

Exploring the Impact of Higher Entrepreneurship Education: Critical Experiences as Triggers or Deterrents for Career Perceptions of Graduates

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Perceptions of Graduates

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Abstract

Existing research suggests that entrepreneurship education has varying degrees of impact on the economic outcome of the participants; however, there is no consensus on what the impact is, and what actually constitutes entrepreneurship education. In career literature, a link between higher education and career choices can be found. Therefore, understanding the differences in career paths and career accomplishment of different programme graduates can be key indicators of the impact of the specific study programme. More particularly, Griffiths et al. (2012) opined that by researching entrepreneurship education, we can understand the pedagogical strategies and teaching practices that are significantly related to the student's innovation intentions – those learning experiences that increases the likelihood that a student will become an innovative entrepreneur.

However, despite the plethora of research assessing different areas of entrepreneurship education; the issue of how entrepreneurship education interplays with career choices of graduates has surprisingly remained unexplored.

The current thesis addresses this gap in literature. It examines how critical experiences during the period of entrepreneurship education interplays with students' career perception leading to their career choices after graduation. A qualitative case study deploying the video-interview technique was used to study how critical experiences and emotions /associations acted as triggers, or deterrence for the formation, crystallisation or obscuring of self-entrepreneur image perception of MSc entrepreneurship graduates from Aalto University School of Business.

The findings suggest that different incidents and events both those formally embedded in the programme content, and extracurricular activities consisted critical experience for individual students. Thus, a dynamic interaction between perceived criticality of an experience and emotional association to the experience is observed; and such is dependent on the strength and certainty of the initial motivation, interest and preconceptions for choosing to study entrepreneurship.

The result of this study contributes significantly towards bridging the prior knowledge gap regarding: (a) factors influencing change in the career perception of entrepreneurship graduates; (b) triggers and deterrents for career choices after graduation; c) the role of critical experiences during the education programme on the formation and crystallization of graduate's career perception.

Key words: entrepreneurship, education, career perception, critical experience

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1 INTRODUCTION

This chapter introduces the reader to why “the career choice of graduates from Entrepreneurship Master’s Programmes” is a relevantly inviting topic to study. The chapter begins with an introductory background on the perceived influences or common expectations on Entrepreneurship education. The problem discussion identifies the lack of research on this topic and highlights our contribution to the dialogue on Entrepreneurship career literature. Specific focus of the study is expressed through the research questions, objectives and delimitation, while the structure of the entire thesis is presented at the end of the chapter.

“Find a job you love and you’ll never work a day in your life”

~ Confucius

Scholars and policymakers are often in favour of including entrepreneurship content in the curricula at all phases of the formal education system, and as a result, various entrepreneurship majors or specialization programmes are gaining popularity at higher education institutes in Finland and abroad. Such growing popularity is perhaps build on the conventional believe that entrepreneurship education increases the propensity for new venture creation which is in turn seen by stakeholders as the engine for sustainable economic growth and economic renewal (Ekankumo & Kemebaradikumo, 2011; O’Connor & Greene, 2012; Vázquez-Burgete et al, 2012). However, the over-arching research problem here is whether entrepreneurship education actually produces entrepreneurs or not. In other words, does entrepreneurship education (EE) matter when it comes to whether graduates will pursue self-employment or prefer regular employment as career choice after graduation (Nilsson, 2012).

The current study seeks understanding on the interplay between what happens during higher entrepreneurship education process and the graduates’ career perception. Furthermore, the study investigates the role of critical experiences during EE in shaping the formation/crystallization of preference to pursue entrepreneurship in the sense of owner-manager or employment as career path.

1.1 Study Background

Entrepreneurship education seems to be attracting significant attention from academia, government and the larger society in recent years; mostly regarding its perceived potential to orient students and participants towards viewing entrepreneurship as viable career option (Aldrich & Martinez. 2001; Chandler & Lyon, 2001; Elmuti, Khoury & Omran 2012; Nilsson, 2012; O'Connor & Greene, 2012). Perhaps, this perception is best explained by the conventional believe that entrepreneurship education directly increases entrepreneurial propensity that promotes the growth of new venture creation, which in turn is seen by different stakeholders as the engine for sustainable economic growth (*cf*: Lee & Wong, 2003; Floyed & McManus, 2005; Souitaris, Zerbinati & Al-Laham, 2007). For instance, Kuratko (2005) opined that “*entrepreneurship has emerged over the last two decades as the most potent economic force the world has ever experienced*” (p.577). Thus according to Kuratko, entrepreneurial activities has re-revolutionalised the global business landscape beyond prior imagination since the industrial revolution. Scholars further claim that such unprecedented entrepreneurial development is self-evident in terms of new businesses incorporated yearly, popularity of venture activity; and also in the area of job creation and innovation generation by often new small and medium-sized enterprises. Kuratko argues that with such exponential progress have also come rather comparable increases in the area of entrepreneurship education (EE). Apparently, this has resulted in the growth of both the number of educational institutions offering EE, and the development of curricula and study programmes devoted to entrepreneurship and new-venture creation especially in the United States (Kuratko, 2005, p.579-585).

According to Vesper & Gartner (1997), the first entrepreneurship course was introduced by Harvard University in 1945 in response to the then changing societal and economic circumstances emanating from the collapse of the weapon industry at the end of the 2nd world war, which thus triggered a state of transition economy in the United States of America. Similarly, the first undergraduate entrepreneurship curriculum was offered at Babson college in 1968 (See: Katz, 1999) and perhaps, the first graduate entrepreneurship programme can be traced to the first fledged MBA Entrepreneurship concentration offered at the University of Southern California in 1971. However, whether MBA concentrations

can be considered as higher education academic programmes is a debate that is deeply dependent on educational and pedagogical differences across the globe. Thus, McMullan and Gillin (1998) argue that the first post-graduate entrepreneurship degree programme have started only after the *Journal of Business Venturing* printed a landmark article in 1987 providing the architecture for a graduate degree programme in entrepreneurship. Therefore, the subsequent adoption of this blueprint in 1988 by Swinburne University of Technology, Melbourne - Australia to create post-graduate entrepreneurship degree programme could be then seen as the real origin of full-entrepreneurship master's degree curricula which has now spread to numerous higher education institutions (MacMullan & Gillin (1998; p. 275).

The roots of EE in Europe can be difficult to trace to any one particular higher education institute, however, the Nordic countries have been in the forefront with an integrative “Nordic Model of EE” (Chiu, 2012). For instance, Finland was one of the very first countries [if not the 1st] in Europe to integrate EE in the curricula at every level of the national education system in 1994. In general, EE in the Nordic countries have certain commonalities which distinguishes the Nordic model from all other EE models in Europe and beyond. *Figure 1* below illustrates the key common feature of EE in the Nordics. At the same time, it is evident that the pace of implementation and level of development of EE is not exactly the same in all the Nordic countries.

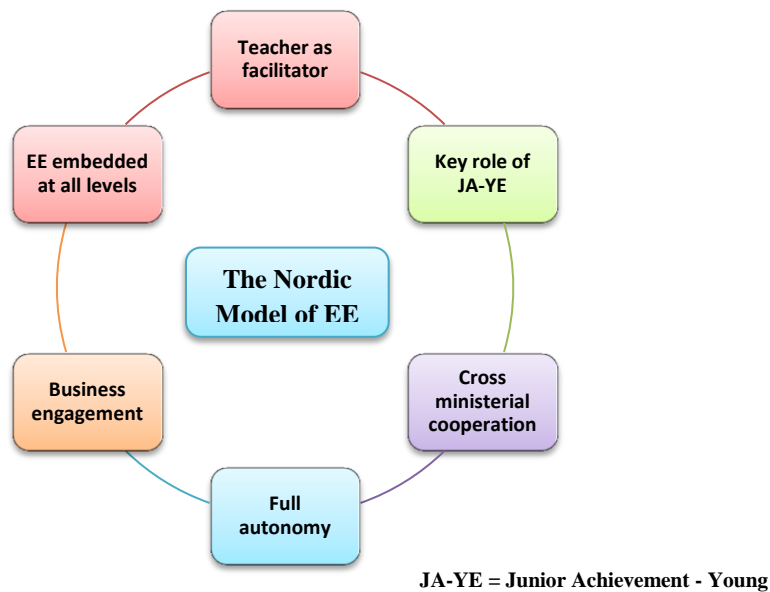


Figure 1: The integrative features of the “Nordic Model of Entrepreneurship Education
 Source: Chiu, (2012)

Existing studies have pointed out that there are recognizable differences amongst the five Nordic countries when it comes to the level of infrastructure, government recognition, financial/policy support, teacher development, labour/tax regulations, and attitudes towards both the promotion of EE and the actual pursuit of entrepreneurship per se (Kozlinska, 2011; Chiu, 2012).

In most other countries, EE strategy is formulated at the education policy level and thus passed down to the education institutes for implementation based on the interpretation of each institution. Therefore, for most of these countries EE is often relegated to be offered by higher education institutions; and even more in MBA programmes. Furthermore, the involvement of non-governmental organisations (NGOs) in EE is almost non-existent in many countries except the United States. On the other hand, the Nordic countries are far behind the US, UK and Germany in terms of the engagement of local businesses and local entrepreneurs in EE at higher education level (Kozlinska 2011; Chiu, 2012; Rae 2012).

Despite the relatively young history of EE and the graduate entrepreneurship degree programmes in particular, it is evident that policy makers and educators are showing renewed interest in understanding the effectual outcome of entrepreneurship education (*cf*: Griffiths, Kickul, Bacq & Terjesen; 2012). Therefore, studying the career choice of graduates from entrepreneurship higher education programmes and explaining the triggers or critical learning events in entrepreneurship master's degree programme that are influential for the participants' career choices, as well as understanding the outcomes would shed much lights on: (a) whether such EE actually produces venture oriented entrepreneurs as acclaimed by popular media, (b) enlighten both pundits and sceptics about the actual role of entrepreneurship education, and (c) above all the study could provide clear understanding of the impact of entrepreneurship curriculum design on the participant's entrepreneurial career perception formation which may influence their ultimate choice of career path after graduation. This will undoubtedly also help entrepreneurship scholars, educators and policy makers to better understand the impact of different critical experiences contained or not included in the entrepreneurship education curricula at the master's level.

1.2 Motivation of the Study

Why is this topic worth studying? There is an age-long belief that educational programme is as good as its graduates. In other words, there is a link between higher education and career choices (Robinson & Haynes 1991). Therefore, educational programmes or curricula can be evaluated based on the career path of graduates it produces as an output. Having said that; it is also important to note that the current study is not about the unending debate on the notion of “elite” versus “mass” education; however, in career dialogue, comparing the differences in career paths and career accomplishment of different programme graduates can be seen as key indicators of not only the quality, but also the impact of any specific study programme (Robinson & Haynes 1991; Harvey, 2000). Griffiths et al. (2012) have highlighted that by researching EE, we can understand the pedagogical strategies and teaching practices that are significantly related to the student’s innovation intentions – those learning experiences that increases the likelihood that a student will become an innovative entrepreneur mirrored as ability to create/spin-off new entry out of innovations [(Mayhew, Simonoff, Wiesenfeld, Baumol, & Klein, 2011) cited in Griffiths et al. 2012].

Several scholars acknowledge that the on-going debate about the impact of EE as a multifaceted one and thus scholars seem not to have any consensus regarding the real outcome of EE (Gartner, 1990; Shane & Venkataraman, 2000). Furthermore, existing studies have highlighted that the considerable variation in different entrepreneurship programmes and curricula content could be one of the key factors influencing the variety of outputs from participants and graduates of respective entrepreneurship study programmes (Hills, 1988; Vesper & Gartner, 1997; Fayolle, 2000).

There is no unifying definition of the term – *entrepreneurship* and what the phenomena actually entails (Bygrave & Hofer, 1991; Cunningham & Lischeron, 1991). In fact, some authors have attributed the infancy of the academic field of entrepreneurship as a major factor contributing to its lack of a unifying framework (see: Sexton & Smilor, 1986; Gartner, 1990; Shane & Venkataraman, 2000). Furthermore, scholars argue that despite decades of often provocatively disappointing entrepreneurship inquiry, the question that still remains is if perhaps entrepreneurship scholars have been thinking about and teaching

entrepreneurship in the wrong manner (Sarasvathy & Venkataraman, 2012; Alvarez & Barney, 2013).

For these reasons, it is necessary to investigate this topic from the perspective of EE graduates in order to understand how the education programme interplays with the graduate's career perception and career choices.

1.3 Problem Discussion

Although several authors seem to agree that EE has varying degree of impact on the supply of venture-oriented entrepreneurs – that is, self-employment or owner-managers who create, develop and manager new ventures (Clark, Davis & Harnish, 1984; Ronstadt 1987; Scott & Twomey, 1988; Gartner, 1990; Robinson & Sexton, 1994; Rasmussen & Sørheim 2006; Matlay, 2008), however, despite much of these speculations, existing studies have pointed out that in the past the impact of EE has often been neglected in mainstream academic research (Robinson & Sexton, 1994; Matlay, 2008). More particularly, it is evident from the ensuing discussions that how EE programmes influence career choices of graduates subsequently leading to self-employment or traditional employment career choice is underexplored in academia.

Recently, it seems that a renewed scholarly interest has emerged towards studying the interplay between different EE programmes and the corresponding economic outcome. For instance, [among others] Galloway & Brown (2002) have studied whether university level EE drives the creation of high-growth firms; Rasmussen & Sorheim (2006) study looked at the implications of *action-based EE* in six Swedish universities. Similarly, Matlay (2008) study assessed the *impact EE* can have on *entrepreneurial outcome* amongst a cohort of entrepreneurship programme graduates from eight universities in the United Kingdom; and Hytti, Stenholm, Heinonen, & Seikkula-Leino (2010) have investigated how *motivation* and *team behaviour* interplay with the *perceived impact of EE*. In addition, Clausen & Vegard (2011) have studied "*EE and pupil's attitude towards entrepreneurs*" in Norway; Fayolle (2011) has analysed the interplay between *experiential learning and EE*, - in other words, how experiential learning impact outcome of EE.

However, most of these studies call for research addressing the long-term results and/or career implications for individuals who have graduated from various entrepreneurship study programmes. Rasmussen & Sorheim (2006) specifically called for research assessing the effect of EE on individual's entrepreneurial intentions and career track (Rasmussen & Sorheim, 2006; p.193). Hence, the extant study is necessary because it contributes towards bridging the lack of knowledge and/or prior studies addressing: (a) the career perception of entrepreneurship graduates; (b) triggers and deterrents for changes in career choices – why graduates of entrepreneurship degree programmes may prefer specific career path after graduation instead of the conventional expectation for own venture creation; c) the role of critical experiences during the education programme on the formation and crystallisation of graduate's career perception. For instance, it is now common knowledge that good percentage of these entrepreneurship graduates choose paid employment as career path contrary to the conventional expectation that most of them will become independent entrepreneurs and self-employed.

1.4 Research Question

Following the preceding discussions, it is evident that the impact of EE cannot be over-emphasised. There seem to be evolving research interest in understanding the implications of entrepreneurship study programmes in higher education institutions and how it interplays with overall entrepreneurship or entrepreneurial outcomes in the society. Entrepreneurship career literature is said to be in its infancy, leading to lack of research on how EE influences the career path of graduates (Rasmussen & Sorheim, 2006). Hence, the focal interest of the extant thesis is to investigate the following research questions concerning the impact of higher EE on career choices. More particularly, the focus of this study is further narrowed down to investigating critical experiences during the period of EE as triggers or deterrents for formation and/or crystallisation of career path perceptions of students after graduation from the EE master's programme.

- *How do critical experiences during education influence students' future career choices?*

- *Does the career perception of students admitted to the MSc in Entrepreneurship programme change during the period of the education?*

These questions will be studied from the perspective of only graduated entrepreneurship students, to identify what is the actual influence of EE and entrepreneurial learning in the entire master's study programmes has had on the graduates' formation of entrepreneurial intentions which reflects on the ultimate career choice after graduation. Whatever the identified self-entrepreneurial perception and intentions maybe; a crucial aspect of this study tries to understand and explain the critical incidents which might be the triggers for the formation, crystallisation or obscuring of perception of entrepreneurship as career path.

1.5 Thesis Objectives

Some have questioned whether entrepreneurship is a career or not, while others have argued for and against the different implications of EE (see: Gartner, 1990; Vesper & Gartner, 1997; Henderson & Robertson, 2000; Shane & Venkataraman, 2000).

The objective of this thesis is two-fold. The current study serves as a programme evaluation aimed to gain insights on the entrepreneurship graduates' perception of the real impact of the master's study programme in entrepreneurship at Aalto University School of Business in particular when it comes to the graduates' career decisions. In other words, how the MSc entrepreneurship programme suits and fulfils both the formal study objectives and the participants' own-learning expectations. The second aspect of this study focuses on the factors promoting or fettering career choice of MSc entrepreneurship graduates who did not have own or family enterprise when entering the programme - that is, no *entrepreneurship specific human capital* prior the master's education in entrepreneurship. Can we identify elements of the EE that could account for why specific career path might seem attractive or non-attractive for the entrepreneurship programme graduates? The second perspective will also allow for capturing and answering key questions such as: students' own learning and self-mastery, self-entrepreneurial identity perception - formation and crystallisation of own identity as an entrepreneur.

1.6 Delimitation of the Study

Based on recent reports of the Finnish Ministry of Education, three stages of entrepreneurship education promotion can be distinguished in Finland: general SME economic education in 1950-60s, entrepreneurial training in 1980s and entrepreneurship education in 1990s. Entrepreneurship education received a special attention from the side of the government in late 2000s due to recession in the late 90's resulting in employment problems that stretched to early 2000s. The Ministry of Education was given the responsibility to promote self-employment as a career option among younger generation in all levels of education in Finland (Opetusministeriö, 2009).

In addition to fact that the level of education of young entrepreneurs constantly increased following the general trend of higher education level among young people in Finland. This was also considered as a reason for the growing importance of the educational system in new business creation process stimulation. According to the same source 20% of new entrepreneurs have had a university degree by the year 2009 (Opetusministeriö, 2009).

Following the preceding background on the development of EE in Finland, the former Helsinki School of Economics - HSE was considered a key player in providing business education in general and entrepreneurship education in particular to the Finnish population. For instance, entrepreneurship programme was initiated in 1983 at HSE. Following the renewals of the Finnish higher education system, then HSE became one of the three schools that merged in 2010 to give birth to a multidisciplinary University currently known as the Aalto University. Hence, the HSE was renamed as the Aalto University School of Business. Refer to subsection 4.2.4 for more details on the development of the current entrepreneurship programme. More importantly, the case of the MSc entrepreneurship programme at Aalto University was chosen for this study due its uniqueness, rich history and its exemplary role in terms of entrepreneurship education in the context of Finnish higher education system.

The scope of this study has been narrowed down to include only graduates of the master's degree programme in entrepreneurship at Aalto University School of Business. Thus, the study does not take into account of students/participants from other Schools and department

of Aalto University who take courses, elective study modules, and even minors in entrepreneurship. More specifically, the data is collected from programme graduates from September 2005 to March 2013.

The following delimitation is necessary because existing studies has shown that there are considerable differences between foreigners and non-foreigners when it comes to push and pull factors that influence whether an individual will pursue entrepreneurship career such as self-employment or not (*cf.* Hughes 2003; Langevang et al., 2012). Please note that there is no point delving into the discussions on opportunity versus necessity driven entrepreneurship in this document; however, it is important to underline the fact that existing studies has emphasised the fact that perceived employability of different groups within a given society as a key force influencing the pursuit of entrepreneurship intensions. Dyer (1994) has stressed that individual, social, and economic factors have strong determinant impact on career choices. Furthermore, Ardichvili, Cardozo, & Ray (2003), Tang, Kacmar, & Busenitz (2012), and Parker, & van Praag (2012) agree that background factors such as parental role models and own experiences have significant implications on whether an individual will pursue entrepreneurship or not irrespective of what happens. More so, drawing upon Scott & Twomey (1988) and Super (1980) frameworks, we identify a clear relationship between one's current life phase and career perceptions which reflect on the career choices.

In order to control for bias, the study concentrates only on those MSc entrepreneurship programme participants with no *specific human capital in entrepreneurship* such as own enterprise (Dyer, 1994) or family business background prior to their enrolment in the study programme. Furthermore, in order to ensure a homogeneous sample in terms of experience level according to Super's (1980) framework for "*Life-Span Approach to Career Development*" this study focused on graduates who are in the earlier establishment phase of 25 – 33 years old. It thus, excluded graduates who are 34 years old and above by 31st March 2013.

In order to further homogenise the sample, the study excluded differences brought by ethnic (Dyer, 1994) and gender (Brenner, Pringle & Greenhaus, 1991) characteristics. Thus, the study concentrates only on male Finns, who according to the programme graduation list

accounted for the vast majority (73%) of all MSc in entrepreneurship graduates between 2005 and March 2013.

1.7 Definition of Key Terms

Amongst the variety of labels associated with entrepreneurship and different EE programmes; a major question that is of interest to various stakeholders and which is also of paramount importance to the extant study is whether EE actually produces entrepreneurs or not. Some scholars have voiced their concerns that the plethora of existing definitions and conceptual spectrums for interpreting what is meant by *entrepreneurship* and/or what consists *entrepreneurial engagement* has led to the term *entrepreneurship* becoming a label of convenience with little or no inherent meaning (Gartner 1990). Thus, previous research has opined that “it is clear that the term *entrepreneurship* is often used by analysts, pundits and laymen to mean whatever they like” (Gideon, 2010, p.17; Wiklund, Audretsch & Karlsson, 2011).

Based on this, it is apparent that a clear definition of the key terminologies as used in the context of this thesis is of great importance in order to help the reader better understand the actual phenomena being observed. Besides, this would aid the audience in understanding both the theoretical and contextual starting point for this study. It also serves as the basis for making sense of the framework, claims and findings presented in the entire study. Therefore, the following lines present the definitions of the key terms which this study is built upon:

Entrepreneurship: *a dynamic process of vision, change, and new creation through the application of creative mind-set towards the creation of new economic entry (Drucker, 1985; Lumpkin & Dess, 1996; Kuratko & Hodgetts, 2004).*

Entrepreneurship Education: *In the context of this study, entrepreneurship education refers to formal teaching and learning geared towards the development of the participants’ competencies to foster risk-taking, opportunity identification, creativity, and passion for new entry in both economic and non-economic venture activities.*

Higher Entrepreneurship Education Programme: for the purpose of this study, higher entrepreneurship education is seen as full Entrepreneurship Master's Degree Programme whereby the participating students are admitted directly to a complete curriculum MSc in Entrepreneurship. This concise focus excludes different Entrepreneurship MBA concentrations, Entrepreneurship minors, other forms of Enterprise Education and even Entrepreneurship major or specialization which is a part of another Economics/ Management/ International Business master's degree programme.

Career Path: A career path is a process of an individual's long-term job orientation, preference and development of the employment experience along a defined or specific job and concatenation of office (see: Baruch, 2003)

Critical Events & Incidents: "a critical incident is a sudden moment of awakening, a flashpoint, a mental anchor which is triggered by perception, and a critical event is the cause or outcome of a critical incident. Both incidents and events are reproduced through reflectivity." (Kyrö, Kurczewska & Moisala, 2011)

Predisposing Factors: predisposing factors are background/ personality/ perceptions, environment and mental orientation that develop over several years and thus becoming a long term conditioning of the individual's preferred future or expressed preference for particular career - including employment type, or self-employment.

Triggering Factors: triggering factors are situational and short-term events that may have significant or strong bearing on a person's choice/change of preference and career goal. Triggering factors include the effects of looking for work, career advice received, success or failure experiences, sudden realisation of own-capabilities and the prospect of unemployment which may have long lasting ramification on the overall career outcome (cf: Scott & Twomey, 1988).

A general description of this thesis is presented in table 1 in the next page. This is aimed to provide the reader with ease of finding relevant information, and clear direction based on the simple overview of the entire document.

1.8 Thesis Disposition

<p>Chapter 1 – Introduction</p>	<p>This chapter introduces the background to why the <i>Career Path of Entrepreneurship Master’s Programme Graduates</i> is a relevant topic to study. The research questions, purpose and delimitations of the study are presented to give overall preview to the reader.</p>
<p>Chapter 2 – Theoretical framework and literature review</p>	<p>This chapter presents the theoretical framework for the study and introduces to the reader the different concepts and theories guiding the thesis. It also reviews and integrates the existing empirical evidence and literature from previous studies and ends with a conceptual framework.</p>
<p>Chapter 3 – Methodology</p>	<p>This chapter presents the methodology and research philosophy that is used for the study. It explains the research paradigm, survey approach and the criteria for the sample selection and justification.</p>
<p>Chapter 4 – Data process</p>	<p>This chapter presents an overview of the data-handling process, survey instrument, and explain how the data collection is organised and will be analysed. Ethical considerations, reliability and validity of the study are also discussed.</p>
<p>Chapter 5 – Data Presentation & Empirical findings</p>	<p>This chapter presents the empirical data gathered from the interviewees who are the units of analysis for the study. Quick facts about the responding graduates are tabulated in order to provide synopsis concerning the entrepreneurship graduates included in the research.</p>
<p>Chapter 6 – Discussion & Conclusion</p>	<p>This chapter presents the analysis and discussion of the empirical findings and reflections of the authors on the interpretations different information embodied in the data being analysed. Summary of the most important findings are present. It also provides recommendations for further research and the limitations on generalizability of the findings.</p>

Table 1: General overview of the thesis structure

2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The current chapter elaborates on the literature about the status of entrepreneurship education, its success and challenges as well as its effect on career perceptions of graduates. The purpose of the theoretical part of the thesis is to extensively examine existing studies on chosen topic use this information in order to build the framework connecting the existing literature to the empirical findings.

“[...] there are many moments filled with despair, agony, and dealing with difficulty situations..., it’s so hard that if you don’t have passion, you will give up!”

~ Steve Jobs

2.1 Entrepreneurship education Process: A Literature review

This part of the study starts with an overview of selected existing definitions of the subject of entrepreneurship in order to elucidate the age-long lack of consensus on what the term actually entails. Further, a deep review of the key literature on *entrepreneurship education process* is presented. The uniqueness and challenges of teaching entrepreneurship, as well as its effect on career perceptions of graduates are identified and discussed. More so, the interplay of entrepreneurship research, differences between Anglo-American and European research and teaching practices as well as insights about common features of education process are also highlighted.

2.1.1 ON DEFINING ENTREPRENEURSHIP

The table 2 below presents some popular definitions of entrepreneurship in a concise manner that also allow for comparison of the role of the entrepreneur or how the entrepreneur is featured in the context of each of these descriptions. The definitions may or may-not clearly illustrate the variety of conceptual understanding about entrepreneurship; however it does to some extent expose the decades-old struggle in labelling various kinds of mind-set, behaviour, actors, activities, outcomes, and even intentions as entrepreneurship. The definitions highlighted in the table also echoes William B. Gartner’s

study published two decades ago titled “*What are we Talking about When We Talk About Entrepreneurship?*” (See: Gartner, 1990). The study has become one of the currently most referred articles on the meaning of entrepreneurship. In that study, Gartner identified two groups of associations that respondents labelled entrepreneurship. One group label a situation entrepreneurial depending on what happened in the situation – that is, to this group a situation is considered entrepreneurial if there is *innovation, growth, uniqueness*, and an *entrepreneur* involved. The other group considered entrepreneurship from the perspective of *value creation* as an outcome. That is, to the second group a situation is considered entrepreneurial only when there is *value created* and/or some sort of *economic gain* (Gartner, 1990, p.16).

Author(s)/pub.	Central view / assumptions	The entrepreneur mirrored as:
Schumpeter (1934)	Entrepreneurship is market innovation - identifying market opportunities and using innovative approaches to exploit them.	- <i>innovator who implement entrepreneurial change within markets</i>
Kirzner (1973)	Entrepreneurship equates to market alertness to disequilibrium, or information asymmetry in order to reap profitable opportunities	- <i>arbitrageur who drives dynamic market process & profiting from price inefficiencies in markets</i>
Drucker (1985)	Entrepreneurship is the act of innovation which bestows existing resources with new-wealth/value-creation capacity	- <i>an innovator/manager, change maker who combines resources to create new value</i>
Lumpkin & Dess (1996)	Entrepreneurship is essentially new entry! New entry is the act of entering new or established markets with new or existing products/services. It is also venture creation	- <i>novelty creator in market lunch, product & service offerings</i>
Kuratko & Hodgetts (2004)	Entrepreneurship is a dynamic process of vision, change, and creation. Application of energy and passion towards the creation and implementation of new ideas and creative solutions	- <i>vision & passion-driven person who creates new solutions</i>
Kozlinska, (2011)	Entrepreneurship refers to an individual’s ability to turn ideas into action. “It includes creativity, innovation and risk-taking...”	- <i>an action-oriented and creative individual</i>
Griffiths, Kickul, Bacq & Terjesen (2012)	A defining characteristic of entrepreneurship is “the creation of organizations. Entrepreneurship is thus seen from the context of the creation of growth-enterprises	- <i>entrepreneurs create organizations while non-entrepreneurs do not!</i>

Table 2: Selected existing definitions of entrepreneurship

Indeed, existing research suggests that entrepreneurship not only includes but also goes beyond all these characteristics that have been described above. Thus, entrepreneurship is a very complex concept which facets of its field may only be explained from specific paradigms or perceptual viewpoints (Ahmad & Seymour, 2007). Welter (2011) and

Griffiths et al., (2012) have argued the importance of contextualised view of entrepreneurship in order to move the field forward. Therefore, in this study even though the authors acknowledge the definitions describing entrepreneurship with such terms as innovative, flexible, dynamic, risk taking, creative, and growth oriented; however, the specific perspective of entrepreneurship being examined in the current study is rooted in the narrower concentrations of studies that defines the term as starting and operating new ventures (Drucker, 1985; Lumpkin & Dess, 1996; Kuratko & Hodgetts, 2004; Griffiths et al., 2012).

Following these definitions, it is evident that the concept of entrepreneurship and how the entrepreneur per se is mirrored varies significantly depending on the viewpoint of a specific definition. However, following the definition we adopted earlier in subsection 1.7, this paper argues that it is important to study how critical experiences during EE interplay with career perceptions of graduates through the viewpoint of whether the resultant career decisions lead to owner-manager type of entrepreneurship career such as self-employment or not.

According to Kuratko (2005), “*the younger generation of the 21st century is becoming the most entrepreneurial generation since the industrial revolution*” (Kuratko, 2005. p. 578). The results of the survey conducted by Scott & Twomey, (1988) have also indicated high interest in EE among students. At the same time, research has revealed the lack of knowledge about scientific ingredients of the topic of entrepreneurship and its practical implications. Research outcome of Vesper & McMullan (1988) revealed that students interested in entrepreneurship could be divided into two distinctive groups: the first group consisting of students determined to start their own business at some point; and the second group being those initially interested in the topic and willing to learn more about it in order to clarify own largely unclear interest in pursuing entrepreneurship career.

In addition to the academic interest of getting to know the essence of entrepreneurship, Clark, Davis, & Harnish (1984) have concluded that constantly changing global economic conditions increase the interest in entrepreneurship. Such skills as risk taking, essence of leadership and pro-activeness in identification and pursuit of opportunities have become the attributes of entrepreneurship of which the students seem to be longing for (Plaschka &

Weisch, 1990; DeTienne & Chandler, 2004). The evolving of courses encouraging development of these skills and pushing students to test their own venture ideas have been an evident reaction from the side of academia to the growing interest in this topic (Clark, Davis, & Harnish, 1984). Thus, various national and international economic fluctuations paralleled by such renewed faith in the notion of entrepreneurship by different stakeholders perhaps ushered-in psychological legitimisation of the pursuit of entrepreneurship in the eyes of the society. Nowadays, entrepreneurship has a strong role in the society and in the future, it is believed that EE will play a more significant role in innovative entrepreneurship due to the growing complexity of innovations (Griffiths et al., 2012, p.167).

Scholars have opined that, driven by such growing interest in the topic of own business creation “*the term (entrepreneur) began to shift from notions of greed, exploitation, selfishness, and disloyalty to **creativity, job creation, profitability, innovativeness, and generosity***” (Vesper & Gartner, 1997, p406); and therefore helping entrepreneurship becoming recognised as an independent field of science despite the constant struggle of identification and acceptance within academic circles (Plaschka & Weisch 1990).

The renewed interest in both the pursuit of entrepreneurship and the teaching of entrepreneurship at higher education institutes is self-evident. However, there is lack of scientific knowledge on whether what Kuratko (2005) described as “*the entrepreneurial generation*” is a product of higher EE or is the teaching of entrepreneurship at our higher education institutes producing mere employable workforce equipped with such entrepreneurial skill-set which Plaschka & Weisch, (1990) and DeTienne & Chandler, (2004) have emphasised. Well, a review of relevant entrepreneurship literature under the following educational subheadings will lead to insights on these overarching questions and perhaps allow for better understanding of how critical experiences taking place during higher entrepreneurship education interplay with the students’ career perception.

2.1.2 UNIVERSITY ENTREPRENEURSHIP EDUCATION

Since the introduction of the first course, the growth of the whole eco-system within the topic of entrepreneurship has been remarkable (Sexton & Bowman, 1984; Katz, 2003). The transition from a single course in a handful of schools to thousands of universities offering

entrepreneurship majors has been incredible (Sexton & Bowman-Upton, 1988; Katz, 2003). Robinson & Haynes (1991) as well as Katz (2003) have underlined the development of the whole range of academic and non-academic organizations, publications and other supplementary infrastructures in addition to the EE to promote entrepreneurship per se. The growth of infrastructure supporting entrepreneurship in US was followed by various European, Asian and South-American countries together with Australia emphasising entrepreneurship as a major engine for economic growth and sustainability (Gartner & Vesper, 1994). Sarasvathy & Venkataraman (2011), Shepherd & Patzelt (2011), and McMullen (2011) agree that entrepreneurship is a strong force for creating a better world. Different economic conditions, culture and educational systems of each country have contributed to the wide variety of teaching techniques and methods under the same topic of EE (Pittaway & Cope, 2007; Griffiths et al., 2012).

Gartner & Vesper (1994) point out the complexity and myriad of interconnections within the methods of entrepreneurship teaching. Some scholars have argued that all aspects of the past and present as well as predictions for the future of operating business environment should be taken into account when constructing the entrepreneurial learning event (Cope, 2005). Constant development and change of entrepreneurship courses make each programme unique and very difficult to compare (Vesper & Gartner, 1997). Such development has challenged scholars with finding the most efficient ways of teaching entrepreneurship (Kuratko, 2006).

Kuratko (2005) has stated that promotion of entrepreneurship had a straight influence on economic boom of United States of America - USA starting in mid-nineties. Seeing such a positive interdependence between economic growth and small business development, policy makers try to promote the later by investing in EE (Sexton & Bowman, 1984; Pittaway & Cope, 2007). Hjorth, (2008) has noticed that in addition to the USA, governments of most European countries have also underlined the interdependence of entrepreneurial activity and growing economy. Promotion and support of entrepreneurship within the society has become a distinctive feature of major European policies (Hjorth, 2008). Welter & Lasch, (2008) have provided information about the steady increase in number of positions given to entrepreneurship researchers at European Universities and

research centres. In their study, the authors have also noted the differences between entrepreneurship research within large and small European countries. For instance, countries such as France and Germany have developed mainly inward-looking research communities, when the distinctive feature of smaller countries such as Finland, Sweden and Norway has been the openness, which could be noticed by larger number of international publications (Welter & Lasch, 2008). According to Hjorth (2008) Nordic countries have the image of well-developed social equity, security and solidarity. These characteristics are supported by a number of examples such as high percentage of women representation in parliament and academia as well as publicly financed educational system. Nordic Entrepreneurship Research community can be also characterized by having appreciation for the local and contextual insights instead of following the growing global trends of standardisation (Hjorth 2008).

Kuratko (2006) argues that research is the power which fosters the development of education in universities. Scholars seem to highlight a number of entrepreneurship research themes, such as venture financing, small firm performance, international and corporate entrepreneurship which are somewhat reflecting the academic curricula. In addition to that, Hjorth (2008) has evaluated the research topics of Nordic European countries and the result seemed to be mentioning the same major topics. For example, growth and financing were identified as strongest aspects in Finnish research, financing and the role of the state in Norwegian research, growth and the state role in Swedish research on entrepreneurship. Such results indicate no clear difference within divisions of Nordic research topics.

Major American universities have established PhD programmes in order to promote and ensure the future development of entrepreneurship research and teaching (Kuratko, 2006). Hjorth (2008) and Welter & Lasch (2008) have described the same development within European countries such as Finland, Sweden, Norway, Denmark and Iceland. Thus, indicating the growing tendency to standardise research methods and direction with their U.S counterparts in order to provide state departments, ministries, and national agencies with unified tools for decision-making.

Despite the rapid development of entrepreneurship research and education there is a number of questions left to be answered: can entrepreneurship be taught overall, who

should teach it, the current stage of teaching development and how it can be evaluated is only a minor part of the questions scholars and governments are interested in. More recently, Wiklund, Davisson, Audretsch & Karlsson (2011) are still questioning whether entrepreneurship has achieved legitimacy as a bona fide independent field of study (*cf.*: Griffiths et al., 2012, p.611 & 612). Pundits and sceptics are increasingly looking for answers regarding the actual impact of EE, and thus it should be in the common interest of academia, governments, and even sceptics to elucidate the overarching question: whether EE produces venture oriented entrepreneurs or not (Pittaway & Cope, 2007; Neck & Greene, 2011).

Sexton & Bowman (1984) have classified the essence of EE as the integration of practical areas of various business fields into a “strategic framework” that could be used within the venture initiation process and its initial growth. Hence, it could be deduced that a major goal of EE is to produce entrepreneurs and capability for new entry (Lumpkin & Dess, 1996). Thus, following our earlier description of entrepreneurship in the context of this study, a key goal of the thesis is to seek understanding on how the critical experiences taking place during the period of EE impact on the perceived capability of new entre by the focal graduates.

2.1.3 UNIQUENESS OF TEACHING ENTREPRENEURSHIP

Drucker (1985) asserts “*the entrepreneurial mystique? It’s not magic, it’s not mysterious, and it has nothing to do with the genes. It’s a discipline. And, like any discipline, it can be learned*” (Drucker, 1985, p.143). The possibility of teaching entrepreneurship is recognised by number of scholars (Vesper, 1982; Hills, 1988; Hanlon & King, 1997; Gorman, Fayolle, Kyrö & Uljin 2005; Kuratko, 2005 & 2006). However, academics still have not agreed on the question of how to teach entrepreneurship (Fiet, 2000; Cope, 2005; Neck & Greene, 2011). Entrepreneurship is considered as a new and constantly developing interdisciplinary puzzle which requires continuous innovation and flexibility (Kuratko, 2005; Plaschka & Weisch, 1990; Gartner & Vesper, 1994; Hjorth 2008). It is continuously facing the challenge of designing the effective learning processes (Kuratko, 2006; Neck & Greene, 2011).

Scholars have different opinions regarding the focus within the subject. For instance, Vesper & Gartner, (1997) have raised the question whether the focus of entrepreneurship curricula should be venture creation, its development, creativity or small business management. The following subsections are dedicated to highlight the large variety of interpretations, methods and techniques used for teaching entrepreneurship.

As stated earlier and in accordance with our working definition of entrepreneurship, the focus of entrepreneurship curricula that is of interest to the current study is venture creation and/or similar activities leading to such new-entry as defined by Lumpkin & Dess (1996). This focus is consistent with the “venture creation process” which is the core of the current case programme being studied.

2.1.4 UNDERSTANDING ENTREPRENEURSHIP AS A CLASSROOM SUBJECT

Topics such as: identification of unique characteristics of students (Sexton & Bowman, 1984), content and delivery methods of entrepreneurship teaching (Sexton & Bowman-Upton, 1988), hands-on activities (Weinrauch, 1984; Gartner & Vesper, 1994) and interdisciplinary (Plaschka & Weisch, 1990; Neck & Greene, 2011) have been discussed and suggested by scholars to concentrate on when teaching entrepreneurship.

Existing studies have pointed out that one of the challenges of teaching entrepreneurship for educators lays in understanding the difference between needs and requirements of entrepreneurship and other business majors (e.g. management) students (Sexton & Bowman, 1983, 1984; Gartner & Vesper, 1994; Kuratko, 2005). Individuals majoring in entrepreneurship look for theoretically supported practical solutions ready to be applied for enterprise use (Weinrauch, 1984; Fiet, 2000). Ronstadt (1987) and Gartner & Vesper (1994) have mentioned that the initial difference between basics of entrepreneurship and basics of other business majors lays in the emphasis on organisational creation rather than its maintenance and development. However the next stage of entrepreneurship teaching emphasises on integration of useful topics for new venture creation issues from variety of business fields; such as strategy, marketing, management and finance (Plaschka & Weisch, 1990; Vesper & McMullan, 1988).

Scholars have stressed on the importance of flexibility and unstructuredness of EE in order to encourage self-initiative and creativity among students (Sexton & Bowman, 1984; Kuratko, 2005; Ronstadt, 1987; Gartner & Vesper, 1994). In his article, Cope (2005) has merged the topic of creativity with “learning by doing”. Cope has stated that making mistakes while trying different options, getting feedback from classmates, mentors and own team and using this opportunity to find new ways of problem solving are the major parts of entrepreneurial learning process. The role of getting feedback and importance of interaction is also discussed by Hills (1988) and Gartner & Vesper (1994). They have concluded that the presence and feedback from outsiders with business experience helps entrepreneurship students with business ideation and planning. In addition to getting feedback and its use for venture development purposes Vesper & McMullan (1988) have underlined the importance of students’ own excellence in communication and skills of conveying their business ideas to potential clients, partners and investors.

Following the preceding discussions, it is evident that entrepreneurship is indeed a multifaceted interdisciplinary discipline when viewed from the perspective of it being taught as a classroom subject. Furthermore, there various challenges facing the teaching of entrepreneurship as a classroom subject, however, such challenges and complexity also can be seen as some of the unique characteristics that distinguish entrepreneurship from other management/business disciplines. However, in the context of the current study, the main emphasis is placed on the later aspect which has been described as “the next stage of teaching entrepreneurship” by Plaschka & Weisch (1990) and Vesper & McMullan (1988). That is, this aspect of teaching entrepreneurship entails the useful integration topics that equip the student and participant with skills-set for new venture creation.

2.1.5 NUDGING THE CORRIDOR PRINCIPLE THROUGH VENTURE PROJECTS

Many entrepreneurship master’s programme contain a capstone module known as the New Venture Creation Module. This hands-on practice module mimics the real business world through either enterprise projects or requires students to set up their own venture and operate it as part of the course framework.

A number of topics have been summarised to be a part of New Venture Creation course framework considered being essential part of many entrepreneurship majors (Plaschka & Weisch, 1990). Honig (2004) and Cope (2005) have considered this framework as a “real world” experience connecting theory and practice (*cf.* Robinson & Haynes, 1991). Such course outline provides different learning experiences to each individual participant due to unique set of characteristics of each student’s background. Every individual creates own learning task within the same course once entering the new venture creation process (Cope, 2005, p.379). Such circumstance makes each venture creation process unique and interdependent with its participants and diversity of their backgrounds.

In addition to acquirement of analytical skills, the course provokes critical deep reflection (Cope, 2003), increased self-confidence, motivation and endurance to risks through connection of the simulation to the real business environment (Honig, 2004; Fiet, 2000). Scholars have gathered solid empirical evidence of strong emotions and double-loop learning through the venture creation course (Cope, 2003). Such a strong reflection has provoked many scholars to relate this experience to the concept of war. The accent has been put on constant uncertainty, necessity to re-evaluate and revise initial plans and strategies in accordance to changing demands of the process (Honig, 2004; Fiet, 2000; Kuratko, 2005; Cope, 2005). Gartner & Vesper (1994), Sexton & Bowman-Upton (1988) and Honig (2004) have also underlined the importance of feeling the imbalance, frustration and failure during the venture creation exercise. Such experience enables students to maintain confidence and avoid pitfalls in their future business life. On the other hand passion has been emphasised in some literature as being deeply embedded in the pursuit of entrepreneurship (Cardon, Wincent, Singh & Drnovsek, 2009). Entrepreneurship is often a practice of self-volition that defies reason-based explanations, such as unconventional risk-taking, unwavering devotion and commitment to a dream. Therefore, the term entrepreneurial passion is used by academics to explain such unrelenting emotional attachment to development and realisation of own venture idea(s). A link between entrepreneurial passion and the eventual success of entrepreneurship aspirations can be found in existing literature (Breugst, Domurath, Patzelt & Klaukien, 2012). Thus, emotional associations are very crucial in enabling our understanding of the individual’s

perception and commitment to entrepreneurship as a career option (Cardon et al 2005/2009, Breugst et al 2012).

Opportunity identification is a vital part of entrepreneurial reality (Shane & Venkataraman, 2000; Ardichvili, Cardozo & Ray, 2003) and thus integral to venture creation process (DeTienne & Chandler, 2004). Scholars propose that opportunity identification is a competency which can be developed and as such taught within entrepreneurship programme. However there is no consensus on how it should be taught and how the teaching methods could be measured (DeTienne & Chandler, 2004).

Ronstadt (1988) has identified the Corridor principle framework emphasising on opportunity identification within the concept of venture creation process. The Corridor Principle states that *“the mere act of starting a venture enables entrepreneurs to see other venture opportunities they could neither see nor take advantage of until they had started their initial venture”* (Ronstadt, 1988 p. 31).

It is thus fair to assume that the venture creation course framework provides entrepreneurship students without prior business experience with the first trial of venture creation and thus helping to launch this corridor principle. It has been identified that the expectations towards the first venture experience are usually set too high. The evidence that succeeding ventures prove to be more efficient based on the avoidance of pitfalls and taking advantage of established networks from the preceding trial has also been put forward (Ronstadt, 1988; DeTienne & Chandler, 2004).

In addition to the differences discussed in the previous chapter, existing studies have shown that EE often evokes strong emotional association on the experiences students had during the class. The venture formation track which is common with many of the entrepreneurship study programmes is aimed to provide a platform for students to combine the emotions and experience to practice-run own venture ideas. Thus in such programme and curricular constructs, it is fair to expect an interconnection between the critical experiences taking place during the EE period and the student’s career perception and attitudes towards the pursuit of venture oriented entrepreneurship after graduation. In other words, a core mission of the current study is at least to try to reveal such interconnections of being exposed to

such corridor principle and how it is reflected on student's own career perceptions and choices.

2.1.6 CHALLENGES IN TEACHING ENTREPRENEURSHIP

Despite the relatively high growth of EE; strikingly, many scholars are worried about the challenges in development of programmes and teaching staff (Fiet 2000; Katz, 2003; Honig, 2004; Kuratko, 2005; van der Sluis & van Praag, 2008; Hjorth, 2008). Wiiklund et al., (2011) questioned whether entrepreneurship has achieved legitimacy as a bona fide independent field of study (*cf*: Griffiths et al., 2012, p.611 & 612).

The reason for such contradiction lies in cultural, historical and pedagogical differences in understanding the concept of entrepreneurship as we have discussed earlier in chapter one (Kuratko, 2005). Due to its interdisciplinary character (Plaschka & Weisch, 1990; Neck & Greene, 2011) the field of entrepreneurship has been expanding in breath instead of depth (Robinson & Haynes, 1991; Shane & Venkataraman, 2000). This has led to very dissimilar courses and lack of unified curricula (Fiet, 2000). The discussion about the challenge of evaluation of syllabi with very dissimilar entrepreneurship curricula is raised by Clark, Davis & Harnish (1984), Ronstadt (1987) and Fiet (2000). A number of existing scholars agree that it is practically impossible to draw conclusions about the impact of EE on career success of graduates. The consensus among scholars about the right balance of conceptual and practical teaching techniques (Hills, 1988), unified study materials and exercises (Gartner & Vesper, 1994) is still far from being achieved. Due to these reasons Kuratko (2005) highlights a concern about the danger of diluting the meaning and misusing the concept of EE.

In addition to variety of teaching approaches the development of new venture business plan has been the major component within majority of venture creation courses (Hills, 1988; Gartner & Vesper, 1994; Neck & Greene, 2011). Such exercise has provided the unity to the course structure among different programmes and better preparedness of graduates to respond to demands of external investors when applying for funding (Honig, 2004; Neck & Greene, 2011). However, the business planning framework within entrepreneurship curricula has been more criticised than praised (Gartner & Vesper, 1994; Honig, 2004;

Ronstadt, 1987; Neck & Greene, 2011). Having been developed as a decision making tool for the purpose of strategic planning, the business planning exercise has provided focus on ideas instead of actions which has reduced rather than expanded opportunity identification possibilities for entrepreneurship students (Honig, 2004). The lack of scientific evidence about the connection of business planning to venture success is also lamented by Honig (2004).

Business modelling canvas introduced by Osterwalder in 2010 has gained considerable fame among scholars and students replacing the traditional business planning exercise. The canvas has provided users with flexibility and playfulness. However many similarities can be noticed when comparing the business modelling canvas to traditional business planning tools. Similarity to “thinking inside the box” discredited by Honig (2004) about business planning and no scientific evidence about its connection to the new venture success are the factors which can be identified reducing the current credibility of the business modelling concept. Longitudinal research is needed in order to prove or disprove the influence of such planning exercise on the venture success of entrepreneurship graduates deploying it.

The entrepreneurship discipline is considered having largely unsupported and imperfect theoretical bases (Hills, 1988; Cope & Watts, 2000; Cope, 2005; Robinson & Haynes, 1991; Honig, 2004). This has been one of the reasons for syllabi with very dissimilar curricula among entrepreneurship programmes (Clark, Davis & Harnish, 1984; Ronstadt, 1987). On the same stance, Fiet (2000) and Sexton & Bowman (1984) have emphasised on the importance of theory within EE process in order to provide students with tools to understand and partly predict the future outcomes of their actions. Both studies - that is Fiet, (2000); Sexton & Bowman, (1984) have stated that there is no perfect theory in entrepreneurship. However, borrowing theoretical insights from other disciplines can provide students with a mix of modified theoretical frameworks providing them a good base for entrepreneurial decision making.

By “borrowing theoretical insights” we mean that entrepreneurship students do not necessarily seek for perfect theorisation, rather they are more inclined to look for relevant theoretical explanations that could be used to apply towards solving practical challenges related to venture establishment, development and operational issues.

2.1.7 CRITICAL EXPERIENCES

The impact of critical incidents and events on the learning process was first discovered and scientifically proved by John Flanagan in 1954. The procedure of *Critical Incident Technique* is considered highly efficient due to the use of only extreme behavioural variables to identify interconnections. Scholars have described the creation of higher-level learning effect among entrepreneurs based on their reflection of critical experiences (Cope, 2001; 2003 & 2005). Cope (2005) portrayed critical events as being triggers for deeper reflection compared to habitual learning process. The importance of deep reflection on negative critical events is especially underlined by Cope. Entrepreneurs are able to interrelate various critical experiences from their past to current practices; such creating a valuable chain for fundamental forms of learning (Cope, 2003 & 2005).

By combining the literature about the *Venture Formation* experience within EE (Plaschka & Weisch, 1990; Robinson & Haynes, 1991; Honig, 2004; Fiet, 2000; Cope, 2003 & 2005; Kuratko, 2005; Gartner & Vesper, 1994; Sexton & Bowman-Upton, 1988); and the importance of critical experiences as triggers or deterrents for subsequent choices (Cope, 2001, 2003 & 2005; Flanagan, 1954); it is possible to deduce a conceptual understanding of the importance of paying attention to such events during the EE process.

Since critical experiences can be seen as crucial aspect of EE process, it is fair to argue that the critical experiences play significant role in the emotional associations which students develop towards the pursuit of entrepreneurship as career option after graduation. Therefore, understanding how emotions and associations with critical experiences during the study programme [if any] have impacted the student's self-entrepreneurial identity formation and/or crystallisation will certainly provide important insights into why graduates construct specific career perceptions.

2.1.8 LINK TO ENTREPRENEURIAL CAREERS

As cited earlier, Robinson & Haynes (1991), has opined that educational programme is as good as its graduates. Hence, programme curricula are designed to build or develop specific

key competencies in participants and therefore the graduates are expected to exhibit the designated skill-set in order to fulfil the programme objectives. In other words, whether explicitly or implicitly stated, one essential goal of each particular higher education major is to prepare graduates with specialised competencies for specific career and even for particular industry in some cases.

Scholars have divided the career progressions of entrepreneurship graduates into three major parts: (1) own venture creation (Ronstadt, 1987), (2) employment by Small-and-Medium size enterprises - SMEs (Ronstadt, 1987; Pittaway & Cope, 2007) and (3) employment by Large Enterprises - LEs (Ronstadt, 1987; Hills, 1988). In broader context, entrepreneurship graduates can be also found pursuing career in various institutional settings such as governmental, non-profit, and academic institutions.

Vesper & McMullan (1988) have concluded that in general entrepreneurship graduates have better knowledge of business basics, are able to identify and explore new business opportunities and motivate people around them. This is also noticed by large companies, which according to Hills (1988) are promoting intra-preneurship among employees. Based on findings of Ronstadt (1987) many companies are especially interested in graduates with combination of EE with other academic disciplines.

On the other side, findings by van der Sluis & van Praag (2008) have indicated that higher level of education decreases interest to entrepreneurship due to the increased likelihood of graduate to receive a well-paid, safe and stable job. The results of their study have indicated that the relation between higher education background and interest in entrepreneurial career is insignificant negative. However it is important to remember that these conclusions were made on the basis of general education level and not EE in particular. Thus, these findings cannot be generalised to graduates with entrepreneurship major. According to Pittaway & Cope (2007) the current state of research on entrepreneurship graduates career realisations is non-existent. Pittaway & Cope (2007) have called for scholars to begin analysing the career development of entrepreneurship major graduates on both historical and longitudinal bases (p. 489).

Sexton & Bowman (1984; 1988) have described entrepreneurship students as rebellious explorers who are able and willing to take high risks in unpredictable situations. The authors have also mentioned the unwillingness of entrepreneurship students to deal with routines. According to Cope (2005), entrepreneurship students are very heterogeneous due to different predisposing variables of their backgrounds. Different stocks of experience keep students as separate individuals working towards their own needs and interests. On the other side, Drucker (1985), Hills (1988) and Kuratko (2005) have advocated for the possibility of acquiring the needed entrepreneurial skills and qualities through education. According to Neck & Greene (2011) teachers' behaviour sets up the role models, identification and reflection of which may have a very deep impact on students. Roles of an entrepreneur can change in accordance to the needs of each phase of the venture development. Combining the findings of this overview, it is possible to assert that despite the challenges in implementation; EE provides students with a possibility to try different entrepreneurial roles and develop them in accordance to their individual needs.

3 LINKING CRITICAL EXPERIENCES WITH CAREER PERCEPTIONS: A CONCEPTUAL FRAMEWORK

This chapter investigates various career development models and emphasizes on two of them in order to create suitable conceptual frame of reference upon which the discourse of gathered literature and empirical analysis of the study is built upon.

*“Success is walking from failure to failure with no loss of enthusiasm.”
~ Winston Churchill*

Curran & Blackburn (2001) have opined that a conceptual framework embodies abstract notions and/or pictures which bundle ideas together. Conceptual framework is a tool that guides research enquiry by mapping or structuring ideas that shape the research question, theory and method together to present a cohesive model which should drive the data analysis, as well as enable the audience to give meaning to the research output (Denzin & Lincoln, 2003; Smyth, 2004). Thus, the aim of the conceptual framework developed and presented in this section is to synthesise and visualise the overall thoughts and theories which form the skeleton of the current study (Curran & Blackburn, 2001, p.37).

A number of relevant career theories has been identified and reviewed within the extant literature in entrepreneurship. These include: Shane’s (1978) Career cycle cone; Holland’s (1959) Theory of Career Choice; Ajzen’s (1991) Theory of planned behaviour; Super’s (1980) “Life rainbow” theory; Scott & Twomey’s (1988) Career Aspirations matrix; Sarasvathy’s (2001) Causation and Effectuation framework, and Digman’s (1990) “Five factor” model. Out of these the Scott & Twomney’s (1988) “Career aspiration” matrix and Super’s (1980) “Life rainbow” theory emerged as the best fit to support the objectives of the current study. Therefore these two were taken further for detailed exploration and used as a basis for the conceptual frame of reference part of the current paper. The chosen frameworks are unravelled from the perspective of the current study in the following subsections.

3.1.1 SUPER'S "LIFE RAINBOW" CAREER DEVELOPMENT THEORY

Super (1980) has defined a career as “the combination and sequence of roles played by a person during the course of a lifetime” (p. 282). Dyer (1994) has mentioned the same when discussing the pillars of an entrepreneurial careers theory, and Cope (2005) in his paper on entrepreneurship learning perspectives. According to Super's theory each person has a number of roles, which may complement or conflict each other. In Super's model presented below, life-stage linked to the age plays momentous role in determination of priorities and roles played by each person. It is worthwhile to note the description of interconnection of roles brought up by Super. The author has highlighted the importance of balance between roles played; success in one role received with too much effort may have negative impact on other roles. The study also underlined the importance of experiences stimulating change in perception of familiar roles without devotion of additional time. Such experiences can be classified as critical incidents triggering the change in perceptions of people.

These claims put forwards in the preceding paragraph can be interpreted in the context of the current study to mean that – the student's hard-earned success in one role during the EE phase, could impact positively or negatively on other roles which might therefore trigger change of the individual student's perception and choices on role aspirations for current and future life stages.

Super's (1980) life-stage and career aspiration theory places much emphasis on the importance and meaning of specific age or life stage to a person's career ambitions and determination of priority. In other words, this view claims that determinants of career perceptions are dynamic factors that are dependent on the role priority at a given life stage. However, it is important to note that majority of the life roles played between the exploration phase and establishment phase according to the framework in figure 2 below, overlap and conflict with each other. Thus, the attached dominance or significance placed on one role as compared to the others may have antecedents lurked in critical experiences happening in other aspects of a person's life.

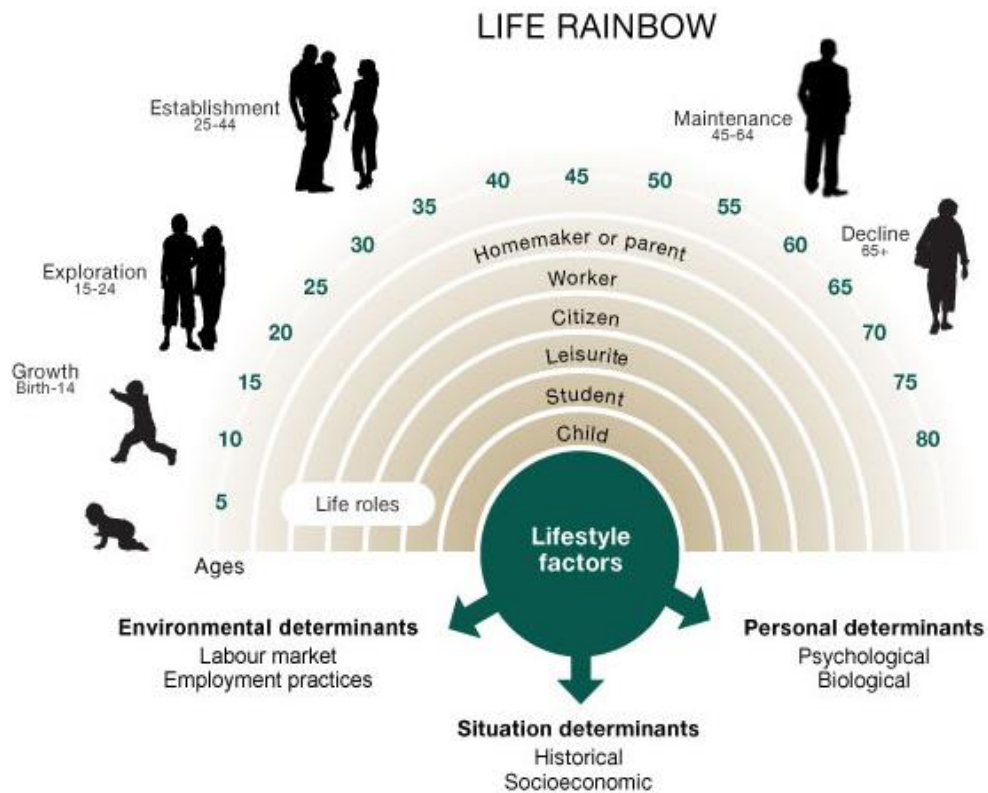


Figure 2: Super's "Life rainbow" (1980)

3.1.2 SCOTT AND TWOMEY'S "CAREER ASPIRATIONS" MATRIX

Scott & Twomey (1988) have identified the reasons shaping career aspirations towards self-employment. The conducted research survey aimed to identify the factors influencing (soon to graduate) students to pursue entrepreneurship (e.g. self-employment) careers. The validity of these research findings is strengthened by the number of surveys gathered (over 1000) and its international approach – conducted in US, UK and Ireland.

Three main topics: "Predisposing" and "Triggering" factors as well as possession of "Business idea" were identified being the main factors influencing the aspiration of self-employment perception as a future career choice among students. "Predisposing factors" were identified consisting of parental role models, work experience and hobbies affecting the perception of oneself as entrepreneur and general interest in small business. Such factors could be summarised as attitudes and development of one's perception as entrepreneur being cultivated over a longer period of time. The second part of "Triggering factors" consisted of the fact of seeking for a job, unemployment effect and career advice

from third party. Such factors may be described as short term and situational having immediate effect on decision-making process of individuals. Possession of business idea was identified as the factor initiating the combination of predisposing and triggering factors into career preference aspiration of either self-employment or employment.

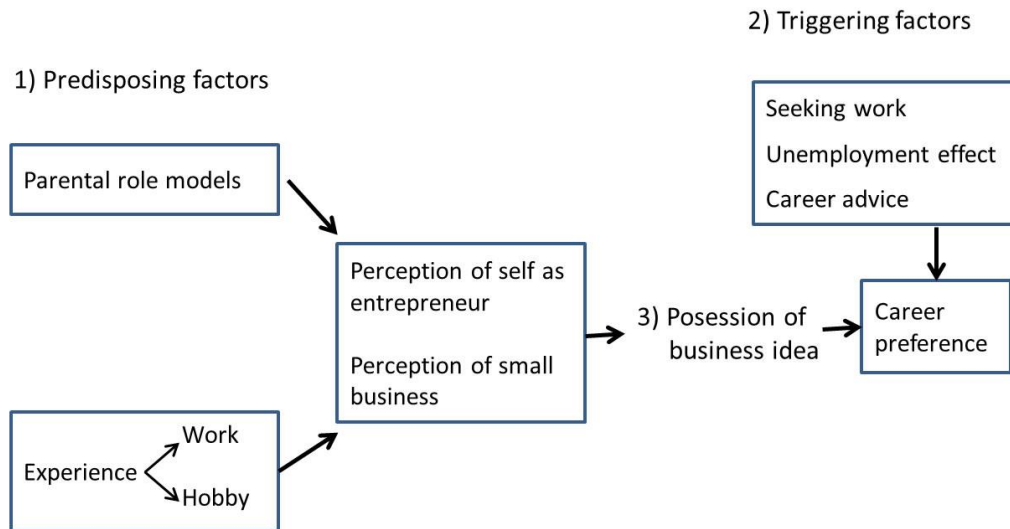


Figure 3: Main factors influencing career aspirations, Source: Scott & Twomey (1988)

The Scott & Twomey (1988) framework is presented in figure 3 above to illustrate the preceding discussions. The described framework has separated the main factors having influence on career perceptions of graduates. This division has provided us with the possibility to identify the place of higher EE and emphasise solely on elements influencing that part of the matrix.

The career aspiration framework has a division into *predisposing and triggering factors*; the place of higher education is not discussed within the publication of Scott & Twomey, such it requires us to determine the cell [*i.e. predisposing or triggering*] best fitting the characteristics of higher education. Considering the time-limitation of the education programme which is the focus of the current study, and also the fact that the empirical aspect of the study would be targeted only to recent graduates; these characteristics provide us with the premonition that higher entrepreneurship education should be considered among the cell of *triggering* factors.

Since this study is concentrating mainly on what happens during the EE process, it is only fair that next the education box is taken and opened-up in order to explore in more details how critical experiences within this triggering cell may interplays with the career choices as an outcome of graduate's career perception. In order to do so, first a perceived process overview with the influence of predisposing factors on EE [triggering factors], leading to career outcome is presented in the following session. Subsequently, the refinement of our viewpoint leads to a conceptual framework for the study.

3.1.3 REFINING THE INITIAL VIEWPOINT

Super's "Life rainbow" Career development theory has provided the information about influence of changing life-stages on attitude towards career development paths. It is important to note that preferences change depending on a life-cycle. The Scott and Twomey's "Career aspirations" matrix has enabled us to identify the place of higher entrepreneurship education among factors influencing the career aspirations of graduates. Placing the *education* into the cell of "Triggering factors" provides us with possibility to emphasise on incidents influencing the career aspirations within the period of education. This enables us to limit the study purely to investigation of impact of "higher entrepreneurship education life-stage" on career perceptions of graduates.

In order to streamline the theoretical framework to the thesis purpose, we have combined the Scott & Twomey's (1988) and Super's (1980) frameworks into single narrative presented in figure 4 below. Such picture has enabled us to determine the place of EE among triggering factors within the time-line provided by Super (1980). The higher entrepreneurship education is considered being a "triggering factor" in the thesis due to its immediate impact and influence on students and recent graduates. Seeking for work and career advice described by Scott & Twomey as components of the *Triggering Factor* can be considered as a part of the EE time-period. The education factor would over the years move to the "predisposing factors" together with the career development of entrepreneurship graduates.

Initial stage of theoretical framework supporting reasons for delimitation: the development of the picture below based on Scott & Twomey (1988) career aspiration framework and

Super (1980) Life rainbow was necessary in under to (a) visualise the place of EE within these theoretical frame of references which forms the backbone of the conceptual framework guiding this study, (b) the conjugation also provides the filtering for focused selection of case subjects with the appropriate background that befits this study.

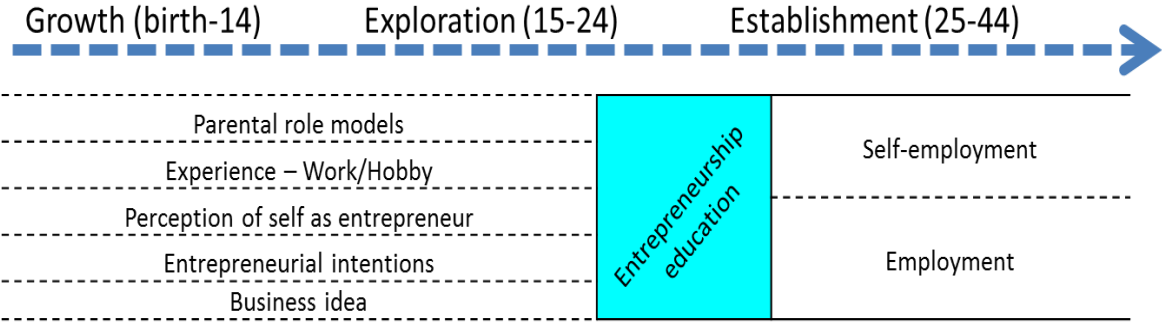


Figure 4: A framework identifying the place of EE within the combination of Scott and Twomey’s “Career aspirations” matrix with Super’s “Life rainbow theory”

3.1.4 FINALISING THE CONCEPTUAL FRAMEWORK

The following figure has gathered the insights we plan to concentrate upon within the process of EE. Taking into account the framework developed on the basis of theories of Scott and Twomey’s (1988) “Career aspirations” matrix with Super’s (2980)“Life rainbow” career development theory and EE one could define the target group of interviewees dependent on whether they possess of lack certain predisposing variables as identified in figure 4 above. Based on this clarification, the authors have decided to eliminate the biases caused by different predisposing factors and thus concentrate this research on those students with no prior specific human capital in entrepreneurship at the time of stating the entrepreneurship study programme.

The conceptualisation deduced from the extant literature review is presented below to illustrate a potential flow of impact and linkages between the students’ preconceptions of critical experiences, emotion and eventual change in career perception leading to specific career choices.

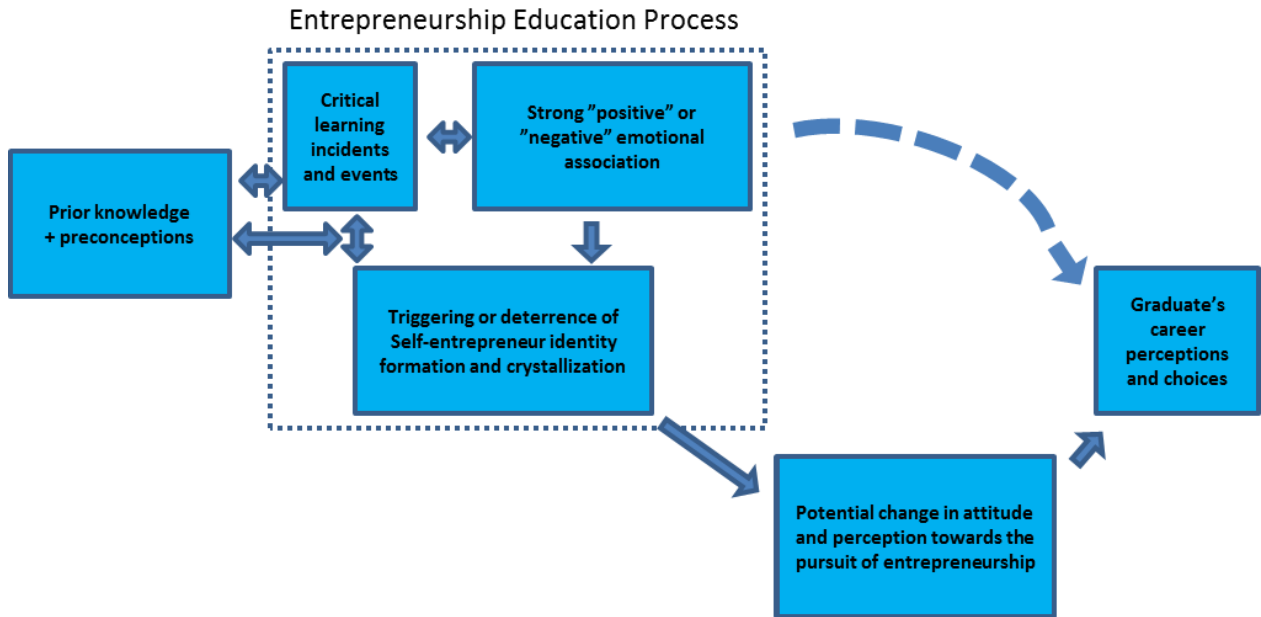


Figure 5: A framework linking critical g experience with career perceptions

3.1.5 *DISENTANGLING THE CONCEPTUAL FRAMEWORK*

Deducing from the literature review part and theoretical discussions above, it could be seen that the possession of specific human capital in entrepreneurship such as family business background, and own enterprise experiences is predisposing factors having strong bearing on the students perception of self as an entrepreneur as well as certainty regarding ones engagement to the pursuit of entrepreneurship/self-employment as career path. Therefore the perceived criticality or significance of different experiences during EE period may differ significantly when compared to the group of students without any such prior specific human capital in entrepreneurship at the point of entering the MSc entrepreneurship study programme.

It is thus evident that one's background – including upbringing, experiences and environmental settings lay long term conditioning of the individual's preconceptions and knowledge about entrepreneurship as potential career path. Hence it is safe to postulate in the conceptual framework above that either the possession of or the lack of prior specific human capital in entrepreneurship build-up to the specific preconceptions and knowledge all the students had regarding entrepreneurship at the start of the study programme. At this

life stage, education is considered a strong force which could either reinforce or fetter this general knowledge and interest that shapes the career aspiration of young persons (*cf.* Zhao, Truell, Alexander, & Hill, 2006).

The *educational box* in the presented framework conceptualises in accordance with extant literature that critical experiences taking place during the period of higher entrepreneurship education may have varying degree of negative or positive emotional resonance to the student's enthusiasm for entrepreneurship career. As a result, such emotional association [if strong enough] might trigger or deter the formation/crystallization of the individual's view of oneself as entrepreneur.

Cope (2003) has provided empirical evidence emphasising strong emotions and double-loop learning associated with venture creation courses during EE; and Honig (2004) also underlines the significance of feeling the emotions and frustrations during venture creation exercise which afterwards strengthens or weakens view of own capabilities and skills for business success. Thus, emotional associations interplay with the individual's perception and preference for future career in the manner suggested through the conceptual framework (see also: Cope, 2003/2005; Cardon et al., 2009; Breugst et al., 2012).

Hence, the empirical aspect of the extant study is concerned with exploring the self-reflections of critical experiences that happened within the education box of the MSc entrepreneurship graduates and how such is linked to potential change of attitudes, and/ or emotional linkages [if any] leading to the career decision after graduation. A key goal is to find what implications can be construed as a reflection of the meaning of these critical experiences to the student's career choices after graduation. More so, the empirical analysis will help in understanding the process through which the critical experience interplay with career perception.

4 RESEARCH METHODOLOGY

This section presents the methodological choices for the study, the consideration for the theoretical sampling and data selection. It shows how data collection is handled; and also the design and administration of the semi-structured interview guide, as well as videographic instrument used for data collection and analysis.

*Strength comes from diversity
~ Heisley, (2001).*

The research methodology describes a chosen technique for tackling a research problem and it puts into perspective the procedural framework through which a scholarly solution is to be obtained. Scholars have argued that the core elements of scientific enquiry are: “*a) posing a question, b) developing procedures to answer the question, c) planning for and making appropriate empirical observations, and d) rationally interpreting the empirical observation*” (Graziano & Raulin, 2010, p. 27).

In accordance with Graziano & Raulin (2010) outline of basic components of research, this section of the thesis provides the philosophical standpoint and procedural framework guiding the current study, as well as the rationality for interpreting the empirical data which leads to answering the research questions.

4.1 Qualitative Research Approach

Scholars have argued that qualitative research is iterative, emergent, and always receptive and witnessing to events that is experienced through the collection of empirical materials that are (re)visited and (re)interpreted (*cf.* Gummesson, 2003).

For this research project a qualitative method was chosen. Qualitative research handles complexity, analyses the context and puts variables in context and analyses human and social properties of entities studied (persona) (Gummesson, 2006, p. 170). This entails more flexibility than in quantitative method. With the qualitative study the authors can go deeper to find the information required to answer the research question. With the qualitative method we are able to analyse the actors involved in the situation, how they affect the

process, and at the same time we are analysing the processes that are involved (Alvesson & Sköldbberg, 2009). In the case of the current study, this can be interpreted that qualitative method of enquiry allowed the authors to dig deep into individual reflections of graduates from the MSc programme in entrepreneurship at Aalto University School of Business as to make sense of how they perceive the impact of critical experiences during the period of EE in regards to their career choices. The video interview method used for collecting research data is another distinctive benefit of qualitative research approach that allows for capturing of non-verbal communications and context specific information.

4.1.1 WHY QUALITATIVE RESEARCH DESIGN AND STRATEGY?

According to Morgan & Smircich (1980), the appropriateness of qualitative research approach is contingent to the “*nature of the social phenomena to be explored*” (p. 491). In other words, the researcher’s perception of theoretical and analytical instruments appropriate for tackling a preconceived research problem and the nature of knowledge to be produced by investigating the phenomena thus justifies the research paradigm (Morgan & Smircich, 1980; Gummesson, 2000, 2006).

In accordance with the above explanation, this study favours the qualitative approach due to the intrinsic nature of the focal research problem. In the authors’ opinion, the characteristics of social elements embedded in the students’ critical experiences during an entire educational programme could not be effectively investigated using quantitative method of enquiry. The emotional associations with critical experiences and subsequent behavioural changes or change of attitudes towards entrepreneurship are almost impossible to capture in quantitative approach. Therefore, it is believed that a qualitative inquiry will enable this thesis to produce the best possible insight and understanding of the process and actions involved in the EE process which influences career choices from the perception of the programme graduates.

As many authors have noted, proper application of the qualitative approach allows for flexibility, richness and ensures scholarly rigor; while excluding focus from mere numeric data [*just numbers*] (Gummesson, 2000; Bryman & Bell, 2007; Alvesson & Sköldbberg, 2009). Malhotra & Birks (1999) stated, the qualitative research is designed based on small

samples, intended to provide insightful understanding why the authors select the case study for the project and how to collect the necessary information in order to answer the research question (Malhotra & Birks, 1999). Considering the objective of the current study and the nature of the phenomenon central to the research problem, it is indeed clear that qualitative approach will provide the most comprehensive insight and knowledge creation on the problem at hand.

4.1.2 *THE CASE STUDY*

Case study is a qualitative research strategy which entails an in-depth investigation of phenomena based on observing individual groups or behavioural events within a real-life context (Yin, 2003). The current study is a single case of the Master's in entrepreneurship study programme offered at Aalto University School of Business – the programme context and general overview is presented in subsection 4.2.4. According to Wilson et al., (2006), different voices from the case study are important for “*both triangulation and understanding of findings*” (Wilson et al., 2006, p.1551), which may provide researchers with varied perspectives in considering the problem. Thus, here the authors have decided to video interview as many programme graduates with similar background, age bracket and career level when they entered the entrepreneurship study programme. Thus, seeking to understand in retrospect, how, critical experience during EE period interplays with their career perception after graduation. This will assure that the result of the study would be more credible and provide comparable multiple view.

4.1.3 *CRITICAL INCIDENT TECHNIQUE*

Entrepreneurial learning process is distinguished by instability, inconsistency and unpredictability (Cope, 2005). Critical experiences play important role within entrepreneurial opportunity process and often being the key factors in business idea development (Kyrö, Kurczewska & Moisala, 2011). Such events might be self-imposed and initiated by clear mistake from the side of individual (Cope, 2003). Research has emphasised the importance of studying this in order to identify entrepreneurial learning patterns (Cope, 2003 & 2006).

One of the purposes of this thesis is to identify the influence of critical incidents and events connected to education on career choice of MSc in entrepreneurship students and graduates. The importance of critical events and incidents is underlined within human behaviour (Flanagan, 1954; Super, 1980) and entrepreneurship literature (Cope, 2003 & 2005; Kyrö, Kurczewska & Moisala, 2011).

The initial Critical incident technique used by Flanagan (1954) was considered highly efficient due to the use of only the extremes of behaviour. Such extremes could be identified more accurately compared to repetitious average behaviour (Flanagan, 1954). Super (1980) has stated that discontinuous events may change the perception of familiar role bringing new insights and arising importance to it without additional time devotion. Cope (2003) has mentioned using the modified and simplified method of Critical incident technique with six participants for his original unpublished PhD thesis. Despite differences in sample size both, Flanagan (1954) and Cope (2003), have however used similar interviewing technique asking the main question and avoiding leading ones (in case of Flanagan) and asking to focus on best versus worst experiences within a given time-frame in case of Cope.

Thus, in the case of the current study, the authors believe that deploying the same critical incident technique will allow for not only capturing the extreme occurrences which constituted critical experiences to the students; but also allows for insights about the interconnections between emotional associations with the critical experiences and how it reflects in whether there is a change or no change in student's career perceptions and choices.

4.1.4 OVERVIEW OF THE AALTO BIZ MSc ENTREPRENEURSHIP PROGRAMME

The current entrepreneurship programme at Aalto University School of Business was initiated in 1983 at the former Helsinki School of Economics. It consisted of a number of BSc and MSc level courses taught in Finnish and English. In order to meet the international requirements the programme was significantly restructured in 2006 thus giving birth to the current MSc in entrepreneurship study programme consisting of MSc level courses taught entirely in English. The programme curriculum of 2009-10 is presented below in order to

provide a clear overview of the structure of MSc in entrepreneurship programme prior the reinvention of the entrepreneurship programme that began in 2006.

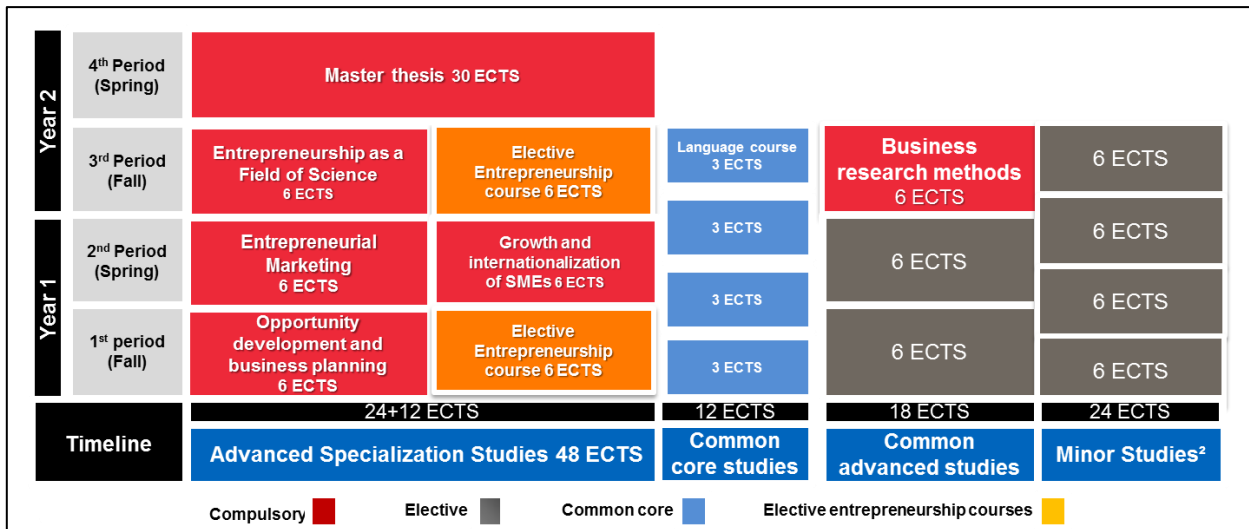


Figure 6: Structure of MSc Entrepreneurship programme at Aalto University School of Business 2009-10
Source: Aalto University School of Business

The year 2010 witnessed a major change to the structure and content of the programme development with the introduction of the “*Venture Creation Process*.” The aim of the three “*hands-on*” courses framework is to provide students with the continuity of the venture creation process throughout the education period. This focus is important because, since the venture creation process is the key specialty that differentiates entrepreneurship discipline from the other programmes offered at Business School.

In essence, figure 7 and 8 along with the following information are essential because they provide a clear overview of the programme development and its two corner stones which are: “*the venture formation process*” and *research orientation* of the study programme.

Year 2	4 th Period (Spring)	Master thesis ¹ 30 ECTS				
		New Venture Creation Process				
Year 1	3 rd Period (Fall)	Follow-up of the New Venture Creation Process ¹ 6 ECTS	Doing qualitative / quantitative research 6 ECTS	6 ECTS	6 ECTS	6 ECTS
	2 nd Period (Spring)	Venture Formation 6 ECTS	Entrepreneurship as a Field of Science 6 ECTS		6 ECTS	6 ECTS
	1 st period (Fall)	Introduction to New Venture Creation Process 6 ECTS	Academic Skills 6 ECTS	6 ECTS	6 ECTS	6 ECTS
		18 ECTS	18 ECTS	12 ECTS	18 ECTS	24 ECTS
Timeline	Advanced Specialization Studies 48 ECTS			Elective Studies	Minor Studies ²	
		Compulsory ■	Elective ■			

Figure 7: Structure of MSc Entrepreneurship programme at Aalto University School of Business 2013-14

Source: Aalto University School of Business

In their article Plaschka & Welsch (1990) have discussed the emergence and development of entrepreneurship programmes worldwide and provided two frameworks for emerging structure of EE. The Plaschka & Welsch (1990) framework is borrowed here in order to describe the transition of the Aalto BIZ MSc entrepreneurship programme from its fairly unstructured roots in 1983 to its most recent outlook.

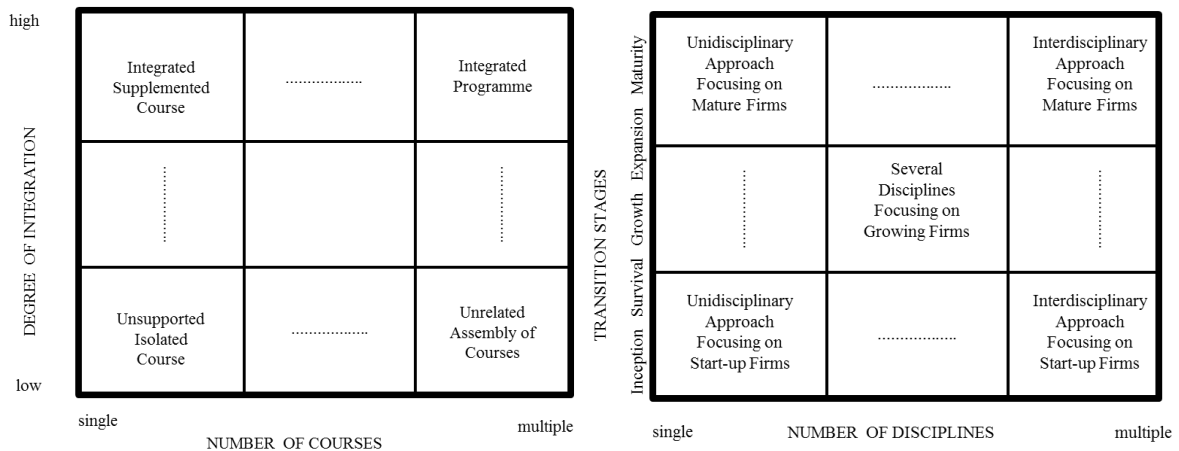


Figure 8: Emerging Structures of Entrepreneurship Education

Source: Plaschka & Welsch (1990, pp. 63-65)

Based on the comparative understanding of the two entrepreneurship programme curricula (2009-10 & 2013-14) the development of the programme towards multiple courses framework with higher integration between major courses can be noticed. In addition, the increased amount of elective courses is aimed to provide students with more choices for courses of their particular interest – providing the freedom for certain level of personalisation of the competence content of each graduating student.

As can be seen from the diagram above, this study is focused mainly on the two capstone blocks which forms the core of the entrepreneurship program. This narrower focus is important because, since the venture creation process is the key specialty that differentiates the entrepreneurship major from the other management and business majors offered at Aalto School of Business, the authors argue that critical learning experiences within this core specialization or the lack of it thereof has stronger resonance in the graduates perception as compared to events in their minor and/or elective courses.

4.2 Data Process

Data collection and handling is one of the most essential aspects of any research endeavour, as it provides the empirical input of evidence that is required for answering the research question (Remenyi et al., 2005). The research data can be divided into ‘primary and secondary data’ (Malhotra & Brinks, 1999). Primary data can be seen as when the researcher goes directly to the origin of the information in order to gather first-hand information mainly for the purpose of the research problem at hand, while secondary data take in consideration relevant pre-existing information that is available in different formats and exist for other purposes than the present research but can be usefully applied in the new research work (Malhotra & Brinks, 1999, p. 112; Remenyi et al., 2005, p. 141). For this research, both primary and secondary data sources were utilized. The primary data was collected from the selected representatives of graduates of the MSc entrepreneurship programme at Aalto University School of Business through multiple video interview sessions with each respondent. The primary data source on the other hand is the individual motivation letters which the students had written as part of their application package to the master’s programme. The usage of both data sources was important not only for the

triangulation sake, however, it also provided deeper and often different insights on the same individual's perceptions which helped us to capture some elements of opinion alteration process "prior-during-&-post EE. This added information brings significant implication for the analysis and interpretation of the interview findings.

As mentioned before the qualitative research methodology is the approach chosen for this thesis. One principal characteristic of the qualitative method is that it focuses on words (Bryman & Bell, 2007). For this reason qualitative research has different methods to gather the data, such as interviews, ethnography, focus groups, observation and consultation (Kent, 2007).

4.2.1 DATA COLLECTION METHOD

The paramount objective of the data process for this interpretative qualitative study is to collect precise, unbiased and enriching information about interviewees' reflection of past events and incidents connected to the time-period of EE. Semi-structured interview technique is considered being the most effective due to the manner of open-ended questions and the need for flexibility, while at the same time providing a guide for the questions asked and how the interview process should proceed.

Video interview method was chosen as the main means for gathering primary data. This technique is one of the most efficient methods for the case study (Yin, 2003) and with qualitative interviews it is possible to capture vital non-verbal contextual elements of face-to-face communication which enriches the information collected from the interviewees (Saunders et al., 2007). In addition, this technique allows the different actors to comment their points of views, and interviewees to emphasize those issues they consider important in a manner that can give the researchers a wider perspective on the observed process (Charmaz, 2006).

Since this is a qualitative study about life experiences reflected upon in retrospect, the following logic of semi-structure qualitative enquiry formed the operational logic for the data gathering process in order to get as deep and rich information from interviewees as possible:

- Semi-structured interview facilitates open-ended questions and flexibility
- Open questions facilitate story telling (Gold & Holman, 2001)
- Story telling facilitates critical thinking (Gold, Holman & Thorpe, 2002)
- Critical thinking facilitates deeper analysis of events & incidents within the story
- Critical events & incidents facilitate the impact on one's perception

Furthermore, recorded video interviews were utilized to capture the thickness and richness of non-verbal communications during the interview sessions as mentioned above. Recent studies have emphasized the usefulness of video materials during the analysis of the data due to its qualities and possibilities of reincarnating the original experience audiovisually (Garrett, 2010).

In his book, Patton (1990) has presented the Matrix of Questions Options (see table below). *“Keeping these types of questions in mind can be particularly helpful when it comes to planning the comprehensiveness of the interview and ordering the questions in some sequence”* (p. 293). The matrix is used at the initial stage of interview design in order to support the interview technique described by Cope (2003) concentrating only on best and worst times interviewees had experienced during the MSc education process time period. Such method would provide the possibility of “self-defined criticality” described by Cope (Cope, 2003. p. 436).

Phase:	Purpose:
Initial contact by phone or e-mail	a) Short introduction of ourselves
	b) Introduction to our thesis topic concentrating on memorable events and incidents during the time of MSc in Entrepreneurship education.
	c) Request for interview
Confirmation of interview (e-mail)	a) Reminder about the time for interview
	b) Information about the content of the interview: best and worst times within the time period of MSc education.
First phase of the interview	a) Warm-up with <i>“Tell us a bit about yourself”</i> question
	b) Memorable events during the period of education:
	b1) - best times Supportive questions as "Why and How" for deeper reflection (if needed). b2) - worst times
Break	Coffee or tea with snacks offered
Second phase of the interview	a) Meaning of these events and incidents to one's current life-stage
Wrap it up	Additional comments and things one would like to elaborate

Table 3: The thesis interview process matrix

Source: Authors

Combining the insights from Patton (1990) and Cope (2003) the interview guide instrument was developed and utilised in order to ensure the freedom of respondents and emphasis on deep reflection of topics discussed. The description of interview phases is summarised in the table 4 above.

4.2.2 DATA MANAGEMENT

As stated earlier, the data for this thesis was collected from all-to-gather eight video interview sessions with representatives of entrepreneurship graduate from Aalto University school of Business. Each initial video interview lasted for about 40 to 60 minutes. All interviewees agreed to be video-recorded. During the interview the researchers took notes and also marked observations on how the respondents answered the questions, e.g. pauses between the answers, gestures, facial expressions and follow-up questions; in order to have a reasonable back-up data in case the video equipment malfunctioned losing all/aspects of the recordings. It was important to prepare beforehand for alternative means for capturing the needed research information in case the video device failed, and to this end two smart phones were kept on standby.

In line with Tracy (2010) recommendations for quality of the personal experience that enriches this type of research, the authors believe that each interview was conducted with a person that has a wealth of experience and could clearly articulate different incidents/events that took place during the period of his EE. Thus, it was easy for the interviewee to reflect upon the entire process, while at the same time being able to answer the follow-up questions.

An interview guide designed to help the process (see table 4) was prepared taking into consideration the research problem and subsequent conceptual framework. The questions were aimed to be open-ended. Some possible follow-up questions were anticipated *á priori* in order to induce more information on most relevant issues, and certain specific comments from the interviewees attracted more follow-up questions in response. It is important to mention that the interview guide was primarily used as a tool to probe for the insights, but was not used in a strict manner as each interview required flexibility in order to accommodate the individuality of the interviewees.

The interview guide was practiced before the real interviews in order to calculate the estimated time it will take and if all the key elements in the interview guide explore all the aspects relevant for the research. Also, it was important to pilot-test the questions with three people with varying backgrounds and levels of English language proficiency. This enabled the authors to evaluate how easy it would be for interviewees to understand the concepts and what were implied (*cf.*: Graziano & Raulin, 2010). The interview guide was neither given to the interviewees nor presented to them after the discussions. This enabled the research to eliminate potential biases that might have come from ready prepared answers which are often controlled for sense-making (*cf.*, Buchanan & Dawson, 2007).

An informal conversation was usually held before the start of the main recorded aspect of the interview to introduce the researchers and create a friendly feeling that helped to have a more relaxed atmosphere. At the beginning of the interview the general theme of the thesis was explained once again in order to emphasize the focus of the study and the interview context. The transcription of the interviews was done verbatim from the recorded interview as to retain as much as possible all non-verbal communication and contextual factors that could aid the data analysis (Saunders et al., 2003, p. 263). The immediate transcription also ensured that individual responses do not get mixed with the other cases.

Something missing here

Charmaz (2006) describes coding as “*the process of defining what the data are about*”. Coding means naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of information (Charmaz, 2006, p. 43). The initial coding of the data facilitates the identification of similarities and differences between the responses and opinions expressed. It also helped to link categories from the motivational letters to the two interview sessions. As shown in the examples below, the first sorting of the data also allowed comparisons between the different data segments (Charmaz, 2006).

4.2.3 ANALYSIS METHOD

Different approaches can be found on how the qualitative data should be analyzed; the methods of analysis can be highly structured and formal or informal and have a low

structure (Saunders et al., 2003). Scholars suggest that the use of the theoretical framework help the researcher to organize and direct the data analysis (Saunders et al., 2003, p. 388).

For this study the authors will conduct the analysis taking in consideration the research purpose and conceptual framework developed to organize the data collected in order to reach the most plausible results (Yin, 2003). As stated earlier, the use of the conceptual framework for the analyses provides the needed tools to select the appropriate data from the interview transcripts.

Methodology experts suggest the use of a clear operational definition which highlights the main category of information that the empirical observation seeks to provide (Graziano & Raulin, 2004, p.84–87; Yin, 2009, p. 128 &129). The following table reflects the core category of information which the interviews pursued. These variables are in essence the major elements that will drive the analysis section and lead to the discussion of findings and/or conclusions of this thesis. Evident from the literature review section of this thesis, these emerging themes in the table below were deduced from extant literature, articulated in the theory section and proposed through the conceptual framework. Thus, it is scientifically sound to utilize the same set of variable categories to drive the empirical analysis and discussions.

VARIABLE CATEGORY	OPERATIONAL DEFINITION/EXPLANATION
Predisposition	This is about the general knowledge, preconceptions and interest towards entrepreneurship or self-employment prior at the start of the EE programme
Critical experience	Critical experiences taking place in one’s life during the period of the education
Emotion/association	Positive or negative emotions/associations [if any] the individual attached to the self-defined “memorable occurrences” during time of MSc Entrepreneurship education
Trigger	Activating/fortifying or deterrence of the individuals initial preconception, attitude and perception towards entrepreneurship as a career option
Change/influence	Meaning of such memorable experiences on the individual’s career choices and current life stage

Table 4: Operational Definition for empirical analysis

4.3 Ethics and Quality Consideration in Qualitative Research

Research ethics and quality consideration are important aspect of any research undertaking (Clifford, 2000, p. 138-141), however, when it comes to qualitative enquiry, the notion of *validity and reliability* becomes somewhat elusive and ambiguous to be fully captured within the limitations of qualitative research methods. As such, leaving researchers with more open hand and yet more challenging choices to make in order to ensure the rigor and credibility for their research output (Polkinghorne, 2005; Tracy, 2010).

In order to ensure the high quality and scientific rigor in the extant study, the authors had followed Tracy (2010)'s "*Qualitative Quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research*" principle to the best of their ability. A summary of Tracy's framework for excellence in qualitative enquiry is present in Table 6 in the page below.

Perhaps, the *worthiness of the topic* of this thesis could be considered as the starting point for ensuring quality qualitative research in accordance with the criteria put forward by Tracy (2010). Subsequently, on a broader perspective the issue of significance and/or impact of entrepreneurship education is self- echoed in the attention the topic has received in recent years from policymakers, academia and main stream media (Ekankumo & Kemebaradikumo, 2011; O'Connor & Greene, 2012; Vázquez-Burgete et al, 2012). More particularly, both pundits and skeptics are attracted to understanding whether entrepreneurship education matters when it comes to whether participants will pursue self-employment or regular employment after graduation (Nilsson, 2012). However, as well elaborated in the introductory chapter of the thesis – the interplay between what happens [i.e. critical incidents and critical events] during the period of EE and how it reflects on the career perception/choices of EE graduated has surprisingly been ignored in both main stream media and scientific journals. Thus, the topic of this thesis is perhaps overdue, and therefore the result of this study should be relevantly inviting for not just the academic world but the larger society as well!

The preceding paragraph also captures the *resonance*, & *significant contribution* criteria (Tracy, 2010, p. 845). In essence, this is a morally justifiable research endeavour which is aimed at providing meaningful practical and conceptual contributions for practitioners, and the academia. The *rigor & credibility* aspect of this study is reflected in the thick and meticulous literature review, description of conceptual constructs, data triangulation, and imbeddedness of the research questions in the specific context of Aalto University School of Business' MSc Entrepreneurship Programme.

Criteria for quality (end goal)	Various means, practices, and methods through which to achieve
Worthy topic	The topic of the research is <ul style="list-style-type: none"> • Relevant • Timely • Significant • Interesting
Rich rigor	The study uses sufficient, abundant, appropriate, and complex <ul style="list-style-type: none"> • Theoretical constructs • Data and time in the field • Sample(s) • Context(s) • Data collection and analysis processes
Sincerity	The study is characterized by <ul style="list-style-type: none"> • Self-reflexivity about subjective values, biases, and inclinations of the researcher(s) • Transparency about the methods and challenges
Credibility	The research is marked by <ul style="list-style-type: none"> • Thick description, concrete detail, explication of tacit (nontextual) knowledge, and showing rather than telling • Triangulation or crystallization • Multivocality • Member reflections
Resonance	The research influences, affects, or moves particular readers or a variety of audiences through <ul style="list-style-type: none"> • Aesthetic, evocative representation • Naturalistic generalizations • Transferable findings
Significant contribution	The research provides a significant contribution <ul style="list-style-type: none"> • Conceptually/theoretically • Practically • Morally • Methodologically • Heuristically
Ethical	The research considers <ul style="list-style-type: none"> • Procedural ethics (such as human subjects) • Situational and culturally specific ethics • Relational ethics • Exiting ethics (leaving the scene and sharing the research)
Meaningful coherence	The study <ul style="list-style-type: none"> • Achieves what it purports to be about • Uses methods and procedures that fit its stated goals • Meaningfully interconnects literature, research questions/foci, findings, and interpretations with each other

Table 5: Eight “Big-Tent” Criteria for Excellent Qualitative Research

Source: Tracy, 2010

Having argued the above standpoint, it is important to also note that the individual-reflections of the interviewees were the main source of primary data for the study. Thus, the retrospective sense making by the interviewed graduates could lead to possible self-inflated causal linkages among constructs as a result of the interviewee's self-generated validity, criticality or even pejoration in self-narrative of events taking place during the EE period. One must admit that the information triangulation method in the form of first analyzing the motivation letters and having two successive video interviews with interviewees might not sufficiently eliminate this bias.

In general, the authors have made sincere efforts to maintain transparency, as well as methodological and procedural ethics in every stage of the study. Also, utmost objectivity has been pursued when it concerns the treatment of human participants and the interpretations of views expressed.

On the other hand, the authors acknowledge that there is perhaps no such thing as a "perfect" research paper. However, in terms of ethical and quality considerations, the paramount goal of the authors is to produce a logical and structurally coherent document that fulfils even the strictest requirements of 30ECTS master's level thesis.

5 DATA ANALYSIS AND EMPIRICAL FINDINGS

In this chapter, the empirical findings of this study are presented. Quick facts about the interviewees are tabulated in order to provide synopsis concerning the individual representatives that made up the entire study group.

“The best way to predict the future is to create it”

~ Peter Drucker

This chapter begins with the presentation of quick-facts about the entities researched, followed by simultaneous presentation of the empirical data and the analysis. Discussion of the empirical findings is done in the next chapter. The main focus of the qualitative findings is the video-interview responses and information gathered through analysis of the motivational letters. Also, observations were used by the interviewers to capture non-verbal communication contexts (Kvale, 1996) which could be useful for the data analysis and making sense of certain phrases or expression of ideas contained in the recorded discussions (Graziano & Raulin, 2010).

As can be seen from table 7, all the interviewees not only fulfilled the set selection criteria, but also had stated that interest towards owner-manager type of entrepreneurship was a key motivation for applying to study in the MSc Entrepreneurship programme. Interestingly, three individuals out of the graduates are currently employed by large enterprises - thus portraying a self-evident shift from initially stated career objectives and the graduates' career accomplishment at the time of the current study.

Table missing here

Please bear in mind that there is no logical reasoning behind the numbering of the number-coding of interviewees, however, the interviewers simply numbered them according to the

interview sequence, and the EM before the numbers represents: *Entrepreneurship Master*. Thus, this means that EM-01 is the first person interviewed in process.

5.1 Explanation for data presentation and analysis

In terms of not revealing the interviewees' identity, Yin (2009) opined that researchers have the option to choose between partial or complete anonymity. Furthermore, the Yin (2009) adds that the chosen pattern should depend on the confidentiality needs of the entities researched.

In the case of the current study, the authors decided to apply partial anonymity in the presentation of empirical data. The respondents understood and agreed that their background information (i.e. without names) could be presented as part of the study. However, considering the sensitivity/non-sensitive potential implications of the study findings, the authors made good efforts to eliminate as much identifying personal information as possible from the empirical information presented. Having said that, please note that even-though the analysis and interpretations presented in this thesis is purely under the responsibility of the authors, however, at the time of the study, there were not any comprehensive means for weighing the future potential sensitivity of what is said (at least to the best of the knowledge of the authors). And at the same time, the authors are not skilled in understanding and forecasting sensitivity of such issues relevant to this current study. Therefore, common-sense was applied to protect the identities of the entities researched; whether common-sense is enough or not could not be established at the time of the study.

According to Holstein & Gubrium (2007), "*the rationale for working with transcripts is that recordings and the transcripts based on them provide highly detailed and accessible social action..., thus, the empirical material is presented in a form that allows readers and researchers to make their own checks and judgments*" (Holstein & Gubrium, 2007, p. 423). In this section, the raw information collected from the interviewees is put on view. These interview responses are organized according to the corresponding interview questions that generated the answers. The logic for this section is to first introduce the idea behind each

line of enquiry, then all relevant responses are presented, after which a brief explanation of how the information was/is understood.

5.2 Data Source 1: The Admission Motivation Letters

Admission motivation letter is a common feature in the Finnish higher education admission system and thus constitutes one of the documents required from applicants to higher education study programmes. Finnish universities are not alone in this matter as individual interest and motivation stated on admission motivation letters form a part of the key considerations for gaining university admission in different parts of the world.

In psychology, motivation is associated with sensation, perception, attention, and formation of mental associations, and it helps to translate our thoughts and feelings into actions (Howey, 1999); general conceptualization of goals, and how the goals individuals are pursuing create the framework within which they interpret and react to events (Dweck & Leggett, 1988). Specifically in educational psychology, motivation is linked to the domain of intellectual achievement identifying two classes of goals: “*performance goals [in which individuals are concerned with gaining favourable judgments of their competence] and learning goals [in which individuals are concerned with increasing their competence]*” (Dweck & Leggett, 1988, p. 258). Howey (1999)’s doctoral dissertation suggests a positive relationship between stated career intentions in admission motivation letters of American college students and academic performance leading at least to majority successful start of career in the intended field.

The sincerity and transparency of what is written on students’ motivational letters is a rather difficult and perhaps socio-cultural context-dependent cognitive psychology investigation which the current study will not plunge into. However, here the content of the admission motivation letters of interviewees are taken just as stated by the individuals.

5.2.1 BACKGROUND AND PREDISPOSITION PART A: MOTIVATION PERCEPTION

When the admission motivation letters of the selected graduates were analyzed for *predisposing* factors that might have ignited the initial interest to study entrepreneurship, it

was evident that the students came from a variety of backgrounds and are motivated by different issues. For instance, the following excerpts taken from the actual letter illustrates the variety and similarity of intentions the students had written for their volition to study entrepreneurship:

“[...] goal is to have own business someday... [...]I think the programme will help me learn in the...” – (EM-01)

“I do not believe in 40 hours per week...”- (EM-02)

“...I have completed bachelor degree in...; and ... give me a good background for studying entrepreneurship. [...] I have always been interested in entrepreneurship, ...but no such thing in my family, so I thought this program would be a good path to understand how to be entrepreneur” – (EM-03)

X... told me about the case-based learning in this program..., and, this is actually what we did in some course in my BSc at ... school. [...] I enjoyed learning about different entrepreneurial behaviours in real life situation – (EM-04).

Some more background info hidden

In these quotations extracted from the letters of the graduates, it is evident that ... expressly stated that they had applied to the entrepreneurship programme expecting to learn about “future own business” ... and “how to be entrepreneur” ... Furthermore, the following expressions as can all be interpreted as indicative of the individual’s intention towards being independent after graduation from the programme, and/or to acquire the needed competencies needed to behave entrepreneurially in real life situations:

... mentions in his admission motivation letter that he is perhaps not looking forward to regular employment described as “40 hours per week.” Such inference could be seen as dissatisfaction with the status quo; and existing studies have consistently emphasised the importance of dissatisfaction with status quo as one of the major distinguishing characteristic of wannabe entrepreneurs (see: Krueger & Brazeal, 1994; Baron, 1998; Cardon et al 2005/2009, Breugst et al 2012).

5.2.2 STATED GOAL(S) FOR PARTICIPATION IN MSC ENTREPRENEURSHIP PROGRAMME

The quotations inserted above captures some key objectives described by these graduates at the time of their application to the programme as [at least part of] the respective individual's motivation and interest to study entrepreneurship. For instance, ... and EM-03 made it explicit in their motivation letters that they applied to the entrepreneurship programme due to the interest in owning a business someday in the future and becoming an entrepreneur. This could be understood as that for these two individuals, the master's study programme in entrepreneurship represented a perceived route towards becoming an entrepreneur. In the case of ... and ..., the same could be inferred even though their stated reasoning is the need to learn about how to behave entrepreneurially and dissatisfaction with the 40 hours per week – representing conventional employment career.

All-to-gather, the terms: *entrepreneurship*, *entrepreneur*, *venture creation*, *own business*, *future company*, and *starting an enterprise* were stated a modest total of 17 times in all motivation letters combined. Even though we are not doing content analysis in this study; however, it was interesting to observe the count of such words or phrases that are presumably indicative and/or emphasises attention and passion for the stated career intentions and aspirations for which the individuals presumed that the entrepreneurship study programme will provide a route towards its accomplishment. On the one hand, the frequency of usage and repetition of such key terms may linguistically imply affirmation, reaffirmation and internalization of the meanings such terms convey to the writer and for which the writer thereby draws attention of his/her audience to its importance by emphasising it. On the other hand, repetitions and related emphasis on key terminologies may be rooted in cultural values and linguistic conventions that either prohibit or encourages their usage in self-expression under specific “*writing cultures*” (Karlgrén and Eriksson, 2007).

Considering the discussion in the later part of the preceding paragraph, it is therefore not possible to extrapolate concrete implications to what degree of interest to pursue owner-manager type of entrepreneurship as a career option based on the graduate's individual motivation letters used to gain admission to the study programme. However, it is at the same time evident in analysed motivation letters that all graduates did indicate general

interest in entrepreneurship and entrepreneurial “*real life*.” Such general interest towards a specific field [entrepreneurship]¹ has been described by Zhao et al., (2006) as a predisposing factor that shapes the career aspiration of young people. Vesper & McMullan (1988) agrees with this view - revealing that students interested in entrepreneurship could be divided into two distinctive groups: the first group consisting of students determined to start their own business at some point; and the second group being those initially interested in the topic and willing to learn more about it in order to clarify own, largely unclear interest in pursuing entrepreneurship career.

It is important to note that EM-04 mentioned referral by another individual as one of the main reasons for applying to the programme. According to Scott & Twomey (1988) framework, referrals, testimonies and advices given to applicants constitutes a short term triggering factor – whether applicants seeking employment, applicants seeking university admission or those seeking acceptance to specific positions. Therefore, it often helps to legitimise, reshape or build interest in the mind of the individual seeking such position, and can lead to sudden realization of own-capabilities and the prospect for such position. Having said that, it is thus had to say whether EM-04 would have been motivated enough to apply to the entrepreneurship programme without it being recommended by “X”; and on the other hand, the referral might have been a clearly sought legitimisation for this individual’s interest in the entrepreneurship programme rather than a sudden awakening.

5.3 Data Source 2: The Video Interviews

Part A

According to Yin (2009), “analysis of case study evidence is one of the least developed and most difficult aspects of doing case study, ...much depends on the investigator’s own style of rigorous empirical thinking along with the sufficient presentation of evidence and careful consideration of alternative interpretations” (Yin, 2009, p. 127). Thus, by following Yin’s recommendation for incorporating the analytical approach in the study outline before

¹ The word *entrepreneurship* was not mentioned in the original text by Zhao et al (2006), rather, their study looked at in general how personal interests, hobbies and self-volition shape the career aspirations and future career accomplishment of young people.

empirical observations; after data collection phase, the analytical approach was re-examined by the authors and it was ascertained that the analysis for this main section will be directly based on the variable categories as explained in the operational definition.

5.3.1 PREDISPOSITION PART B: AFFIRMATION OF MOTIVATION & INTEREST TO THE PROGRAMME

After all formalities and small-talks before each interview session, the recorded discussions start with the interviewees being asked to briefly tell about themselves – that is, for each individual the first thing enquired was: *tell us briefly about yourself*. This is quite an ambiguous line of enquiry; however, the aim is two-fold: a) to observe to what extent the individual will restate at least parts of the background information they had provided on the motivational letter; b) a primary purpose was to also simply identify the current career situation of the interviewee. The following excerpts are exemplary of how the graduates described themselves:

“and after bachelor studies I changed to entrepreneurship because the management studies, they were ok but but problem with that was that those topics were little bit eh..., weren’t topical for me at the moment... and I didn’t think that I’m going to be a consultant or something like this, so I think that I need to study something more practical” (EM-01).

Without any prompting about the initial motivation for applying to the MSc entrepreneurship programme, EM-01 did not recall any specific pre-conditioning factor that stirred his interest towards EE, rather this individual cited that management topics seemed boring, and thus he chose entrepreneurship because he wanted something more practical. However, it wasn’t clear what exactly the graduate meant by the term “practical” so when asked to elaborate on that, he added: *“and I thought that entrepreneurship might be the best way to go practical so to learn of about real business. What else? Then I made it through the, through the entrepreneurship studies and now I’m here...” (EM-01)*

This resonates a common presumption that entrepreneurship is one of the most practical fields in business studies. For instance, Hills (1988) have argued that entrepreneurship is a subject that requires practical teaching techniques. Sexton & Bowman (1984) have

classified the essence of EE as the integration of practical areas of various business fields into a “strategic framework” that could be used within the venture initiation process and its initial growth. Hence, major goal of entrepreneurship education is to provide entities with practical business skills and capability for new entry (Lumpkin & Dess, 1996).

“but I think it was during that time when I started to become interested in entrepreneurship, ...I would say I didn’t have any entrepreneurial aspirations before ...” (EM-02).

“[...] my family., doesn’t have any kind of background in entrepreneurship and also I don’t think many of my friends are entrepreneurs. ...but during that time I somehow got excited about the idea – I saw so many cool things and maybe there is also the issue that at least in Finland you can’t really make much money by, by working and...”(EM-02).

In addition to telling about his current job and the city he comes from originally, EM-02 quickly reminisced about who he wanted to be the years after high-school and his bachelor’s degree experience and eventually recalling how the desire to become an entrepreneur sprang up in his mind. A key motivation identified was the prospects of financial gain and the need for self-autonomy. According to this individual, the fact that nobody in his family and immediate circle of influence had appropriate entrepreneurial background was seen as a handicap. Thus, for him, studying in the entrepreneurship programme was a means to augment and acquired the needed tools in order to support his entrepreneurship dream.

EM-03 in his introduction did not use any word or phrases denoting entrepreneurship or initial career perceptions, but rather, he leaned forward and started talking about his feelings at the start of the master’s programme. The following statements are some of his first lines of telling about himself:

“[...] I can basically start with when I, I been studying here in a master programme because I came from ... unit. So, which was really good cause all the, all the teachers or professors they are..., we had one or two Finnish ones, but they were mostly from the States or the UK top Universities. ...very good education and aah,

well I had my doubts when I came, came here ...when I uuh, but I knew that, that ... – it doesn't bother me. Then, aah, cause I heard ofcourse from previous ... students some criticism on compared to the ... teaching and yeah” (EM-03).

However, when asked specifically the reasons for having applied to the MSc entrepreneurship, EM-03 responded: “...wanna learn something practical...what I can use if if I want to be entrepreneur...; Yeah, kind of – I knew what I would get, I don't expect that there's school for people who go in and come out as ready entrepreneurs. But I of course... [...] I at least hoped to get some tools perhaps for the future, so, yeah.” EM-04 on the other hand, clearly introduced himself as an entrepreneur whose entrepreneurial ambitions started with general interest in the subject and which had taken through a learning journey that has finally made entrepreneur out of him. The following extract captures his description of himself:

Some more info missing or hidden

5.3.2 CRITICAL EXPERIENCES DURING MSC ENTREPRENEURSHIP PERIOD

In the context of this study, a critical learning experience consists of critical incidents and critical events taking place during the period of EE. Thus, in chapter one of this thesis we adopted the following definitions in order to make the concept clear to our audience: *a critical incident is a sudden moment of awakening, a flashpoint, a mental anchor which is triggered by perception, and a critical event is the cause or outcome of a critical incident. Both incidents and events are reproduced through reflectivity.*” (Kyrö, Kurczewska & Moisala, 2011). This variable category is paramount to the current study and its centrality is reflected in its dominance in both the research topic and the research question(s). In fact, it is perhaps important to recall that the impact of critical learning experiences on graduate career perceptions is the exact phenomena being studied – this point can never be over-emphasised. In order to drive this point down, sub-section 4.2.3 has been devoted for explaining the type of research technique known as “*the Critical Incident Technique*” used to investigate the type of phenomena which the current research is concerned with.

For this variable category, the following line of enquiry was used to elucidate what could be classified as critical experience out of the entire reflections of the individual graduates. The table after the enquiry statement presents some highlighted key memories which the interviewees described.

Now concentrate on the period of education – your master degree, can you highlight memories? Let’s start from the good memories, best experiences which you remember?

As the data presented in table 9 below indicates, ... considered his lack of business idea during the venture formation module as critical because he felt “lost” and unable to make the best out of the three courses that form the “venture formation process module.” According to this particular graduate, since the objective of this module was opportunity identification and development of own venture; and he had neither a business idea nor was able to come up with one during the process; thus he felt that he has lost the essence of the programme and began to question his own entrepreneurial capabilities – this is exemplified the usage of such statements as: “*I’m not really that entrepreneurial;*” and “*that wasn’t really my thing...*” several times during the discussion to describe his inability to picture himself as a self-employed entrepreneur after the graduation. One memorable incident mentioned by ... as very positive for his career outcome was when he started working for a firm with the hopes to make the master’s thesis for the company. This turned out to be as he hoped for and ... is happy to be gainfully employed by the enterprise.

Table missing

Table 6: key memorable incidents and events cited by interviewees

According to Kyrö, Kurczewska & Moisala, (2011), critical incidents and events play important role within entrepreneurial opportunity process, and can often be the key factors in business idea development. Cope (2003; 2005) has emphasised the importance of studying this phenomenon in order to identify entrepreneurial learning patterns. The importance of critical experiences is underlined as guiding human behaviour and intentions

(Flanagan, 1954; Super, 1980); it is a factor identified within entrepreneurship literature to have influence on entrepreneurial accomplishments (Cope, 2003 & 2005; Kyrö, Kurczewska & Moisala, 2011, Neergaard, Krueger, & Robinson, 2012).

... had strong emphasis on his exchange experience. Being exposed to entrepreneurship driven economy as Singapore during the study abroad period brought a different mind-set compared to the usual Finnish fixed-path – secure job ideology which he was used to. Hence he came back to Finland with a venture concept which he actually put through in a business modelling course, however, the business concept got left by the side due to a refocus on the stable job which he already had during the studies. According to EM-02, the exact business concept was later implemented by someone else; however, EM-02 ended up doing his master's thesis on the same topic and interviewing the entrepreneur who had implemented his initial idea.

In the case of ..., the key memorable incidents remembered is a sort of venture capital course which catered for his practical know-how on finance. This also led to him writing a finance related thesis for the firm that he is currently working with. The degree to which the knowledge acquired through the venture capital course influenced his eventual employment could not be ascertained from his reflections. However, it was very clear in his narrative that the venture capital course provided support for the thesis.

For ..., there were two memorable incidents which consisted a self-defined “*turning point in life*”- that is a) “*participation in the Aalto Entrepreneurship Society*” events and his thesis experience. First, the graduate described his exposure to the AaltoES as a wow experience through which he actually connected with many likeminded entrepreneurship enthusiasts. According to this individual, the contacts established through AaltoES became and/or has remained very valuable for his entrepreneurial accomplishments afterwards. The second memorable incident considered by this graduate as “*extreme experience*” was his thesis. During the interview discussions, this graduate vividly recounted how his videography thesis idea was rejected by the entrepreneurship unit. He turned to the marketing department because he really wanted to explore the possibilities of documentary video making and editing through the thesis. According to ..., the subsequent acceptance of the video-thesis by the marketing department “*was the life-line*” because after the thesis he

established a company operating in this video media sector. In his own words: “*the venture has been very successful until now...*,” and his future projections are even brighter.

5.3.3 EMOTIONS AND ASSOCIATIONS BY INDIVIDUALS

The conceptual framework of this thesis that was presented in chapter 3 suggests a dynamic relationship between critical experiences and emotional associations by individuals. That is in fact what the literature suggests that the best and worst experiences of the students should produce certain level of either positive or negative emotions which if [and when] strong enough will trigger, support or deter the student’s self-entrepreneurial image formation and/or crystallisation. Furthermore, the literature as reflected in the conceptual framework suggests a double-loop in that while the critical experiences produce emotions, at the same time such emotional associations often defines the degree of *criticality* which the individuals attach to the perceived best or worst experiences (Cope, 2003; Honig, 2004; Cardon et al., 2009; Breugst et al., 2012).

Arguably, the ‘*emotions and associations*’ variable category is one of the most important variables that would lead towards answering the research question(s). First, we wanted to observe the emotions and associations through careful observation of produced when the interviewees reflected on these self-assigned memorable incidents; and how they talked about those experiences. However, this was quite hard to capture through mere observations probably because most Finnish men are quite conservative and do not necessary display much emotions especially when talking to unfamiliar persons. Therefore, based on this encountered difficulty, we decided to straight forwardly ask about emotions and associations using the following questions right after the interviewee finished talking about memorable experiences:

How did you feel at that time about these experiences you just described; and how do you feel about it now?

The following excerpts were the responses or at least how they pondered over the issue once more while expressing or denying any strong association.

This part has been completely censored due to sensitivity of findings

5.3.4 TRIGGERS AND DETERRENTS

The trigger variable is one of the key variables which the current study is concerned with. It was earlier described in subsection 1.7 as situational and short-term events that may have significant or strong bearing on a person's choice/change of preference and goals (cf: Scott & Twomey, 1988). The goal for observing this particular theme is to understand 'what' and to what extent the 'what' activate, fortify or deter the individuals initial preconception, attitude and perception towards entrepreneurship as career option.

As a background, our conceptual framework proposes that the triggering factor is influenced by both the critical experiences and the emotional associations. Additionally, the dynamics of influences between critical experiences and trigger is impacted by the predispositions and prior assumptions the individual had about entrepreneurship as career option. Without further explanations, we tabulate the perceived trigger/deterrence in the table below and analyse how it emerged from the interview discussions.

Table 10 is missing here

Table 7: Overview of perceived triggering or deterring factors

As can be seen from table ... above, two out of the graduates' perceived triggering reactions to the critical experiences they had; on the other hand, three of them had expressed reactions which suggests that deterrence was perceived from the critical experiences.

Existing studies have predicted that type of emotions experienced would have corresponding correlations to career identity construction (Meijers' 2002; Kidd, 2009). Super's life rainbow have argued that the life stage of the individuals has significant effect on preferred versus actual role the individual will play in the presence of alternatives because the considered criticality is impacted by life situations. This is to suggest that the impact of emotions as trigger or deterrence would be more profound on young minds whose motivations and interests are challenged by both the critical experiences and

multiple career alternatives being considered (Vesper & McMullen, 1988; Goss, 2005; Zhao et al., 2006).

It is important to note that all the interviewed graduates had varying degrees of negative emotions linked to the critical experiences, and at the same time the majority of them had equally positive associations to the critical experiences they had during the period of education. Perhaps, more interesting observation here is that the perceived negative experiences was identified as a triggering factor which pushed the entrepreneurial aspirations of one individual forward and helped make the entrepreneur which he has become.

Part B

5.3.5 PERCEIVED INFLUENCE ON CAREER CHOICES

Based on the analysis of the above operational themes/definition, it is very difficult to deduce any meaningful interpretation of the data when it comes to the issue of how these critical incidents and events influenced the career choices of the graduates. However, as anticipated during the design of the research, the purpose of the second video-interview was to ask the graduates to tell in their own words what and how the critical incidents interplayed with their current career situation. Therefore, we posed the following lines of enquiry to then during the second interview session:

Could you tell what the memorable experiences mean to your current life situation?

Since this variable is one of the most crucial categories that will help answer our research question and/or observe the influence of the other variable on the graduates' career perception, we did not want to pose any loaded or leading question. Therefore, it was a conscious decision to carefully avoid such indicative words as "career" and "influence."

The following are some example what was said by the graduates:

"Not really. aah, as I said before . I thought that I would like to, to make some own business at some point at that time when I when I start this entrepreneurship study.

Hmmm nothing very special, I mean I always like preparing food and restaurant kind of things, but I wasn't really serious with these kind of thoughts" (EM-01).

At first, ... told briefly that he didn't feel that the so-called memorable experiences he had described earlier during the first interview session has or had any pronounced implications to his current life. Then, his speech limped into making general association about the reputation of the Helsinki School of Economics as something that perhaps makes the graduates employable in general. To this end he stated: "...of cause when you study in HSE, they² value the education." This statement wasn't totally surprising, however, it should be noted that until this point the interviewee never mentioned anything regarding the reputation of the Business School. This latest statement make one puzzle whether it was in fact the overall perceived image of the then Helsinki School of Economics that actually attracted his interest; and thus he just took whatever study programme that accepted him. If that was the case, then it suggests that MSc entrepreneurship was just means for obtaining the coveted "HSE" master's degree! It might also be that the interviewee was simply stating that having studied at "HSE" has after-all positive influence to his current employment status. Even so, yet another paradox emerged:

"But it was interesting idea – restaurants or something else, at that point I think. And after studies it was more clear to me that I won't start any food related business – ha, ha, ha. When you study this entrepreneurship I think you know the difficulties and these kinds of things" (EM-01).

The excerpt above brought in two interesting and yet more confusing thoughts which could be either a) interpreted in a sense that the entrepreneurship education made him more risk averse because he became aware of the challenges in pursuing entrepreneurship career – thus influencing his choice of regular employment career instead of entrepreneurship. b) could also mean that the graduate did not/never actually gave any serious consideration to the possibility of entrepreneurship career – he tossed around potential business idea in his head but rather concluded that it is difficult to become entrepreneur, So he maintain a regular job!

² It was understood that the word "they" was referring to employers

For ..., the reflection was slightly different. He reinstated that he had actually applied to the MSc entrepreneurship programme in order to gain the competencies that will support his potential entrepreneurial aspirations. For instance, he stated that:

“Yeah, yeah so it wasn’t research, the motivation to research entrepreneurship so much. The main motivation was to have more of the courses that would help me to become the entrepreneur that’s what I thought at least that they would be more useful for me if I want to at some point have the vision of being entrepreneur” (EM-02).

It should be noted that this is also the very individual that told in the previous interview session that even though his exchange period consisted a critical experience because it brought a sudden awakening of the desire to become entrepreneur, and introduced him to the corridor principle of opportunity recognition; however, he admitted *“...also playing it safe..., taking those courses to support work skill in ...field which I already have experience.”* Thus, the *“playing it safe”* factor drew him back to his day job which according to him did not allow much free time to concentrate on the business idea. EM-02 recounted how uneasy it was to combine work and study at that time, so he just wanted to graduate as soon as he can – that as well brought about few glitches to his thesis writing process. More importantly, at the end he acknowledged that lack of action was what stifled his prospective venture idea.

His narrative and casual linkages between critical experiences and current life situation suggests that he might have benefited a lot more from the entrepreneurship programme if he had not ‘played it safe.’ The act of *“playing it safe”* in itself was earlier associated with the lack of *“tools”* in the programme that satisfied the type of competencies he thought the EE would equip him with.

When ... was asked the same questions, his reflections produced three perceptions that might be somewhat interconnected. First, he identified that the reason he prefers regular employment is because he does not yet have the guts to take the risk of becoming entrepreneur:

“I don’t have at least the guts to do it so that hey – now I want to be entrepreneur, it doesn’t matter what I do I just start something...” (EM-03).

Second, he further argues that because he was working in listed companies during the period of his university education, he felt that he knew that certain type of job was very suitable for him. Hence, after graduating from the programme he continued with the same line of job experience. Thus, even though ... did not speak about work and study earlier as a major memorable experience during the period of his education, however, the current statement seem to suggest that working while studying might have consisted critical learning experiences which actually deterred his self-entrepreneurial image perception. Therefore, he expressed weak perception of own entrepreneurship capabilities, even though he still has strong desires to establish his own business in the future. Third, the statements suggest that risk aversion has certain degree of influence on the current career situation. All the three perceived influencing factors are capture in the following extract:

“There’s so so I still have quite a lot to learn in that. Market potential is quite big, so yeah. Its something that interests me and I don’t have to invest that much money in that, so I can actually pay my mortgage and don’t have to worry about losing the house because of risks that are involved in being entrepreneur. So like I said I have seen it is not always easy. Or most of the time its uneasy, so yeah, I think I, after school I wanted to take the ‘easy’ option and go for someone else.” (EM-03)

Based on the statements above, it is hard to identify if any aspect of the EE had influence on the final career choices and career perception of this particular graduate. At least, EM-03 did not mention during the second interview phase any such thing that would suggest otherwise. Rather, it could be recalled from the first interview session that EM-03 had expressed a degree of dissatisfaction with the amount of practical learning content that he could get from the MSc entrepreneurship programme, thus he felt inadequately prepared to face the challenges, risks and promises of entrepreneurship career.

During the last but not the least video interview session, interviewee EM-04 was faced with the same identical line of enquiry as has been presented to the previous ones. He straightforwardly acknowledged that his critical experiences had strong implication for his current career. Thus he claimed:

“...when I chose the approach that it’s the video³ – in that way I could kind of, it was the same time the business I work in, I mean we do video production, so I kind of knew lots about video productions and today” (EM-04).

He suggested that a chief reason for his persistency about doing a video-thesis was because he wanted to try out his video production skill since he was interested in making a venture in the video/multimedia sector. Thus, his eventual triumph – with the thesis being accepted in the marketing department echoed also a triumph for his venture concept. Therefore, he soon established the company with a partner. At the end, EM-04 argued the following:

“I think that it was always been my goal to be entrepreneur. It doesn’t mean that, well, there are of course some stages that I’ve been in a pay job of course. ..., but I think the most important thing is the attitude how you work –So in that sense, if you, if you’re allowed to work as entrepreneur in your job, it doesn’t matter if you’re employee or employer” (EM-04).

With the statements above, EM-04 argued that perhaps there was no real change or influence of the critical learning experiences on his career perception. He asserts that he was determined to pursue entrepreneurship even though he also had regular employments at some point. Furthermore, he argues that whether he succeeded in being self-employed or ended up working for someone, he would always consider himself entrepreneur and behave entrepreneurial in both situations. Perhaps, his strong determination and attitude towards seeing entrepreneurship in every situation, ascribes to the stream of literature that defines entrepreneurship as a mind-set. This concept of entrepreneurship as a mind-set is also the definition the European Commission has adopted in 2006 as bases for fostering entrepreneurship education within the European Union (see: Hitt, Ireland, Camp & Sexton, 2001).

5.4 Summary of Findings

In general, these findings suggest that different incidents and events whether formally embedded in the programme content, and/or extracurricular activities consisted critical experience for individual students. Thus, a dynamic interaction between perceived

³ meaning videography thesis

criticality of an experience and emotional association to the experience is somewhat dependent on the student's own predisposition(s). As such, on the individual level whether or not such self-termed critical experiences will trigger a change in career perception or attitudes is dependent on the strength and certainty of the initial motivation, interest and preconceptions for choosing to study entrepreneurship.

On the programme level, it could be seen that the structure and content of the programme has since been moving towards providing more practical skills and flexibility content-wise in addition to its scientific academic orientation. As described in section 4.1.4, it appeared during the interviews that the students perceived having a more defined course outline and structure that contribute to each other towards an overall venture creation orientation- that is more hands-on practice courses, would have contributed towards strengthening their initial entrepreneurial ambition.

Furthermore, the extra-curricular activities were described by the interviewees as missing or not having any connection with the entrepreneurship study programme. Thus, a closer collaboration with different stakeholders within the Aalto University's entrepreneurship ecosystem (e.g, ACE, venture garage, AaltoES, etc) could have provided a variety of tools supporting the hands-on practice aspect of the programme. Also more flexibility and freedom to choose such courses and study events that suits individual needs and career aspirations were touted as one of the key factors strengthen their initial career perceptions and interest towards owner-manager type of entrepreneurship.

Perhaps, the best support for such claims made by the interviewees when it comes to the programme level findings as summarised in the preceding paragraphs can be found in the following literature: Sexton & Bowman (1984; 1988) have described entrepreneurship students as rebellious explorers who are able and willing to take high risks in unpredictable situations. The unwillingness of entrepreneurship students to deal with routines is particularly evident. According to Cope (2005), entrepreneurship students are very heterogeneous due to different predisposing variables of their backgrounds. Different stocks of experience keep students as separate individuals working towards their own needs and interests.

6 DISCUSSION AND CONCLUSIONS

This chapter presents the discussion of the empirical findings and reflections of the authors on the interpretations of different information in the data being influenced by various factors. It also highlights the most findings.

“The camera gives informants the opportunity to speak with their own voice”

~ Garrett (2010)

The analysis chapter above has presented empirical data and its interpretation based on the key variables that defined the operational scope of the extant study. In the current chapter, the findings that emerged from the analysis are discussed in relation to relevant literature presented in the literature review section and in light of conceptual framework that was developed and discussed in subsection 3.1.4.

Bearing in mind that in chapter 1 we problematized that even though scholars agree that entrepreneurship education has varying degree of impact on the supply of venture-oriented entrepreneurs (Clark, Davis & Harnish, 1984; Ronstadt 1987; Scott & Twomey, 1988; Gartner, 1990; Robinson & Sexton, 1994; Rasmussen & Sørheim 2006; Matlay, 2008), however, despite these speculations, what the impacts are, and how it influences entrepreneurship programme participants has been surprisingly neglected in mainstream academic research (Robinson & Sexton, 1994; Matlay, 2008).

Due to this gap in literature, entrepreneurship education researchers has called for studies that could bridge this gap and therefore contributing to the understanding of how different EE programmes interplay with participants' career decisions. For instance, Rasmussen & Sorheim (2006) specifically called for research assessing the effect of entrepreneurship education on individuals' entrepreneurial intentions and career track (Rasmussen & Sorheim, 2006; p.193). Therefore, a major aim of this thesis was to contribute towards bridging the gap about the lack of knowledge or prior studies addressing: (a) the career perception of entrepreneurship graduates; (b) triggers and deterrents for changes in career

choices; c) the role of critical learning experiences during the education programme on the formation and crystallization of graduate's career perception.

In order to empirically investigate the phenomena and close the identified knowledge gap, the following research questions were formulated and used to drive the thesis enquiry:

- a) *How do critical experiences during education influence student's future career choices?*
- b) *Does the career perception of students admitted to the MSc in Entrepreneurship programme change during the period of the education?*

One of the aims of the first research question was to first identify what the graduates considered as critical learning experiences that took place during the period of their entrepreneurship education; and then a key objective was to observe through their individual reflections how such critical experiences [if any] have influenced the graduate's career perception after graduation. The second research question is directly linked to research question 1, in that after identifying the critical incidents and how it influences future career choices, we then wanted to observe whether the career perception of these graduates actually changed based on the critical experiences that they witnessed during the education period. Below, we discuss our findings regarding these questions, showing how the research questions have been answered and how our framework and findings contribute to the literature gap we identified earlier. Finally, some concluding remarks are presented, and suggestions for further research are given.

6.1 Future career choices are influenced by critical experiences?

6.1.1 IDENTIFIED CRITICAL EXPERIENCES

Without much repetition, the empirical analysis found six incidents and occurrences during the education programme which the graduates retrospectively discussed as critical experiences remembered. These are:

- i) not having business idea while participating in some entrepreneurship/venture creation courses brought major feeling of lost and “*I don’t belong to this group*” type of mood.
- ii) working in large enterprises during the EE period disoriented some students from self-employment aspirations, and rather introducing them to the tempting promises of potential lucrative career accomplishment through regular employment path in those industries and career routes which the student has already familiarised himself with. Thus, the notion of: “*I’ve already done this and that... and the next step is they will make me a manager...*” became difficult to overcome.
- iii) A study abroad period was very impactful in both helping to shape entrepreneurial attitude and as well enabling the identification of venture opportunity. Thus, the student came back with a self-described “*great business idea.*” This was also identified as introducing the corridor principle that enables the graduate to be alert to the identification and assessment of subsequent venture ideas.
- iv) Practice oriented course(s) became a good source of insight and feeling of competence for a relevant career type.
- v) Extracurricular and networking events contributed immensely to the student’s building social capital and connecting with likeminded people who share certain entrepreneurial interest. For example, statements such as “*...but that was something where I really connected with different people ...and it was really useful...*” captures the essence of such networking opportunities
- vi) The master’s thesis process constituting impactful experiences – thus, both perceived negative and positive incidents that took place as part of the thesis process became very memorable for some of the interviewed students. In fact, all interviewees talked at different lengths about the thesis experience.

The above highlighted critical learning experiences suggest that many of the things happening during the period of EE potentially consisted of critical learning experiences for the programme participant. Not surprisingly, different incidents were considered “memorable” and thus critical experience to individuals; however, some similar points were highlighted by majority of the interviewees. These include: the thesis process – mentioned by all interviewed graduates even though the expressed degree of criticality differed, similarly, the interviewees discussed the courses as importance experiences that impacted their competence base and three of the graduates expressed perceived criticality of course content and course experiences because courses either entrepreneurship courses supported their competence expectations or individuals were taking courses from other fields which interested them more and that became one of the defining factors for their career choices. Furthermore, type of work experience during the study period were emphasised by half of the interviewees as critical to whom they became. These graduates perhaps could not overlook such perceived promises of potential career progression, and instead opt to start afresh trying to create own employment through owner-manager type of entrepreneurship after graduation, bearing in mind the risks associated with entrepreneurship. Lastly, student exchange experiences and networking events were each highlighted by two graduates respectively.

Looking back to the literature review section, we find support for such similarity and differences in perception of what constituted critical learning experiences within the entrepreneurship domain is discussed within the stream of literature dealing with the uniqueness and challenges of teaching entrepreneurship (Fiet, 2000; Cope, 2005; Neck & Greene, 2011). The diversity of expectations and competences needs amongst entrepreneurship aspirants, entrepreneurship students and educators reflect the individuality and diversity of backgrounds that can be found within the entrepreneurship domain. More so, such has posed specific challenges for the definition of entrepreneurship as a field of study; while some scholars argue that the initial problem of varying and sometimes contradicting expectations stems from the lack of unifying definition for the domain of entrepreneurship (Plaschka & Weisch, 1990; Fiet, 2000; Kuratko, 2005, Neck & Greene, 2011), therefore students, aspirants and practitioners expect whatever they want from

entrepreneurship. Due to these reasons Kuratko (2005) highlights a concern about the danger of diluting the meaning and misusing the concept of entrepreneurship education.

On the other hand, the Scott & Twomey (1988) career aspiration matrix combined with Super (1980)'s life rainbow suggested that individuals within similar life phase and that are equally similar in terms of life experiences and demographic background has a greater tendency to a) have similar expectations, b) play or at least consider playing similar roles at each phase of life theatre and c) attach equal significance of association to same events happening within the same phase of life. Thus, this assumed similarity of association is reflected on the conceptual frame of reference for this study. For instance, the conceptual framework postulates that all those without specific human capital in entrepreneurship are on the same level when it comes to their point of departure, preconceptions and general interest towards the pursuit of entrepreneurship career.

6.1.2 ON HOW CRITICAL EXPERIENCES INFLUENCE STUDENT'S FUTURE CAREER CHOICES

Understanding how critical experiences taking place during the period of entrepreneurship education influences the students' career choices was a central focus of both the literature part and the empirical aspect of this thesis. The conceptual framework that emerged from the literature review suggested that a) the initial career perception of a homogenous group of EE participants is built upon their backgrounds, prior knowledge and preconceptions about entrepreneurship; b) critical learning incidents or critical experiences taking place during the time of entrepreneurship education will arouse strong positive or negative emotional association which will either trigger or deter the student's self-entrepreneurial image formation and/or crystallisation – leading to potential change in attitude and conception towards the pursuit of entrepreneurship; c) such change will finally reflect on the participant's overall perception of entrepreneurship as viable career option or not and eventual career choices after graduation.

It is important to notice the dynamic interaction and feedback loop between constructs in the highlighted aspects of the conceptual framework. Such interdependency of the interactions between *preconceptions, critical experiences, emotions and trigger/deterrence* suggests that how individual perceive and construct sense of *criticality* out of experiences

may depend on their respective *predispositions*, and while the *critical experiences* produce *emotions*, at the same time such *emotion and associations* often defines the degree of *criticality* which the individuals attach to the perceived best or worst experiences, and finally, such perceived criticality triggers or deters potential change or vice-versa (Cope, 2003; Honig, 2004; Cardon et al., 2009; Breugst et al., 2012).

When relating to the conceptual framework presented earlier in subsection 3.14, it is evident that the empirical findings support the most part of the framework; however, certain aspects did not conform to the insights generated from the data. For instance, the earlier framework suggested a single loop relationship between *trigger/deterrence* and *emotions/associations* to effect *change* towards the pursuit of entrepreneurship, but the data analysis has actually revealed a dynamic interaction *between trigger/deterrence – change – and graduate career choices*. Furthermore, the revised framework suggests according to the data analysis that the chief outcome of critical experiences are the emotions/associations which then lead to the actual career perception and career choice of the individual after graduating from the programme.

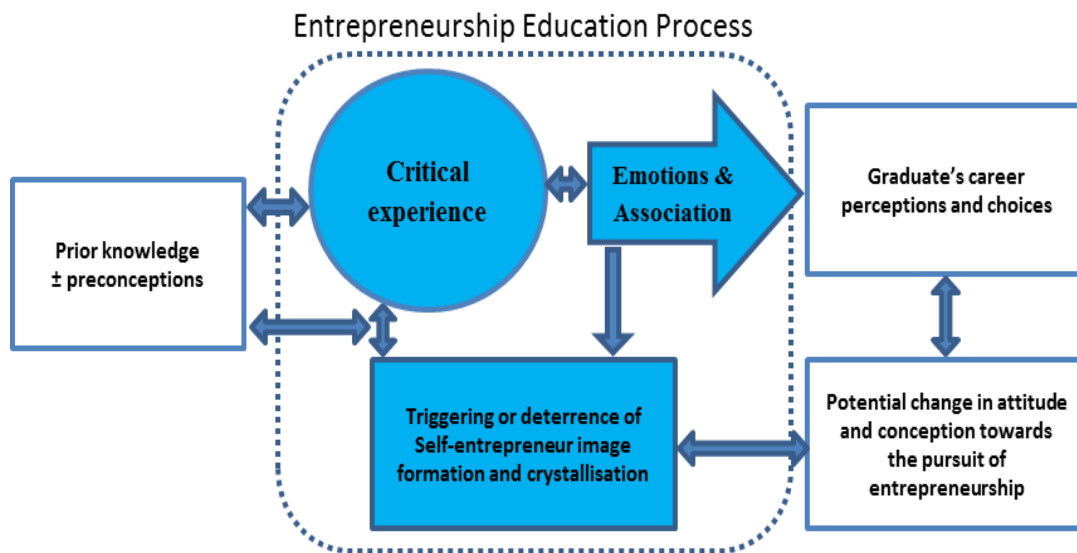


Figure 9: Conceptual framework revisited

Source: Authors

The analyses suggest that such double-loop interaction can be confirmed in all the units of analysis. For instance, empirical evidence on table 10 in subsection 5.3.4 seems to show that the lack of emotional association by XX number of the graduates to the various incidents they expressed as critical experiences lowered the perceived criticality of the incidents and thus resulted in either none or low triggering/change of attitude and perception towards entrepreneurship (see: Meijers' 2002; Kidd, 2009).

Simply stated, these findings imply that the process through which critical experiences during education influences the student's career perception and career choices through the dynamic loop between how predispositions or the lack of it thereof interplay with the how and what is perceived as critical experiences and such through emotional association triggers, sustains or deters the interests and motivations for entrepreneurship aspirations. Therefore, this in turn results in either change or no change in career perceptions and choices after graduation. The process is visualised in the figure below. Thus, research question one is answered and illustrated. This process flow that emerged from data suggests that there is not only a dynamic interaction between the critical experiences and emotions/associations; however it advocates that emotions are embedded in the experiences.

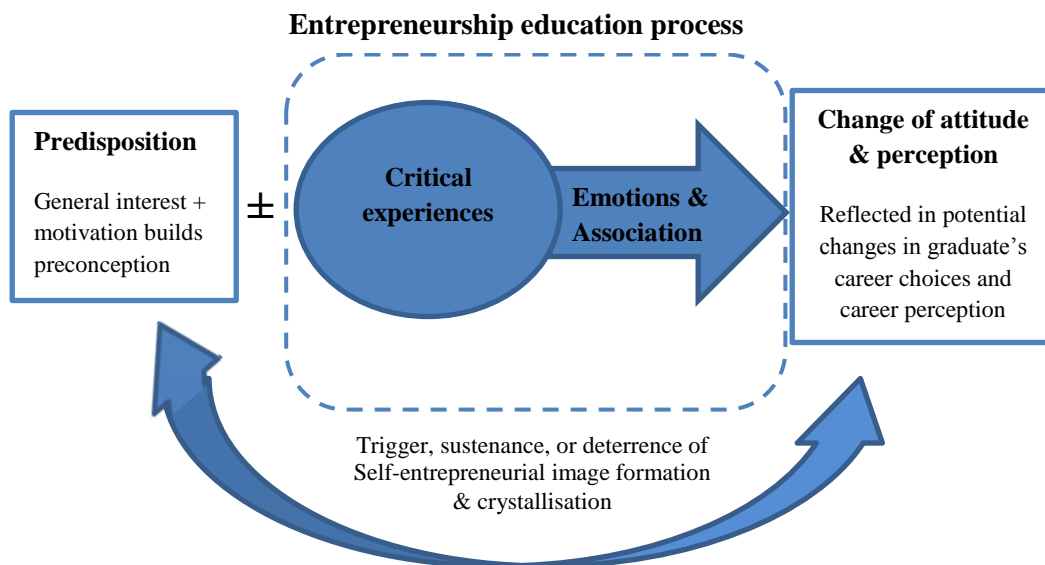


Figure 10: A process of how critical experiences influence career perception
Source: Authors

6.1.3 CHANGE IN CAREER PERCEPTION

In order to answer the second research question – that is whether the career perception of students admitted to the MSc Entrepreneurship Programme change during the education, we needed to first identify what was their career perceptions at the time of starting the study programme. For this reason, the authors analysed the admission motivation letters of the study sample. Through the analysis of these motivation letters and separate interviews, it was possible to extract the initial career interests and motivation for studying entrepreneurship. Then, the authors carefully implement video interviews which one of the goals was to understand the current career situation of these graduates and compare it to what was stated as the initial career interest and motivation. The overall findings regarding this research question has been tabulated ease of understanding and thus presented in the table 11 below.

Table missing

Table 8: Overview of finding on whether there was change in graduate's career perception

It is important to bear in mind that all the interviewees are from the same age group as mentioned earlier, and also similarity in lack of predisposing entrepreneurship specific human capital was ensured by following the Scott & Twomey (1988) career aspiration matrix in addition to Super (1980) life rainbow. Similarity can be also noticed from explorative manner of their motivation letters/statements. This enables us to categorize them as people with as homogeneous predisposing background as (within the boundaries of this work) possible.

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6.2 Concluding Remarks

Some existing studies have questioned whether entrepreneurship can be considered as a career or not, whereas other scholars have argued for and against the different effects, outputs and goals of entrepreneurship education, yet other scholar have questioned the legitimacy of the academic field of entrepreneurship (see: Gartner, 1990; Vesper & Gartner,

1997; Henderson & Robertson, 2000; Shane & Venkataraman, 2000). Scholars call for research addressing the long-term results and career implications for individuals who have graduated from various entrepreneurship study programmes. Rasmussen & Sorheim (2006) specifically pinpointed the need for research assessing the effect of entrepreneurship education on individuals' entrepreneurial intentions and career track (Rasmussen & Sorheim, 2006; p.193).

6.2.1 HIGHLIGHTS OF THE OBJECTIVES AND MOTIVATION FOR THE STUDY

The current study set out to accomplish two key objectives. First, the study serves as a programme evaluation aimed to gain insights on the entrepreneurship graduates' perception of the real impact of the master's study programme in entrepreneurship at Aalto University School of Business. In other words, how the MSc Entrepreneurship Programme fulfils both the formal study objectives and the participants' own-learning expectations. The second objective of this study focuses on the factors promoting or fettering career choice of MSc Entrepreneurship graduates who did not have own enterprise or family business background prior to entering the programme - that is, no *entrepreneurship specific human capital* at the beginning of their master's education in entrepreneurship. This second aspect was aimed to enable insights for answering key questions related to students' own learning and self-mastery, self-entrepreneurial image perception - formation and crystallisation of graduate's own image as an entrepreneur.

In order to fulfil these study objectives stated above and contribute to the identified gap in literature, the two research questions we formulated and used to guide both the theoretical conceptualisation section and the empirical investigation.

6.2.2 SUMMARY OF LITERATURE FINDINGS

Extant literature has argued that there is a link between higher education and career choices (Robinson & Haynes 1991). Therefore, educational programmes curricula can be evaluated based on the career path of graduates it produces; and, in career dialogue, understanding the differences in career paths and career accomplishment of different programme graduates can be key indicators of not only the quality, but also the impact of the specific study

programme (Robinson & Haynes 1991; Harvey, 2000). More particularly, Griffiths et al. (2012) opined that by researching EE, we can understand the pedagogical strategies and teaching practices that are significantly related to the student's innovation intentions – those learning experiences that increases the likelihood that a student will become an innovative entrepreneur [see also, Mayhew, Simonoff, Wiesenfeld, Baumol, & Klein, 201, cited in Griffiths et al. 2012].

The literature review has shown that '*entrepreneurship*' has become a label of convenience with little or no inherent meaning (Gartner 1990) and thus, the term *entrepreneurship* is often used by analysts, pundits and laymen to mean whatever they like (Gideon, 2010, p.17; Wiklund, Audretsch & Karlsson, 2011). In addition to definitional and conceptual misunderstandings characterising entrepreneurship as an academic domain; entrepreneurship educators disagree on teaching methods, curricula content, and the objectives of EE (Plaschka & Weisch, 1990; Gartner & Vesper, 1994, Kuratko, 2005; Neck & Greene, 2011). Due to such multi-level discrepancy about the actual concept and focus of entrepreneurship, there is therefore no consensus between/amongst policymakers, educators, and students regarding what should be the actual outcome of EE (Clark, Davis & Harnish 1984; Ronstadt, 1987; Fiet, 2000; Neck & Greene, 2011; Wiklund, Audretsch & Karlsson, 2011).

Renewed interest can be identified in the body of literature examining the interplay between different entrepreneurship educational programmes and economic outcome. For instance, Galloway & Brown (2002) have studied whether university level entrepreneurship education drives the creation of high-growth firms; Rasmussen & Sorheim (2006) observed the implications of *action-based entrepreneurship education* in six Swedish universities. Similarly, Matlay (2008) have assessed the *impact entrepreneurship education* can have on *entrepreneurial outcome* amongst a cohort of entrepreneurship programme graduates from eight universities in the United Kingdom; and Hytti, et al., (2010) have investigated how *motivation* and *team behaviour* interplay with the *perceived impact of entrepreneurship education*. In addition, Clausen & Vegard (2011) have studied "*entrepreneurship education and pupil's attitude towards entrepreneurs* in Norway; Fayolle (2011) have analysed the interplay between *experiential learning and entrepreneurship education*, - in other words,

how experiential learning impact outcome of entrepreneurship education. Despite these studies, the issue of how critical experiences during EE interplay with the students career perception and career choices after graduation remain unanswered. Therefore, the current study has tackled this gap.

Based on extensive literature review, the current study has conceptualised and discussed a framework for understanding the interplay between critical experiences during the period of EE and student's career perceptions/decisions after graduation.

6.2.3 SUMMARY OF EMPIRICAL FINDINGS

In this qualitative case study, empirical data/information gathered through video interviews with graduates has been used to examine how career perception of entrepreneurship students are influenced by critical experiences taking place during the period of the EE. The findings suggest that:

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- a) The degree of criticality a student attached to different incidents and events happening during the education programme did not only depend on the initial career aspirations, but depended heavily on the individual's current life stage and roles played according to Scott & Twomey's (1988) career life rainbow framework.
- b) Surprisingly, the results show that a major problem influencing changes in attitude and career preferences stems from the lack of standard definition of entrepreneurship. Thus, as motivation for entrepreneurship career intentions the applicant develop a variety of conceptual assumptions which they either felt were implicitly inferred in the formal programme descriptions or believed to be a common component/outcome of entrepreneurship education – so they applied to the programme hoping to gain such competencies and/or guidance towards specific career outcome but are might be dissatisfied when and if the students find such expected features wanting from the actual study programme content delivered to them. Hence, some develop either positive or negative emotional associations

leading to change of attitude and perceptions towards entrepreneurship based on so called “self-fined disappointment”.

- c) Students are the chief architects for their own learning experiences and mastery of own competence needs. Thus, those students who knew the career path they wanted and understand the skill-set requirement are able to tailor the programme to suit their personalised career needs by seeking and choosing courses/projects that provide such tools sought for. Hence the results provide confirmed evidence of even situations where student is able to transform both perceived positive and negative critical experiences towards the fulfilment of own career aspirations
- d) Another important finding is that different intervention activities formally embedded in the study programme which were aimed to be impactful were portrayed by the graduates as having slightly less relevance in terms of criticality of experiences but rather, extracurricular activities such as involvement in different student events; study abroad; working during the period of the study; and thesis process were perceived by graduates to have had more perception-changing impact which reflects on whether they are currently pursuing self-employment or on regular employment after graduation.

6.3 Implications and Value

The outcome of this study makes significant contribution towards the understanding of critical experiences taking place during EE influence on the career perception of students and therefore having suggestions on whether the students will pursue entrepreneurship career aspirations or not. It also provide an interactive framework that enables us to determine and explain the role critical experiences and emotions/associations as triggers, or deterrence for the formation, crystallisation or obscuring of the perception of self-entrepreneur image which is a strong predictor of how graduates perceive entrepreneurship as viable career path after graduation. The result of the study is especially of interest because it could serve a base for the evaluation of entrepreneurship degree programmes offered at higher education institutes, and thus potentially lending support for renewals of entrepreneurship study programmes and curricula.

The extant study has contributed towards bridging the lack of knowledge and/or prior studies addressing: (a) the career perception of entrepreneurship graduates; (b) triggers and deterrents for changes in career choices – why graduates of entrepreneurship degree programmes may prefer specific career path after graduation instead of the conventional expectation for own venture creation; c) the role of critical experiences during the education programme on the formation and crystallization of graduate’s career perception.

Furthermore, to the best of the author’s knowledge, this current study is the first of its kind to explore the role critical experiences may have on self-entrepreneurial career formation and perception amongst graduates from entrepreneurship master’s programme in the Finnish higher education context.

6.4 Limitations of the study

This study has several limitations that should be taken into consideration when interpreting the findings discussed in this thesis. Firstly, the authors would like to emphasise that the goal is not to generalise the finding of the current study due to the limited amount of empirical observations. Secondly, it is important to highlight that the programme development described under subsection 4.2.4 is not a comprehensive mirror of interpretation of conducted interviews because it may not represent the reality of implementation. Thus, it was and is more of a structural outline which should form the bases of implementation. Whether the structure and objectives of the master’s programme in entrepreneurship has been implemented verbatim as described on the curricula is a different phenomenon that is outside the scope of the current study.

Thirdly, it is also important to note that some of the interviewees have studied within the entrepreneurship programme curriculum that had no “*Venture creation process*” module discussed in the same subsection. Such the purpose of the current thesis is not to compare the impact of structural changes within the programme curriculum, but to identify and analyse the memorable incidents within the MSc study period of interviewees. Therefore, the diversity of the programme structure and content would have some implications to the interpretation of the empirical findings.

Since this is a study based on reflective narrative of past experience, the research data is also subject to the limitations of retrospective sense-making. Following the precedence of Flanagan (1954) and Cope (2001) guidelines for this type of enquiry, no measure of control was identified for eliminating biases stemming from retrospective sense-making and the potential for self-inflated causalities and linkages between constructs.

6.5 Suggestions for further research

The current thesis is being the initial step towards a bigger research of impact of critical events and incidents during the period of education on career perceptions of graduates. It is important to note that current paper does not provide any generalizations, but rather suggest the further research in this area. There are number of ways to expand this research both longitudinally and quantitatively. Suggestions for further research replication and extension are stated below:

1. The larger scale and longitudinal approach are required in order to make this study generalizable. Conducting interviews on a yearly basis within the Aalto BIZ entrepreneurship programme and making quantitative research using the longitudinal data gathering would provide more insights about triggers influencing the entrepreneurship programme students' career perceptions.
2. Having the possibility to replicate the same research to other Finnish Business Schools of a similar level (e.g. Turku Schools of Economics, and Hanken Schools of Economics or other business school in Finland) would provide scholars the possibility to make comparative study in order to get the "best practices" and share the experiences of career triggers of Finnish students majoring in entrepreneurship.
3. The comparative analysis of similar data gathering of entrepreneurship programmes from Universities of different countries (Nordic countries, EU) would provide the insights about cultural differences (if there are such) and their influence on career perceptions.

The homogeneity of entrepreneurship programme applicants predisposing factors is especially important to keep in mind during when reading and interpreting the research findings in order to avoid the misleading generalisation assumptions about people with and without entrepreneurship specific human capital prior to entrepreneurship education.

The reliability of motivation letters used for application to Business School is considered as additional topic for further research. Based on the thesis findings we suggest video-interviewing the target group of respondents straight after the admission in order to get the trustworthy picture of applicants' intentions and interests for further replication of this research. Such procedure would enable the recollection of initial intentions and precise definition of their change within the progress of education process. This initiative however needs to be replicated on a yearly basis in order to provide scholars with the valid and generalizable data.

These suggestions are just a scratch on the surface for further development of the current research initiative. Scholars are welcomed to replicate the theoretical framework constructed in this study and use it for own research purposes.

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