups.
- Understand what behaviors build and degrade trust while learning how to engage with angel investors as early as possible.
- Understand the impact of personal commitment in the investing process and show historical evidence of commitment to other activities.

- Analyze their passion for the idea they are considering and analyze where this passion is rooted. Evaluate the passion of other entrepreneurs to understand how perceptions moderate passion.
- Apply their understanding of emotional intelligence (EQ) through the use of human-centered design principles, which includes empathy-driven interviews with potential customers.
- Create a vision for their idea and themselves as a person.
- Understand how outside evaluators perceive their ability to be coached.
- Create a portfolio of evidence detailing how they have overcome failure with a burn to succeed.
- Create a resume that offers a narrative of previous successes and analyze the current environment of a domain an idea of interest is.
- Promise to complete a task during a busy time for someone they know to show reliability.
- Evaluate and analyze the current external environment they operate in through information obtained in questioning domain experts.
- Reflect on what values are important and could be important to angel investors. Understand the process of evaluating the values that others hold true.
- Understand a completely new problem and create a simple pitch of a solution for that problem during a weekend.
- Evaluate the first impressions they have of others and analyze how their own impressions may appear.

Following such learning objectives can provide entrepreneurs with a robust preparation to engage with angel investors for funding. In addition to the learning objectives, following along with behaviors that build trust are important. In the next section, I show how many of the expectations identified relate to trust-building and trust-eroding activities.

**Building trustworthiness.** Trust is not always an attribute established in a relationship after one interaction. Building trust is a process that takes time and opportunities. Part of building this trust relates to a show of consistency. Novice entrepreneurs should consider this when they are interacting with angel investors. Especially when there is a feeling of interpersonal fit or connection between two people meeting, an entrepreneur should consider requesting permission for a follow-up in the future. This initiative provides a preemptive opportunity for the entrepreneur to show they are following through on something stated in a conversation and begins to develop an early relationship.

If entrepreneurs do not start this activity, angel investors will. Some of the judgement that angel investors build is due to their own initiation of a situation to see what exactly an entrepreneur will do. Coachability is a good example of this. Many angel investors indicated that they used this kind of approach to measure the coachability of an entrepreneur over time instead of just one instance.

The entrepreneur should undertake trust-building activities, while avoiding trust damaging or trust-violating activities. Trust violating actions committed by entrepreneurs lowers the chances of receiving an investment by 500 times, and trust damaging actions by 20 (Maxwell and Levesque, 2014).

The construct of trust in the entrepreneurial literature encapsulates many of the factors listed in the two tables of shared factors.

					Anticipatory		
				Trust	ust Socializatio		ization
Behaviora			Trust	Trust			
Dimensions (Maxwell			Buildin	Damaging/Viol	Referen	Knowledg	Learning
and Leves	que, 2014)	Factors	g	ating	ces	е Туре	Task
			Display		Butler,		
			behavi		1991;		
			ors that		Gabarro,		
			confirm		1978;		
			previou	Inconsistent	Lewicki		
			S	words, actions.	and		Learning
Trustwor	Consisten	Authenti	promis	Failure to keep	Bunker,	Metacogni	about
thy	су	city	es	promises.	1996	tive	oneself
					Mayer		
					et al.,		
			Exhibit		1995;		
			concer		McAllist		
		50	n about		er,		
		EQ,	well-	Self-interest,	1995;		
	Demonstra	Empathy,	being	takes	Rempel	C	Learning
	Benevole	Respectf	of	advantage of	et al.,	Conceptua	about
	nce	ul	others	others.	1985	1	oneself
						Matagani	Learning
		Europeather.				Metacogni	about
		Empathy				tive	oneself
						Matagani	Learning
		Despect				Metacogni	about
		Respect			Arthurs	tive	oneself
					and		
			Actions		and Busenitz		
			confirm	Behaviors do	, 2003;		
			shared	not match	, 2005, Butler,		
			values	values, lack of	1991;		
			or	shared values	Lewicki		Learning
	Alignmen		objecti	or willingness	et al.,	Conceptua	about
	t	Values	ves	to compromise.	2006		oneself
	L	values	ves	to compromise.	2000	1	Ullesell

Table 24: Building Trust

# Table 24 (continued)

			Display relevant technical or	Lack of context- specific ability,	Butler , 1991; Gabar		
Canabla	Compete	10	business	misreprentin	ro,	Conceptu	Learning about
Capable	nce	IQ	ability	g ability.	1978	al	oneself
		Ability				Metacogn itive	Learning about oneself
		, as in the second s	Demonst rate				
			relevant work	Inappropriat e experience			
		Previou	and/or	or			Learning about
	<b>F</b>	S Formation	training	misrepresen	Amit		venture
	Experienc	Experie	experien ce	tation of experience.	et al., 1990	Factual	creation/mana
	е	nce		experience.	1990	ractual	gement Learning about
		Previou					venture
		S					creation/mana
		Success				Factual	gement
	Judgment				Kramer, 1996; Rosen and Jerdee, 1977		
					Clark and Payne, 1997; Currall and		
<b>-</b>	Disclosur				Judge, 1995; McAllister, 1995;		
Trusting	е				Rempel et al., 1985		
	Reliance				Clark and Payne, 1997; Gabarro, 1978; Gillespie, 2003		
				Excuses for			
				failure,	Butler		
			Demonst	postpone	,		
			rate "coachab	implementat ion of new	1991; Levie		
			ility" and	ideas, refute	and		
			willingne	feedback,	Gimm		
	Receptive	Coachin	ss to	blame	on,	Metacogn	Learning about
	ness	g	change.	others.	2008	itive	oneself
					Rotter		
			Provide		,		
			truthful		1980;		
			and	Minner	White		
Communic			timely informati	Misrepresen t or conceal	ner et	Motocoge	Loarning about
ative	Accuracy	Honesty	on.	crucial data.	al., 1998	Metacogn itive	Learning about oneself
	Accuracy	nonesty	011.	ci uciai uata.	1,2,20	itive	Unesen
		Reliabili				Metacogn	Learning about

# Table 24 (continued)

Explanati on	Simple Pitching			Sapienza and Korsgaar d, 1996; Whitene r et al., 1998	Procedural	Learning about investing process
Opennes s	Open to Input/Mentors hip	Open to new ideas or new ways of doing things.	Does not listen, refutes feedback, shuts down and undermin es new ideas.	Butler, 1991; Gabarro, 1978; Sapienza and Korsgaar d, 1996	Metacognit ive	Learning about relationship s
	Curiosity				Metacognit ive Metacognit ive	Learning about oneself Learning about oneself

Nineteen of the 25 converged factors are included in Maxwell and Levesque's (2014) Behavioral Trust Schema. The 19 factors included in this table can help entrepreneurs understand the usefulness of various personal qualities and actions while using them to build trust with angel investors. Relationships are one of the most important, if not the most important, piece of the angel investing process. Relationships require trust in order to operate successfully. As seen by tying elements of the trust schema with factors uncovered in this study, the value in trust-building activities clearly should be a focal point of anticipatory socialization. Information from all sides play a part in the socialization of entrepreneurs into the angel investor environment (Taylor and Kent, 2010). The information to focus on, however, may be unclear. The research

questions for this study include an investigation into what entrepreneurs and angels expect. These expectations help uncover what factors entrepreneurs *should* focus on as important ones. The results of this study show specific factors as well as behaviors to assist new founders in building up the proper stock of knowledge as they move into building a relationship.

Entrepreneurs can take an active role in their anticipatory socialization by proactively increasing their knowledge and learning various procedures of importance. Early actions taken prior to due diligence or screening will help entrepreneurs decrease the anticipation asymmetry between their expectations and the expectations of angel investors. One such process is for entrepreneurs to conduct their own set of due diligence before applying for funding with an angel investor group. Before describing that process, I introduce a brief commentary on the impact of socialization sources on the anticipatory socialization process.

#### Sources of socialization

Previous research has established the role of sources of socialization in the organization and for entrepreneurs. This study elaborates on what some of the specific elements are for entrepreneurs to explore in order to understand angel investors. Based on Tables 14-18, we can see somewhat of a mismatch in where entrepreneurs are saying they get their information. The internet is not a surprising place to find information. Angel investors specified several internet-based channels to find such information, like a simple Google search.

Entrepreneurs, while more general about the internet, did also mention resources such as podcasts. The podcast element is listed separately as the internet in the table as it did not appear as a suggestion from angel investors. Other elements related to media include books and TV shows, specifically, Shark Tank.

Media remains a powerful way for entrepreneurs to learn about angel investors, yet there is no guarantee that any of the information found online will be providing the same advice to entrepreneurs. A web search, like the one below in Figure 19, may not even yield the same results to two different searchers.

Google	what do angel investors expect	<b>پ</b> ۹		
	All News Images Shopping Videos More	Settings Tools		
	About 3,650,000 results (0.55 seconds)			
	The Potential for a Solid <b>Return. Angel investing</b> involves a high degree of risk, so <b>angel investors</b> have the expectation of doing more than just getting their money back when they invest in an enterprise. They are looking for a higher <b>return</b> on their <b>investment</b> than they can get on the stock market, for example. Mar 25, 2018	1		
	What Are Angel Investors Looking for in a Business? https://www.thebalancesmb.com/the-7-things-angel-investors-are-looking-for-2	948104		
	About this res	ult 🕅 Feedback		
	People also ask			
	Do you have to pay back angel investors?	~		
	How much do angel investors take?	~		
	What do angel investors do?	~		
	How do you attract angel investors?	~		
	20 Things All Entrepreneurs Should Know About Angel Investor https://www.forbes.com//20-things-all-entrepreneurs-should-know-about-ang Feb 5, 2015 - How much do angel investors invest in a company? of thumb that it w longer to raise angel financing than you expect, and it will What Are Angel Investors Looking for in a Business? https://www.thebalancesmb.com > >Small Business > Growing Your Business Mar 25, 2018 - A Viable Exit Strategy. Before hor she invests in your business, an ang expect to see an exit strategy. While angel Investors are patient and willing to make lo	el-inve • ill always take • lel investor will		

Figure 19: Google Search for Angel Investors Expectations

Much of the results from such a search yield "how-to" articles or "## things that angel investors are looking for in a startup company" type of articles. If angel investing was part of a static system and only technical factors mattered, this might be fine. However, it is clear that angel investors do not all follow the same system on everything in an investment. No one article will sufficiently prepare an entrepreneur for an encounter and a jump into the investing process. Three of the seven factors mentioned by entrepreneurs were media-related. Angel investors listed 17 total elements they thought that entrepreneurs used to find information about investors, with a mix of sentiment about each one. On the topic of the internet, angel investors generally hoped that entrepreneurs did research on their specific group using the web. One angel said that they pay attention to whether the entrepreneur mentions anything that was on the website in initial conversations, especially when discussing the wide variety of value-added services that many groups provide. The internet hosts many other resources like blogs, podcasts, and even e-books to some extent. While angel investors are expecting the entrepreneur to consume this information, it may be the source of some mismatched expectations.

Theories outlining anticipatory socialization note the importance of sources of norms, values, and other expectations and the points of origin of each item. Each entrepreneur mentioned learning something about angel investors from their friends. Some of these friends were cofounders themselves with successful investment experience, but the nature of such friends was not always revealed. The internet was another source of information, especially in media tailored specifically for entrepreneurs, such as podcasts. Books on the subject are useful, but "like drinking through a firehose." Experienced entrepreneurs built some of their expectations based on previous experiences with angel investors, whether they be positive or negative.

Angel investors listed different sources of expectations where they thought entrepreneurs were getting their information. While the internet was included, other institutional factors are major data points for entrepreneurs. These include incubators, accelerators, high schools, universities, and other educational institutions that discuss entrepreneurship. Professionals in the ecosystem, like attorneys and accountants, also add to expectations of what interactions with angel investors may be like. Angel investors themselves are also a source of expectations, especially given the nature of many investors preferring to have initial interactions with entrepreneurs prior to seeing their application through informal networking or functions like "office hours." This also is in line with entrepreneurs discussing their previous experiences with angel investors. While the sources of socialization were reasonably consistent across participants, the valence of such sources were not. Angel investor groups should consider what resources they direct towards preparing third parties in the ecosystem to work together, as well as helping them understand the value-add of the angel investor groups. This ultimately benefits the angel investor group and helps the professional services direct help to entrepreneurs who need it.

Entrepreneurs should still be wary of where they are getting their information and take care in evaluating the worth of advice they receive, especially when it is generalized. Generalized information does not help entrepreneurs reducing the uncertainty in their expectations and those of the angel investor group. To reduce the anticipatory asymmetry between their expectations and angel investors, entrepreneurs should conduct their own due diligence on investors and partners they are looking to work with. The next section begins to describe this process for entrepreneurs to follow. I first describe some observations about the overall due diligence process then detail the process of due diligence that an entrepreneur should use to assess angel investor groups and other sources of capital.

#### **Due Diligence Processes**

There is no universally defined way of conducting due diligence. As one angel investor said:

## "We all have the same goals, but very different ways of getting there."

The investors interviewed see hundreds of companies to invest in per year, and the number of companies that remain after any screening indicates this. Screening itself is a variable process. The norm in this situation is to go through an initial contact point. This could be an introduction at a social function, an entrepreneur sitting in on "office hours," or other form of initial connection. This initial filter indicates that there are likely far more entrepreneurs who are attempting to raise capital from angel investors, but do not move on even to the application phase of the process that follows.

The application process is the founding team's opportunity to fulfill requests of the angel investor or group to be considered for funding. This is where we have primarily seen "gatekeepers" occupy, whether that gatekeeper is an individual or a committee. Gatekeepers are known to have an impact on the final outcome of investments (Mason and Botelho, 2016), yet it is critically important to understand which stages gatekeepers occupy. If the gatekeeper is involved in prescreening decisions, the impact of other gatekeepers is obvious. Future research should include investigation into angel investors that decide to invest in companies rejected by initial gatekeepers.

Screening criteria are used to determine who should move to the next round, which would be an actual presentation to a group of investors or an investor. After this point, investors decide who is worth taking a closer look into for consideration of an investment.

While research has suggested that an increase in time spent conducting due diligence leads to the discovery of startups with high upsides (Wiltbank, 2005), there is an acknowledgement in the community of investors that highlights the uncertainty surrounding the process. One investor said it best that you *"cannot ever predict that a founder might have a mental breakdown in a few years*" after an investment has been made. This quote highlights the necessity to allocate some uncertainty in the process. After all, many of the businesses that go through due diligence do not end up returning the initial invested capital for a variety of different reasons.

Angel investors indicated the importance of the person when deciding or not a venture makes sense to include in their portfolio. This was evident in discussions on how investments were made as well as answers to direct questions about what is important in the investment process. Investing in people also calls for an establishment of "ideal" values important to the angel investor and the group that they belong. The origin of such values and norms are varied, but some are established through the socialization of the angel investor to the group. Many angel investors did not go through any form of traditional training as they became an angel investor with a specific group. Most just started to participate and at most attended some basic seminars that covered information and terminology.

Multiple angels used the term "alignment" to describe compatibility between two individuals and their personalities. Alignment could also refer to how a company fits with criteria of the investment group, but in this case, it was used in discussion of personal factors that are of importance. Several entrepreneurs brought up "Alignment" as the term "fit", but the definition appeared to describe angel investors doing things the way the entrepreneur wanted. Angel investors do not have malleable processes, and entrepreneurs who believe they will change their methods to fit one business are mistaken.

Angels also discussed elements related to personal satisfaction, such as enjoyment from watching an entrepreneur try to build a business and admiration towards an "honesty try" when trying to build a company. This also included selection of people they would "like to see succeed" without playing favorites.

Preparation for engagement with the angel investor was also an expectation. This preparation includes factors related to the company, like the stage it is in, as well as awareness of the offerings that a group has in addition to capital infusement. Some angels expected the entrepreneur to have high amounts of IQ and EQ to seek out external information about angel investors.

Preparation is a critical part of anticipatory socialization. In order to socialize with investors, it is beneficial for entrepreneurs to understand *when* due diligence starts. In many cases, this is much earlier than is anticipated, although it may go under a different

name. Much evidence was presented suggesting that the very first interaction, even if years prior to investing in an entrepreneur, is critical for the angel investor to formulate opinions on the "jockey driving the horse."

# **Due Diligence Starting Point**

Most due diligence models discuss the formal process an entrepreneur must go through after first official contact with an angel investor group. Generally, due diligence occurs later in the process as evidenced by the Angel Capital Association's general outline on the angel investing process shown in Figure 20:





The findings in this research study suggest that extended models need to include antecedent actions, especially those related to socialization, to inform entrepreneurs of the factors involved along the way. Such socialization processes occur in the "familiarization stage" of the angel investing process (Paul et al., 2007). The carryover effects from interactions in the familiarization stage may be underestimated in many models of due diligence. The current model and understanding of due diligence potentially devalue the socialization process that is undergoing from the first real point of contact, or even earlier than that. A major finding from this study is the potentiality for carryover effect from even a first meeting with someone in an angel investor group. Earlier engagement with angel investor groups from the entrepreneur's perspective can pay major dividends down the road. In the words of one participating investor:

"My advice is to engage early and fully understand as much as you possibly can before you formally are in the process so there are not surprises and you're well prepared."

Some entrepreneurs also understand this sentiment, as Entrepreneur 8 said: *"It's good to start a friendship before getting to a business."* 

The interaction component of such a relationship is only a portion of the equation. This process includes finding knowledge from a variety of sources publicly available, but it also implies a focused type of networking taken on by entrepreneurs to build up what options may be available. Another angel investor who invests as part of a group says:

"We would always encourage people to engage very early to talk to one or more members of the group long before they think they need money."

In fact, some of the groups *require* entrepreneurs to be acquainted with at least one member of the group prior to presenting for further consideration. Not all angel groups publicly advertise this as a standard but based on the interviews there is an implied urgency to enter the orbit of an angel group's attention through known paths of approach. Such vectors might be through an affiliate group, accelerator, incubator, partner group, networking, or other personal connection.

Angel investors groups see many inquiries from companies per year, ranging from 600 to 1200 depending on factors like geography and the footprint of the group. Conservatively, that signals anywhere between a .17% chance and 3.33% chance of receiving an investment from a group from any single attempt. Chances may increase greatly by paying attention to basic attributes and characteristics advertised by the angel investor group. Static factors like stage of the business, industry, and geography may reduce the total number of companies by 30%, as suggested by Angel 1. Such static factors are part of what angel investors allude to when they talk about "fit" and "alignment," but this is limited to the fit and alignment to the group factors. This does not necessarily include fit and alignment with a broader network of individual investors. The spread for receiving investment increases for entrepreneurs that pass this first hurdle to range between .51% and 5.05%. Many angel investors discuss what they look for in an entrepreneur. However, an entrepreneur will never get the chance to show anything about them as a person without a prior connection or passing through a basic set of criteria.

While it is always a strong practice for entrepreneurs to participate in networking activities, this directive highlights the value of making a strong impression early on when having a discussion with an angel investor or group of angel investors. This may seem like common sense, but many nascent entrepreneurs may not even understand the correct stage to pursue funding from an angel investor. One entrepreneur in this sample was looking for funding based on the idea they had and no prototype, no customers, or revenue. While there are some that may receive funding for an idea, this is not the normal case.

The suggestion to network towards angel investors may be difficult due to the challenge in identifying angel investors in the first place. Nascent entrepreneurs who are new to the process rarely have the skills and connections built up to locate these individuals. Therefore, it is important for entrepreneurs to actively search for the different events that are open for them to attend in the local ecosystem. These events are wide in variety, from pitch competitions to structured events hosted by angel investor groups to help educate new entrepreneurs and prepare them for future engagements.

First, we must consider some of the problems related to networking towards angel investors. The first obvious question is whom are we networking towards? This becomes a challenge for nascent entrepreneurs because of their general lack of awareness of resources available in the ecosystem, but also because angel investors can be hard to individually identify.

Angel investors may not always want to be publicly identified. In contrast, it does not take too long by searching on a popular platform like Angel.co or LinkedIn to locate someone that has self-identified as an angel investor. Some angel investors may be amenable to a cold message sent asking to meet for coffee.

This does not necessarily describe all investors, however. Entrepreneurs looking to networks towards a group first should seek out what events or programming might be available to founders hosted by the group. Many investor groups hold speaking events, workshops, and other chances to meet a working member of an investor group in a public setting. This would provide an opportunity for a nascent entrepreneur to introduce himself or herself in a lower pressure situation than alternatives.

This interaction can serve as a first step on a long path of receiving funding from a group of angel investors. The goal of the entrepreneur should be to convey useful information about his/her personality, and if he/she is in the early stage of starting a company, some data of intrigue, milestones, or vision. While most entrepreneurs also focus on presenting useful information about their business, nascent entrepreneurs are generally not ready to have such discussions. Presenting a picture that has no basis in proven results could prove to be an indicator of an entrepreneur who is overconfident. Such overconfidence is one sign that many angel investors indicated they wanted no part with.

We must revisit the common process suggested by the Angel Capital Association in terms of how the investment process occurs. Upon reviewing the information collected from this study, another stage should be added to the process – the silent phase. This step consists of the pre-application behaviors that may be necessary for novice entrepreneurs in even finding the door to an angel investor group. This step, and encouragement of such for angel investors, solves a major issue: increased deal flow. Following the steps outlined here help groups find more *quality* startup companies to invest in, as the silent phase acts as a longer-term relationship building exercise.

# A Framework for Entrepreneur Due Diligence

The advice dispensed by many angel investors included suggestions on how entrepreneurs go about understanding whether an investor will make a good addition to their venture. In no cases during this research did angel investors indicate capital be provided without any additional value-added services, board positions, advice, coaching, or other involvement. When courting this resource and future collaborator, there remains an emphasis on ensuring several-factor alignment between entrepreneurial team and angel investor. In addition, entrepreneurs should consider their interactions, networking, and interpersonal efforts with the local entrepreneurial community as it may have an impact on how successful they are at receiving funding down the road. Fit is critical for understanding whether an entrepreneur will receive continued attention from an angel or angel investor group. Both serial entrepreneurs and angel investors echo this sentiment.

Entrepreneurs must first take the approach of understanding some items about themselves. What values and beliefs do you hold that are difficult to change or that guide your behavior? This self-realization and introspection will help to provide a method of seeking an angel group with the proper fit. Figure 21 shows the first step in this proposed model.

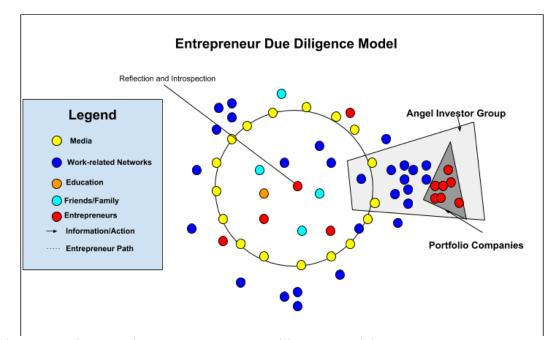


Figure 21: First Step in Entrepreneur Due Diligence Model

One way to deal with expectations held by the entrepreneur is to let them go (Kriger and Hanson, 1990). Given the social construction of many constructs in the angel investing and corporate world (Weick, 1979), entrepreneurs may be better served to embrace a simplistic approach to absorb the unique expectations that angel investors may have for them, as recommended by Kriger and Hanson (1990). This concept also mirrors parables from Christianity, in that Jesus instructed people to approach the Kingdom of God with the mind of a child, as well as Zen ideas on the "mind of the beginner" (Suzuki, 1970). A simpler approach to expectations may also work well for the complex, dynamic environment that the entrepreneur is entering. As Taleb (2016, p.102) puts: "You can expect blowups and explosive errors in fields where there is a penalty for simplicity."

Entrepreneurs will encounter a wide variety of socialization sources, whether these are intended or not. Figure 22 shows the entrepreneur engaging with a wide variety of sources. The path of the entrepreneur is without purpose at this stage. The purposeless path is akin to the notion of convex tinkering. Entrepreneurs are enacting experiments in the social space they live in. They are seeking information and connections that might help them move forward. They may feel they need to raise capital at some point, and this networking phase may benefit them in the future.

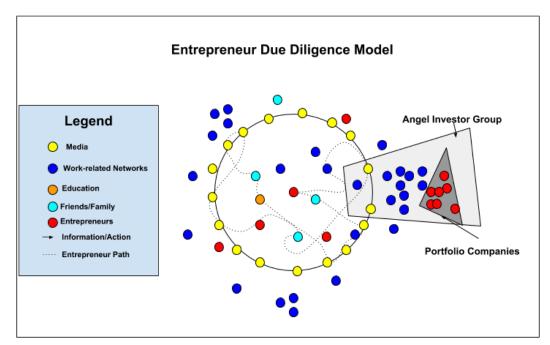


Figure 22: Step 2 in Entrepreneur Due Diligence Model

The next step in the process is to "get on the radar," so to speak, though personal connections. Note that this does not necessarily require a purposeful seeking out of a specific angel investor, but broadly, entrepreneurs should participate in activities that bring them closer to an angel investors' sphere of influence. This may include a variety of activities such as mentorship events, open pitch meetings, competitions, office hours, workshops, or anything else that may be offered. This is also when entrepreneurs are receiving generalized information from socialization, as shown in Figure 23.

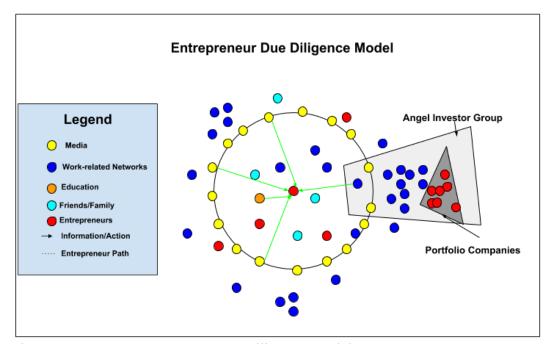


Figure 23: Step 3 Entrepreneur Due Diligence Model

During one of these events or through the course of general networking in the space, it is likely that one would meet and interact with an angel investor. Such angel investors attending an event expect this to be a fruitful way to meet new entrepreneurs.

The purpose of the interaction between entrepreneur and angel investor is not necessarily to secure funding. For the novice entrepreneur, or one with high entrepreneurial intentions but no solid business idea, this serves as an initial touch point to show an angel investor the softer skills that one may possess as well as one's communication skills. This is also an important opportunity to set the baseline to show growth over a period. It also starts the entrepreneurial journey to build up a champion.

Champions may very well be the individual that ends up funding the venture, or they may be the vehicle that provides greater opportunities if that investor is part of an angel investor group. A "deal captain," a "champion," a "lead investor," and other localized terms are used to describe a sponsoring angel investor that brings an entrepreneur into a group. Such a champion may be necessary in situations when the group requires a personal connection for investment consideration. This does not explicitly describe each angel investor group (as some accept open online submissions for consideration as part of deal flow), yet the benefit of personal connection in the space is unquestionable as shown through the results of the current study, previous research and directly stated criteria from numerous websites.

Upon meeting someone from an angel group of interest, the entrepreneur must put some time into understanding what the group is looking for in a company. An easy way of checking basic information is to look at the website of the angel investor group to see what their overall focus is as an organized group, followed by how they make their investment decisions. If the group invests as a fund in a democratic process and your business does not fit some of the clearly identified criteria like geography or industry, an entrepreneur will likely filter out in the initial screening upon a submission. However, an important procedural piece that entrepreneurs to pay attention to is if there are sidecar deals that drive the investment. Many angel investors join groups for benefits like shared deal flow and pseudo-shared investment criteria – those companies that make it past the initial screening and into the group setting still may be selected for investment by individual investors or a group of investors in a sidecar deal. Entrepreneurs must seek out objective and subjective factors by engaging with sources of socialization inside and outside of the group, including entrepreneurs of portfolio companies related to the angel investor group.

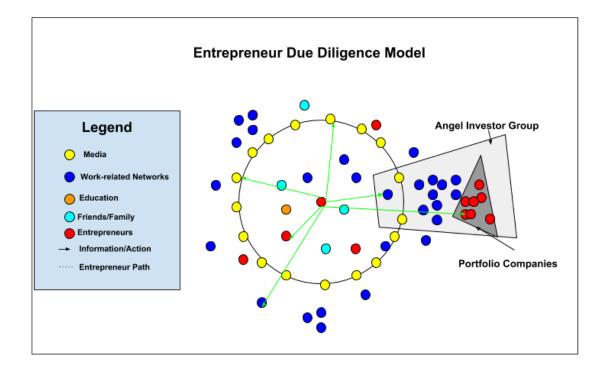


Figure 24: Step 4 Entrepreneur Due Diligence Model

These are subjective as they are more difficult to place in a Boolean situation. You can either have some form of intellectual property protection or not. There is still gray area (i.e., an application for patent pending), but many of these factors are fixed unless changed by effort. Subjective factors are more difficult to assess for an entrepreneur considering if the group is for them. If the entrepreneur finds themselves "fitting" with the angel investors, they may choose to officially submit their startup company to the due diligence process as shown in Figure 25.

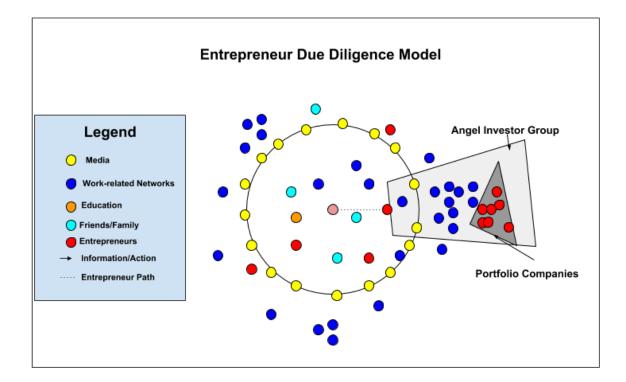


Figure 25: Step 5 Entrepreneur Due Diligence Model

The proposed model adds an additional set of steps and process to the normal due diligence framework, expanding on Paul et al.'s (2007) ideas on the familiarization stage since anticipatory socialization exists *a priori* to the familiarization to a specific angel investor group. The Entrepreneur Due Diligence Framework is shown in Figure 26 and displays the length of time that it spans, along with its relationship with anticipatory socialization:



Figure 26: Expanded Entrepreneur Due Diligence Framework

This expanded framework enforces the importance of relationship-building to entrepreneurs and displays the pre-application evaluation of softer factors outside of traditional "due diligence."

The framework proposed provides a variety of benefits to the entrepreneur and the angel investor group, especially when it relates to anticipatory socialization. The first is the closing of any anticipatory asymmetry that might exist between an entrepreneur and the group they are socializing towards. Asymmetry exists when there is an informational gap between two parties. Entrepreneurs that undertake their own due diligence and realize they are evaluated earlier than expected can take actions to reduce this asymmetry. Activities like discussions with portfolio founders and engagement with a wide variety of sources help mitigate unhelpful or useless information. This may also help hedge against sources that have disproportionate influence on the founder, such as key influencers in the media (Jablin, 2001; Bird, 1986). This framework also details a positive anticipatory socialization process where entrepreneurs and angel investors may reduce uncertainty (Bauer et al., 2007; Berger and Berger, 1979) and disillusionment (Carcello et al., 1991).

Disillusionment may indicate mismatched expectations. Early and continuous engagement offers a path to remedy this issue, as well as any entry shock (Paulson and Baker, 1999) or surprises (Louis 1980) when learning about the details of a particular angel investor group.

## Conclusion

Entrepreneurs should be interested in undertaking any approach that can increase the probability of success. Given the high rate of failure for entrepreneurs to receive funding, the framework proposed, expectations described, and learning objectives created offer a new perspective on what might need to change in order to raise funding. Paying special attention to anticipatory socialization may offer novice entrepreneurs a pathway to mitigate some of their inexperience with angel investors.

Gathering resources for a startup company is no easy task. Entrepreneurs who have had the experience before are more likely to have success in doing it another time in the future. For the novice entrepreneur, the first time could be the only time if there is a negative enough experience. Rather than using a "fail fast" mentality, entrepreneurs can leverage anticipatory socialization processes to better prepare themselves to engage with financers. The anticipatory socialization process links to entrepreneurial learning through its role between stock of experience and entrepreneurial preparedness. The entire entrepreneurial learning process is shown below in Figure 27.

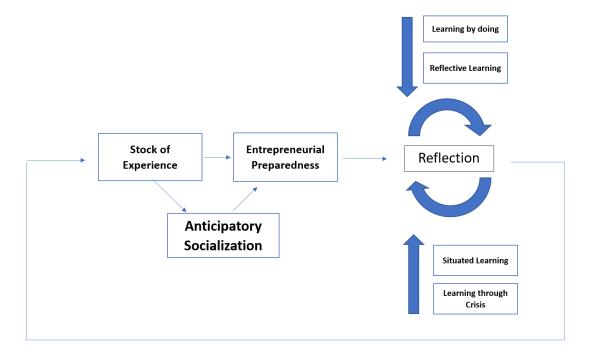


Figure 27: Entrepreneurial Learning Revisited

The entrepreneurial learning process is triggered by a number of critical instances, many of them experiences of success and failure as an entrepreneur. Through the framework of entrepreneurial due diligence, entrepreneurs may use each interaction point with a socialization source as a trigger to reflect and add to one's stock of knowledge. This will lead to better performance in anticipatory socialization and end up making the entrepreneur more prepared for interactions with angel investors.

Mental rehearsal towards future events is worthless if that rehearsal is not congruent with the situation in which one is entering. If entrepreneurs have no framework or method to sharpen or confirm their expectations, the first time they put them to the test may include a lower chance at receiving funding. Therefore, leveraging anticipatory socialization mixed with the entrepreneurial framework offers a repeatable way to participate in convex tinkering (Taleb, 2012) to improve one's position and reduce uncertainties in angel investor expectations. Upon finding any investors, entrepreneurs should engage in trust-building behaviors and activities that offer display of their positive qualities. This preemptively may speed along a future due diligence process if the idea they are working on is mature enough to move forward.

Clearly, there is a difference in expectations between entrepreneurs and angel investors. Entrepreneurs construct their expectations though an anticipatory socialization process influenced by outside sources of information. Some of these sources provide good information, some bad. As entrepreneurs mentally rehearse for engagement with angel investors, the wrong information may cause them to miss factors of importance. If the anticipatory socialization process is rife with expectations that are clearly wrong, the entrepreneur may not have a good chance to move forward with their ability to receive funding. The table below presents some overarching and high-level observations: Table 25: Key Findings

Entrepreneurs and angel investors have differing expectations towards one another.

There is higher agreement amongst angel investors on expectations for founders than

what founders think angel investors perceive about them.

Many important factors are difficult to assess in one point in time. Entrepreneurs

should engage in their own due diligence process with convex tinkering to improve

their chances in the anticipatory socialization process.

The evaluation and assessment of whether an entrepreneur is investable occurs earlier

than due diligence.

Entrepreneurs should strongly consider the reliability of sources in which they are

receiving information about angel investors.

Entrepreneurs have the ability to learn how to practice and display important

expectations angel investors have for them.

Entrepreneurs have the most to learn about the investing process and themselves.

Many expectations are related to metacognitive and conceptual pieces of the investing process.

This research is one of the first major contributions creating linkages between anticipatory socialization, entrepreneurial learning, and the angel investing process. This work serves as one of the first applications of the ideas of entrepreneurial learning, anticipatory socialization, and the angel investing process. Furthermore, this work provides an actionable model for entrepreneurs to follow in order to put anticipatory socialization in practice to reduce uncertainty in potential investments.

Many of the conclusions in this document provide guidance and suggested benefit for novice entrepreneurs. Angel investors also benefit from entrepreneurs undertaking a due diligence process of their own. Increasingly socialized entrepreneurs may arrive with a company that is ready for investment, but entrepreneurs who are also *investable* to put in the terms of investors. The risks of angel investment are high and well-known. As described earlier in this study, the failure rate of companies raising capital from angel investors is very high, thus severely decreasing the chances for angel investors to capture a respectable return. Information asymmetry and anticipatory asymmetry both stand between making a good investment decision. When entrepreneurs go through their own process of due diligence and discovery, they help reduce anticipatory asymmetry and information asymmetry by the nature of the entities they engage with. If this reduction turns into a higher percentage of companies being funded, angel investor portfolios naturally increase their chances for a positive return. The increase would be due to the nexus of entrepreneurial preparedness with the number of applicants. Encouraging entrepreneurs to go through their own meticulous process could potentially *decrease* the total number of applicants, but if the quality of founder and startup increases it would be well worth it.

A follow-up research question might be what creates investable entrepreneurs. As many of the factors described are subjective, investable entrepreneurs may not fit one universal profile. This is at odds with current approaches to learning about many new topics, where we look for archetypes that we should emulate to guarantee a path towards success. In a totally objective situation, this could work. In the dynamic and very social world of angel investing, viewing each entrepreneur through a cookie-cutter lens may not guarantee success. A completely subjective lens may have its drawbacks as well. If the socialization process is one that ensures entrepreneurs align with the ideals of the angel investor completely, the risk of only investing in those that we like occurs. This may introduce certain biases into the investment process and cause angel investors to miss opportunities with entrepreneurs they do not necessarily understand. This is a major reason why the entrepreneur should work hard in evaluating their potential investors. Generally, in human nature, we may have a negative reaction to people asking *us* to alter our values to fit a new system.

The rise in very specialized and national angel investor groups may provide a shred of evidence that entrepreneurs are going through their own due diligence in addition to failing to receive capital based on lack of alignment with individuals in a greater group. Golden Seeds is a business angel network that invests in companies being led by women. Many of the participating investors are women, which would greatly change the dynamic for a female founder trying to raise in the traditional angel investor environment.

One goal that entrepreneurs should strive toward is finding someone in the group that they connect with. This person would serve as their champion as they move through a more formalized investment process. The background of angel investors in groups and networks can vary to the extreme, and many of them were entrepreneurs at some point in the past. Finding some common group can be a fruitful exercise to build a positive relationship that results in resources for the new startup. This may also take time, which is another reason that entrepreneurs should consider beginning to engage in their own due diligence process before they even need the resource.

No two entrepreneurs are the same, which makes skill generalization difficult. There are certain axioms that are universally mentioned, such as being trustworthy, but that is a prerequisite for many relationships built outside of the investing process. Most state criteria on angel investor websites consist of broad things that angels look for, like a "strong team" or a "competent founder." It is up to the entrepreneur to find out what this really means as they try to raise a round of funding. One angel investors' definition of a strong team may differ from another, so coping with this dynamic situation through socializing from a variety of broad and specific sources is beneficial.

The dynamic and organic nature of entrepreneurial interactions creates another wrench for those that look at the social process through a completely objective lens. The process of anticipatory socialization, combined with entrepreneur due diligence, is meant to function within a dynamic system. Participants are provided the strategies, not a definite, linear progression to success.

Extra analysis on the expectations generated in this study will provide entrepreneurs and angel invests with better understanding of what they are assessing and what matters, especially since many of them are multi-faceted. When the investment decision comes to an individual investor, it is their money, so it is their expectations driving the choice. Business angel networks and groups of angels introduce additional moderating factors and social pressures that may blend existing expectations with that of the group.

**Policy implications.** The implications of this research for policy-makers concerns how various parties in the entrepreneurial ecosystem, from universities to accelerators, help equip entrepreneurs with the right mindset towards raising angel financing. Not every startup is appropriate for angel investing, and this could be a critical component of designing jobs programs for local entrepreneurs interested in starting a firm.

The importance of sources of socialization to the process for entrepreneurs and angel investors provide insights on how government-supported initiatives centered on entrepreneurship should carefully consider information provided to entrepreneurs. Websites, programs, and other media have an impact on the founders who are searching for resources to grow their company.

**Future research directions.** The underlying research performed in this study provides a foundation for additional research in the area. I started this work with an intention to gain a deeper understanding of the due diligence process in order to model it in a more accurate way. Using grounded theory, I narrowed the scope of the investigation to consider the various factors and expectations that angel investors may have for entrepreneurs inside and outside of due diligence. I then connected this to anticipatory socialization and generated a model on how entrepreneurs can utilize anticipatory socialization.

Anticipatory socialization is an under-studied portion of the entrepreneurial condition, with few articles describing the process. Many of the factors that are discussed

in the results of this research may be assessed in a variety of ways, and future researchers may create the necessary experiments and instruments to better describe them in a useful way.

Mapping out various processes in the fundraising domain is critical to developing new exercises and learning devices to help entrepreneurs learn more about the dynamic ecosystem they operate within. Future research may focus on various specific factors to understand them at a deeper level, akin to Melissa Cardon's pivotal research in understanding the various aspects of entrepreneurial passion and emotion.

## Epilogue

I believe I was able to accomplish the goals that I set out to do, especially understanding the dynamic and organic nature of entrepreneurship. I began the study with a positive view on angel investors and completed that study upholding that view. There are many different motivators and personalities amongst angel investors, just as there are with entrepreneurs. Included in those are individuals with altruistic mindsets looking to provide resources to "investable" entrepreneurs and building a relationship with that founder. Building a relationship is dependent on a variety of expectations about values, attitudes, behaviors, and other factors. This is a critical step that many founders, especially novice ones, may overlook.

My study also began with a look at due diligence and the deep dive into a company. Due diligence was supposed to be where the statements provided are verified and a larger look at the company and founding team. When carrying out the study, I found that due diligence is inseparable with prior interactions with entrepreneurs. If first impressions are important and have a carryover effect, naturally a chance meeting months before due diligence may have an impact on the thought process of that angel investor. This would also hold true for other factors within the investor expectations, especially with those that must be proven over time instead of just within one interaction.

I suspect that many entrepreneurs are only receiving generic information about angel investors. This comes from media sources that are overly-prevalent and not necessarily situated in the reality an entrepreneur is operating in. Entrepreneurs viewing a round raise from a longer-term perspective and focusing on relationship-building will give themselves the best opportunities possible to succeed. This work offers a great foundation to begin generating key educational components to assist entrepreneurs and angel investors better the process. I complete this work hopeful that findings about anticipatory socialization can impact entrepreneurs on their journey to build the future.

## References

- Aernoudt, R. (1999). Business angels: should they fly on their own wings?. *Venture Capital: An International Journal of Entrepreneurial Finance*, 1(2), 187-195.
- Allinson, C. W., and Hayes, J. (1996). The cognitive style index: A measure of intuitionanalysis for organizational research. *Journal of Management studies*, 33(1), 119-135.
- Angel Resource Institute (2017). 2016 HALO Report.
- Annett, J. (1969). Feedback and human behaviour: The effects of knowledge of results, incentives and reinforcement on learning and performance.
- Appelbaum, S. H., and Goransson, L. (1997). Transformational and adaptive learning within the learning organization: A framework for research and application. *The learning organization*, 4(3), 115-128.
- Aram, E., and Noble, D. (1999). Educating prospective managers in the complexity of organizational life. *Management learning*, 30(3), 321-342.
- Aram, J. D. (1989). Attitudes and behaviors of informal investors toward early-stage investments, technology-based ventures, and coinvestors. *Journal of Business Venturing*, 4(5), 333-347.

Argyris, C. (1985). Strategy, change and defensive routines. Pitman Publishing.

- Audet, J., and Couteret, P. (2012). Coaching the entrepreneur: features and success factors. *Journal of Small Business and Enterprise Development*, *19*(3), 515-531.
- Azoulay, P., Jones, B., Kim, J. D., and Miranda, J. (2018). *Age and High-Growth Entrepreneurship* (No. w24489). National Bureau of Economic Research.

Average Age of a Successful Startup Founder is 45." Harvard Business Review.

- Bacon, T. R. (2003). Helping people change. *Industrial and Commercial Training*, 35(2), 73-77.
- Balachandra, L., Sapienza, H., and Kim, D. (2014). How critical cues influence angels' investment preferences. *Frontiers of Entrepreneurship Research*, *34*(1), 1.
- Bammens, Y., and Collewaert, V. (2012). Trust between entrepreneurs and angel investors: Exploring positive and negative implications for venture performance assessments. *Journal of Management*, 40(7), 1980-2008.
- Baron, R. A. (2006). Opportunity recognition as pattern recognition: How entrepreneurs "connect the dots" to identify new business opportunities. *The Academy of Management Perspectives*, 20(1), 104-119.
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33(2), 328-340.
- Baron, R. A., and Markman, G. D. (2003). Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing*, 18(1), 41-60.
- Baty, G. B. (1991). Entrepreneurship for the 1990s.
- Baty, G., and Sommer, B. (2002). True then, true now: A 40-year perspective on the early stage investment market. *Venture Capital: An International Journal of Entrepreneurial Finance*, 4(4), 289-293.
- Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., and Tucker, J. S. (2007). Newcomer adjustment during organizational socialization: a meta-analytic review

of antecedents, outcomes, and methods. *Journal of Applied Psychology*, 92(3), 707.

- Bedwell, W. L., Pavlas, D., Heyne, K., Lazzara, E. H., and Salas, E. (2012). Toward a taxonomy linking game attributes to learning: An empirical study. *Simulation and Gaming*, 43(6), 729-760.
- Benjamin, G. A., and Margulis, J. (2000). Angel financing: How to find and invest in private equity (Vol. 75). John Wiley and Sons.
- Benjamin, G. A., and Margulis, J. (2001). The angel investor's handbook. Bloomberg: Princeton, 1-368.
- Ben-Zvi, T. (2010). The efficacy of business simulation games in creating Decision
  Support Systems: An experimental investigation. *Decision Support Systems*, 49(1), 61-69.
- Berger, C. R. (1986). Uncertain outcome values in predicted relationships uncertainty reduction theory then and now. *Human Communication Research*, 13(1), 34-38.
- Berger, P. L., and Luckmann, T. (1979). The social construction of reality: A treatise. Penguin.
- Berger, P. L., and Berger, B. (1979). Becoming a member of society. *Socialization and the Life Cycle*, 4-20.
- Berscheid, E. (1994). Interpersonal relationships. *Annual Review of Psychology*, 45(1), 79-129.
- Bhide, A. (1992). Bootstrap Finance: the art of start-ups. *Harvard Business Review*, 70(6), 109-117.

- Bian, Y. 1997. Bringing strong ties back in: Indirect connection, bridges, and job search in China. American Sociological Review, 62: 355–385.
- Bickman, L., and Rog, D. J. (Eds.). (2008). *The SAGE handbook of applied social research methods*. Sage publications.
- Bierly III, P. E., Kessler, E. H., and Christensen, E. W. (2000). Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management*, 13(6), 595-618.
- Billhardt, B. (2004). The promise of on-line simulations.
- Bird, B. (1986). Entrepreneurial behavior: What do entrepreneurs do? In: Ronstadt, R.,
   Hornaday, J., Peterson, R., and Vesper, K. (Eds.) *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
- Bird, B. J. (1989). Entrepreneurial behaviour. *Engineering Management Journal*, 1(4), 37-40.
- Bird, B. J., and West III, G. P. (1998). Time and entrepreneurship. *Entrepreneurship theory and practice*, *22*(2), 5-9.
- Bird, S. E. (1992). Travels in nowhere land: Ethnography and the "impossible"; audience. *Critical Studies in Media Communication*, *9*(3), 250-260.
- Black, J. S., Mendenhall, M., and Oddou, G. (1991). Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *Academy of Management Review*, 16(2), 291-317.
- Blenker, O., Neergaard, H., Korsgaard, S., and Thrane, C. (2010). Paradigms and progression in entrepreneurship education. In *ISBE Conference*.

- Bloom, B. S. (1956). Taxonomy of educational objectives. Vol. 1: Cognitive domain. New York: McKay, 20-24.
- Bogdan, R. C., and Biklen, S. K. (2006). Qualitative research in (validation) and qualitative (inquiry) studies. *It is a method-appropriate education: An introduction to theory and methods*.
- Bonini, S., Capizzi, V., Valletta, M., and Zocchi, P. (2018). Angel network affiliation and business angels' investment practices. *Journal of Corporate Finance*.
- Boud, D., and Middleton, H. (2003). Learning from others at work: communities of practice and informal learning. *Journal of Workplace Learning*, 15(5), 194-202.
- Box, T. M., Watts, L. R., and 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.
- Brewer, J.D. (2000) Ethnography. Buckingham: Open University Press.
- Brown, S. C., Stevens, R. A., Troiano, P. F., and Schneider, M. K. (2002). Exploring complex phenomena: Grounded theory in student affairs research. *Journal of College Student Development*, 43(2), 173-183.
- Bruner, J. (1986). Actual minds, possible worlds. Cambridge, MA: Harvard University Press.
- Brush, C. G., Edelman, L. F., and Manolova, T. S. (2012). Ready for funding? Entrepreneurial ventures and the pursuit of angel financing. *Venture Capital*, 14(2-3), 111-129.

- Burgoyne, J. G., and Hodgson, V. E. (1983). Natural learning and managerial action: A phenomenological study in the field setting. *Journal of Management Studies*, 20(3), 387-399.
- Burrell, G., and Morgan, G. (1979). Social paradigms and organizational analysis. *Elements of the sociology of corporate life*.
- Butler Jr, J. K. (1999). Trust expectations, information sharing, climate of trust, and negotiation effectiveness and efficiency. *Group and Organization Management*, 24(2), 217-238.
- Butler, J.K. (1991). Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management*, 17(3), 643–663.
- Bygrave, W. D. (2007). The entrepreneurship paradigm (I) revisited. *Handbook of qualitative research methods in entrepreneurship*, 1748.
- Cable, A. J. (2010). Fending for themselves: Why securities regulations should encourage angel groups. U. Pa. J. Bus. L., 13, 107.
- Cannon, H. M., and Feinstein, A. H. (2014). Bloom beyond Bloom: Using the revised taxonomy to develop experiential learning strategies. *Developments in Business Simulation and Experiential Learning*, 32.
- Carcello, J. V., Copeland Jr, J. E., Hermanson, R. H., and Turner, D. H. (1991). A public accounting career: The gap between student expectations and accounting staff experiences. *Accounting Horizons*, 5(3), 1.

- Cardon, M. S., Foo, M. D., Shepherd, D., and Wiklund, J. (2012). Exploring the heart: Entrepreneurial emotion is a hot topic. *Entrepreneurship Theory and Practice*, 36(1), 1-10.
- Cardon, M. S., Sudek, R., and Mitteness, C. (2009). The impact of perceived entrepreneurial passion on angel investing. *Frontiers of Entrepreneurship Research*, 29(2), 1.
- Carpentier, C., and Suret, J.-M. (2015), Canadian business angels perspectives on exit: A research note.
- Carter, R. B., and Van Auken, H. E. (1992). Effect of professional background on venture capital proposal evaluation. *Journal of Small Business Strategy*, 3(1), 45.
- Charmaz, K., 2008. Constructionism and the grounded theory method. In J. A. Holstein and J. F. Gubrium, eds. Handbook of constructionist research. New York: The Guliford Press, pp. 397-412.
- Chell, E. (2007). Social enterprise and entrepreneurship: towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25(1), 5-26.
- Chell, E., and Pittaway, L. A. (1998). The social construction of entrepreneurship.
- Chell, E., (1997), 'The Social Construction of the Entrepreneurial Personality', Paper presented at the British Academy of Management Conference, September, London.
- Chen, X. P., Yao, X., and Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: a persuasion analysis of venture capitalists' funding decisions. *Academy of Management Journal*, 52(1), 199-214.

- Clark, C. (2008). The impact of entrepreneurs' oral 'pitch'presentation skills on business angels' initial screening investment decisions. *Venture Capital*, *10*(3), 257-279.
- Coelho, P. R., and McClure, J. E. (2005). Learning from failure. *American Journal of Business*, 20(1), 1-1.
- Cohen, L., Manion, L., and Morrison, K. (2013). Research methods in education. Routledge.
- Collewaert, V. (2012). Angel investors' and entrepreneurs' intentions to exit their ventures: A conflict perspective. *Entrepreneurship Theory and Practice*, *36*(4), 753-779.
- Collins, A. (1991). The role of computer technology in restructuring schools. *Phi Delta Kappan*, 65-80.
- Collins, O.F., and Moore, D.G. (1964). *The Enterprising Man*. East Lansing, MI: Michigan State University Press.
- Cope, J. (2003). Entrepreneurial learning and critical reflection: Discontinuous events as triggers for 'higher-level' learning. *Management Learning*, 34(4), 429-450.
- Cope, J. (2005). Toward a dynamic learning perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 29(4), 373-397.
- Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing*, 26(6), 604-623.
- Cope, J., and Watts, G. (2000). Learning by doing–an exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behavior and Research*, 6(3), 104-124.

- Cross, B., and Travaglione, A. (2003). The untold story: is the entrepreneur of the 21st century defined by emotional intelligence?. *The International Journal of Organizational Analysis*, 11(3), 221-228.
- Cukier, W., Trenholm, S., Carl, D., and Gekas, G. (2011). Social entrepreneurship: a content analysis. *Journal of Strategic Innovation and Sustainability*, *7*(1), 99-119.
- Dahlberg, K. (2006). The essence of essences-the search for meaning structures in phenomenological analysis of lifeworld phenomena. *International Journal of Qualitative Studies on Health and Well-being*, *1*(1), 11-19.
- Daly, J., Kellehear, A., and Gliksman, M. (1997). The public health researcher: A methodological approach.
- Daly, J., Kellehear, A., Gliksman, M., and Daly, K. G. (1997). *The public health* researcher: A methodological guide (pp. 89-106). Melbourne: Oxford University Press.
- Dasborough, M. T., and Ashkanasy, N. M. (2002). Emotion and attribution of intentionality in leader–member relationships. *The Leadership Quarterly*, 13(5), 615-634.
- Daudelin, M. W. (1997). Learning from experience through reflection. *Organizational Dynamics*, 24(3), 36-48.
- Day, C.(1993)'Reflection: A necessary but not sufficient condition for professional development', *British Educational Research Journal*, 19(1), 83-93.
- De Jong, T., and Ferguson-Hessler, M. G. (1996). Types and qualities of knowledge. *Educational Psychologist*, 31(2), 105-113.

- Deakins, D., and Freel, M. (1998). Entrepreneurial learning and the growth process in SMEs. *The Learning Organization*, 5(3), 144-155.
- DeFillippi, R. J. (2001). Introduction: Project-based learning, reflective practices and learning.
- Denis, D. J. (2004). Entrepreneurial finance: an overview of the issues and evidence. Journal of Corporate Finance, 10(2), 301-326.
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. Routledge.
- Denzin, N. K., and Lincoln, Y. S. (2005). *The Sage handbook of qualitative research*. Sage Publications Ltd.
- Dominguez, J. R. (1974). Venture capital. Lexington Books.
- Douglas, J. D. (2017). Understanding everyday life. In Everyday life (pp. 2-44). Routledge.
- Dubini, P., and Aldrich, H. (1991). Personal and extended networks are central to the entrepreneurial process. *Journal of Business Venturing*, 6(5), 305-313.
- Dyer Jr, W. G. (1994). Toward a theory of entrepreneurial careers. *Entrepreneurship: Theory and Practice*, 19(2), 7-22.
- Dyer, J. H., Gregersen, H. B., and Christensen, C. (2008). Entrepreneur behaviors, opportunity recognition, and the origins of innovative ventures. *Strategic Entrepreneurship Journal*, 2(4), 317-338.
- Edley, N. (2001). Unravelling social constructionism. *Theory and Psychology*, *11*(3), 433-441.

- Elder-Vass, D. (2012). Towards a realist social constructionism. *Sociologia, Problemas e Práticas*, (70), 9-24.
- Fayolle, A., Liñán, F., and Moriano, J. A. (2014). Beyond entrepreneurial intentions: values and motivations in entrepreneurship. *International Entrepreneurship and Management Journal*, 10(4), 679-689.
- Feeney, L., Haines Jr, G. H., and Riding, A. L. (1999). Private investors' investment criteria: insights from qualitative data. *Venture Capital: An International Journal* of Entrepreneurial Finance, 1(2), 121-145.
- Feinstein, A. H., and Cannon, H. M. (2002). Constructs of simulation evaluation. Simulation and Gaming, 33(4), 425-440.
- Feldman, D. C. (1981). The multiple socialization of organization members. Academy of Management Review, 6(2), 309-318.
- Feldman, H. D. (1995). Computer-based simulation games: A viable educational technique for entrepreneurship classes?. *Simulation and Gaming*, 26(3), 346-360.
- Fenn, G. W., and Liang, N. (1998). New resources and new ideas: Private equity for small businesses1. *Journal of Banking and Finance*, 22(6-8), 1077-1084.
- Fereday, J., and Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis:A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-92.
- Fischer, A. K., Freund, J. M., and Crouch, J. H. (1997). Developing the entrepreneurial spirit. *Journal of Entrepreneurship Education*, *1*(1), 18-25.

- Fischer, R. (2006). Congruence and functions of personal and cultural values: do my values reflect my culture's values? *Personality and Social Psychology Bulletin*, 32(11), 1419–1431.
- Fisher, C. D. (1986). Organizational socialization: An integrative review. *Research in Personnel and Human Resources Management*, 4(1), 101-145.
- Fletcher, D. E. (2006). Entrepreneurial processes and the social construction of opportunity. *Entrepreneurship and Regional Development*, *18*(5), 421-440.
- Forbes, D. P. (2005). Are some entrepreneurs more overconfident than others?. *Journal* of Business Venturing, 20(5), 623-640.
- Fox, J., Pittaway, L., and Uzuegbunam, I. (2018). Simulations in Entrepreneurship Education: Serious Games and Learning Through Play. *Entrepreneurship Education and Pedagogy*, 1(1), 61-89.
- Freear, J., Sohl, J. E., and Wetzel Jr, W. E. (1994). Angels and non-angels: are there differences?. *Journal of Business Venturing*, 9(2), 109-123.
- Freear, J., Sohl, J. E., and Wetzel Jr, W. E. (1995). Angels: personal investors in the venture capital market. *Entrepreneurship and Regional Development*, 7(1), 85-94.
- Fried, V. H., and Hisrich, R. D. (1994). Toward a model of venture capital investment decision making. *Financial management*, 28-37.
- Füredi-Fülöp, J. (2017). Factors Leading to Audit Expectation Gap: An Empirical Study in a Hungarian Context. Theory, Methodology, Practice, 13(2), 13.
- Garris, R., Ahlers, R., and Driskell, J. E. (2002). Games, motivation, and learning: A research and practice model. *Simulation and Gaming*, *33*(4), 441-467.

- Garrison, W. A. (1992). The social psychology of collective action. Frontiers in *Social Movement Theory*, 53-76.
- Gartner, W. B. (2001). Is there an elephant in entrepreneurship? Blind assumptions in theory development. *Entrepreneurship Theory and practice*, *25*(4), 27-39.
- Gaston, R. J. (1989). Finding private venture capital for your firm: A complete guide. John Wiley and Sons Inc.
- Gherardi, S., Nicolini, D., and Odella, F. (1998). Toward a social understanding of how people learn in organizations: The notion of situated curriculum. *Management Learning*, 29(3), 273-297.
- Gibb, A. A. (1997). Small firms' training and competitiveness. Building upon the small business as a learning organisation. *International Small Business Journal*, 15(3), 13-29.
- Gioia, D. A., and Pitre, E. (1990). Multiparadigm perspectives on theory building. Academy of Management Review, 15(4), 584-602.
- Glaser, B. G. (1996). Gerund grounded theory. Mill Valley. CA: Sociology.
- Glaser, B., and Strauss, A. (1967). The discovery of grounded theory. London: Weidenfeld and Nicholson, 24(25), 288-304.
- Gold, J., Thorpe, R., and Mumford, A. (2010). Leadership and management development. Kogan Page Publishers.
- Greco, M., Baldissin, N., and Nonino, F. (2013). An exploratory taxonomy of business games. *Simulation and Gaming*, 44(5), 645-682.

- Griffin, A. E., Colella, A., and Goparaju, S. (2000). Newcomer and organizational socialization tactics: An interactionist perspective. *Human Resource Management Review*, 10(4), 453-474.
- Gupta, A. K., and Govindarajan, V. (1994). Organizing for knowledge flows within MNCs. *International Business Review*, 3(4), 443-457.
- Haar, N. E., Starr, J., and MacMillan, I. C. (1988). Informal risk capital investors:
  investment patterns on the East Coast of the USA. *Journal of Business Venturing*, 3(1), 11-29.
- Haines Jr, G. H., Madill, J. J., and Riding, A. L. (2003). Informal investment in Canada: financing small business growth. *Journal of Small Business and Entrepreneurship*, 16(3-4), 13-40.
- Hamilton, D. L., Katz, L. B., and Leirer, V. O. (1980). Cognitive representation of personality impressions: Organizational processes in first impression formation. *Journal of Personality and Social Psychology*, 39(6), 1050.
- Hamilton, E. (2004, November). Socially situated entrepreneurial learning in family business. In Proceedings of the 27th ISBA National Small Firms Policy and Research Conference.
- Handal, G. (1990). Promoting the articulation of tacit knowledge through the counselling of practitioners', Keynote paper at Amsterdam Pedalogisch Centum Conference, Amsterdam, Holland, 6-8 April.
- Harris, M. J., and Garris, C. P. (2008). You never get a second chance to make a first impression: Behavioral consequences of first impressions.

- Harvey, M., and Evans, R. (1995). Strategic windows in the entrepreneurial process. Journal of Business Venturing, 10(5), 331-347.
- Haynie, J. M., and Shepherd, D. (2011). Toward a theory of discontinuous career transition: investigating career transitions necessitated by traumatic life events. *Journal of Applied Psychology*, 96(3), 501.
- Hellmann, T., and Thiele, V. (2015). Friends or foes? The interrelationship between angel and venture capital markets. *Journal of Financial Economics*, 115(3), 639-653.
- Hemingway, C. A. (2005). Personal values as a catalyst for corporate social entrepreneurship. *Journal of Business Ethics*, 60(3), 233-249.
- Hense, J., Kriz, W. C., and Wolfe, J. (2009). Putting theory-oriented evaluation into practice: A logic model approach for evaluating SIMGAME. *Simulation and Gaming*, 40(1), 110-133.
- Hill, B. E., and Power, D. (2002a). Inside secrets to venture capital. John Wiley and Sons.
- Hill, B. E., and Power, D. (2002b). Attracting capital from angels: How their money-and their experience-can help you build a successful company. John Wiley and Sons.
- Hindle, K. (2002). A grounded theory for teaching entrepreneurship using simulation games. *Simulation and Gaming*, 33(2), 236-241.
- Hisrich, R. D., and Jankowicz, A. D. (1990). Intuition in venture capital decisions: An exploratory study using a new technique. *Journal of Business Venturing*, 5(1), 49-62.
- Hmieleski, K.M. and J.C. Carr. (2008). The relationship between entrepreneur psychological capital and new venture performance. 28(4), Article 1.

- Hoehn-Weiss, M. N., Brush, C. G., and Baron, R. A. (2004). Putting your best foot forward? Assessments of entrepreneurial social competence from two perspectives. *The Journal of Private Equity*, 17-26.
- Holman, D., Pavlica, K., and Thorpe, R. (1996). Rethinking Kolb's theory of experiential learning: The contribution of social construction and activity theory. *Management Learning*, 4(24), 485-504.
- Hsu, D. H. (2007). Experienced entrepreneurial founders, organizational capital, and venture capital funding. *Research Policy*, *36*(5), 722-741.
- Hsu, D. K., Haynie, J. M., Simmons, S. A., and McKelvie, A. (2014). What matters, matters differently: a conjoint analysis of the decision policies of angel and venture capital investors. *Venture Capital*, 16(1), 1-25.
- Huang, L., and Pearce, J. L. (2015). Managing the unknowable: The effectiveness of early-stage investor gut feel in entrepreneurial investment decisions. *Administrative Science Quarterly*, 60(4), 634-670.
- Hurry, D., Miller, A. T., and Bowman, E. H. (1992). Calls on high-technology: Japanese exploration of venture capital investments in the United States. *Strategic Management Journal*, 13(2), 85-101.
- Ibrahim, D. M. (2008). The (not so) puzzling behavior of angel investors. *Vanderbilt Law Review*, 61, 1405.
- Isabella, L. A. (1990). Evolving interpretations as a change unfolds: How managers construe key organizational events. *Academy of Management Journal*, 33(1), 7-41.

- Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, 8(4), 49-62.
- Jablin, F. M. (2001). Organizational entry, assimilation, and disengagement/exit. In F.
  Jablin, and L. Putnam (Eds.), The new handbook of organizational communication: Advances in theory, research, and methods (pp. 732–818).
  Thousand Oaks, CA: Sage.
- Jensen, M. (2002). Angel investors: opportunity amidst chaos. *Venture Capital: an International Journal of Entrepreneurial Finance*, 4(4), 295-304.
- Jeraj, M. (2012). TOWARD THE NEW CONSTRUCT; ENTREPRENEURIAL CURIOSITY. Interdisciplinary Management Research, 8.
- Jonassen, D. H., Tessmer, M., and Hannum, W. H. (1998). *Task analysis methods for instructional design*. Routledge.
- Jones, O., Macpherson, A., and Thorpe, R. (2010). Learning in owner-managed small firms: Mediating artefacts and strategic space. *Entrepreneurship and Regional Development*, 22(7-8), 649-673.
- Jonsen, K., and Jehn, K. A. (2009). Using triangulation to validate themes in qualitative studies. *Qualitative Research in Organizations and Management: An International Journal*, 4(2), 123-150.
- Katz, J. H., and Miller, F. A. (1996). Coaching leaders through culture change. *Consulting Psychology Journal: Practice and Research*, 48(2), 104.
- Katz, R. L. (1974). Skills of an effective administrator. Harvard Business Review Press.

- Kerr, W. R., Lerner, J., and Schoar, A. (2011). The consequences of entrepreneurial finance: Evidence from angel financings. *The Review of Financial Studies*, 27(1), 20-55.
- Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research*, 48(2), 134.
- Kirton, M. (1976). Adaptors and innovators: A description and measure. *Journal of Applied Psychology*, 61(5), 622.
- Kirton, M. J. (2003). Adaption and innovation in the context of diversity and change Routledge.
- Klabbers, J. H. (1999). Three easy pieces: A taxonomy on gaming. *International Simulation and Gaming Research Yearbook*, 7, 16-33.
- Kleiner, A., and Roth, G. (1997). How to make experience your company's best teacher. *Harvard Business Review*, 75(5), 172-177.

Kofman, F. (1994). Double-loop accounting. The Fifth Discipline Fieldbook, 286.

Kolb, D. (1984). Experiential learning as the science of learning and development.

- Kolb, S. M. (2012). Grounded theory and the constant comparative method: Valid research strategies for educators. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(1), 83.
- Krathwohl, D. R., and Anderson, L. W. (2010). Merlin C. Wittrock and the revision of Bloom's Taxonomy. *Educational Psychologist*, 45(1), 64-65.

- Kriger, M. P., and Hanson, B. J. (1999). A value-based paradigm for creating truly healthy organizations. *Journal of Organizational Change Management*, 12(4), 302-317.
- Kriz, W. C. (1998). Training of systems-competence with gaming/simulation. Gaming/simulation for policy development and organizational change. Tilburg University Press, Tilburg, 287-294.
- Kriz, W. C. (2003). Creating effective learning environments and learning organizations through gaming simulation design. *Simulation and Gaming*, 34(4), 495-511.
- Kriz, W. C., and Auchter, E. (2016). 10 Years of Evaluation Research Into Gaming Simulation for German Entrepreneurship and a New Study on Its Long-Term Effects. *Simulation and Gaming*, 47(2), 179-205.
- Landström, H. (1998). Informal investors as entrepreneurs: Decision-making criteria used by informal investors in their assessment of new investment proposals. *Technovation*, 18(5), 321-333.
- Lange, J., Leleux, B., and Surlemont, B. (2003). Angel networks for the 21st century: An examination of practices of leading networks in Europe and the US. *The Journal of Private Equity*, 18-28.
- Larson, A., and Starr, J. A. (1993). A network model of organization formation. *Entrepreneurship Theory and Practice*, *17*(2), 5-15.
- Lazarsfeld, P. F., and Merton, R. K. (1972). A professional school for training in social research. *Qualitative Analysis: Historical and Critical Essays*, 361-391.

- Levie, J. and Gimmon, E. (2008). Mixed signals: Why investors may misjudge first time high technology venture founders. *Venture Capital*, 10(3), 233–256.
- Lewicki, R. J., Tomlinson, E. C., and Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management*, 32(6), 991-1022.
- Liggio, C. (1974). The expectation gap: the accountant's Waterloo. *Journal of Contemporary Business*, 3(Spring), 27-44.
- Lincoln, Y. S., and Denzin, N. K. (Eds.). (2003). *Turning points in qualitative research: Tying knots in a handkerchief*. Rowman Altamira.
- Linde, L., Prasad, A., Morse, K. P., Utterback, M., Stevenson, H., and Roberts, M. (2000). Venture support systems project: angel investors. Unpublished manuscript, MIT Entrepreneurship Center.
- Lomborg, K., and Kirkevold, M. (2003). Truth and validity in grounded theory–a reconsidered realist interpretation of the criteria: fit, work, relevance and modifiability. *Nursing Philosophy*, *4*(3), 189-200.
- Louis, M. R. (1980). Surprise and sense making: What newcomers experience in entering unfamiliar organizational settings. *Administrative Science Quarterly*, 226-251.
- Low, M., Venkataraman, S., and Srivatsan, V. (1994). Developing an entrepreneurship game for teaching and research. *Simulation and Gaming*, 25(3), 383-401.
- MacDonald M. and Schrieber R.S. (2001) Constructing and deconstructing: grounded theory in postmodern world. In: Using Grounded Theory in Nursing (eds S.R. Schreiber and P.N. Stern), pp. 35–53. Springer Publishing Company, New York.

- MacMillan, I. C., Siegel, R., and Narasimha, P. S. (1985). Criteria used by venture capitalists to evaluate new venture proposals. *Journal of Business Venturing*, 1(1), 119-128.
- Madill, J. J., Haines, Jr, G. H., and RIding, A. L. (2005). The role of angels in technology SMEs: A link to venture capital. *Venture Capital*, 7(2), 107-129.
- Mäkelä, M. M., and Turcan, R. V. (2007). Building grounded theory in entrepreneurship research. Handbook of Qualitative Research Methods in Entrepreneurship. Edward Elgar Publishing, 122-143.
- Makhbul, Z. M., and Hasun, F. M. (2010). Entrepreneurial success: An exploratory study among entrepreneurs. *International Journal of Business and Management*, 6(1), 116.
- Markman, G. D., and Baron, R. A. (2003). Person–entrepreneurship fit: why some people are more successful as entrepreneurs than others. *Human Resource Management Review*, *13*(2), 281-301.
- Marsick, V. J., and O'Neil, J. (1999). The many faces of action learning. *Management Learning*, 30(2), 159-176.
- Mason, C. M., and Harrison, R. T. (1997). Business angels in the UK: a response to Stevenson and Coveney. *International Small Business Journal*, 15(2), 83-90.
- Mason, C. M., and Harrison, R. T. (2001). 'Investment readiness': A critique of government proposals to increase the demand for venture capital. *Regional Studies*, 35(7), 663-668.

- Mason, C. M., and Harrison, R. T. (2003). "Auditioning for Money": What Do Technology Investors Look for at the Initial Screening Stage?. *The Journal of Private Equity*, 29-42.
- Mason, C. M., and Harrison, R. T. (2008). Measuring business angel investment activity in the United Kingdom: a review of potential data sources. *Venture Capital*, 10(4), 309-330.
- Mason, C. M., and Botelho, T. (2017). Comparing the Initial Screening of Investment Opportunities by Business Angel Group Gatekeepers and Individual Angels.
- Mason, C. M., and Harrison, R. T. (2002). Is it worth it? The rates of return from informal venture capital investments. *Journal of Business Venturing*, 17(3), 211-236.
- Mason, C., and Botelho, T. (2014). The 2014 survey of business angel investing in the UK: A changing market place. Glasgow: Adam Smith Business School.
- Mason, C., and Botelho, T. (2016). The role of the exit in the initial screening of investment opportunities: The case of business angel syndicate gatekeepers. *International Small Business Journal*, 34(2), 157-175.
- Mason, C., and Harrison, R. (1996). Why'business angels' say no: a case study of opportunities rejected by an informal investor syndicate. *International Small Business Journal*, 14(2), 35-51.
- Mason, C., and Stark, M. (2004). What do investors look for in a business plan? A comparison of the investment criteria of bankers, venture capitalists and business angels. *International Small Business Journal*, 22(3), 227-248.

- Mason, C., and Stark, M. (2004). What do investors look for in a business plan? A comparison of the investment criteria of bankers, venture capitalists and business angels. *International Small Business Journal*, *22*(3), 227-248.
- Mason, C., and Rogers, A. (1996). Understanding the business angel's investment decision. Univ. Southampton, Department of Geography.
- Mason, C., and Rogers, A. (1997). The business angel's investment decision: An exploratory analysis. In National Small Firms Policy and Research Conference (pp. 29-46). CRANFIELD SCHOOL OF MANAGEMENT.
- Mason, C., and Stark, M. (2004). What do investors look for in a business plan? A comparison of the investment criteria of bankers, venture capitalists and business angels. *International Small Business Journal*, 22(3), 227-248.
- Mason, C., Botelho, T., and Harrison, R. (2016). The transformation of the business angel market: empirical evidence and research implications. *Venture Capital*, 18(4), 321-344.
- Maxwell, A. (2016). Investment decision-making by business angels. *Handbook of Research on Business Angels*. Cheltenham, UK: Edward Elgar, 115-146.
- Maxwell, A. L., and Lévesque, M. (2014). Trustworthiness: A critical ingredient for entrepreneurs seeking investors. *Entrepreneurship Theory and Practice*, 38(5), 1057-1080.
- Maxwell, A. L., Jeffrey, S. A., and Lévesque, M. (2011). Business angel early stage decision making. *Journal of Business Venturing*, *26*(2), 212-225.

- McGrath, R. G., and MacMillan, I. (2000). *The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in an Age of Uncertainty*. Harvard Business Press.
- McLaughlin, H., and Thorpe, R. (1993). Action Learning-A Paradigm in Emergence: the Problems Facing a Challenge to Traditional Management Education and Development. British *Journal of Management*, 4(1), 19-27.
- Meglino, B. M., and Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, *24*(3), 351-389.
- Merleau-Ponty, M. (2013). Phenomenology of perception. Routledge.
- Merton, R. K., and Kitt, A. S. (1950). Contributions to the theory of reference group behavior. *Continuities in Social Research*, 40-105.
- Mezirow, J. (1991). Transformative dimensions of adult learning. Jossey-Bass, 350 Sansome Street, San Francisco, CA 94104-1310.
- Minniti, M., and Bygrave, W. (2001). A dynamic model of entrepreneurial learning. *Entrepreneurship: Theory and Practice*, 25(3), 5-5.
- Mitteness, C. R., Baucus, M. S., and Sudek, R. (2012). Horse vs. jockey? How stage of funding process and industry experience affect the evaluations of angel investors. *Venture Capital*, 14(4), 241-267.
- Mitteness, C., Sudek, R., and Cardon, M. S. (2012b). Angel investor characteristics that determine whether perceived passion leads to higher evaluations of funding potential. *Journal of Business Venturing*, 27(5), 592-606.

- Mole, K. F., and Mole, M. (2010). Entrepreneurship as the structuration of individual and opportunity: A response using a critical realist perspective: Comment on Sarason, Dean and Dillard. *Journal of Business Venturing*, 25(2), 230-237.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1-16.
- Moore, D. R., and Hsiao, E. L. (2012). Concept learning and the limitations of arcadestyle games. *International Journal of Game-Based Learning (IJGBL)*, 2(3), 1-10.
- Morrison, E. W. (1995). Information usefulness and acquisition during organizational encounter. *Management Communication Quarterly*, 9(2), 131-155.
- Morrissette, S. G. (2007). A profile of angel investors. *The Journal of Private Equity*, 10(3), 52-66.
- Moustakas, C. (1994). Phenomenological research methods. Sage.
- Muljadi, P. (2005). Community. Paul Mujadi.
- Mumford, A. (1994) 'A Review of Action Learning Literature', *Management Bibliographies and Reviews*, 11 (2).
- Murnieks, C. Y., Sudek, R., and Wiltbank, R. (2015). The role of personality in angel investing. *The International Journal of Entrepreneurship and Innovation*, 16(1), 19-31.
- Navis, C., and Glynn, M. A. (2011). Legitimate distinctiveness and the entrepreneurial identity: Influence on investor judgments of new venture plausibility. *Academy of Management Review*, 36(3), 479-499.

Neergaard, H., and Ulhøi, J. P. (Eds.). (2007). Handbook of qualitative research methods in entrepreneurship. Edward Elgar Publishing.

Northwestern Mutual Life Insurance Company (1985). What's your E.Q.?

- O'Neil, I., and Ucbasaran, D. (2010). Individual identity and sustainable entrepreneurship: The role of authenticity. In *London: Institute of Small Business and Entrepreneurship Conference*.
- O'Neil, I., and Ucbasaran, D. (2016). Balancing "what matters to me" with "what matters to them": Exploring the legitimation process of environmental entrepreneurs. *Journal of Business Venturing*, *31*(2), 133-152.
- Ostroff, C., and Kozlowski, S. W. (1992). Organizational socialization as a learning process: The role of information acquisition. *Personnel Psychology*, 45(4), 849-874.
- Page West III, G., and Dale Meyer, G. (1997). Communicated knowledge as a learning foundation. *The International Journal of Organizational Analysis*, 5(1), 25-58.
- Patton, M. (2002). Qualitative research and evaluation methods (3rd ed.). Thousand Oaks, CA: Sage.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.
- Paul, S., Whittam, G., and Wyper, J. (2007). Towards a model of the business angel investment process. *Venture Capital*, 9(2), 107-125.

- Paulson, S. K., and Eugene Baker III, H. (1999). An experiential approach to facilitate anticipatory socialization. *The International Journal of Organizational Analysis*, 7(4), 365-378.
- Payne, W. H., and Macarty, M. J. (2002). The anatomy of an angel investing network: Tech Coast Angels. *Venture Capital: An International Journal of Entrepreneurial Finance*, 4(4), 331-336.
- Pedler, M., and Aspinwall, K. (1996). Perfect plc?: The purpose and practice of organizational learning. McGraw-Hill.
- Pegden, C. D., Sadowski, R. P., and Shannon, R. E. (1995). Introduction to simulation using SIMAN. McGraw-Hill, Inc..
- Pellegrino, J., and Scott, A. (2004, December). The transition from simulation to gamebased learning. In *The Interservice/Industry Training, Simulation and Education Conference (I/ITSEC), NTSA.*
- Pittaway, L. A. (2000). The social construction of entrepreneurial behaviour.
- Pittaway, L., and Tunstall, R. (2016). Examining paradigms in historical entrepreneurship research. *Challenging Entrepreneurship Research*.
- Pittaway, L., and Cope, J. (2007). Entrepreneurship education: a systematic review of the evidence. *International Small Business Journal*, 25(5), 479-510.
- Pittaway, L., and Thorpe, R. (2012). A framework for entrepreneurial learning: A tribute to Jason Cope. *Entrepreneurship and Regional Development*, 24(9-10), 837-859.

- Pittaway, L., Rodriguez-Falcon, E., Aiyegbayo, O., and King, A. (2011). The role of entrepreneurship clubs and societies in entrepreneurial learning. *International Small Business Journal*, 29(1), 37-57.
- Politis, D. (2005). The process of entrepreneurial learning: A conceptual framework. *Entrepreneurship Theory and Practice*, 29(4), 399-424.
- Politis, D. (2008). Business angels and value added: what do we know and where do we go?. *Venture Capital*, 10(2), 127-147.
- Politis, D., and Gabrielsson, J. (2015). Modes of learning and entrepreneurial knowledge. *International Journal of Innovation and Learning*, 18(1), 101-122.
- Pollack, J. M., and Bosse, D. A. (2014). When do investors forgive entrepreneurs for lying?. *Journal of Business Venturing*, *29*(6), 741-754.
- Porter, M., and Spriggs, M. (2013). Informal private equity investment networks: the role of the nexus angel. *The Journal of Private Equity*, 48-56.
- Powers, W. T. (1973). Feedback: beyond behaviorism. Science, 179(4071), 351-356.
- Prensky, M. (2001). Fun, play and games: What makes games engaging. *Digital Game-Based Learning*, 5, 1-05.
- Rae, D. (2000). Understanding entrepreneurial learning: a question of how?.*International Journal of Entrepreneurial Behavior and Research*, 6(3), 145-159.
- Rae, D. (2002). A Narrative Study of Entrepreneurial Learning in Independently Owned
   Media Businesses. *The International Journal of Entrepreneurship and Innovation*, 3(1), 53-59.

- Raelin, J. A. (1997). A model of work-based learning. Organization Science, 8(6), 563-578.
- Rafaeli, A., and Sutton, R. I. (1987). Expression of emotion as part of the work role. *Academy of Management Review*, *12*(1), 23-37.
- Reuber, A. R., and Fischer, E. (1999). Understanding the consequences of founders' experience. Journal of Small Business Management, 37(2), 30.
- Reuber, A. R., and Fischer, E. M. (1993). The learning experiences of entrepreneurs. Frontiers of Entrepreneurship Research, 234.
- Reynolds, M. (1999). Critical reflection and management education: Rehabilitating less hierarchical approaches. *Journal of Management Education*, 23(5), 537-553.
- Rice, P. L., and Ezzy, D. (1999). Qualitative research methods: A health focus. *Melbourne, Australia*.
- Riding, A., Dal Cin, P., Duxbury, L., Haines, G., and Safrata, R. (1993) Informal Investors in Canada: the Identification of Salient Characteristics, Ottawa: Carleton University.
- Riding, R., and Rayner, S. (2013). Cognitive styles and learning strategies: Understanding style differences in learning and behavior. Routledge.
- Roach, G. (2010). Is angel investing worth the effort? A study of Keiretsu Forum. *Venture Capital*, 12(2), 153-166.
- Robb, A. M., and Robinson, D. T. (2014). The capital structure decisions of new firms. *The Review of Financial Studies*, 27(1), 153-179.

- Sadler-Smith, E., and Badger, B. (1998). Cognitive style, learning and innovation. *Technology Analysis and Strategic Management*, 10(2), 247-266.
- Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of management Review*, 26(2), 243-263.
- Schön, D. (1983). The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books. Paperback ed. Aldershot, UK: Arena/Ashgate Publishing, 1995.
- Schumacher K.L. and Gortner S.R. (1992) (Mis)conceptions and reconceptions about traditional science. *Advances in Nursing Science*, 14(4), 1–11.
- Schutz, A. (1967). *The phenomenology of the social world*. Northwestern University Press.
- Schwandt, T. A. (2000). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics, and social constructionism. *Handbook of qualitative research*, *2*, 189-213.
- Schwartz, S. H. (2011). Studying values: personal adventure, future directions. Journal of Cross-Cultural Psychology, 42(2), 307–319.

Securities Exchange Commission (1933). Section 4(a)(2), Rule 506 Regulation D.

- Shackle, G. L. S. (1955). Business men on business decisions. *Scottish Journal of Political Economy*, 2(3), 32-42.
- Shackle, G. L. S. (1979). Imagination and the Nature of Choice. Columbia University Press.

- Shane, S. (2008). Fool's Gold?: The truth behind angel investing in America. Oxford University Press.
- Shaw, R., Turvey, M.T., and Mace, W. (1982). Ecological psychology: The consequence of commitment to realism. In W.B. Weimer and D.S. Palermo (Eds.), *Cognition and the Symbolic Processes*, 2, p. 159-226). Hillsdale, NJ: Lawrence Erlbaum.
- Shepherd, D. A. (2003). Learning from business failure: Propositions of grief recovery for the self-employed. *Academy of Management Review*, 28(2), 318-328.
- Singh, S., Corner, P., and Pavlovich, K. (2007). Coping with entrepreneurial failure. Journal of Management and Organization, 13(4), 331-344.
- Slovic, P., Finucane, M., Peters, E., and MacGregor, D. G. (2002). Rational actors or rational fools: Implications of the affect heuristic for behavioral economics. *The Journal of Socio-Economics*, 31(4), 329-342.
- Smith, D. J., Harrison, R. T., and Mason, C. M. (2010). Experience, heuristics and learning: The angel investment process. *Frontiers of Entrepreneurship Research*, 30(2), 3.
- Smith, R. (2006). Understanding the entrepreneur as socially constructed (Doctoral dissertation, Robert Gordon University).
- Snow, C. C. (1976). A comment on business policy teaching research. Academy of Management Review, 1(4), 133-135.
- Sohl, J., and Sommer, B. (2002). Angel investment activity: bracing for the downdraft. *Frontiers of Entrepreneurship Research*.

- Stajduhar K.I., Balneaves L. and Thorne S.E. (2001) A case for the 'middle ground': exploring the tensions of postmodern thought in nursing. *Nursing Philosophy*, 2(1), 72–82
- Starks, H., and Brown Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, 17(10), 1372-1380.
- Starr, J. A., and Fondas, N. (1992). A model of entrepreneurial socialization and organization formation. *Entrepreneurship Theory and Practice*, 17(1), 67-76.
- Stedler, H., and Peters, H. H. (2003). Business angels in Germany: an empirical study. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5(3), 269-276.
- Sternberg, R. J. (2004). Successful intelligence as a basis for entrepreneurship. Journal of Business Venturing, 19(2), 189-201.
- Stott, N. (2010, September). Anticipating military work; digital games as a source of anticipatory socialization. In British International Studies Association American Foreign Policy Conference, University of Leeds, UK.
- Strauss, A. L. (1987). Qualitative analysis for social scientists. Cambridge University Press.

Strauss, A., and Corbin, J. (1998). Basics of qualitative research. 1998. Thousand Oaks.

Streufert, S., and Nogami, G. Y. (1989). Cognitive style and complexity: Implications for I/O psychology.

Suddaby, R. (2006). From the editors: What grounded theory is not.

- Sudek, R. (2006). Angel investment criteria. Journal of Small Business Strategy, 17(2), 89.
- Sudek, R. (2007). Investigating the angel funding process: How entrepreneur enthusiasm, trustworthiness and venture attributes affect angel investment decision processes (Vol. 68, No. 07).
- Sullivan, M. K. (1991). Entrepreneurs as informal investors: Are there distinguishing characteristics. Frontiers of Entrepreneurship Research, 15, 456-467.
- Sullivan, M. K., and Miller, A. (1990). Applying theory of finance to informal risk capital research: Promise and problems. Frontiers of Entrepreneurship Research, 14, 296-310.
- Susi, T., Johannesson, M., and Backlund, P. (2007). Serious games: An overview.
- Suzuki, S. (1970). Zen Mind, Beginner's Mind. Weatherhill: New York, NY.
- Symon, G., and Cassell, C. (1998). Qualitative methods and analysis in organizational research. *A Practical Guide. London/Thousand Oaks/New Delhi.*
- Taleb, N. (2012). Antifragile: Things that Gain from Disorder. Random House.
- Taleb, N. N. (2016). *The bed of Procrustes: Philosophical and practical aphorisms*.Random House Trade Paperbacks.
- Taleb, N. N. (2018). Skin in the Game: Hidden Asymmetries in Daily Life. Random House.
- Taylor, D. W., and Thorpe, R. (2004). Entrepreneurial learning: a process of coparticipation. *Journal of Small Business and Enterprise Development*, 11(2), 203-211.

- Taylor, M., and Kent, M. L. (2010). Anticipatory socialization in the use of social media in public relations: A content analysis of PRSA's Public Relations Tactics. Public Relations Review, 36(3), 207-214.
- Taylor, R. (1990). Interpretation of the correlation coefficient: a basic review. Journal of Diagnostic Medical Sonography, 6(1), 35-39.
- Thompson, J., and Downing, R. (2007). The entrepreneur enabler: identifying and supporting those with potential. *Journal of Small Business and Enterprise Development*, 14(3), 528-544.
- Timmons, J. A. (1990). New business opportunities: getting to the right place at the right time. Brick House Pub Co.
- Timmons, J., and Spinelli, S. (2004). New venture strategies: Entrepreneurship for the 21st century. *Burr Ridge, IL: Irwin-McGraw-Hill Publishers*.
- Tyebjee, T. T., and Bruno, A. V. (1984). A model of venture capitalist investment activity. *Management Science*, 30(9), 1051-1066.
- Ucbasaran, D., Shepherd, D. A., Lockett, A., and Lyon, S. J. (2013). Life after business failure: The process and consequences of business failure for entrepreneurs. *Journal of Management*, 39(1), 163-202.
- Ucbasaran, D., Westhead, P., Wright, M., and Flores, M. (2010). The nature of entrepreneurial experience, business failure and comparative optimism. *Journal of Business Venturing*, 25(6), 541-555.
- Van Osnabrugge, M. (1998). Comparison of business angels and venture capitalists: Financiers of Entrepreneurial Firms. British Venture Capital Association.

- Van Osnabrugge, M. (2000). A comparison of business angel and venture capitalist investment procedures: an agency theory-based analysis. *Venture Capital: An International Journal of Entrepreneurial Finance*, 2(2), 91-109.
- Van Osnabrugge, M., and Robinson, R. J. (2000). Angel Investing: Matching Startup Funds with Startup Companies--The Guide for Entrepreneurs and Individual Investors. John Wiley and Sons.
- Vogel, J. J., Vogel, D. S., Cannon-Bowers, J., Bowers, C. A., Muse, K., and Wright, M. (2006). Computer gaming and interactive simulations for learning: A metaanalysis. *Journal of Educational Computing Research*, 34(3), 229-243.
- Wagner, C., and Ip, R. K. (2009). Action learning with Second Life-A pilot study. Journal of Information Systems Education, 20(2), 249.
- Wakkee, I. A. M. (2004). Starting global, an entrepreneurship-in-networks approach.
- Watson, J., and Everett, J. E. (1996). Do small businesses have high failure rates?. Journal of Small Business Management, 34(4), 45.
- Wayne, S. J., and Kacmar, K. M. (1991). The effects of impression management on the performance appraisal process. Organizational Behavior and Human Decision Processes, 48(1), 70-88.
- Weick, K. E. (1969). Laboratory organizations and unnoticed causes. Administrative Science Quarterly, 14(2), 294-303.
- Weick, K. E. (1995). Sensemaking in organizations (Vol. 3). Sage.
- Wenger, E. (1991). Communities of practice: where learning happens. Benchmark, Fall, 6-8.

- Whitener, E. M., Brodt, S. E., Korsgaard, M. A., and Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of Management Review*, 23(3), 513-530.
- Wilson, K. A., Bedwell, W. L., Lazzara, E. H., Salas, E., Burke, C. S., Estock, J. L., ... and Conkey, C. (2009). Relationships between game attributes and learning outcomes: Review and research proposals. *Simulation and Gaming*, 40(2), 217-266.
- Wiltbank, R. (2005). Investment practices and outcomes of informal venture investors. *Venture Capital*, 7(4), 343-357.
- Wiltbank, R., Sudek, R., and Read, S. (2009). The role of prediction in new venture investing. *Frontiers of Entrepreneurship Research*, 29(2), 3.
- Wittrock, M. C. (1974). Learning as a generative process 1. *Educational psychologist*, 11(2), 87-95.
- Wittrock, M. C. (1989). Generative processes of comprehension. *Educational psychologist*, 24(4), 345-376.
- Wolfe, C. S. (2018). *Co-existence of Traditional and Online Schools as Experienced by Principals in Rural Appalachian Ohio* (Doctoral dissertation, Ohio University).
- Wolfe, J., and Chanin, M. (1993). The integration of functional and strategic management skills in a business game learning environment. *Simulation and Gaming*, 24(1), 34-46.

- Wong, A., Bhatia, M., and Freeman, Z. (2009). Angel finance: the other venture capital. *Strategic Change*, 18(7-8), 221-230.
- Wood, M. S., and McKinley, W. (2010). The production of entrepreneurial opportunity: a constructivist perspective. *Strategic Entrepreneurship Journal*, 4(1), 66-84.
- Young, A. M., and Perrewe, P. L. (2000). What did you expect? An examination of career-related support and social support among mentors and protégés. *Journal of Management*, 26(4), 611-632.
- Young, J. E., and Sexton, D. L. (1997). Entrepreneurial learning: a conceptual framework. *Journal of Enterprising Culture*, 5(03), 223-248.
- Young, M. F. (1993). Instructional design for situated learning. *Educational Technology Research and Development*, 41(1), 43-58.
- Zacharakis, A. L., McMullen, J. S., and Shepherd, D. A. 2007. Venture capitalists' decision policies across three countries: An institutional theory perspective. *Journal of International Business Studies*, 38: 691–708.
- Zacharakis, A. L., Meyer, G. D., and DeCastro, J. (1999). Differing perceptions of new venture failure: a matched exploratory study of venture capitalists and entrepreneurs. *Journal of Small Business Management*, 37(3), 1.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35(2), 151.
- Zhang, M., Macpherson, A., and Jones, O. (2006). Conceptualizing the learning process in SMEs: improving innovation through external orientation. *International Small Business Journal*, 24(3), 299-323.

Zorn, T.E. (2001) Lecture Notes on Ethnography (unpublished), Hamilton, NZ: B.
Johnstone. In *Handbook of qualitative research methods in entrepreneurship* (2007), eds. Neergaard, H., and Ulhøi, J. P. Edward Elgar Publishing.

Knowledge				
Dimension				
	Remember	Understand	Analyze	Create
Factual	Remember some of the			
Knowledge	most common business			
	models in use today.			
Conceptual		Understand how		
Knowledge		startup		
		companies use		
		SEC Rule 506 to		
		receive angel		
		investing.		
Procedural				Create the
Knowledge				documents
				necessary to submit
				for the initial
				screening of an
				angel investor.
Meta-			Analyze	
cognitive			whether a	
knowledge			founder is	
			sincere in	
			his	
			presentation.	

## Appendix A: Revised Taxonomy of Educational Objectives with Examples

## **Appendix B: General Interview Questions**

- What is your professional background?
- How did you get started with angel investing (entrepreneurship)?
- Do you invest individually or as a group? (angels only)
- What was the onboarding process for angel investing like? (angels only)
- What is your role in the due diligence process? (angels only)
- What are you overall feelings on the due diligence process?
- What do you think are general expectations entrepreneurs have as they prepare to engage with angel investors?
- What are some misconceptions entrepreneurs have about angel investors?
- What are some of the values entrepreneurs think are valuable to angel investors?
- What are some of the norms entrepreneurs think are valuable to angel investors?
- What are some of the behaviors entrepreneurs think are valuable to angel investors?
- What are some of the attitudes entrepreneurs think are valuable to angel investors?
- How do you feel most entrepreneurs get their information about angel investors?



Thesis and Dissertation Services