

Don't Worry About a Thing: The Entrepreneurial Attitude

Master degree project in Knowledge-based Entrepreneurship

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Don't Worry About a Thing: The Entrepreneurial Attitude

- A multiple case study

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Abstract

In regards to the method, two types of strategies have been considered: qualitative and quantitative. However, the lack of research in the field makes it a strong argument to choose the qualitative study. Additionally, the inductive approach has been selected as well as a multiple case study. Entrepreneurship and entrepreneurial practices as research fields emerged from Schumpeter's theory of economic development in 1934. He stated that entrepreneurs are the drivers of the economy and that there is a link between personality traits and entrepreneurial behaviors. However, new studies suggest that the connection is indirect, and the moderators of conduct are in between those two factors. Surprisingly, the latest reviews about moderators and project failure have a study in common, which is Ajzen's papers and his theory of plan behaviors. He found that attitude, intentions, and motivation could predict behaviors in general.

Thus, we tested three theories in the context of project failure and five moderators have been included: alertness, creativity, attitude, intentions, and motivation. The first two moderators do not influence entrepreneurial behaviors. Contrasting, the following three moderators have a substantial effect on entrepreneurial activities. Within the attitude, intentions, and motivation, it was found that three endogenous factors influenced entrepreneurial behaviors. It is also suggested to consider the emotions as one more moderator and the grief as an endogenous factor for that moderator.

Keywords: project failure, entrepreneurial behavior, moderator, emotional intelligence

Acknowledgment:

In retrospect, the previous years were cognitively challenged; however, it was not as tough as the emotional challenges. Thus, I would like to acknowledge the importance of motivation in this journey. Furthermore, I want to express my most sincere gratitude to my supervisor Ryan Rumble for his genuine interest in helping me and the interviewees for their time and effort. Also, I would like to thank the University of Gothenburg, but especially my most profound appreciation to the people that were behind the scenes.

Christian Ricardo Vera Murillo

Definitions

Project: The term ‘project’ refers to the development of a new product or service.

Project failure: This term could mean many things. However, for the sake of the research, it was decided to use the term from the project management literature. Which the following quote clarified as: “If I took a very simplistic approach I would suggest that project failure would be not completing on time, not making the required profit margin and not to the desired quality, as simple as that” Sage et al. (2013, p.547)

Entrepreneurial behaviors: The term means the activities of a person as the founder of a company concerning the construction of the company, but not concerning the management activities.

Moderators: There is a degree of uncertainty around the terminology since it is not typically used (Valkmann, 2012). However, in the present study it is defined as the moderators of behaviors.

Alertness: The term ‘alertness’ refers to the degree to which an entrepreneur is capable of predicting an outcome before somebody else.

Creativity: For Rui (2018) it means: “Creativity, which refers to the development of novel and useful ideas, is closely related to innovation”.

Attitude: Research suggests that attitude has a direct impact on the intention and in the field of entrepreneurship. The term refers to the degree to which a person has an unfavorable or favorable evaluation of the behavior in question.

Intentions: In broad terms, intention captures the motivation. Thus, the term ‘intention’ refers to the degree an individual is willing to perform a specific behavior.

Motivation: A reason or reasons for acting or behaving in a particular way.

Exogenous influence behaviors: The term ‘exogenous influence behaviors’ has come to be the external factors from the moderators, that influencing the entrepreneurial activities.

Endogenous influence behaviors: The term ‘endogenous influence behaviors’ has come to be the internal factors from the moderators, that influencing the entrepreneurial activities.

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1. Introduction

This chapter is where the author introduces the reader to the research topic, describing the theoretical background and problem. Also provides the reader with well-defined motivation aiming to response the research question. Finally, conclude with the research problem and delimited the boundaries of the topic.

1.1. Background

In the history of development economics, entrepreneurial behavior has been thought of as a critical factor in the process of building an advanced economy Schumpeter (1934). With a few other countries, Sweden leads the rankings. It is one of the top twelve economies in terms of “starting a business” as per the World Bank’s report “Doing Business 2019 Training for Reform” (World Bank Group, 2019). In Sweden, it takes a person seven days to establish a new business. Moreover, in order to put this phenomenon in context and the implication for the entrepreneurial field, and the economies for Europa, we look at the statistics, which estimate that the European Union is based on entrepreneurial firms. Over ninety-nine percent of the workforce is in start-ups, and ninety-one percent of those start-ups are micro-firms (ten employees or less). On the contrary, the risk of failure in the European Union is still as high as any other market. Spinelli and Adams (2012, p.91) stated that most of the firms fail during the first two years and besides, they said: “Unfortunately, the record of survival is not good among all firms started. One of the most optimistic research estimates that the rate of failure for start-ups is 46.4 percent.”

Now, if you look at the rate of bankruptcies in Sweden from 2008 to 2009, the bankruptcies increased over 50 percent. The OECD reported that entrepreneurial activities impact three critical economic factors: job creation, Economic growth GDP (Gross Domestic

Production), and poverty reduction or Gini coefficients (Ahmad et al., 2008). At the micro level, entrepreneurs face the possibility of losing their assets, jobs, time, effort, and the uncertainty of income. At the macro level, technological advances are threatening economies. Although all the effort put in the governments to continue this economic stability, several new technologies are emerging, and we still do not know what the implication of those technologies will bring and what it is going to happen in the economies. At the same time, those technologies such as artificial intelligence, machine learning, automation, and blockchain could bring new opportunities as well.

In conclusion, entrepreneurship as an economic field has a significant impact in all aspects of the society from the healthcare systems, wealth, employment, and many other (Volkman et al., 2012). Therefore, it is very important to understand the reaction towards a project failure and the impact in the entrepreneurial behaviors. Another point is that bankruptcy is part of this process. In general terms, the phenomenon is inevitable; this means that entrepreneurs will deal with project failures in regular bases regardless of the prevention they take. Therefore, learning from the mistake and moving forward quickly to a better stage is something that entrepreneurs can do.

1.2. Problem Discussion

When a star-up goes to bankruptcy, it is not just the loss of the entrepreneur, their families, and employees. It is the loss of every person in society. We know that the research has suggested that entrepreneurial activities are the catalyst for the economic growth and the society Schumpeter (1934) and Kirzner (1998). We also know that the rate of bankruptcy of start-ups is very high, which truly affects the economic growth. Perhaps, society is not taking the right actions to provide the entrepreneurs with the right tools, which at the end would be

beneficiary to all of us. In some sense, we could say that society is failing entrepreneurs. Thus, the problems that this thesis is approaching are not just in the field of entrepreneurship, but the macro-economics, psychology, welfare, and policy making. It would be a great success to contribute to science by closing the gap of knowledge in the field.

1.3. Research question

George Sand once said, "Let us accept the truth, even when it surprises us and alters our views."

On the whole, it is impossible to avoid the failures in our life, work, and businesses, but the only thing we cannot do is ignore them because we need to find solutions. The entrepreneurial road is full of ups and downs. It has failures on a daily basis, and some of them are fatal for the firm. Failures cannot be avoided, not even when you are prepared. However, what entrepreneurs do after a project failure is what matters. The research question intends to understand what happens after a project failure and in this journey contributes to science by breaking through the discovery between a major failure during initial years of the firm, the effect it takes in the entrepreneur behaviors, and what happens in between those two factors. How does the failure of a project in the software industry affect entrepreneurial behavior?

Furthermore, Yin (2014) advises that the literature review should narrow down the research question. Second, hesitate about the exciting topic, and even ask yourself if, in the literature, you found dead end topics. Third, check for alternative studies to validate the research topic.

1.4. Research Aim

The literature already found empirical evidence suggesting that personality traits have an indirect effect on entrepreneurial behaviors and a direct effect between moderators of conducts and the entrepreneur's activities. However, this field of research has not been studied exhaustively. Up to now, we have not profoundly understood what happens in the entrepreneurial mind after a project failure. The objective of the thesis focuses on understanding the relationship between the moderators and the behaviors of entrepreneurs.

1.5. Delimitations

This study does not intend to understand the phenomenon or theories outside the relationship between moderators and entrepreneurial behaviors. The study requires to touch upon some field such as economics, project management, psychology, personality traits; however, none of those are the focus of this study.

1.6. Research disposition

This thesis presents the following structure: it starts with the introduction which describes and motivates the empirical background. Followed by a narrow and well-defined research question aiming to fill a gap of study. Then comes an exploratory literature review and the respectively definitions with the individual frames of data collection. This should be a synthesis and expressed in a problematic way. Thus, including the essential references in the field. It continues with the methodology. Subsequently, presenting the empirical results in a systematic order or code. Finally the analysis and discussion of the findings and the conclusions (theoretical and practical managerial implications).

Introduction	Background, problem discussion and research question
Theoretical Background	Project failure and entrepreneurial behaviors
Methodology	Research strategy, design and data collection
Results	Case studies and topics one to four
Discussion & Analysis	Analysis of the empirical data, presenting the new model
Conclusion	Answering the research question and implications

Table 1 Outline of the thesis

2. Theoretical Background

The following chapter aims to introduce and address the reader to the most recent and relevant theories about entrepreneurship behaviors and project failure. Following by presenting the literature review in a systematic order by topic, then make a critical evaluation and provide a summary of the theories.

2.1. Project failure

A project can mean many things. i.e., a new venture, new products, new services, entering new markets, and/or implementing new processes, but for the purposes of this thesis, it will mean a new product or service. On the other hand, failure means not meeting one of the following criteria: budget, time, and quality Sage et al., (2013) and Guzzini et al. (2017). Also, if the project does not reach the market, it is a failure too. As a project manager said:

I think you could get it on time and it could make the required profit margin, it could be built at the right quality, but if the brief is not what the client wants that could be a failure couldn't it? Sage et al, (2013, p. 547).

It is essential to keep in mind the concept of projectification, since now, more than ever and especially in the software industry, new firms are being treated as a single project (project management). Those start-ups are being built with one product in mind, although the risk of bankruptcy is considerable high. Therefore, it is something that needs to be addressed because the resources and experience would be wasted. Another point is the emotional distress caused by a project failure. Sage et al. (2013) said, that project failure is evidence of poor management, and the solution is in replacing the management team. They also touched upon the cost of research and development and stated that all funds in one project are sunk until this project reaches the market.

Moreover, in the paper Software development risks to project effectiveness, Jiang and Klein (2000) address the issue of risk in software development projects, which means that indirectly they address the risk and effectiveness of project failure. A few of their findings are highly relevant: first, the field often fails to meet time, budget, and market expectation. The other one is related to the project risk categories and the project effectiveness items. Basically, they said that you need to make sure that users support your product and that your team has the experience.

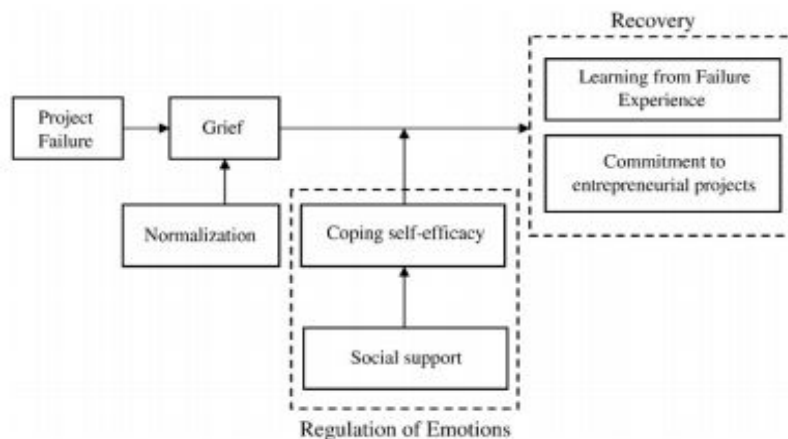
Researchers attempted to evaluate the role of innovative ventures in the field of project failure and Guzzini et al. (2017) conclude that the costs of research and development are sunk until the project proves to reach the market successfully.

2.2. Managing failure

“Success is the ability to go from failure to failure without losing your enthusiasm.” —

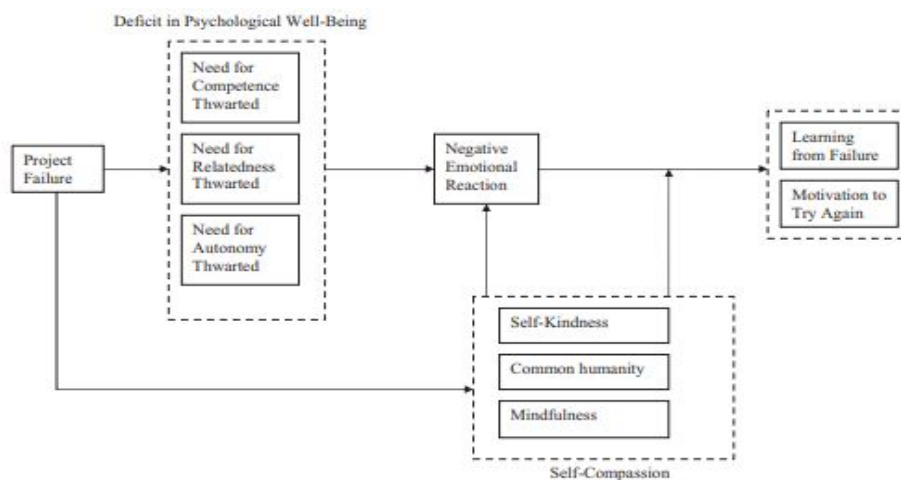
Winston Churchill

Most of the techniques to manage failure, if not all, are cognitive or psychological processes — for instance, the grief approach. The theory started with the concept of grief, which is an adverse emotional reaction to the loss of something that has value to a person according to Archer (Nesse, 2000). Shepherd et al. (2009) complemented the theory by mapping the grief process with two positive outcomes: learning from failure experience and commitment to entrepreneurial projects.



Shepherd, Covin & Kuratko (2009)

Table 2 Conceptual model of recovering from grief over project failure



Shepherd & Cardon (2009)

Table 3 A model of an organizational member's emotional process from project failure

When the consequences of failure are particularly high “small wins” provide an individual the opportunity to build the motivation to continue, it may have an effect of self-efficacy too. The other approach is called “intelligent failure,” which validates the advantages of self-efficacy (Shepherd, 2009). Another part of the discussion involves emotional regulation or coping mechanism. Shepherd, Covin, and Kuratko (2009) argue that few techniques could help to go through those problems such as self-efficacy and social support. On the same paper, they conclude that without the grief, the benefit of learning or the commitment to the entrepreneurial project is lower. The grief provides the signaling of the relevance of the event. Shepherd et al. (2011) suggest that instead of eliminating the grief, it should be regulated. Thus, time is a relevant factor in project failure. The reason is that learning from a failure takes time and cognitive effort, sometimes the problem is complex.

The other approach for managing project failure could be based on intentions. The most famous one is the theory of planned behavior. Behavior starts from the attitude, which can be defined as “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991, p. 188).

Then the intention, which it is just planned behaviors and conclude with the target behavior. It is essential to show intentions, which should capture individual motivation. This is an indication of how people are willing to try a planned behavior.

Not many people are willing to give failure a second opportunity. They fail once, and it is all over. The bitter pill of failure is often more than most people can handle. If you are willing to accept failure and learn from it, if you are willing to consider failure as a

blessing in disguise and bounce back, you have got the essentials of harnessing one of the most powerful success forces. (Shepherd et al., 2009)

2.3. Entrepreneurship

In 1848, Mill published a paper named the Principles of Political Economy in which he described the characteristics of an entrepreneur. Despite that, the paper is about economics. What is essential is that the paper represents the beginnings of entrepreneurship as a research field. Many people have been trying to define entrepreneurship, and over decades, scientists could not conclude with a clear definition. Therefore, in the attempt to define entrepreneurship and entrepreneurial behaviors, the author of this thesis will construct a taxonomy with several explanations, examples, and definitions from several authors and fields. One of the first works in which they were mentioning entrepreneurship is in the book "Theory of economic development" (Schumpeter, 1934), in which he demonstrates that all economic cycles have recessions. The process is called "Creative Destructive." The theory states that recession generates opportunities for the new business to emerge, but it is up to the entrepreneur to act and innovate on those opportunities. Thus, without the role of entrepreneurship in the economy, the economic system would be impossible. Moreover, Croitoru (2012, p.143) made a book review of Schumpeter and concluded the following. Further in the book, we find the assertion that the only things a person needs to be an entrepreneur are "the will and the action" and Schumpeter's metaphor of 'creative destruction' is embedded in the role attributed to the entrepreneur and his or her innovation.

To begin with, most of the differences in the studies about entrepreneurship are semantics. What is more important is that most of them agree with three common factors: opportunities, skilled people, and resources, and previous factors are affected by two themes:

the surrounding regulatory framework and culture. Moreover, the critical aspect is imperative for entrepreneurs' access to capital and R&D (Ahmad and Hoffmann, 2008).

Secondly, Kirzner (1985) has more-less the same theory about entrepreneurship in comparison with Schumpeter (1934). In both theories, the entrepreneur plays the role of "middle road" and that entrepreneurship is needed for the long term of economic growth (Barreto and Kirzner, 1986). In line with the theories and on the same paper, Kirzner (1985) emphasized the alertness of an entrepreneur and stated that the alertness is the driver for the economy.

Despite its common usage, entrepreneurship is massively present in different disciplines, but it means different things. As in the example with the OECD, they struggle to define the term and without a clear definition, the research's results; therefore, it needs to be interpreted with caution. For the most part, this lack of agreement about the definition, it is still possible to explore the main characteristics, and factors to make some conclusions. First, the economy as we know it today would not exist without the entrepreneur that supports the systems, which has a positive effect on the jobs creation, poverty reduction, and taxation that implicates social programs and economic wealth. Second, the system itself is a cruel game, due to applying the law of survival of the fittest.

2.4. Entrepreneurial behaviors

Entrepreneurial behaviors are tightly associated with economic and social science, as per Volkmann, Tokarski, and Ernst (2012). Due to the importance for the governments, the OECD started collecting information and statistics about them, and they struggle with the definition of the entrepreneurial activities or behaviors. The paper named "The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses" (2009)

recognizes the lack of universal definition and the long history of contentions and differences in the definition, but; they also needed to settle down this to ensure that the indicator was well calibrated. The definition focuses attention on the actions, and not so much in the intentions (Ahmad and Seymour, 2008). Some formal Definitions from the OECD are the following:

Drawing on the above analysis and arguments, the following definitions of the entrepreneur, entrepreneurship, and entrepreneurial activity are therefore proposed.

Entrepreneurs are those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets. Entrepreneurial activity is the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets. Entrepreneurship is a phenomenon associated with entrepreneurial activity (Ahmad and Seymour, 2008).

The following part of this paper moves on to describe, in greater detail, what behavior in the entrepreneurial context means. Starting from Gartner, Carter and Reynolds (2010, p.102), they said that:

The creation of an organization is the primary outcome of entrepreneurial behavior, that is, our primary dependent variable for research on entrepreneurial behavior is determining whether an organization comes into existence, or not. While a number of other outcomes of entrepreneurial activity might occur in the organization formation process (e.g., the creation of new products, the identification of new markets, new customers and groups of customers, the acquisition of new skills and knowledge). The

primary outcome of entrepreneurial behavior is the organization, itself (Gartner, Carter and Reynolds (2010).

2.4.1 Characteristics

Entrepreneurial behavior involves the activities of individuals who are associated with creating new organizations rather than the activities of individuals who are involved with maintaining or changing the operations of on-going established organizations (Gartner, 2004)). Previous research from Gartner, Carter, and Reynolds (2010) has consistent definitions, theories, and findings into entrepreneurial behaviors.

Thus, entrepreneurship is a social-based science and within the organization overlap the entrepreneurial activities with the management activities. Due to the overlapping of activities, the term is typically confused between each other. By drawing on the definition of entrepreneurial behavior, Gartner et al. (2010) have been able to clarify the phenomenon, which differs slightly from the management field. The argument focuses on management and entrepreneurial behaviors activities. The entrepreneurial behaviors activities are only involved in the process and the construction of the organization.

On the other hand, managerial behaviors focus on the activities about the maintenance of the organization. One important argument is that despite entrepreneurship happening in between the context of social science, economics, politics, etc.; it is not created by their context but from the actions taken by many people (entrepreneurs), at the individual level. In essence, it is the collective process from many individuals with four major dimensions (individual, organizational, environmental, and process) that focus their day to day activities in the formation of the firm (Gartner, 1985).

We believe that entrepreneurial behavior is an individual-level phenomenon, which occurs over time (is a process), and results in an organization as the primary outcome of these activities. We then identify an issue that we believe has caused considerable confusion in the entrepreneurship field: namely the assumption that the study of new organizations is comparable to the study of emerging organizations. We argue that the information gained from the retrospections, insights, or the current behaviors and thought processes of individuals who are operating established new businesses are not comparable to the experiences of individuals actually in the process of organization creation." (Gartner, Carter and Reynolds, 2010, p.100)

Moreover, this shows a need to be explicit, about what is meant by the word 'activities'. Within the activities there are the categories, the sequence, the rates of occurrence, the reasons, and the element in the process of creating an organization. By zooming out in the context of activities, it is easy to see that all the characteristics are interconnected, and by zooming in researchers found patterns of characteristics. For example in one of the studies (Gartner and Starr, 1993) identified a list of twenty-four activities and sequences of entrepreneurial behaviors. This is a crucial factor to consider in this research. Due to some of the activities that happened in the early stage of the firm's formation, which are not relevant for this study; however, the activities that take place in the late stage of the firm formation are the ones that were taken into account.

In regards to the elements and order of entrepreneurial activities and innovation Cheng and Van de Ven (1996) pointed out the activities in the process of creating a firm, seemingly-random and chaotic, and it does not follow a sequential order and argue that chaos creates opportunities — also Vesper (as cited in Gartner et al., 2010) found five critical

elements in the process of creating an organization which can happen in any order: 1) technical know-how to generate the company's product or service, 2) the product or service idea which provides direction for the organization's efforts, 3) personal contacts "because ventures are not started in isolation", 4) physical resources, and 5) customer orders. On the contrary, Birley (1993) suggests that the entrepreneurial process happens in this specific order: 1) decision to start a business, 2) quit job, 3) incorporate, 4) establish bank account, 5) acquire premises and equipment, 6) receive first order, 7) pay first tax, and 8) hire full-time employees. "Over time, these entrepreneurs accumulate the external resources and technology necessary to transform their ideas into concrete reality by constructing a new business unit" Van de Ven et al. (1984, p. 225).

Another point, in reference to the categories, Gatewood et al. (1995) found five categories of behavior: gathering market information, estimating potential profits, finishing the groundwork for the business, developing the structure of the company, and setting up business operations, and Reynolds synthesizes it in six domains:

- 1) Business presence: The emphasis is on formal registration of the firm, full-time attention by the nascent entrepreneur, and the beginning of hiring employees (five items).
- 2) Production implementation: Attention to acquiring inputs (supplies, inventory, components), use of major assets, the actual sale of the product or service (six items).
- 3) Organizational, financial structure: Mobilizing individuals, preparing plans, and acquisition of outside financial resources (four items).
- 4) Personal Planning: The nascent entrepreneur' self-efforts to prepare for the business and personal involvement (three items).
- 5) Personal preparation: The nascent entrepreneur's organization of their personal life to become involved, by taking classes, saving money, or arranging for help with childcare or housework (three items).
- 6) Focus on the task or the product:

Attention to developing the product or service to be sold and acquiring formal property rights to the same (two items) (2007, pp. 68–69).

One random idea, but essential to mention, is that entrepreneurial behavior reaches a high level of complexity, and contains common factors that are not always logical or chronologically structured. Therefore, Frederic Delmar and Scott Shane (2003) provide four justifications to have a business plan: 1) planning helps the developments of a framework, 2) taking into account the resources to use them wisely, 3) identifying the action plan, and 4) planning helps the communication process in order to accomplish the objective.

Volkman, Tokarski, & Ernst (2012) summarized the relationship between personality traits and entrepreneurial behaviors. They conclude that the initial research from Kirzner (1985) and Schumpeter (1934) stated that there is a direct link between personality and entrepreneurial behavior, and this trend lasted for many years. Later, Baum & Locke (2004) and Bird (1988) propose that personality does not have a direct effect on entrepreneurial behaviors, but a profoundly indirect effect on it. Finally, Krueger et al., (2000) and Ajzen (1991) found that, i.e., motivation, attitude, and intention are moderators between the personality and the behaviors. Furthermore, five personality traits are highlighted: risk-taking propensity, innovativeness, need for achievement, need for independence, and proactiveness.

One important distinction of the definition of entrepreneurial behavior is explained in the work of Carland et al. (1984). These authors explain that there are fundamental differences between what the entrepreneur DOES and what an entrepreneur IS. Thus, the personality traits are based on the psychology of the entrepreneur, which are difficult or impossible to change, but the entrepreneurial behaviors are based on abilities and skills that can be trained. Some of the entrepreneurial behaviors referred are the ability to search and gather information, the ability to identify opportunities, the ability to deal with risk, the ability

to establish relationships and networks, the ability to make decisions under uncertainty and ambiguity, leadership ability and the ability to learn from experience. Timmons and Spinelli (2012) argue about the motivations to become an entrepreneur: 1. the need for achievement, 2. the need for power, and 3. the need for affiliation.

Previous studies of entrepreneurial behaviors have not dealt with what it is; however, almost no one has dealt with what it is not. Thus, here there are some boundaries of what entrepreneurial behavior is and what it is not according to Bird (2017). So, Bird's stands on entrepreneurial behavior are the following: It is all about the individuals, and behaviors are equal to actions or activities. Therefore, the results of those actions are the performances. Thus all cognitive processes and motivation need to end up in some actions in the real world, giving birth to a new venture. Then eventually, those behaviors will end up creating innovations, new competition, new jobs, or new revenue streams. On the other hand, Bird (2017) fails to describe in detail what it is not. It is not a process, since it may involve behaviors, but not all the time. It is not a decision either, due to the fact that this is a cognitive process, and it leads to multiple alternatives. Another excellent point from Bird (2017) is the description of abilities and skills. The ability is a stable characteristic of an individual that affects his or her performance, in general terms, it is difficult to improve, but it can be enhanced with effort, time, and education. Skills, on the other hand, are abilities to perform a specific task, knowledge, and competencies enable behaviors but are not behaviors themselves (Bird, 2017).

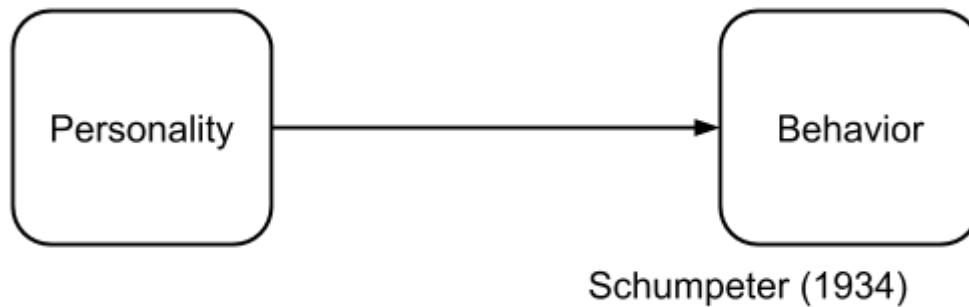


Table 4 Original hypothetical relationship between entrepreneurial personality and behavior.

2.5.Rival theories

The empirical data are somewhat controversial, and there is no general agreement about entrepreneurial behaviors. The view that was taken in this paper when choosing a definition of entrepreneurship and entrepreneurial behavior is connected with the theory and definition of entrepreneurship developed by Schumpeter (1934). However, a couple of writers have been able to draw essential critics about Schumpeter theories. For instance, Hansemark (1998) stated that all theories about entrepreneurial behavior are based on assumptions about intentions and actions. A critique from Williams (1983), stated:

It may be hypothesized that entrepreneurship is a creative process, that entrepreneurial activity stimulates innovation, and that economic growth depends upon the existence of an innovative environment. If these premises hold, there should be a high degree of correlation between entrepreneurship and economic growth. Baum et al. (2004, p.4) explain that personality traits research only generates weak effects.

2.6. Moderators for entrepreneurial behaviors

More recently, literature that offers detailed findings of the initial Kirzner's and Schumpeter's theories, about entrepreneurial behavior, has emerged. As mentioned before, the first theory stated that personality traits have a direct impact on entrepreneurial behavior, but new empirical data suggest that this relationship is indirect and other factors called moderators are included. Those moderators are supposed to be part of the ability and skills which are supposed to be trainable, but not the personality traits around the late '80s and early '90s in the field of psychology. The Theory of Planned Behavior started to take importance (Ajzen, 1991) and many authors utilized this theory to build theirs on theories about moderators of entrepreneurial behaviors.

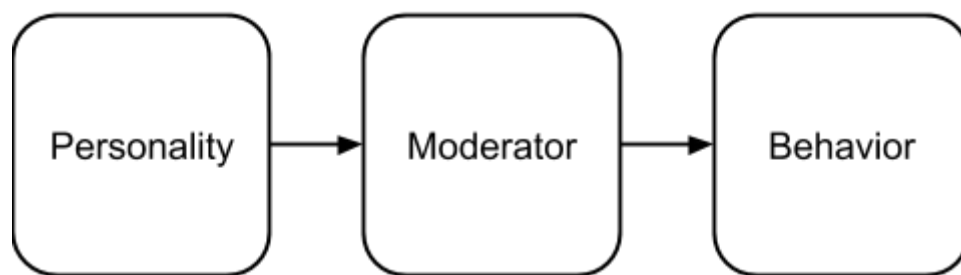
Thus, Kirzner (2009) commented on the research of the behavior, he made a fascinating analysis of the relationship between creativity, alertness, and entrepreneurial behaviors. The conclusion was that profit-winning could be driven by creativity, but it needs alertness to seek the opportunities and then act on entrepreneurship. To clarify, the relationship between individual entrepreneurial behavior and the alertness exist. The individual can see or perceive opportunities earlier than others.

Baum and Locke's (2004) paper about moderators "The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth" is one of the most important text for this thesis. The authors found the link between entrepreneurial skills and traits; such as passion, tenacity, and new resource skill. Also, motivation such as communicated vision, self-efficacy, and goals. All three: skills, traits, and motivation have a direct and indirect effect on venture growth.

Moreover, entrepreneurial intention scholars have increasingly been investigating the link between entrepreneurial intentions and behavior, while a robust empirical link has been confirmed, there is still a lack of in-depth theorizing about the underlying conceptual

mechanisms. We address this gap by arguing that individual-level perceptions of cultural practices moderate the relationship between entrepreneurial intentions and behavior. Sieger et al. (2016) also suggest that there is a lack of empirical studies about entrepreneurial behavior.

One model about moderators is the Krueger's theory of intention-based model (1993). He argues that intentions predict better target behavior. Then, the attitude is a linear process to predict intention and intention to predict behaviors (Krueger, 1993). Within the same line of thinking, Ajzen (1991) argues the same, attitudes towards entrepreneurship and entrepreneurial intentions influence each other.



Volkman (2012, p. 55)

Table 5 Latest hypothetical relationship between entrepreneurial personality and behavior, and in the middle the moderator of conducts.

2.7. Theoretical summary

“Man is so intelligent that he feels impelled to invent theories to account for what happens in the world. Unfortunately, he is not quite intelligent enough, in most cases, to find correct explanations. So that when he acts on his theories, he behaves very often like a lunatic.” — Aldous Huxley

The literature reviewed exhaustively narrows the research field of entrepreneurial behaviors from Schumpeter (1934) to Bird et al. (2017). The original theory stated that there was a link between personality traits and entrepreneurial behaviors. However, in the following years, other researches such as Krueger (1993) and Kirzner (2009) found that the relationship is indirect. All theories about moderators come from Ajzen (1991) and his theory about plan behavior, which explains the relationship between attitude, intention, and motivation affecting the behaviors. Therefore moderators came to establish patterns of characteristics that affect the entrepreneurial behaviors. Cartan et al. (2007) argue that personality traits are impossible to change since they are embedded in the personality, but the motivators are abilities and skills that are easier to change. This is why these authors say that people can teach entrepreneurship. Very little literature exists about rival theories. The most relevant stated that all moderators are based on the assumption of intention to action, and, the second stated that there are no real studies that prove the correlation between entrepreneurship and economic growth, which contradicts Schumpeter original theory. However, all this was before Ajzen (1991). Finally, the literature on project failure defined the concepts of project and failure in the context of entrepreneurship.

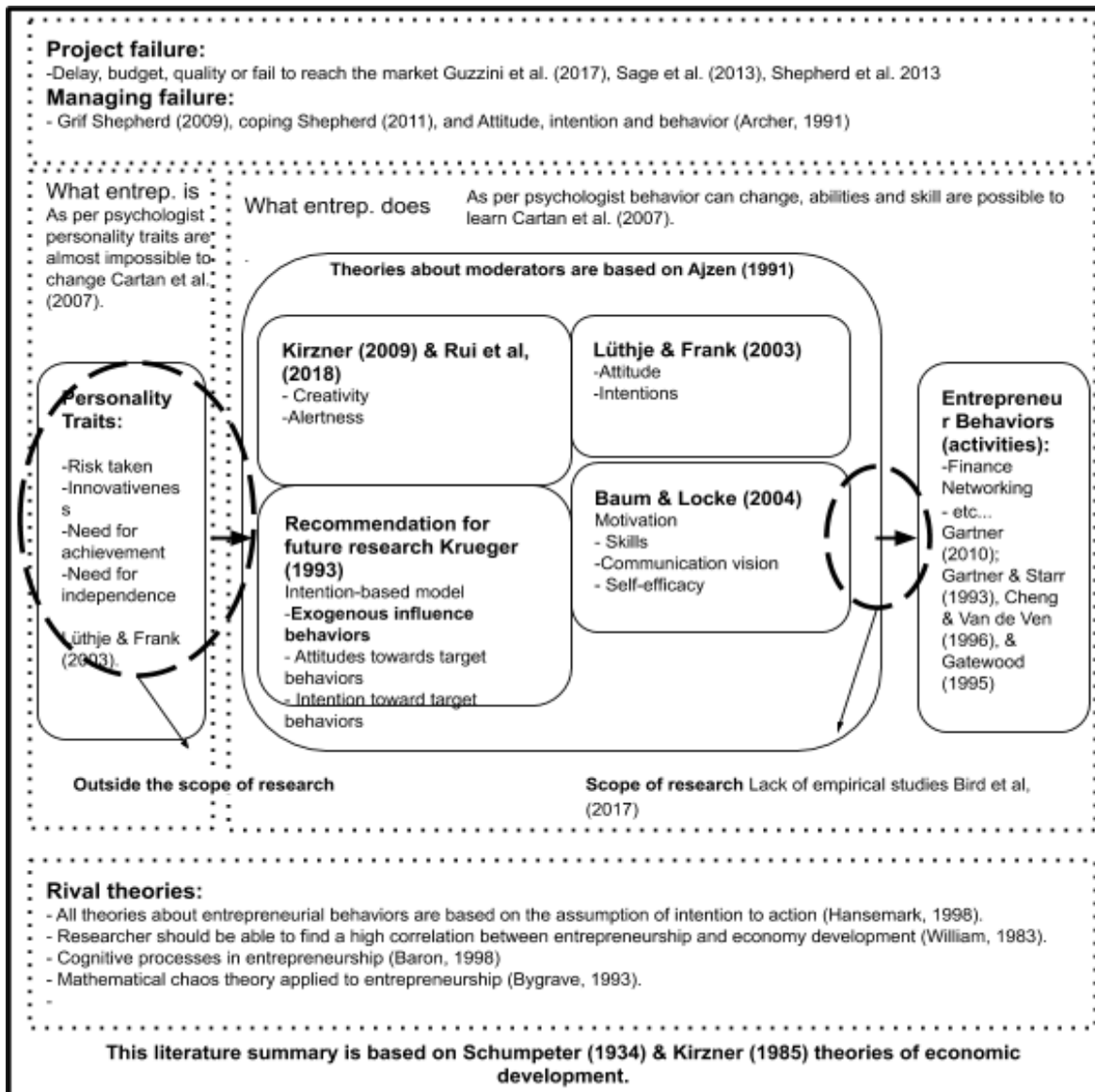


Table 6 Theoretical Summary

3. Methodology

The following chapter has the objective to present the methodology and explain the motivation behind the choices of the data collection and analysis method related to the research question. Moreover, explain how the data has been collected, coded, and analyzed — I.E., research strategy, research design, and research method.

3.1. Research strategy

The basic premise of the research question is to study the degree to which moderators of behaviors affect the entrepreneur behaviors, within a problematic condition. Such as a project failure or a significant setback. The latest literature, argues that moderators, i.e., intentions or motivations, have been associated with entrepreneurial behaviors. So, this study aims to contextualize the phenomenon within those problematic conditions. It is owing to the lack of understanding between the moderator and the behaviors. It was decided that the qualitative method would provide more valuable information than the quantitative one. The methodology chosen would provide a broad picture, which also can be narrowed down with the comparison between cases. Within this process, it was considered both approaches. The first one (inductive) to build-up the concept and theory and then tested with the empirical data. The second one (deductive) takes an existing theory, and from the observation of empirical data generates inferences (Collis and Hussey, 2014). Thus, taking into account both options, it is more appropriate to use the inductive theory development approach and a constructionist ontology. To conclude, it is the opinion of the author of this thesis that the qualitative method, the inductive approach, and a personal view or reality would respond better to the research question, and will facilitate the collection of the case study evidence.

3.2. Research Design

In the decision process, it was thought that the single case method approach has many attractive features, and it may come with invaluable results. However, the multiple-case study, even a “two-case” design study is likely to be a stronger option than a single case study (Yin, 2014). In this sense, the multiple-case study is an excellent choice due to the fact that it provides a series of advantages for the collection and analysis of the data. One advantage is

related to conceptualization and definition. In the entrepreneurial field, everyone seems to know what is an entrepreneur and entrepreneurial behaviors, but they cannot agree on a standard definition. Therefore, this problem allows us to construct the case, the definitions and response to the research question in line with the literature review. In other words, this means that the researcher will define project failure, moderators and entrepreneurial behaviors for the better understanding of the data and, later on, decode the interviews in themes order to find patterns in the data collected.

On top of that, Bird et al. (2016) stated that the research field of entrepreneurial behaviors lacks empirical studies. The second advantage of using the multiple-case study method is based on the unit of analysis — entrepreneurial behaviors accountants for two levels. The first level is group level or collective entrepreneurial action of several individuals involved in creating the firm. The second is just a single level of entrepreneurial activities (Gartner, 1985). The two units of analysis, embedded and holistic, were considered; however, the holistic makes more sense due to the time limitation, a holistic unit of analysis would simplify the coding process.

3.3. Research method

Due to the nature of the research which is based on the theory building approach, the qualitative method is applied. The flexibility and adjustability are some of the main reasons to choose this method in this thesis, as well as the interviews because they can be adjusted during the data collection process. This is especially convenient because it provides the necessary flexibility to explore the interview responses, analyzed the data, and redesign the questionnaire.

More in detail, the primary data collection is the semi-structured interview. The sample was chosen with some specific characteristics in mind such as geographic and demographics. Two geographic areas were chosen, this is to compare the cases between each other. Then, it is designed to collect the data from individuals with similar age, education, and social class.

Interview No.	Firm	Foundation	Location	Position	Date (2019)	Type	Length
1	Anonymous	2016	Gothemburg	CEO/ Founder	April 15th	F2F	0 h 34 min
2	Dialogtrail	2017	Gothemburg	CEO/ Founder	April 18th	F2F	0 h 38 min
3	Unbiased	2018	Gothemburg	CEO/ Founder	April 24th	F2F	0 h 27 min
4	Flourish	2017	Gothemburg	CEO/ Founder	May 3rd	Phone	0 h 37 min
5	4geeks	2013	San Jose	CTO/ Founder	May 2nd	Phone	0 h 27 min

Table 7 Overview of the conducted interviews

Another essential point to highlight is that it is intended to have a comparative case study. The idea is to analyze the differences between Europe and Central America: what they have in common and what they do not have in common.

3.4. Data analysis

As an initial step, the research will explore interviews with open-ended questions, as the primary data collection method. This is the degree which a sample of interviewees are inquired about the research topic, and it aims to extract their opinions and feelings (Collis and

Hussey, 2014). In this decision, process features such as flexibility and openness with the interviewees were highly desired. Both features would be used in the semi-structured interview (Bryman and Bell, 2015). The questions would be direct and indirect. One refers to the questions they are asked to the interviewee about them and, the other, about the actions asked the interviewee about a group (Bryman and Bell, 2015). Now, despite the general idea that states that you cannot change the design in the data collection, new information can be enormously relevant, guiding you to a new original design and findings (Yin, p.65); therefore, the interview had a few changes during data collection. To collect the empirical data, the semi-structured interview was chosen. This method for data collection increases the possibilities to collect data that is meaningful (Bryman and Bell, 2015).

The data collection is going to be decoded by extracting the main context and regrouping it in new themes. These groups will be compared and analyzed later in order to find contrasts or similarities. The data needs to be decoded and coded, hand in hand, with the theories. One disadvantage is that the interpretation can be biased, and it can mislead the analysis of the data. Secondary data or a combination of both primary and secondary data brings many advantages to the research and the process of validation. The relationship between cost and time leans to our advantage. Also, analyzing secondary data could be considered as primary data. (Bryman and Bell, 2015, p.314).

3.5. Research Quality

Concerning data analysis, it was decided that the best option to code the empirical results would be with Yin's (2014) Logic modes with a thematical analysis. The data would be divided into four themes, and it would be compared with the literature, rival theories, the

real, and other contextual conditions. Finally, time constraints leave us no choice but to choose the cross sectional time frame.

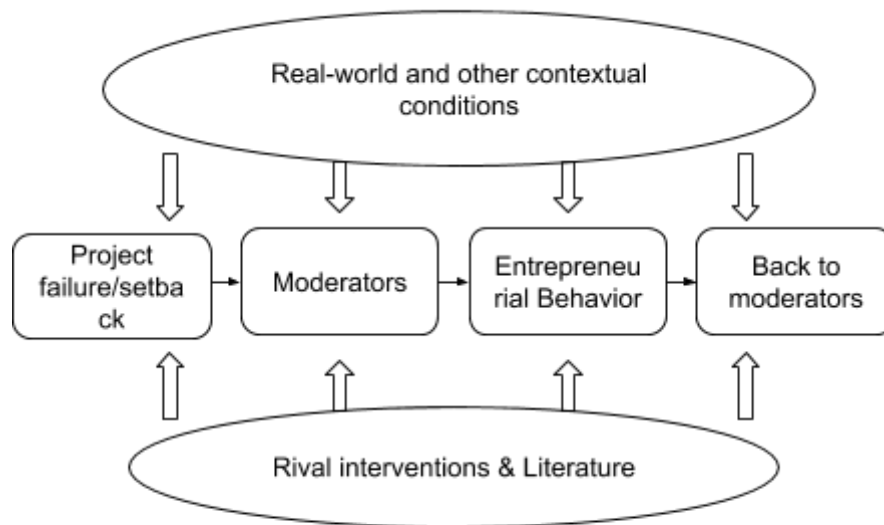


Table 8 Coding

Cognitive mapping is a technical research method toolbox used to capture the individual perspective of a problem (Bryman and Bell, 2015, p.315).

Play with your data searching for patterns, insights, or concepts. Moreover, other options to sort the information are: using different arrays, making a matrix, tabulating the event in different frequencies, and the chronologic order (Yin, 2014, p.135).

The high quality of analysis ensures that you attended all the evidence. Exhaust the rival theories, so you make sure that your analysis does not have weak spots, and continue with all possible interpretations of the rival theories. Then, address the case study with the most significant aspects. The more, the better; so, in this part show the knowledge you build with the literature review (Yin, 2014, p.163).

3.6. Validity

The internal validity refers to the causality of the study and how it is interconnected with the conclusion and matches the empirical findings (Bryman and Bell, 2015). In this case, the validity was constructed with the case protocol. The interview was designed with four parts. The first three parts are intended to capture the control variable and the independent variables, and, finally, the last part is intended to capture the dependable variable. External validity concerns the viability of the study, which means that the finding could be spread to other degrees of the same field (Bryman and Bell, 2015). In the case of this thesis, external validity was a little bit more complicated to establish. First, the time limitation makes it difficult to conduct a sample that could be big enough to provide external validity. Second, the reason is based on theories and definition. To build the definition, the present study started with the construction of a taxonomy that frames the critical concepts of project failure, moderators, and entrepreneurial behavior — followed by landing the concrete meaning for this research about the unit of analysis. The unit of analysis provides the marriage between the definition and the case. In essence, this is the fundamental problem “the definition of the case” of the research question. (Yin, 2014, pp. 31-32).

3.7. Reliability and Replicability

The reliability refers to how likely it is to repeat the research (Bryman and Bell, 2015). In our case, we construct reliability and replicability with the case study protocol. Among the most important characteristics for reliability are: to set the goals, the research question, to read the theoretical framework, the role of the interviewer, and a log of activities for the interviews.

4. Results

In this section, the author reports to the reader the results of the multi-case study. Thus, focus on the empirical results, the pattern recognition, and the themes created after the interviews. It concludes the finding.

The beginning of this process started as soon as the interviews were transcribed and coded. Then, the author organized the data into different themes. After that, the author had to become familiar with the data and map the themes. In this part, the objective is to frame the scenario in which the start-up operates and gets general information about the founders, risk, and funding process among others. The first theme is about project failure. In this regards, project failure means that the firm did not meet the plan in one of the following terms: budget, time, quality or fail to reach the market (customer did not accept the product). The second step focused in theory of moderators between the personality traits and the entrepreneurial behaviors. The most famous moderator theories are Kirzner's (2009), Ajzen's (1991), Krueger's (1993) and Baum & Locke's (2004). The third theme makes the relationship between project failure and entrepreneurial behaviors (activities). Finally, the fourth theme is inspired by the reverse engineer technique, which makes the interviewee's response questions backwards, which means from the entrepreneurial behavior to the motivation.

4.1. Case studies

The participants are firms based in the area of Gothenburg, Sweden, in their first, second, or third year of foundation. Most of them have few collaborators, and some already have many. All of them are software-based organizations, providing e-services or in the beta stage of the service. The majority of companies were founded with the founder's capital, and eventually, investors got involved in the firms. There is one case that would be used as a

comparative case study. The firm is already consolidated; it has several services and employees, and it is based in San Jose, Costa Rica.

Anonymous

This firm is a start-up founded in February 2018, by an entrepreneur with a degree in the field of communication. The founder quit his job and raised an initial investment from his two neighbors. The idea initially came as a spin-off of another project he was working on. In this project, they built an MVP (minimum viable product) of the current service and tested with a potential client. We could say that the company runs in the share economy industry, and has a functional service. However, it is still in the developing stage.

Dialogtrail

The firm started in February 2018, with two founders. They knew each other from the university when both studied their master degree in entrepreneurship. The founder started raising money from the beginning without even having a prototype. The service is based on chatbot technology, which provides, via messenger, purchase options of potential clients. Today Chalmer Venture and one of their developers are shareholders too. Moreover, the service is about to be launched, and it already has paying customers.

Unbiased

Unbiased is a start-up founded in 2018. There are only two founders, both with a background in engineering. The firm has no employees, but the founders. However, through

collaboration with an established Swedish firm; they managed to involve fifteen people. Soon, they are going to launch the service. The service they will provide is inspired in a social problem which affects everyone. They used blockchain technology to fight biased and fake news.

Flourish

The founder was born and raised in an entrepreneurial family, and at a very young age. He holds a degree in human resources and management. The firm has two more investors, who are involved at the strategic level, almost like advisors. The organization was founded in June 2017, and it used AI and network technology to provide users with management solutions.

4Geeks

4geeks is a consolidated technological firm based in Costa Rica and founded in 2013. The company's founders are two software engineers, who ran the firm together for three years and eventually started hiring people. The organization is self-funded and it only has two owners. Today, the firm has a few products and services such as payment method and AI artificial intelligence.

4.2. Topic One: Project Failure

There were no surprises that project failures have the roots in the financial situation of the firms. There is sufficient literature that confirms this is a classic issue among start-ups.

Overall, the empirical data found two main reasons causing a project failure in start-ups, and whose failures could cause the bankruptcy of all the firms or would stop them from continuing. It was also found that all of the firms had minor setbacks related to the development of the beta version, but that was arguably easy to solve, and it did not endanger the organization. The two main issues were: first, one firm experienced a significant issue with the legislation:

"We had a setback when it comes to laws and regulations. People did not know exactly what to do, and it took us one year to be able to establish the firm"(Kumar, personal interview, Unbiased, 2019).

In regards to the other main issue, all of the firms experienced financial stress. The reasons for these issues are the lack of precision of the projections and the loss of a client or investors.

We had an idea that we could run a very lean start-up methodology, but when we started installing customer, we soon ran with technical difficulties that we could not handle. Since we did not develop the platform of our own. We hire people to build the platform for us, and we realize that the funding we had at the moment would not cover for the development costs (Andersson, personal interview, Flourish, 2019).

Referring to the project failure and the possibility of quitting, early in the data collection stage, we found that the possibility of quitting was very present. Most of the interviewees stated that they would not quit. Ironically, and, at the same time, the idea of quitting was always there, since the condition was complicated. The entrepreneurs had the idea in the back of their minds. A couple of the comments reflecting these realities are:

"No, I would not quit until I reject the hypotheses that are not a profitable market."

(Andersson, personal interview, Flourish, 2019), and *"Definitely yes, I thought about quitting."*(Anonymous, 2019).

4.3. Topic Two: Moderators

Intentions and Attitude

Only after the theory of plan behavior from Ajzen (1991), the researchers in the field of entrepreneurship started building their further explanation about the entrepreneurial behaviors. The results show a positive relationship between intentions and entrepreneurial behaviors. The intention to continue after a project failure is obvious. As proof of the intention to continue, the interviewees explore an alternative to the possibility of failing i.e., to establish the firm somewhere else, to find new clients or investors. On top of that, what stands out in the empirical data and which is congruent with Lüthje and Frank's theory (2003) is that the founder has a careless attitude towards the problem and the firm's intention to solve the problem.

"I did not have the chance to go and cry in the bed. I had to work on the solution, so it was not too much about the negative emotions. I knew that if I feel bad, it would be worst, so instead of thinking about the setback, I focus on the opportunities we had ahead."(Monge, personal interview, 4Geeks, 2019).

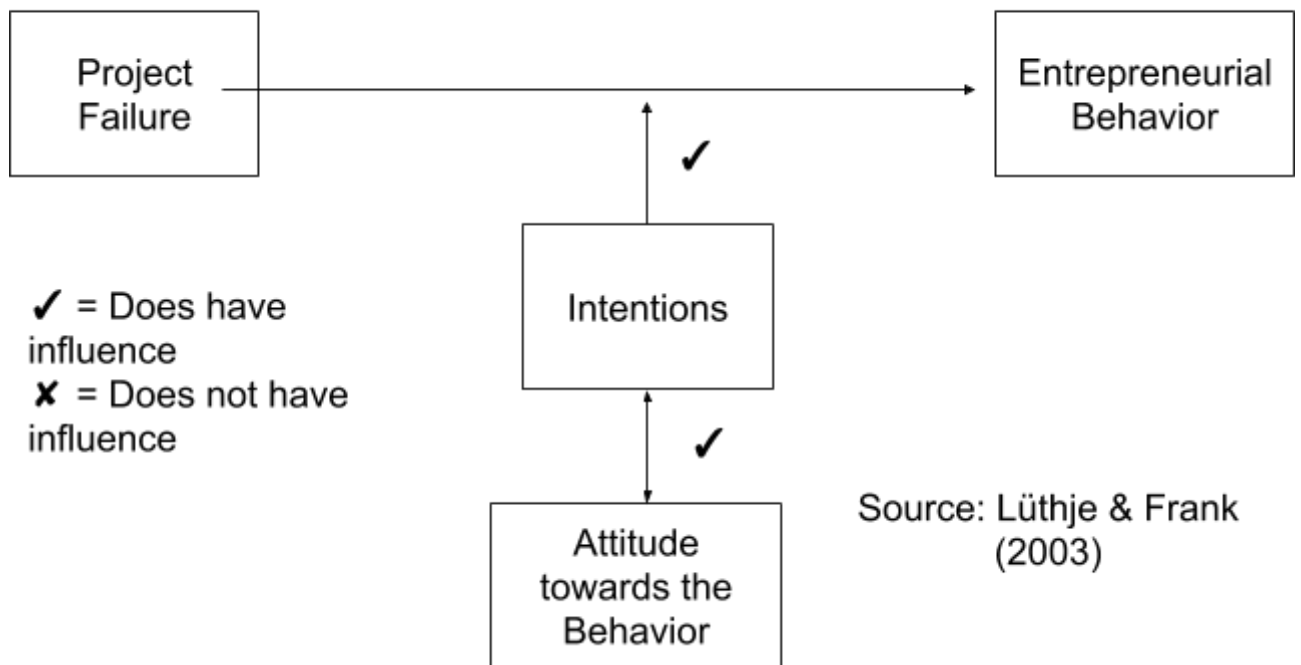


Table 9 Intentions and Attitude model

Alertness and creativity

It is a pleasant feeling to see how the models that are being put to the test actually work and it was the case for most of the model that were tested. However, one of the single most striking observations to emerge from the data was that none of the interviewees mentioned Kirzner's model about alertness or creativity in any context, not even when they were asked directly.

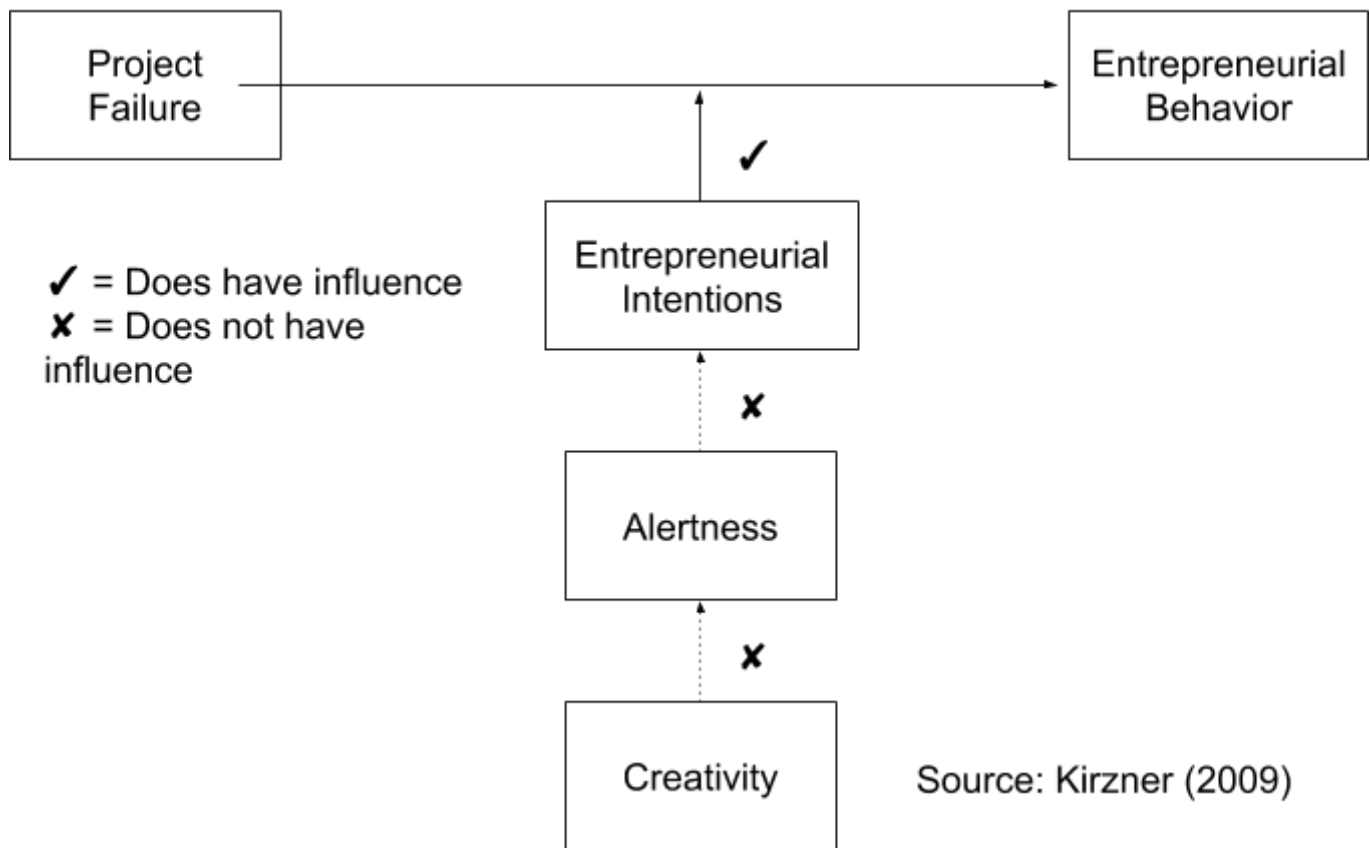


Table 10 Alertness and creativity Model

Kirzner’s model, suggests that being alert is a cognitive process that consumes a lot of mental resources: “we cannot deliberately search for something if we have no inkling of its very existence. However, it does seem intuitively obvious that alertness can be switched off” (Kirzner, 2009, p.7).

Motivation

Ajzen (1991) argues that intention assumes to capture the motivation. In its bases, motivation is the rational argument people have to act. In that regard, entrepreneurs are

motivated by the responsibility they have towards the employees and investors. They do not want to disappoint themselves, the stakeholders, or the employees.

"I was really worried for the people we have in the company."(Monge, personal interview, 4Geeks, 2019).

In Bird (2017) there are previous studies on motivations and behaviors. He argued that in order to understand people or entrepreneur's behaviors, it is necessary to look at the brain and the cognitive processes. Those cognitive processes involve different variables that are related to desires, intentions, beliefs, and motivation. What is striking about the theories this research is validating is the importance of motivation in the entrepreneurial behaviors. The results obtained from the preliminary analysis show little relevance in the communication vision. On the other hand, self-efficacy and goals turn to be highly relevant among the findings.

I have a moral responsibility with my co-founders, and I have a friendship with them that I do not want to lose. So, in some way, it is not just a positive, motivating factor, but at the stressful moments, it makes me run faster and do the right things. (Hellström, personal interview, Dialogtrail, 2019).

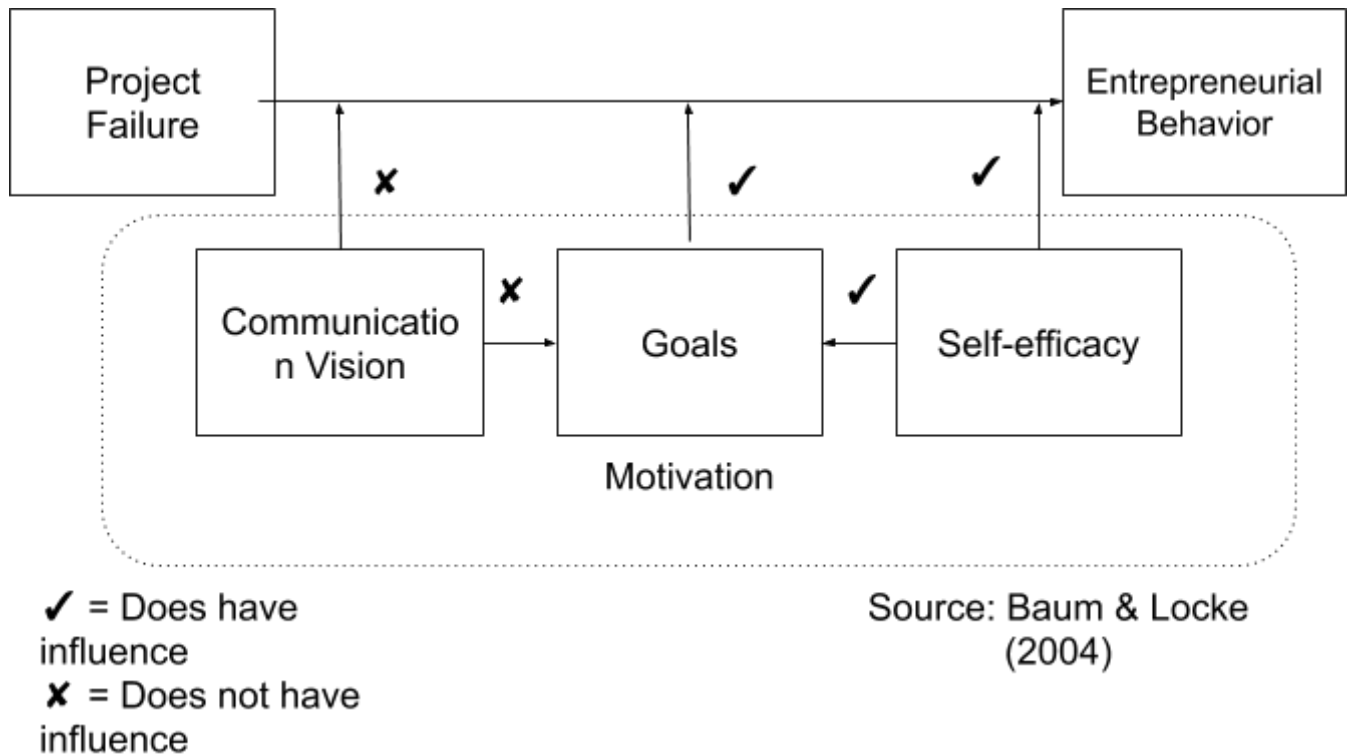
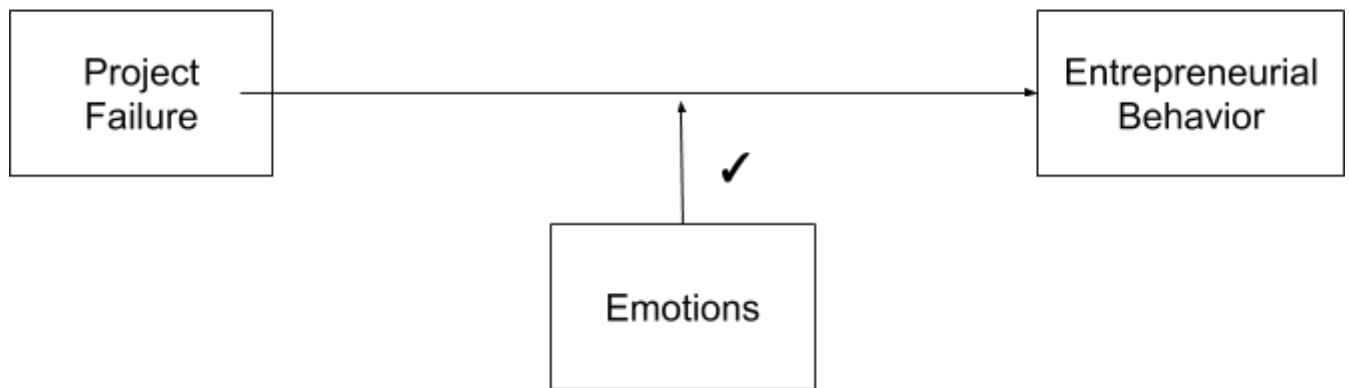


Table 11 Motivation Model

Emotions

All of the interviewees expressed that they lived great grief and awkward moments. Amount the feelings that they stated were: disappointed, anger, sadness, and stress.

"I initially had too much excitement and interest. When you have this type of setback, you go down and re-evaluate your place. Whether it worth the idea or not and you start working again" (Kumar, personal interview, Unbiased, 2019).



✓ = Does have influence
 ✗ = Does not have influence

Source: Own illustration

Table 12 Emotions Model

"You need to be able to shut down your emotions. You cannot take it too harsh, because of the motivation and morale in the team can drag down. No, the emotion were pretty stable I would say" (Andersson, personal interview, Flourish, 2019).

4.4. Topic Three: Entrepreneurial behaviors

One of the most surprising aspects of the data is that entrepreneurs argue that their day to day activity did not change that much. Nevertheless, a considerable amount of behaviors changed after project failure. The list is so big that it was necessary to divide it into six categories: Behaviors in general, Behaviors related to learning, Behaviors related to technology, Behaviors related to finance, Behaviors related to network, and Behaviors related to strategy.

"Right now, we are working in a partnership with the actors. They already established a relationship with our customer in the eCommerce platform and they have legitimacy. We did not have the networks before, so coming from an outsider, with a product that nobody hears about, from someone that you never hear about.

We fund channels with a relationship that already exists. End that was a change we had after the problem". (Andersson, personal interview, Flourish, 2019).

4.5. Topic Four: Back to Moderators

This part was added only in the last interview. The intention was to perform a reverse engineering approach that may provide a different perspective of the moderators by formulating the questions from back to front in the chronological sense. E.g., from consequences to moderators. Unfortunately, due to the fact that this was performed only in the last interview the data is not as relevant as desirable. Therefore we had no findings in this part.

4.6. Summary

This study sets out to assess the relationship between moderators and entrepreneurial behavior. All that within the context of a project failure. The results were a mix of relevant and irrelevant factors, as well as surprising and not so surprising, as expected characteristics. Nevertheless, the results show two main reasons which are potential threats for bankruptcy and one reason that it is problematic, but not a reason to go bankrupt. Then, the following three theories about the moderators of conduct were tested: Kirzner's (2009), Lüthje & Frank's (2003), Baum & Locke's (2004). It was found that two of the theories have an impact

on the behaviors, and the third one has not. The ones that have an impact on the behaviors have endogenous factors influencing the behaviors. Moreover, within the theories mentioned above, it was found that the decision to quit it is raised when things are getting complicated, but that moderators (theories above) shape the conduct to continue. Finally, many behaviors that change were found after the project failure and, they were divided into six categories.

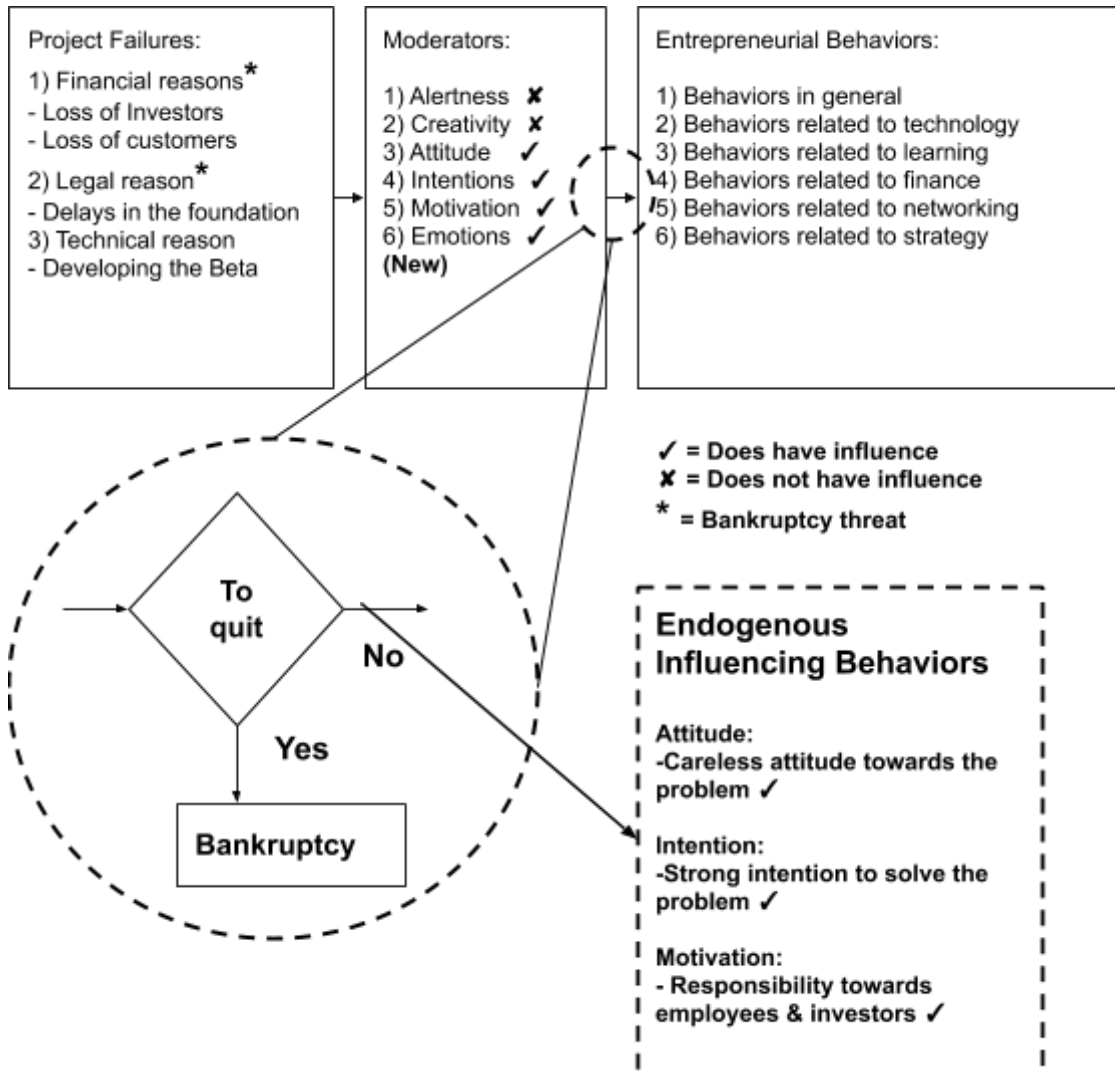


Table 13 Findings

5. Discussion and Analysis

This study covered one hundred years of research, from the roots of entrepreneurship to what, in my opinion, would be a new bud of a branch in the field of entrepreneurial behaviors. The branch of entrepreneurial behaviors started, with Schumpeter in 1934, with the theory of economic growth and the relationship between personality traits and entrepreneurial behaviors. In the '80s and '90s, few rival theories emerged such as William's (1983) or Hansemark's (1998). However, those theories did not get too much attention due to evidence actively supporting Schumpeter's theories. For several reasons, the field got stagnated. Until 1991, a paper in the field of psychology in regards to people's behaviors got published by Ajzen. The theory of plan behavior made the field of research in entrepreneurship to move forward towards the moderator of conducts Bauman and Locke (2004), Kirzner (2009) and Lüthje and Frank (2003). Looking backward, I have the feeling that this research field has moved very slowly, although scientific knowledge is constructed with baby steps. Within the broad sense of the literature reviewed, on the one hand, and the empirical data on the other. I must say that the findings are not so surprising, but it is exciting to confirm some of the theories and to discover that emotion has so much influence in the behaviors, and also to discover the endogenous factors affecting the behaviors.

5.1. Project Failure

The reason to choose the definition of project failure from the project management literature was not a coincidence. It is a trend of being a start-up as a single project. It is called projectification, and it is the norm today, at least in the software industry. This way of setting a firm is not necessarily good or bad; however, it has several implications, such as the highest possibility of bankruptcy. In reviewing the literature on project failure, data was found and

confirmed: all the project that were reviewed in this thesis are project failures by definition. Thus, this makes me think that hardly any start-up would fulfill the criteria of budget, time, and quality. Therefore, does this mean that all start-ups are projected failures too? To my surprise, I think they all are. However, if all start-ups will fail, the ones that stay afloat must have one or more factors in common. Consistent with the literature, this research found that the start-up could go to bankruptcy for two reasons: one, in particular is very common, all of them are susceptible to financial strength. It is sometimes out of the hands of the founders and this leaves the company at considerable risk.

Nevertheless, this is what the entrepreneurs do, manage the risk, and continue until there are no more reasons to continue. One point that would be essential to highlight is that at a personal level, project failure should not mean anything but an enriching experience. Obviously, it has several other implications that are not good. However, being an entrepreneur is very hard and there is no warranty for success.

The other reason for project failure is that the interviewees stated that emotionally, the process of failing was very difficult or challenging. Thus, it suggested that all of them had the same coping mechanism, which makes them move forward. Interestingly, it seems that all of them ignore that they had this emotional intelligence. In my opinion, they would not have their businesses if they did not have this kind of intelligence. This is the way of dealing with the problem in combination to solving the problem and the motivation makes them continue and, the positive outcome is that all the firms are still in business.

Within another scope, the implication of project failure for the research field is a bit disappointing since it was noted that there are many behavioral changes, but not of the changes suggest anything that you would not expect. The idea that there would be some behavior that will be standing out or that would surprise us, does not happen.

In a brief comparison between the scenario in Sweden and in Costa Rica, both cases experience the same problems, for instance, technical issues are everyday problems. Then, legal issues are highly important; but financial stress is the one that matters the most. The main difference between both countries is the accessibility of resources, which is a significant advantage in the case of Sweden. In the case of Costa Rica, there are very few investors or venture capitals willing to invest in firms. Nevertheless, how the firm is financed is out of the scope of the research.

5.2. Moderators

As mentioned before, the entrepreneurial behaviors research field staged for several years until the theory of plan behavior from Ajzen (1991) came out. This shows the close relationship this field has with psychology; both usually look at behaviors, emotions, and thoughts. Very early in the research, I knew that I would find the response to the question inside this moderators factors, and not so much in the behaviors per se. It was considered testing Kirzner's (2009), Lüthje & Frank's (2003), Baum & Locke's (2004) and Krueger's (1993) theories. Due to some problem with the questionnaire, the article from Krueger (1993) got out of the research, but the exogenous influence behavior is one of the recommendations we have for future research. About the other three models, they include five moderators' categories: alertness, creativity, attitude, intentions, and motivations. It was clear that attitude, intentions, and motivation were critical elements to continue and there was no evidence that alertness and creativity had any influence in the entrepreneurial behaviors. Within the three moderators influencing the behavior, it was identified that the emotional factor is imperative in order to understand the entrepreneurial behaviors and in the decision-making process. It was also found that there are three exogenous factors influencing behaviors that were not identified before.

In reviewing the literature, no data was found on the association between alertness or creativity and entrepreneurial behaviors. One possible explanation to this discovery is that alertness and creativity are cognitive processes that required time, a considerable amount of concentration, and mental effort, and; it cannot be replicated within the context of this study, since these cognitive process are the focus in something else. It is worth mentioning that Kirzner's theory has been applied in the context of Schumpeter's theory of creativity and destruction process. In this process, the effort and energy are placed in the creative process of building the firm; not in fixing the problem with a project that has failed as in the context of the interviewees. In other words, the entrepreneurs are too busy in their daily activities and dealing with the threat of bankruptcy; therefore, they are not putting any mental effort on been creative or alert. Perhaps this may not be the correct approach since the solution could be found sometimes when people think outside the box, but it is the way that empirical data shows it works.

It is interesting to note that all five cases of this study show a positive effect on all three moderators: attitude, intentions, and motivation. These three concepts are linked together and are mixed between each other in a complicated phenomenon where the intention is the most striking factor to predict behavior and that captures a little of the motivation which has a direct effect in the attitude. In my opinion, the most exciting finding is the attitude entrepreneurs had towards the problem. It is a careless one in relation to the circumstances or causes of the problem. This does not mean that they do not care at all. However, the founders have the emotional intelligence that makes them lower the importance of the event because by making it a big deal the consequences could impact the team or themselves and eventually hurt the firm even more. The other factor is the intention, after having this significant grief, the entrepreneurs lowered the tone of the problem, but they had a strong reaction towards the

solution of the problem. This means that they actively looked and tried to work it out. Thus, the entrepreneurs never stopped working on the solution. They quickly came up with several options to solve the problem and implemented a strategy. Afterward, they acted on the solution, which eventually got them to a point where this was not a significant threat anymore. Finally, all interviewees demonstrated clear motivation towards their employees and investors. It is remarkable, since it may be considered a 'bad' motivation, perhaps you can call it to pressure, but it can be used to accomplish the aims at a personal and business level. The positive effect is that this makes them move ahead and do not let them quit and leave everything behind.

The most prominent finding to emerge from the analysis is the emotional factor. It is present in the literature as part of the self-efficacy, and, in the empirical data since all interviewees demonstrated apparent emotional reaction influencing the behaviors. Therefore, it is a proposal in here to treat the emotions as a moderator factor. Thus, emotions as a moderator of conduct do not limit themselves to self-efficacy as the literature stated. It contains more than dealing with grief. What has been proposed is to include the six basic emotions and the stages of those emotions, which affect the entrepreneurial behaviors. Not only negative feelings, as madness or sadness that generate action that could threaten the company, but also happiness may have negative consequences in the founder generate behaviors that are not in line with the objective of the start-up.

In this study, the firm based in San Jose in comparison with the firms based in Gothenburg showed no difference in any factor of analysis. They all experienced the same emotional challenges and they are all influenced by the same moderators and also experienced the same behavioral changes.

5.3 Decision to quit

This research could be further developed in future studies but there are some immediate, dependable conclusions for the field. For example, the decision to quit is influenced by many conditions. In my opinion, the one that affects the most is the emotional factor. During the interviews, it was noticed that the possibility of quitting is always present and that entrepreneurs sporadically evaluate the idea of leaving. Sometimes the problems are so complicated and the grief is so high that the question is raised. The ones that continue and overcome, not only the financial, legal, or technical issues but the cognitive and emotional challenges too, are the ones that will have a competitive advantage over the competition. This is because the competition will face a similar problem, but they may not be able to deal with it successfully.

5.4 Entrepreneurial behaviors

These findings are rather disappointing. It was discovered that the founders changed several behaviors after a project failure (Appendix No.1). There were so many factors that it was necessary to divide them into six categories: general, technological, financial, network, learning, and strategic. However, this does not help much in responding to the research question or expanding the knowledge in the research field. In essence, the empirical data shows that the interviewees made many changes, but all the changes made were in between the scope of what is considered healthy behaviors. Nothing stands out and nothing had a significant impact in regards to the response of the research question. Still, some of the interviewees mentioned networking as part of the process to get to the solution of the problem and this may be a good focus for future research.

6. Conclusion

In reviewing the literature, the association between personality traits and entrepreneurial behaviors or project failures and personal recovery was found. However, I could not find any author who questions the relationship between project failure and entrepreneurial behaviors. This research has a contribution to several research fields, such as project management, economic development, and entrepreneurship. At the same time, the essential contribution of this thesis is centered in the attempt to predict entrepreneurial behaviors and the roots of those behaviors. This thesis has explored the link between project failure and entrepreneurial actions through the inductive theoretical development approach. Thus, the aim was to develop the theory of plan behavior (Ajzen, 1991) and economic development applied to the field of entrepreneurship and expand the knowledge in the area a little more. In summary, the contribution to the science is the further development of the theories about the economic growth and the plan behavior by adding a decision; the emotion as one more moderator and the endogenous factors influencing the original moderators.

Another element that the empirical data shows is that start-ups struggle in three main areas. The finance and legal areas endanger the continuity of the firm, and the technical field may threaten the continuity of the firm. However, the empirical data did not conclude that this was a significant threat. Among the three models tested Kirzner's (2009), Lüthje and Frank's (2003) and Baum & Locke's (2004), the following five attributes were put to review: alertness, creativity, attitude, intentions, and motivations. The first ones: attributes, alertness, and creativity, do not show any signs of relevance for the founders and do not have any influence on the behaviors. A possible explanation for this might be that the founders are so focused on finding the solution to the problem that exploring opportunities or looking at the middle or long term future is not relevant at that moment.

Moreover, entrepreneurial behavior changes a lot after a project failure. Mostly concerning finance and networking, but despite the possible relevance for the field, the scope of this research focuses on the process and not as much as on the results. Therefore, the behaviors per se are less relevant in this conclusion.

On the whole, project failure has many effects on the entrepreneur's behaviors, but none of the impacts are highly relevant in terms of a scientific discovery or in terms of predicting behavior. Obviously, the practices are essential for the entrepreneurs since the actions taken could save the firm from bankruptcy. However, what is crucial for science is how the entrepreneurs react to the project failure; which the empirical data shows that it is a combination of cognitive and psychological factors that push and pull the person to move forward towards the solution of the problem and to increase the possibilities of success.

6.1. Implications

Both the practical and managerial implications have an impact on the micro and macro level. The association at the macro level is about the role entrepreneurs have in the economy. The government may use the information to create public policies that enable the entrepreneurs to have easier access to legal and financial bits of advice. As well as the private sector can benefit from this thesis and see a potential market niche. On the other side, at the micro level, the entrepreneurs would benefit from this thesis by preparing a business plan that could take into account these significant bankruptcy threats, as well as the psychological effect that attitude, intention, and motivation have in the behaviors. Another element is the implication this thesis could have in the investors. They can also capture some value in the information provided by due to the fact that they could take into account and evaluate these threats and psychological effects. This means that investors could use the influence they have

in the motivation to ensure that the entrepreneur would continue with the plan they had and to push the entrepreneur into the planned direction.

6.2. Future Research

The research made in this thesis has found that there is still room for some investigation about the endogenous factors influencing the behaviors (Kruegen,1993), as well as the endogenous factors that were found in this thesis, for example: the careless attitude towards the problem, the strong reaction towards the problem, and the strong sense of responsibility that motivates entrepreneurs. Another area of research that shows a lack of empirical evidence is the link between personality trait and moderators. The connection between quitting and the moderators. Finally, the role of networking concerning entrepreneurial behaviors.

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8. Appendix No. 1

Behaviors in general	<ul style="list-style-type: none"> -To hide emotions to the team -To stop a consultant, internal development, marketing, hiring -To start development -To analyze the situation -To construct team building
Behaviors related to learning	<ul style="list-style-type: none"> -To learn a new topic such as Business model, new technology,
Behaviors related to network	<ul style="list-style-type: none"> -To get advisory -To contact lawyer and government agencies -To contact start-ups groups, organizations, incubators, colleagues, blogs -To contact private companies To hire a person with the technical skills
Behaviors related to finance	<ul style="list-style-type: none"> -To raise money again -To raise more significant amounts earlier -To Accept some cost -To get government loans and grants
Behaviors related to technology	<ul style="list-style-type: none"> -To build the tool outside Sweden -To hire a new technical person
Behavior related to strategy	<ul style="list-style-type: none"> -To work on a strategy in regards the sales -To work on a strategy in regards the team -To work on a strategy in regards raising funds -To work on a strategy in regards the networking

A. Introduction

a. Mission and goals:

To respond to the research question in line with the research problem.

To collect empirical data consistent with the methodology, validity and reliability, and replicability.

b. Case study questions:

How does the failure of a project in the software industry affect entrepreneurial behavior?

c. The theoretical framework for the case study, key readings

Guzzini (2017), Shepherd et al, (2013), Cartan et al, (2007), Kizner (2009), Krueger (1993), Gartner (2010), Gartner et al. (10993), Baron (1998), Schumpeter (1934), Kirzner (1985) and Bird (2017)

d. Letter of introduction

University of Gothenburg
Gothenburg, Sweden

April xx, 2019

Dear xxxxxxxx,

My name is Christian Vera master candidate for the program Knowledge-Based Entrepreneurship of the University of Gothenburg.

I am writing my thesis on entrepreneurial behaviors and project setbacks.

It would be wonderful to make my contribution to science, by interviewing one of the founders of the firm. The interview won't take too much time is intended to last for one hour. I will be available all week at any time, so please let me know if you are interested.

I am deeply grateful for your kind support.

Sincerely yours!

Christian Vera

xxxxxxxxxxxx@student.gu.se

B. Data Collection Procedures

a. Data collection plan:

The empirical has been planned to be collected in a private room to avoid distractions. Only the interviewee and the interviewer would be present in the room, to avoid any type of peer pressure.

b. Expected preparation

The interviewer was prepared in advance. He had the computer, timer, recording device, notebook, pen, and a constrained attitude.

C. Semi-structured interview

Introduction

Hello, My name is Christian a candidate for the master program in Knowledge-based entrepreneurship of the University of Gothenburg. I am writing my thesis on entrepreneurial behaviors as part of the protocol of the university. I would have to record the interview. Please, let me know if you do not agree with it.

Background & Setting (some Information was collect before the interview).

Organization information:

Name:

Location:

Numbers of employees:

Age:

Field:

Mission:

Vision:

1) Could you please introduce yourself?

Name:

Age:

Position:

Experience managing an enterprise:

Education:

Topic One: Project Failure

2) Please describe the company's scenario in the developing stage.

3) Could you describe the biggest setback/failure you have had in the company?

I.e., delay, quality, budget or fails to meet the market.

4) At any point, your job was at jeopardy?

5) Did you invest your own money in the firm?

6) What was pressing at that point?

Topic Two: Moderators

Kirzner (2009) and Rui et al. (2018)

7) Did your senses change? I.e., alertness, creativity, recognition of opportunities.

8) What was your first reaction?

Lüthje & Frank (2003)

9) Did you have any initial intention towards the issue? I.e., to Quit, to tackle the issue

10) What was your attitude toward the problem?

11) What would you do different this time?

12) Did the setback affect your plans?

Baum & Locke (2004)

13) What was your motivation to continue?

14) How was the communication with the stakeholders?

15) How did you feel about the setback?

Topic Three: Entrepreneurial behaviors

16) What did you do to find solutions?

17) Did you use technology to find solutions?

18) Were you activating looking to learn something new?

19) Have you contacted someone in order to find solutions?

20) What would you do different this time?

Topic Four: Back to moderators

21) Can you trace back the reason you did (behavior #1) and (behavior #2)?

22) How can you explain that it worked out fine?

23) What is your opinion about the motivation behind your actions?

24) Would you like to add something else?

Conclusion: Thank you for sharing your time with me. I may share the results if you are interested.

D. Guide for the case study Report

a. Audiences

Founder, CEO or CTO of a start-up in the field of software.

b. Exhibits to be developed:

Interview Log:

Interview created on 11/04/2019

20 start-ups were contacted on 12/04/19

The pilot ran on 14/04/2019

Fix the interview on 14/04/2019

Fist interview conducted on 15/04/2019

Fix the interview on 16/04/2019

Second interview conducted on 18/04/2019

Fix the interview on 21/04/2019

The third interview conducted on 24/04/2019

Ten more start-ups were contacted on 01/05/19

The fourth interview conducted 04/05/2019

Topic four added to the interview on 04/05/2019

Fifth interview conducted on 05/05/2019