

Entrepreneurship Students, Persistence and Decision Styles

By

Ida Elen Mogstad & Selina-Marie Voss

Master's Program in Entrepreneurship

New Venture Creation Track 2016

Supervisor: Diamanto Politis

Examiner: Jonas Gabrielsson

Abstract

Purpose – Our research aims to discover what happens to entrepreneurship students after their graduation and whether there is a link between their decision styles and their persistence in pursuing an entrepreneurial career

Methodology – An exploratory, mixed-method approach was employed, combining a quantitative, self-completion questionnaire with qualitative, in-depth interviews in order to collect data from graduated entrepreneurship students of Lund University

Findings – The findings of our research indicate that the entrepreneurship graduates' decision styles do have an effect on their persistence in entrepreneurial careers

Implications – This study can help entrepreneurship programs to better understand their students' vocational paths post-graduation and consequently better adapt to their students' needs and aid them in their entrepreneurial journey

Contributions – This research forms a bridge between decision making research, entrepreneurship students and persistence, offering new insights and interesting starting points for further research

Keywords – entrepreneurship students, persistence, decision style, decision making

Acknowledgements

Our hearts go out to everyone who has helped us reach the finish line. We could not have done it without you.

Table of contents

1	Intro	oduction	1
2	Lite	rature Review	3
	2.1	Entrepreneurship Students	4
	2.2	Entrepreneurial Careers	4
	2.3	Persistence in Entrepreneurship	6
	2.4	Decision Making and Persistence	7
	2.5	Decision Making Research	8
	2.6	Decision Style Model	11
	2.7	The Four Decision Styles	12
	2.8	Expectations	14
3	Met	hodology	15
	3.1	Research Design	15
	3.2	Data Collection	16
	3.2.	1 Data Sampling	16
	3.2.	2 The Questionnaire	17
	3.2.	3 Questionnaire, Part 1 – Background Information	17
	3.2.	4 Questionnaire, Part 2 – Decision Style	18
	3.2.:	5 Semi-Structured In-Depth Interviews	19
	3.3	Data Analysis	19
	3.4	Methodology Limitations	20
	3.5	Ethical Considerations	20
4	Rese	earch Results and Discussion	21
	4.1	Overview of Questionnaire Data	21
	4.2	Overview of the Data from the In-Depth Interviews	24
	4.3	Analysis and Discussion.	25
	4.3.	1 Entrepreneurship Students – A Heterogeneous Group of People	25

	4.3.2	Entrepreneurship Students' Motivations	. 26
	4.3.3	Entrepreneurship Students and Their Attitude towards Entrepreneurial Careers	27
	4.3.4	Previous Start-Up Experience	. 28
	4.3.5	Impact of Entrepreneurship Education	. 28
	4.3.6	The Pursuit of an Entrepreneurial Career after Graduation	. 29
	4.3.7	Pursuing Different Kinds of Careers	. 30
	4.3.8	Displaying Persistence	. 31
	4.3.9	Strong Entrepreneurial Intentions and Actions	. 33
	4.3.10	Counterinfluences and Enticing Opportunities	. 33
	4.3.11	Uncertainty, Time Pressure and High Complexity	. 34
	4.3.12	Distraction, Hesitation and Maintaining Intentions	. 36
	4.3.13	Thoughts on Decision Styles	. 36
	4.3.14	The Paradox	. 37
	4.3.15	Important to Consider	. 37
5	Conclu	ısion	. 38
4	5.1 R	esearch Limitations	. 39
4	5.2 P	ractical Implications	. 40
4	5.3 F	uture Research	.41
6	Biblio	graphy	. 42
Li	st of ta	bles	
Tal	ole 1: En	trepreneurial Decision Styles (based on Driver et al., 1995)	. 14
Tal	ole 2: Ov	rerview of Data from Questionnaire Participants	. 22
Tal	ole 3: Co	rrelation Matrix of Questionnaire Participants	. 23
Tal	ole 4: Ov	rerview of Data from In-Depth Interviews	. 24

1 Introduction

Entrepreneurship is an economic force that has taken the world by storm (Kuratko, 2005), driving growth, innovation and job creation (Thurik et al., 2013). The contributions of new ventures to market economies have been substantial and entrepreneurship has been recognized as vital in increasing productivity, spurring innovation, generating employment opportunities and rejuvenating communities (Smith & Beasley, 2011). With it has come a rapidly increasing interest in entrepreneurship education (Kuratko, 2005) and many colleges and universities have expanded their curricula in the field (Edelman et al., 2008).

According to Fiet (2000), entrepreneurship education has seen an explosive growth over the past three decades and truly, the "recent growth and development in the curricula and programs devoted to entrepreneurship and new-venture creation has been remarkable" (Kuratko, 2005 p.577). This immense growth is a relatively recent phenomenon, and a very limited number of universities offered entrepreneurship programs up until the 70s (Vesper & Gartner, 1997). Consequently, it is a research field that still calls for exploration. In particular, little is known about the entrepreneurship students — their character traits, attitudes, drives and interests regarding entrepreneurship education and entrepreneurial careers (Duval-Couetil et al., 2014); further, the student's transition from entrepreneurial intentions to actual start-up remains an under-researched phenomenon (Nabi et al., 2010).

At the heart of entrepreneurial education is the teaching of entrepreneurial competencies; its goal is to encourage the creation of new ventures (Edelman et al., 2008) and while there are a variety of reasons why students choose to study entrepreneurship the most common and obvious one is simple: those who enroll in entrepreneurship courses and programs usually have a strong interest in entrepreneurship and want to become entrepreneurs (Duval-Couetil et al., 2014). In order to aid the students in their pursuit of an entrepreneurial career, entrepreneurship programs would benefit from gaining a deeper understanding of their students; the more is known about the students, the better the programs can cater to their needs. Consequently, it is crucial that more research is done on entrepreneurship students.

A majority of entrepreneurship students start their studies with the intention of pursuing an entrepreneurial career, but what happens to the entrepreneurship students after their graduation? When embarking on the entrepreneurial journey, they are bound to face considerable uncertainty and risk (Burke & Miller, 1999) and need to demonstrate tenacity and significant persistence in order to overcome this (Morris, 1998, p.163). There has been little research done regarding the numbers of entrepreneurship students who start up a new

venture, but past research shows that in some programs as little as one fifth of entrepreneurship students open their own business (Charney & Libecap, 2000). This goes to show that there is a limited amount of students who actually persist in pursuing an entrepreneurial career path.

With this thesis we aim to research and understand more about the vocational journeys that entrepreneurship graduates undergo after their studies and explore what kind of career paths they choose and which students persist in their intent of pursuing an entrepreneurial career. For this we will draw on cognitive decision-making determinants to investigate why some of them persist in their pursuit of an entrepreneurial career post-graduation and some do not. Here, we are not assessing whether their pursuit of entrepreneurial endeavors was or was not fruitful in terms of opening a financially successful venture post-graduation, but whether they were persistent in the pursuit of an entrepreneurial career and how this persistence, or the lack thereof, might have been influenced by their decision making styles.

The journey of finding the right career path involves making and acting upon vocational choices through collecting and analyzing information (Nabi et al., 2010). It is the way in which this information is being processed that makes all the difference: our individual information-processing characteristics (Driver and Streufert, 1969) – our decision styles – are irreversibly linked to how we make decisions and thus significantly impact our choices and behavior (Driver et al., 1993). The way we make decisions is particularly relevant to entrepreneurs as they face numerous important decisions on a daily basis; Politis & Gabrielsson (2011, p. 283) enforce this stating that "Decision-making lies at the very heart of the entrepreneurial process."

With decision-making styles having received attention in the career development and vocational behavior literature (Scott & Bruce, 1995), it can be argued that decision-theory is well suited to "be used as an infrastructure for understanding the processes involved in making career decisions" (Gati et al., 2009). Additionally, decision-making styles are particularly apt for the present study as they have also been used to uncover a person's level of persistence, assessing "the degree to which individuals tend to be able to effectively maintain focus on an intention until the task is complete" (Thunholm, 2003).

Even though there is a variety of theoretical frameworks regarding decision-making styles (e.g. McKenney & Keen, 1974; Mitroff, 1983; Hunt et al., 1989; Harren, 1979), this thesis follows the research framework as developed by Driver (1979, 1983) and associates (Driver et al., 1990; Driver & Mock, 1975; Driver & Pate, 1990; Driver & Streufert, 1969; Schroder, Driver & Streufert, 1967) as it has been drawn on before to explore and explain

vocational behaviors (Driver et al, 1993) and entrepreneurial matters (e.g. Driver et al. 1993; Driver et al, 1995; Kling et al. 1999).

The aim of this research is to form a bridge between entrepreneurship students, persistence and decision styles. We hope to achieve this by finding the answer to our research question: "In what ways does an entrepreneurship student's decision style influence his/her persistence in pursuing an entrepreneurial career after his/her graduation?"

While we acknowledge and touch on important factors such as attitudes, goals, intentions and motivations, which are strongly related to choosing and persisting with a career path (Wu et al., 2007), the main focus of our study is to probe if there is a relationship between an entrepreneurship student's decision style and his/her persistence in pursuing an entrepreneurial career after graduation. In order to do so, we firstly employ the Decision Style Model which was developed by Driver and associates (1979) to determine the student's decision style and then link this — if possible — to their vocational journeys post-graduation through in-depth interviews. By doing this, we hope to contribute to existing decision-making research and add to what is known about entrepreneurship students and persistence in entrepreneurship. Furthermore, it is our intention that our research will be able to help entrepreneurship programs to develop by adapting to student needs; thus enabling them to aid the students in their entrepreneurial journey.

The rest of the paper is structured in the following way: In chapter two we present our literature review by tying together relevant scholarly works concerning entrepreneurship students, entrepreneurial careers, persistence in entrepreneurship and decision making research. Then, in chapter three we explain and argue for the chosen research methodology of our thesis. Next, in chapter four, we present and discuss the results of our research. Finally, in chapter five, we offer our conclusion, as well as the limitations of our thesis. Further we depict the implications of our thesis and propose suggestions for future research.

2 Literature Review

In this chapter we present our literature review, diving into the different themes of our research: entrepreneurship as a choice for education and career, the concept of (entrepreneurial) persistence and how decision-making processes may relate to these topics. Further, the chosen Decision Style Model will be introduced and used to discuss expected findings.

2.1 Entrepreneurship Students

Researchers found entrepreneurship education to have a significant impact on the formation of new ventures, the propensity of graduates to be self-employed, their income, firm growth and to some extend also job satisfaction (Charney & Libecap, 2000). As many students who study entrepreneurship come from majors outside of business, most programs are designed to suit students from various backgrounds and disciplines (Duval-Couetil et al., 2014). Hence, entrepreneurship students make for a very heterogeneous group and as much as they vary in their characteristics, disciplines, previous experiences and interests, their entrepreneurial maturity and intentions, too, vary (Duval-Couetil et al., 2014).

Students may choose entrepreneurship as a subject for a variety of reasons: A study by Duval-Couetil et al. (2014, p.447) showed that many "looked at entrepreneurship as a means to broaden their career prospects and choices (91%), see if they had what it takes to be an entrepreneur (86%), and earn additional educational credentials (69%). The majority of surveyed students – almost three quarters (74%) – stated that they wanted to become an entrepreneur". However, even though intentions are good indicators of which direction the students will take after their graduation (Kirkwood et al., 2014), studies have found that ultimately only a very low percentage of graduate students with entrepreneurial aspirations follow their intentions and start-up a business immediately after graduation (Lüthje & Franke, 2003). And while this may be true for those that are not enrolled in dedicated entrepreneurship courses and programs, Kolvereid & Moen (1997) emphasize that "graduates who have taken a major in entrepreneurship have stronger entrepreneurial intentions and act more entrepreneurially than other graduates" (p. 159). Based on this statement, it is interesting to investigate the factors that determine the career choice of students, and the consistency between their attitudes and intentions when it comes to their pursuit of an entrepreneurial career (Lüthje & Franke, 2003).

2.2 Entrepreneurial Careers

When finishing their studies, entrepreneurship students find themselves in an interesting position: a wide array of possible career paths lay before them as entrepreneurial careers are *boundaryless* (DeFillippi & Arthur, 1994) and span across many different disciplines. "Entrepreneurs create all sorts of new ventures" (Burns, 2014, p.5) and work in all lines of businesses and fields of industries. According to Morris et al (2011) entrepreneurs are self-motivated, self-reliant individuals that value autonomy when accomplishing tasks and want to

feel in charge of their own destiny (p.163). They are opportunity oriented and are defined by their willingness to turn their ideas into actions (Burns, 2014, p.5). In the eyes of the public they often embody creativity, vision and zeal — they are seen as doers that turn their dreams into realities (Burns, 2014, p.3). These traits and the skills that students acquire through their entrepreneurship education are not only valuable for starting up a business themselves; they are also desired by bigger corporations (Duval-Couetil et al., 2014).

When entrepreneurs work within an existing organization they are often referred to as intrapreneurs or corporate entrepreneurs, and their tasks stretch from creating new business ventures to other entrepreneurial activities and orientations such as product/service or process innovation (Antoncic & Hisrich, 2003). Thus, we define intrapreneurs as individuals who are involved in developing new business activities for their employer. Their use of entrepreneurial skills within a company can encompass the development or launch of new goods or services, but it can also be setting up a new business unit, a new establishment or a new subsidiary. This in turn means that not only those entrepreneurship graduates who startup companies, but also those who move on to work as intrapreneurs get to apply their entrepreneurial skills and abilities post-graduation. This is reflected in the students' intentions when applying to an entrepreneurship program; though most are interested in starting their own business, many also show interest in working for larger companies (Duval-Couetil et al., 2014).

This is an important factor to take into consideration, thus our definition of entrepreneurial persistence is not merely related to the creation of a new venture, but also includes those who started working as intrapreneurs. It is also important to note that many students have varying timelines for pursuing the entrepreneurial career path. Often it is necessary for students to gain a deep understanding of the industry they want to enter as it might be crucial when starting up a new venture; further many students associate considerable "opportunity cost" (Duval-Couetil et al., 2014, p.447) when embarking on the entrepreneurial path immediately after graduation. Consequently, less than one quarter of students with entrepreneurial intentions start a company within five years of leaving college and of those who do, many had acquired considerable industry experience before doing so (Wadhwa et al., 2009).

This makes sense if considering that individuals have to grow in readiness and maturity to make and act upon vocational choices (Nabi et al, 2010). First, they need to develop the attitudes, beliefs and competences necessary to solidify their entrepreneurial vocational self-concept (Nabi et al, 2010). This part is especially important since a person's decision to

pursue a certain career path builds on their attitude towards it and the perceptions of whether following it will be a rewarding experience (Farrington et al, 2001). Depending on what a person is looking for in their career, what kind of values and motivations they bring to the table, they are more or less likely to fit a particular career and, if aware of their preferences, may also choose that particular path over others (Brousseau & Driver, 1994).

This goes hand in hand with the notion that "Entrepreneurial endeavors need to pass two tests — desirability and feasibility" (Wu et al, 2007, p.932). If an entrepreneurial career seems desirable and feasible, meaning attractive and realizable, to the entrepreneurship students, then they are more likely to pursue it. Some of the motivational characteristics associated with entrepreneurial careers include the strive for independence, the wish for personal development, the need for achievement and the perception that the venture will generate wealth (Wu et al, 2007). However, the level of self-belief in their own skills and abilities, their self-efficacy, also play a crucial part as self-efficacy has been found to affect a person's decision to engage in a task and persistently invest their efforts (Mau, 2000). Once the graduates have decided on pursuing an entrepreneurial career, they need to translate their choice into action (Nabi et al, 2010, p.392).

2.3 Persistence in Entrepreneurship

Embarking on a career path can be a difficult and challenging task and entering an entrepreneurial career can be all the more difficult and challenging as this field of profession is highly influenced by estimations and risk (Brousseau & Driver, 1994). It is a complicated and complex process (Wu et al, 2007) throughout which an entrepreneur must tackle many uncertainties (Burke & Miller, 1999). When facing these, the entrepreneur must be persistent and ready to take on social, personal and psychological risks (Lumpkin & Dess, 1996). Persistence is therefore a crucial element in entrepreneurship (Adomako et al, 2016), as it helps entrepreneurs push through the challenges and obstacles they encounter in the start-up phase.

Timmons and Spinelli (2009), too, emphasize the importance of persistence in entrepreneurship, stating that "entrepreneurs who are tenacious in pursuit of their goals have a greater chance of success" (Adomako et al., 2016, p. 84). This is further underlined by Kuratko and Hodgetts (2007) who consider persistence to be one of the most important attributes of a successful entrepreneur (Holland & Garrett, 2015). Furthermore, Adomako et al. (2016) link past experience to persistence, establishing that someone who is set on an entrepreneurial career and has prior entrepreneurial experience is more likely to persist in

their entrepreneurial activities; "working experience was positively related to persistence" (p.96). It seems there is little argument among scholars about the importance of persistence when it comes to 'making it as a successful entrepreneur', however, even though there are a number of scholarly works and anecdotal stories that stress the importance of persistence in entrepreneurial endeavors, Wu et al. (2007) still identified a relative lack of scholarly works on this crucial aspect of entrepreneurship.

When defining 'persistence' there are several definitions available: According to Kanfer (1990) 'persistence' is a behavior where you move in a specific direction over a period of time, whereas Markman et al. (2005, p. 3) defined persistence as a tendency to "...endure in the face of adversity". Shane et al. (2003) claim that persistence or tenacity is displayed when goal-directed energy is sustained over time, indicating that someone goal-oriented might be better suited to persist in their endeavors than someone who is not. When looking at entrepreneurial persistence in particular, Holland and Shepherd (2013) state that "entrepreneurial persistence occurs when the entrepreneur chooses to continue with an entrepreneurial opportunity regardless of counterinfluences or enticing alternatives" (p.331). This definition covers an important aspect that is particularly relevant to our thesis: the notion of counterinfluences or enticing alternatives. There are many factors, positive or negative, that could entice entrepreneurs away from their chosen career path. Holland and Shepherd (2015) stress this by saying that an entrepreneur's decision to start a new venture is not only made once, but instead the entrepreneur must decide many times to persist with the business.

In line with this falls this description by Wu et al. (2007, p.929), stating that "the notion of 'persistence' (...) implies a firm and steadfast purpose in adhering to a course of action despite risks and difficulties". In particular, goals and inner desires have been found to affect entrepreneurial persistence (Wu et al, 2007). In our study we will utilize the term persistence mainly in reference to Wu et al.'s definition as we intend to measure the entrepreneurship student's persistence disregarding whether they succeeded or failed in their endeavors, but simply in terms of whether or not they persisted in following their entrepreneurial career intentions after their graduation.

2.4 Decision Making and Persistence

In his article "Decision-Making Style: Habit, Style or Both?", Thunholm (2004) researches military decision-making, however, the variables and themes he investigates can be deemed as highly relevant for our research as well. When pointing out what kind of decision situations

military leaders face in battle, one can recognize characteristics that are also particularly true for operating in an entrepreneurial environment: (1) uncertainty (2) time pressure and (3) a high degree of complexity (Thunholm, 2004). These similarities between military and entrepreneurial environments have also been identified by other researchers and linked in research done by Groot et al. (2004, p. 53-54). According to Thunholm, military leaders often have to make decisions with only insufficient information at hand, whilst maintaining a high tempo in order to retain the initiative over opponents. Further, they need to coordinate various units and activities that are influenced by a great number of factors (Thunholm, 2004). Entrepreneurial environments, too, are often characterized by uncertainty (Burke & Miller, 1999) and especially in lean start-ups entrepreneurs have to operate with rapid speed on goodenough data (Blank, 2013).

One of Thunholm's investigated measures in relation to decision styles, the concept of action control, is particularly interesting for our research, as Thunholm uncovered a close relationship between action control and decision styles. He summarizes action control as the "ability to initiate and maintain intentions" (Thunholm, 2004, p.935), which brings to mind the notion of persistence that has been discussed previously in this thesis. The researcher states further that action control encompasses a person's mental ability to focus on a task or problem without being distracted by other influences (Thunholm, 2004). It also involves how hesitant a person is to get started once they have decided on a course of action. Lastly, action control also entails to what degree a person is able to maintain focus on an intention until the task at hand is completed (Thunholm, 2004). This is particularly interesting for our research, as it comes quite close to our own research objective.

2.5 Decision Making Research

Over the last few years there has been an increasing interest in how individuals make decisions and there have been a number of measures used to distinguish the different ways of doing so (Gait et al., 2010). According to Bruce and Scott (1995), there has been substantial theoretical and empirical research focusing on the tasks and decisions that influence decision outcomes. However, the researchers also state that relatively little attention has been paid to the characteristics of the decision maker which might have influenced the decision outcome. By this they refer to a person's decision making style, which could also be described as an individual's characteristic mode of perceiving and responding to decision-making tasks (Harren, 1979) or the habitual pattern when making decisions (Driver et al, 1993).

In an effort to synthesize existing decision-making research, Bruce and Scott (1995) provided an extensive overview of different theories and models. They posited that researchers such as McKenney and Keen (1974), Mittroff (1983) or Hunt et al. (1989) divided the styles according to differences in the way that data is gathered and being made sense of (Bruce & Scott, 1995), while Driver et al. differentiated their proposed decision styles by the amount of information gathered and the number of alternatives identified (Bruce & Scott, 1995). With our thesis being focused on vocational decision-making, we will investigate those decision style models that have received attention in the career development and vocational behavior (Harren, 1979; Driver 1979) and other relevant theories.

Harren (1979, p.119) states that "a decision-making model is a description of a psychological process in which one organizes information, deliberates among alternatives, and makes a commitment to a course of action". He further links these models to careers, claiming that they become career decision making models when those aforementioned models are applied to vocational behavior (Harren, 1979). Harren also introduces his own decision-making model where he identifies three decision styles: *rational* and *intuitive*, which involve taking personal responsibility for one's decisions, and *dependent*, where the decision maker projects responsibility onto others. The rational decision style revolves around logic and making conscious decisions, whereas the intuitive style bases decisions on feelings and emotions. Dependent style decisions are influenced by the perceived expectations from others (Harren, 1979).

Johnson (1978) referred to two dimensions: *systematic* vs. *spontaneous* as well as *internal* vs. *external*, and Walsh (1987) took a similar approach, also referring to two dimensions. In his case however, these are formed of *thinking* vs. *feeling* and *introvert* vs. *extrovert* (Gait et al., 2010). Scott and Bruce (1995) on the other hand added two styles, *the avoidant* and *the spontaneous*, to Harren's (1979) already existing model, whilst Nevo (1989, in Gati et al., 2010) came up with 13 decision styles characterized by specific domain traits. Gati et al. (2010, p. 278) disagree with the traditional decision style models, stating that "characterizing individuals by a single, dominant style may be an oversimplified description of the manner in which they make career decisions." In contrast to the former decision style models, Gati et al. offer an alternative, multidimensional model where 11 dimensions are used to characterize career decision-making profiles (2010). The idea behind this concept is that instead of having just one decision making style, individuals have a profile with different behavioral patterns that can be utilized as required by the situation. Driver et al. (1993), too, argue that a person has more than one decision style.

Decision making plays an important role in career-finding and -developing and Phillips & Pazienza (1988) define career decision making as the way in which individuals gather, analyze and process information throughout career-related processes that demand action. According to Scott and Bruce (1995, p.820), a career decision making style is a "learned habitual response pattern exhibited by an individual when confronted with a decision situation. It is not a personality trait, but a habit based propensity to react in a certain way in a specific decision context". This definition also reflects Driver et al.'s way of defining decision making as something habitual and learned; meaning that it is changeable.

The fact that decision making is something that can change is particularly important, as decision making patterns play an important role in professional behavior as well as in career development (Harren, 1979; Mau, 2000). This is also supported by Driver et al. (1990), who argue that even though we all have our own primary decision making style, this can change and adapt if the work environment necessitates this. However, having said this, it is important to acknowledge two things: (1) changing decision styles can be a very challenging, long and arduous process as it involves working "against many years of experience and reinforcement" (Driver et al., 1993, p.163) and (2) it requires a high level of self-awareness as only those who understand their decision making behavior can overcome it when necessary (Driver et al., 1993).

Another factor that is crucial regarding decision styles is self-efficacy, and Mau (2000, p. 367) argues that "there are significant relations between self-efficacy and the decision-making styles". Bandura takes this argument further (1986), claiming that self-efficacy not only affects thought patterns, but also plays a part in determining our actions; such as task engagement, input of effort and whether we choose to persevere (Mau, 2000). There is an interesting link here between self-efficacy, decision-making and persistence and Bandura indicates that since self-efficacy influences how we make decisions, it consequently too has an effect on our persistence. Child and Hsieh (2014), too, emphasize the role of individuality and character traits when they argue that "decision-makers in SMEs play a significant role, and that their characteristics can influence their strategic decisions" (Francioni et al, 2015, p.2226). These decision maker characteristics include personality traits such as the need for achievement, socio-demographic characteristics such as educational background, and competencies (Francioni et al, 2015).

2.6 Decision Style Model

For the purpose of this thesis we will follow the decision style model as developed by Driver (1979) and associates as it has been applied not only to vocational behavior and career development, but also to entrepreneurial decision making; as argued for in the introduction of this thesis.

Driver et al. state that "...decision style refers to 'learned habits of decision making." (1993, p. 3); our way of making decisions is determined by a number of internal and external factors and is therefore not predetermined. There are two main factors that are used to determine decision styles; information use and focus (Driver et al., 1993, p. 3). Information use is how much information we utilize when making a decision; people who apply the minimum amount of information needed to reach a decision are satisfiers whereas those who collect all relevant information before deciding on something are maximizers (Driver et al., 1993, p. 4). Focus on the other hand is how many alternatives we recognize when we are attempting to reach a decision; those who follow one particular course of actions are unifocused whereas those who consider a variety of options are mulifocused (Driver et al., 1993, p. 8). Information use and focus do not depend on each other, but the different ways of combining the two creates the foundation for the different decision styles.

It is important to note that people do not always use the same decision style at all times; most of us have a dominant, a primary decision style and a secondary, back-up decision style (Driver et al., 1993, p.44). Further, there is a distinction between a person's role style which is used in front of others when a person is conscious of having to make a favorable impression and an operating style which is a person's naturally adopted style that comes through when people are least self-aware (Driver et al., 1993, p. 55).

There is also a link between the different decision styles and their most compatible career concept. Career concepts are the ways in which we look at and think of our careers and there are four main career concepts: those who suit the *steady state* also known as *expert* career concept best, view a career as a lifelong commitment to a specific occupation, aiming for expertise and security; those with a *linear* career concept view a career as an opportunity to move upwards on a defined career ladder, being motivated by achievement and power; those who follow a the *spiral* career periodically move across occupational areas, seeking personal growth and creativity; and lastly those with a *transitory* career concept focus on independence and variety, which results in them moving onto a new job every three to five years (Brousseau & Driver, 1994).

2.7 The Four Decision Styles

The four styles of the Decision Style Model are: Decisive, Flexible, Hierarchic and Integrative. Until the 1990s there was also a fifth decision style called Systemic; but has since been omitted from the model as it is a hybrid of the hierarchic and integrative style.

Decisive

The decisive decision style is a satisficing unifocus style, which uses moderate to low amounts of information leading to a "good enough" solution (Kling et al, 1999, p.124). People who use the decisive decision style, from here on called *decisives*, value action, efficiency, speed and consistency. They tend to decide on a course of actions very rapidly and usually stick with their initial decision (Driver et al. 1993, p.12). Known for honoring commitment and deadlines, decisives have a strong drive to complete projects even when facing obstacles (Driver et al., 1993, p.89). When it comes to dealing with other people decisives highly prize honesty and loyalty. Some of the advantages found in decisives are their ability to work fast, to be consistent and that they are reliable, additionally they are very loyal and they display obedience. One the other hand, some disadvantages include rigidness, inflexibility and low empathy, they can also be short sighted, resistant to change and avoid complex data (Driver et al, 1993, p. 21). Decisives tend to prefer a steady state or linear career concept where they move towards a specific goal and remain consistent in their endeavors to move forwards and upwards in their career (Driver et al, 1993, p.144).

Flexible

The flexible decision maker has a satisfying multifocus style. Those who use it, *flexibles*, use moderate to low amounts of information and identify multiple solutions that will be tried out successively (Driver, 2000). Similar to the decisive style the flexible values speed and efficiency, but they contrast the decisive in their focus where they emphasize adaptability. This makes them great entrepreneurs as they are able to pursue "fast-moving entrepreneuring activities" (Driver et al. 1993, p.13). Flexibles feel uncomfortable if they feel like they are stuck with one set of actions and prefer to always keep their options open so that they can swiftly change their course if desirable. When dealing with others the flexible decision maker is very engaging and supportive, and will always try to avoid any form of conflict (Driver et al, 1993, p. 12). Flexibles have the advantage of being intuitive, fast and adaptable; they are also known to be entrepreneurial, likeable and opportunistic. In contrast there are also several disadvantages regarding flexibles such as their short term perspective, lack of planning and inconsistency, they also tend to have a short

concentration span, they resist structure and can be unreliable (Driver et al, 1993, p. 26). Flexibles usually prefer to look at careers through a transitory view and they enjoy the challenges and newness of changing their career path (Driver et al, 1993, p.144).

Hierarchic

The hierarchic decision style is a maximizing unifocus style; this decision maker uses a high amount of information, which typically results in one "best" course of action (Driver, 2000). Hierarchics value thorough analysis, facts and quality and they always aim to find the best possible solution to a problem. They often find themselves "...becoming deeply committed to visions of what the future could and should hold" (Driver et al., 1993, p.29) and are good at following through with their elaborate plans (Driver et al. 1993, p.30). In a social setting hierarchics form relationships based on mutual respect and prefer long-term friendships over a range of acquaintances (Driver et al, 1990, p. 13). Some advantages regarding hierarchics include high quality work, thoroughness and precise planning; they are also logical, inspirational and tend to follow through with all their work tasks. Main disadvantages are rigidness, lack of delegation and an over-controlling nature; they also tend to resist the influence of others, get overinvolved in details and can be quite argumentative (Driver et al, 1990, p. 28). Hierarchics prefer working towards a linear career where they can systematically move upwards on the career path; this career concept allows them to focus on one goal whilst performing tasks at a high level (Driver et al, 1993, p.144).

Integrative

Integrative decision makers have a maximizing multifocus style; similar to hierarchics they use a lot of information and facts, but identify a variety of alternative solutions and then pursue several courses of action at once (Driver et al, 1993, p.14). They highly value efficiency, quality and adaptability, but even more so creativity and exploration. Their main focus is on development and innovation, whilst putting an emphasis on adapting to each situation because every situation is unique (Driver et al, 1990, p. 14). Integratives work really well in teams due to their adaptability and appreciation for new inputs, and when working with others they highly value cooperation and trust. The integrative's main advantages are their ability to see the big picture, their creativity and their openness, they also tend to be good listeners, they are empathetic and are usually very well informed. The disadvantages are their indecisiveness, over-intellectuality and passive attitude, as well as being ambiguous communicators and having a slow work pace which can cause them to miss deadlines (Driver

et al, 1990, p. 31). Integratives can thrive in a steady state career concept as well as a spiral one, which might be due to their unique combination of different abilities; such as productivity and quality which suits a steady state career concept, and creativity and exploration which is well suited a spiral career concept (Driver et al, 1993, p.144).

2.8 Expectations

Against the theoretical background mapped out in the literature review, we expect the graduates whose vocational journeys are being explored to be very heterogeneous in their backgrounds and disciplines, career path choices, the lines of businesses and industries they are working in and respectively their persistence (or lack thereof) in pursuing an entrepreneurial career after their graduation. Further, we presume the majority of graduates to have had the intention of pursuing an entrepreneurial career, but also that the actualizations of their intentions vary in their timeline. As far as decision styles are concerned, it is our assumption that there will be all decision styles represented among the graduates.

ENTREPRENEURIAL DECISION STYLES

Unifocus	DECISIVE Acts quickly, efficiently and consistently on one idea	HIERARCHIC Plans extensively to reach long- term vision in a determined perfect day
Multifocus	FLEXIBLE Acts quickly and adaptively switches ideas as situations change	INTEGRATIVE Grasps the "big picture" and pursues several creative ideas simultaneously
ļ	Satisfizer	Maximizer

Table 1: Entrepreneurial Decision Styles (based on Driver et al., 1995)

However, we also identified a paradox in the sense that two decision styles — namely decisive and hierarchic — seem to be more linked to persistence as their unifocus characteristic is associated with zeroing in on one course of action and sticking with it. Driver (1995) describes decisive entrepreneurs as corporate John Waynes that make things happen, but might be too quick in selecting and sticking with a course of action that ultimately proves to be mistaken. Hierarchic Entrepreneurs strive in their endeavors in very determined ways,

but sometimes struggle to adapt when the conditions change. Meanwhile, there are two decision styles — flexibles and integratives — that are more likely to display entrepreneurial behavior as they are typically represented in highly adaptive and creative people. The flexible entrepreneur's "...multifocus ability is advantageous for adaptation to changing situations, but may also resulting in quitting on solutions before they had sufficient chances to develop their viability" (Driver, 1995). Integrative entrepreneurs show great innovativeness, but often fall victim to their indecisiveness which might lead to them not taking action. It will be interesting to see what our research brings to light.

3 Methodology

In this chapter the chosen research methodology is presented and argued for, in particular its expedience and suitability for this thesis. This encompasses the research design, data collection, data sampling, and finally the data analysis and limitations. Further, there will be a short discussion of the ethical considerations that arose during the design and conduction of the research.

3.1 Research Design

In this study we seek to investigate if entrepreneurship students persist in their pursuit of an entrepreneurial career after their graduation and how this is related to their individual decision style. In order to do so, we combine a quantitative and qualitative approach. First, we make use of two self-completion questionnaires to collect data from multiple entrepreneurship graduates regarding their background and decision style. By using uniform questions not only will interviewer effects and interviewer variability be eliminated, but the comparison of results is also facilitated. Furthermore, it is an organized, faster and more convenient way to collect the data needed (Bryman & Bell, 2013, p.232). When collecting information from a pool of candidates, quantitative data is helpful, as quantification provides the researcher with a consistent benchmark, which is an important advantage as it allows the researcher to remain objective (Bryman & Bell, 2013, p.54).

Based on the quantitative data collection we were left with 26 candidates. We then changed to a qualitative approach by conducting semi-structured in-depth interviews; we contacted candidates based on their decision style with the aim of conducting interviews with at least two candidates from each decision style. The interviews provided us with a deep insight into the candidates' individual journeys and gave us a better understanding of how

their decision styles affected their career paths and their persistence therein. A qualitative approach has many pros and Ruyter and Scholl (1998) state that "qualitative research provides an in depth insight; it is flexible, smart-scale and exploratory and the results obtained are concrete, real-life like and full of ideas" (in Brown, 2005, p. 356).

Qualitative interviews are valuable in the sense that they allow for the interviewer to acquire information from the interviewee regarding their "...own behavior or that of others, attitudes, norms, beliefs, and values" (Bryman & Bell, 2011, p. 201). Furthermore, a qualitative interview provides a higher level of flexibility; enabling the interviewer to ask follow-up questions and allowing the interviewee to expand or add information, thus shaping the interview along the way (Bryman & Bell, 2011, p. 465-467). The semi-structured way of interviewing was deemed the most suitable as it gave us "... a list of questions on fairly specific topics to be covered" (Bryman & Bell, 2011, p. 467), whilst allowing us to stray from the interview guidelines when necessary.

3.2 Data Collection

For our data collection we sent out individual emails to all former students of the Master's Program in Entrepreneurship at Lund University, Sweden. The total number of graduates in our sampling is 301; 212 men and 89 women. The email addresses were provided to us by the program coordinator, and out of the 301 emails, 12 were unsuccessfully delivered. The email addressed the graduates personally and informed them of the research topic of our thesis, how their response could help us in our research and the deadline for when we needed their response. Additionally, the email provided them with instructions and a link to the questionnaires. 26 graduates completed the questionnaires, 17 male and 9 female. Then, we contacted candidates based on their decision style in order to arrange interviews with two or more graduates from each decision style; hierarchic, decisive, integrative and flexible. Here 13 graduates, out of which 12 male and 1 female, agreed to hold an interview with us.

3.2.1 Data Sampling

The sample consists of all past students from 2007/2008 until 2014/2015 of the Entrepreneurship Program at Lund University. Introduced in 2007/2008, it aims to equip aspiring entrepreneurs with the right background, knowledge and tools to pursue an entrepreneurial career (Lund University, 2015, program overview). Lund University's Entrepreneurship Program is an interesting choice for this thesis, because it provides the students with an action oriented setting where the students are strongly encouraged to behave

entrepreneurially; it also offers an extensive entrepreneurial network and creates a foundation for an entrepreneurial career.

The course has high entrance requirements and only a small number of applicants are accepted to the course; thus implying that past students can be expected to be equally qualified to become entrepreneurs, thereby making this sample suitable for our research. Furthermore, because these students are well-qualified and highly motivated individuals with a strong interest in entrepreneurship, it will be particularly interesting to explore whether these individuals persist in their objective of becoming entrepreneurs after they graduate. Additionally, because the students studied entrepreneurship in the same educational environment, we can, despite possible changes to the curriculum, expect that they were provided with the same tools and knowledge to help them succeed as entrepreneurs.

3.2.2 The Questionnaire

In order to reach the objective of our thesis, there are two main factors that must be determined: which graduates persisted in pursuing an entrepreneurial career and what are their decision styles. Persistence is being assessed by a questionnaire designed by us specifically for the purpose of this thesis, whereas each graduate's decision style is being determined through an existing questionnaire that is based on over 40 years of decision making research by Driver and associates and is owned by Decision Dynamics, a company that specializes in profiling people's decision making styles (Decision Dynamics, 2016). By utilizing a questionnaire that is based on years of research our results achieve a higher level of academic accuracy, and in depth scientific results can be achieved.

3.2.3 Questionnaire, Part 1 – Background Information

In the first part of the questionnaire the test subjects are presented with 13 questions regarding their background; most of the questions are aimed at discovering persistence, or lack thereof, in the graduates' pursuit of an entrepreneurial career. In order to uncover persistence in the graduates we asked 6 questions related to whether or not they started a business or worked as an intrapreneur. Even though we were confident that due to their academic background in entrepreneurship education the participants had a clear idea of what constitutes as a corporate entrepreneur/intrapreneur, we included our definition of the term in the instructions of how to take the questionnaire in order to ensure that those who were answering the questions were aware of our understanding of it.

Further, we asked participants to provide information regarding gender, age, previous start-up experience and year of graduation in order to acquire an overview of the sample group. Additionally, we asked the graduates about their entrepreneurial intentions when entering the program in order to discover whether those who had intended to pursue an entrepreneurial career have been more persistent than those who entered the program and did not. Intentions could potentially also be linked to which program direction the students chose and we therefore asked the graduates to provide information on which student program they studied; the two are New Venture Creation and Corporate Entrepreneurship. Lastly we asked students about their belief in their own abilities to pursue entrepreneurial careers as self-efficacy has been linked positively to persistence.

When basing research on a questionnaire it is crucial that it is easily understood with straight forward questions; this is because the respondents cannot be taught how the questionnaire works and the researcher is not present to clarify any problems (Bryman & Bell, 2013, p.232); when creating the questionnaire, we therefore put an emphasis on simplicity and transparency.

3.2.4 Questionnaire, Part 2 – Decision Style

The second part of the questionnaire was used to assess each candidate's decision style. This part of the questionnaire is a test that was developed by Driver (1979, 1983) and associates and is based on over 40 years of research. The questionnaire consists of 105 questions that are used to determine a person's role styles and operating styles. Upon completing the questionnaire, the database uses a set of algorithms to determine the individual test subject's decision style based on the answers he or she has provided.

Operating styles are assessed by using a problem solving simulation approach that measures the participants' "behavior (decision), justification of it, reaction to new information that may/may not cause a change in their behavior, and their reaction to feedback" (Decision Dynamics, 2007). Flexible, decisive, integrative and hierarchic styles are the measured dimensions. Cronbach's alphas have been used to measure internal consistency and test-retest for reliability, with the alphas for the decision styles ranging from .6 to .7 and the test-retest correlation coefficients ranging from .5 to .6. The assessment of role styles is not based on simulation tasks, but still makes use of a similar construct as the operating style assessment. The questions measure complexity as well as self-awareness. The dimensions measured and patterns derived are flexible, decisive, integrative and hierarchic. Here the test-retest correlations coefficients range between .5 and .7 and the alphas range from .7 to .9; indicating

satisfactory levels of validity and reliability for both role and operating style measures (Decision Dynamics, 2007).

3.2.5 Semi-Structured In-Depth Interviews

For the qualitative part of our research we conducted semi-structured, in-depth interviews, using an interview guide developed by us based on the articles discussed in our literature review. Some of the interviews were held in person, others through Skype or over the phone; ranging from 30-75 minutes in length. Each interview was recorded in order to maintain fully attentive towards the interviewee, and was later transcribed. Further, the interview was always conducted by the same interviewer in order to avoid interviewer effect. The purpose of these interviews was to get a more complete understanding of the graduates' individual vocational experiences post-graduation, and whether their decision style had influenced their career path.

The in-depth interview consisted of three main sections: who the graduate was prior to his/her studies, who they were upon graduation and what happened between their graduation and now. Using a semi-structured interview enabled us to add relevant questions during the interview and allowed the interviewee to expand on certain points whilst remaining structured and focused (Bryman & Bell, 2011, p. 465). We encouraged the interviewee to provide additional information and to speak freely as "...it gives insight into what the interviewee sees as relevant and important" (Bryman & Bell, 2011, p. 466) and provides "rich, detailed answers" (Bryman & Bell, 2011, p. 467).

3.3 Data Analysis

In order to analyze the quantitative data we created a complete overview of the participants and the information they provided us with. We then searched for patterns by running a correlation matrix in SPSS using a nonparametric measure, namely Spearman's rank correlation coefficient. We then looked at variables where the Spearman's rho revealed a correlation which was significant at the 0.05 level (1-tailed) and at the 0.01 level (2-tailed). However, we also looked at numbers with a slightly lower correlation as a correlation of 0.3 and up represent a moderate correlation (Cohen, 2013). A correlation of 0.1 is a low correlation (Cohen, 2013); consequently we deemed any correlation under 0.2 to be insignificant for our research.

For the qualitative data we applied a comparative analysis where we initially looked at each interview individually before we compared the data from all the interviews and looked for patterns and themes. In order to do so, we employed coding that allowed us to sort the

information into different categories based on our interview guide which in turn is based on our literature review; thus providing us with information regarding similarities and differences (Bryman & Bell, 2011). Further, we linked the information provided in the interviews to the theoretical framework, as qualitative research "predominantly emphasizes an inductive approach to the relationship between theory and research, in which the emphasis is placed on the generation of theories" (Bryman & Bell, 2011, p. 27). The aim of connecting the theory with our research was to discover connections between our findings and previous research regarding entrepreneurship students, persistence and decision making.

3.4 Methodology Limitations

The three core criteria in business research are reliability, replicability and validity (Bryman & Bell, 2011, p. 41) and it is crucial that the researcher is aware of the research's limitations. In our research we used a small sample of 301 graduates, with 26 participants, that had all undergone the same educational program at the same university; thereby limiting the relevance of our results in regards to other educational institutions. Furthermore, when asking the graduates about their intentions, motivations and feelings in the past they might be displaying hindsight bias in their answers and have a selective memory or exaggerate the positive and negative aspects of any given situation.

Regarding qualitative interviews, it is crucial to consider the fact that none of the interviews stand alone; they must be analyzed in regards to the other interviews in order to get an overall picture (Bryman & Bell, 2011, p. 465). It is also important to consider how each interviewee has different characteristics and traits (Bryman & Bell, 2011, p. 225), but also that the interviewer's mindset is variable and subject to change (Bryman & Bell, 2011, p. 202). Lastly, we are moving into a field with limited research, especially regarding Driver's Decision style model and linking it to entrepreneurship. This lack of prior research limits our background knowledge and further research will have to be conducted to confirm our findings.

3.5 Ethical Considerations

Each of the graduates we approached for the questionnaire was made aware of the purpose of our study and we provided written guidelines and information regarding our thesis, the questionnaires and Decision Dynamics. We also stressed that participating was entirely voluntary, and guaranteed complete anonymity. For the in-depth interviews, we contacted the

graduates in writing, explaining the process and the purpose of the interview. The graduates were given the opportunity to choose a place and time, and again promised full anonymity; thus enabling them to speak freely and avoid the risk of them withholding valuable information. During the interview the interviewer asked permission to record the conversation.

4 Research Results and Discussion

In this chapter we will present and discuss the findings of our collected data from the questionnaire as well as the in-depth interviews. First, we provide an overview of the graduates who participated in the questionnaire and those from the in-depth interviews. Then, based on the themes of our literature review we systematically analyze and discuss interesting findings from our conducted research in more detail.

4.1 Overview of Questionnaire Data

Out of the sample of 301 graduates, 26 graduates filled in the two self-completion questionnaires. 9 were female and 17 were male. Their age ranges from 23 years until 37 years old, with the youngest being born in 1992 and the oldest being born in 1979. At least two graduates from each year since the entrepreneurship program has been established have participated. Of the 26 graduates 6 were from the Corporate Entrepreneurship track and 20 were from the New Venture Creation track, out of which 11 were enrolled in the program when the Corporate Entrepreneurship track did not exist yet. As far as their decision styles are concerned, there are 10 graduates whose primary role style is decisive, 4 flexible, 9 hierarchic and 3 integrative. The primary operating styles are distributed the following way: 6 graduates are decisive, 10 are flexible, 5 are hierarchic and 5 are integrative in their decision making. In order to identify interesting patterns, we analyzed the data from the self-completion questionnaires by running a correlation matrix in SPSS where we applied a nonparametric measure; Spearman's rho.

A summarizing table of the graduates' answers and decision styles can be found below as well as the table of correlations. Even though the quantitative data is not representative due to the small sample size, it still makes for some intriguing findings. It is also due to the small sample size that we will for the most part make use of absolute values in the description and analysis of the data as we want to avoid misleading the reader, but where deemed interesting or particularly relevant we will display percentages.

M 29 2013 CE no no yes no 1 M 25 2015 NA yes yes no 1 M 32 2008 NVC yes no yes B B M 36 2011 NVC yes no yes 1 B F 29 2013 NVC yes no yes no M 35 2012 CE yes no yes no M 34 2012 NVC yes no yes B M 35 2009 NVC yes no yes B M 37 2012 CE no no yes no H M 39 2013 CE no yes yes I H M 31 2010 NA yes yes		
F 25 2015 NA yes yes no M 32 2008 NVC yes no yes B M 36 2011 NVC yes no yes 1 M 29 2013 NVC yes no yes no M 35 2012 CE yes no yes no M 34 2012 NVC yes no yes B M 35 2009 NVC yes no no no M 37 2012 CE no yes no B+I M 37 2013 CE no yes no N M 31 2008 NA yes yes I M 31 2010 NA yes yes I M 31 2010 NA yes		
M 32 2008 NVC yes no yes B M 36 2011 NVC yes no yes 1 M 29 2013 NVC yes no yes 1 F 25 2013 NVC yes no yes no M 35 2010 NVC yes no yes B M 37 2012 CE no no no no M 37 2012 CE no yes no B+I F 32 2009 NVC yes yes no no M 37 2012 CE no yes no h F 32 2008 NA yes yes I M 31 2010 NA yes yes I M 27 2015 NA </td <td></td> <td></td>		
M 36 2011 NVC yes yes I M 29 2013 NVC yes no yes 1 F 25 2013 NVC yes no yes no M 35 2012 CE yes no yes no M 34 2012 NVC yes no yes B M 35 2009 NVC yes yes no I M 37 2012 CE no no no no M 37 2012 CE no yes yes I F 32 2008 NA yes yes I M 31 2010 NA yes yes I M 31 2010 NA yes yes I M 27 2015 yes yes yes		
M 29 2013 NVC yes no yes I F 25 2013 NVC yes no yes no F 30 2010 CE yes no yes no M 34 2012 NVC yes no yes B M 35 2009 NVC yes yes no I M 37 2012 CE no no no B+I F 32 2008 NA yes yes I M 31 2010 NA yes yes I M 31 2010 NA yes yes I M 27 2015 NA yes yes B		
F 25 2013 NVC yes no yes no M 35 2012 CE yes no yes 1 M 34 2010 NVC yes no yes no M 35 2009 NVC yes no 1 M 37 2012 CE no no no M 29 2013 CE no yes no B+1 F 32 2008 NA yes yes no no M 31 2010 NA no yes yes no M 27 2015 NVC yes yes yes B		
M 35 2012 CE yes no yes I F 30 2010 NVC yes no yes no M 34 2012 NVC yes no I M 35 2009 NVC yes no I M 37 2012 CE no no no no F 32 2008 NA yes yes yes I M 31 2010 NA no yes yes no M 27 2015 NVC yes yes yes B		
F 30 2010 NVC yes no yes no M 34 2012 NVC yes no yes B M 37 2012 CE no no no I M 37 2012 CE no yes no B+I F 32 2008 NA yes yes I M 31 2010 NA no yes yes no M 27 2015 NVC yes yes yes B		
M 34 2012 NVC yes no yes B M 35 2009 NVC yes no 1 M 37 2012 CE no no no no M 29 2013 CE no yes no B+I F 32 2008 NA yes yes I M 31 2010 NA no yes yes no M 27 2015 NVC yes yes yes B		
M 35 2009 NVC yes pes no I M 37 2012 CE no no no no M 29 2013 CE no yes no B+I F 32 2008 NA yes yes I M 31 2010 NA no yes yes no M 27 2015 NVC yes yes yes B		
M 37 2012 CE no no no no M 29 2013 CE no yes no B+I F 32 2008 NA yes yes I M 31 2010 NA no yes yes no M 27 2015 NVC yes yes yes B		
M 29 2013 CE no yes no B+I F 32 2008 NA yes yes I M 31 2010 NA no yes no M 27 2015 NVC yes yes B		
F 32 2008 NA yes yes I M 31 2010 NA no yes no M 27 2015 NVC yes yes B		
M 31 2010 NA no yes yes no M 27 2015 NVC yes yes B		
M 27 2015 NVC yes yes B		
		- 51
16 M 30 2012 NVC yes no yes B B		
17 F 32 2009 NVC yes no yes no B	DI H	DI IG
18 F 24 2014 CE no no no I I I	DI IG	F IG
19 M 34 2015 CE yes yes B B	н О	F IG
20 F 36 2011 NA yes no no B B+I	H DI	DI IG
M 29 2012 NVC yes no yes B no	DI H	F H
22 M 30 2010 NVC yes yes no B B	DI H	D F
23 F 28 2014 NVC yes no yes no B	р н	DI IG
24 F 33 2010 NVC yes no no B B	Н D	О Н
25 M 23 2015 NVC yes no yes B B	н О	H 9I
26 M 32 2010 NA yes no yes B no	DI 0	

Table 2: Overview of Data from Questionnaire Participants

								Correlati	Correlation Matrix										
	I	2	3	4	5	9	7	00	6	10	II	12	13	14	15	91	17	18	61
1 Gender	1,00																		
2 Age 20-25	-0,36	1,00																	
3 Age 26-30	0,19	-0,31	1,00																
4 Age 31-35	80.0	-0,34	**85'0-	1,00															
5 Age 36-40	0,01	-0,15	-0,26	-0,29	1,00														
6 Track	-0,21	-0,02	0,01	90'0	60'0-	1,00													
7 Currently	*65'0	-0,18	-0,04	0,18	-0,02	0,03	1,00												
8 Whitin 3y	60°0-	-0,11	-0,14	0,12	0,15	0,02	0,41*	1,00											
9 Intention	-0,15	90,0-	90'0-	0,19	-0,13	**990	0,31	0,33	1,00										
10 Experience	0,19	60 0-	-0,02	60'0	-0,01	0,01	0,13	-0,14	90*0-	1,00									
11 Self-efficacy	0,18	-0,02	0,21	90'0	-0,37	0,35	-0,17	-0,23	0,43*	0,01	1,00								
12 Role Decisive	60'0-	0,10	80.0-	-0,14	0,21	-0,32	0,01	0,34	-0,22	60'0	-0,13	1,00							
13 Role Hierarchic	0,02	-0,09	0,15	60'0	-0,26	0,01	-0,04	-0,36	0,15	-0,02	0,21	**85'0-	1,00						
14 Role Flexible	0,31	-0,18	0,14	0,10	-0,15	0,23	500	-0,11	90°0-	60*0-	0,23	-0,34	-0,31	1,00					
15 Role Integrative	-0,24	0,18	-0,26	-0,04	0,25	0,20	-0,02	0,15	0,18	-0,01	-0,37	-0,29	-0,26	-0,15	1,00				
16 Op Decisive	-0,18	-0,23	-0,01	-0,25	**99'0	80.0	-0,23	0,23	0,04	-0,01	-0,13	0,13	-0,01	-0,23	60'0	1,00			
17 Op Hierarchic	0,15	-0,21	0,26	0,02	-0,18	0,27	0,33	0,21	0,24	-0,15	0,04	-0,39	90.0	**09'0	-0,18	-0,27	1,00		
18 Op Flexible	0,24	-0,12	60°0	0,19	-0.29	-0,51**	0,01	-0,32	-0,42*	60'0	-0,13	0,19	-0,08	-0,12	-0,04	-0,43*	-0'39	1,00	
19 Op Integrative	-0,26	*09'0	-0,36	0,02	-0,18	0,27	-0,10	90.0-	0,24	90.0	0,27	0,02	90'0	-0,21	0,13	-0,27	-0,24	-0,39	1,00
*Correlation is significant at the 0.05 level (1-tailed)	at the 0.05 le	wel (1-tailed	4)																
**Correlation is significant at the 0.01 level (2-tailed)	it at the 0.011	evel (2-tail)	ed)																

 ${\it Table~3:~Correlation~Matrix~of~Question naire~Participants}$

23

**Correlation is significant at the 0.01 level (2-tailed)

4.2 Overview of the Data from the In-Depth Interviews

Out of the 13 people we interviewed, one is female and 12 are male. At least one graduate from each year is represented in the selection. Their current age ranges between 23 and 37 years old with the youngest one being born in 1992 and the oldest being born in 1979. 2 of the 13 graduates were enrolled in the Corporate Entrepreneurship track, 7 in the New Venture Creation track and 4 were enrolled before the two tracks were differentiated. In many ways it is a fairly heterogeneous group of graduates not just regarding their educational backgrounds prior to their entrepreneurship education, but also in their experiences and choices regarding entrepreneurial careers. 11 are currently pursuing an entrepreneurial career and only 2 are not. Out of the 11, 7 are running their own businesses, 3 work as intrapreneurs and 1 works as a business angel. Their primary role styles are distributed as follows: 4 decisives, 3 flexibles, 5 hierarchics, 1 integrative; and their primary operating styles: 4 decisives, 3 flexibles, 4 hierarchics and 2 integratives.

Candidate	Primary	Primary	Sex	Age	Track	Year of	Intent	Current
	Role Style	Operating				graduation		career
		style						
Graduate1	Hierarchic	Hierarchic	M	27	NVC	2015	Yes	E
Graduate2	Flexible	Hierarchic	M	30	NVC	2012	Yes	E
Graduate3	Decisive	Decisive	F	28	NVC	2014	Yes	Neither
Graduate4	Hierarchic	Integrative	M	34	NVC	2012	Yes	E
Graduate5	Hierarchic	Flexible	M	29	NVC	2012	Yes	E
Graduate6	Flexible	Hierarchic	M	32	N/A	2008	Yes	E
Graduate7	Hierarchic	Flexible	M	35	Corp	2012	Yes	I
Graduate8	Decisive	Decisive	M	37	Corp	2012	No	Neither
Graduate9	Flexible	Hierarchic	M	29	NVC	2013	Yes	I
Graduate10	Decisive	Decisive	M	36	N/A	2011	Yes	I
Graduate11	Hierarchic	Decisive	M	30	N/A	2010	Yes	E
Graduate12	Integrative	Flexible	M	35	N/A	2009	Yes	I
Graduate13	Decisive	Integrative	M	23	NVC	2015	Yes	E

^{*}F-Female, M-Male, E-Entrepreneur, I-Intrapreneur

Table 4: Overview of Data from In-Depth Interviews

4.3 Analysis and Discussion

In this section we are bringing all of the gathered empirical data together — from the questionnaire, the correlation matrix and the interviews — trying to tie the three themes of our research together: entrepreneurship student, persistence and decision styles. By making use of numerical data as well as quotes and relating them back to our theoretical framework, we depict a multi-layered and in-depth image of what happened to the entrepreneurship students after their graduation.

4.3.1 Entrepreneurship Students – A Heterogeneous Group of People

First and foremost what can be confirmed is that indeed the entrepreneurship students make up for a heterogeneous group of people (Duval-Couetil, 2014). This could already be divined when scouting through the graduates' answers in the questionnaire. Each subject line tells us about the different paths they chose after graduation — even if only in the briefest of ways. The great variations, but also connecting themes were even more prominent when talking to some of the graduates in person and hearing about their individual journeys post-graduation.

As expected, the graduates came from various backgrounds and disciplines when they entered the program (Duval-Couetil, 2014), ranging from business administrations, economics and finance to HR, IT, biological sciences, political science and even arts and philosophy.

Equally, we find that all decision styles were represented among the graduates as to be expected in such a varied group of people; both regarding their role styles and operating styles. However, there are two numbers that stand out. The first is the comparably high number of graduates with a flexible operating style, namely 10 out of 26, a little under 40%. This is interesting to observe as it has been specifically linked to entrepreneurial behavior (Driver et al. 1993, p.13), thus it makes sense to see such a high representation of this operating style in a group of graduates that have enrolled in a program dedicated to entrepreneurship. The other number that is noticeably high concerns graduates with a unifocus role style. 19 out of the 26 graduates, 73%, were either hierarchic or decisive. Drawing back on what we know about role styles we find a possible explanation for this. A person's role style reflects his/her view about how a person should behave and how to act in order to comply with the image they want others to see in them (Driver et al, 1993). As decisives and hierarchics typically strive for a linear or expert career (Driver et al, 1993, pp.143-144), in which the enhancement of qualifications is seen as the foundation for climbing up the ladder, it seems fitting that they would seek a higher education degree to advance their career prospects.

4.3.2 Entrepreneurship Students' Motivations

In regards to the students' motivation when applying to the master's program in Entrepreneurship at LU, our questionnaire revealed that 21 out of the 26 graduates, a total of 81%, intended to pursue an entrepreneurial career after their graduation. It is however important to note that 4 out of the 5 who did not intend to pursue an entrepreneurial career were enrolled in the Corporate track; implying that those who apply to the Corporate track are more likely to have other motivations and are less interested in the traditional entrepreneurial career. Furthermore, this means that 19 out of the 20 students enrolled in the New Venture Creation track, a total of 95%, intended to pursue an entrepreneurial career. When looking at the data from the in-depth interviews we see that the intention of pursuing an entrepreneurial career remains high, and 12 out of the 13 interviewees, 92%, said they wanted to become an entrepreneur or intrapreneur; this is demonstrated by Graduate9, a flexible/hierarchic, who states that:

"I knew I wanted to be involved with business, and working with growth and startups." Further, it is worth noting that these numbers exceed those of Duval-Couetil et al (2014), where 74% of the students stated that they wanted to become an entrepreneur; suggesting that the students that apply to the entrepreneurship program at LU are more likely to intend to pursue an entrepreneurial career than the average entrepreneurship student.

In addition to the motivation of wanting to become an entrepreneur, the graduates also provided a range of other motivations. One of the graduates who is a decisive/decisive felt trapped in a static career and wanted to be more in control:

"I just felt like I didn't have control over what I was doing every day, it was too methodical and so I thought I want to make my own business because I want to be in control and I want to be in charge" — Graduate3

Several also mentioned freedom and independence as a main motivation, including this graduate who is a hierarchic/decisive:

"The only thing I want is to be my own man ... I just wanted to do my own thing, that was the main motivation" – Graduate11

For some of the candidates the main motivation was a profound belief in their idea, this was particularly common amongst hierarchics, including this graduate who is hierarchic/flexible:

"My motivation is I really believe in this business idea... To make a difference" — Graduate7

As can be seen here many of the graduates' motivations aligned with motivational factors identified by Wu et al (2007), such as independence, personal development and especially

need for achievement. Of all graduates interviewed, with the exception of two, all of the graduates ranked their need for achievement four or higher on a scale from 1 to 5.

4.3.3 Entrepreneurship Students and Their Attitude towards Entrepreneurial Careers

A person's attitude towards a certain career has been found to have significant impact on whether or not they are likely to pursue it (Farrington et al, 2001). Desirability and feasibility were identified as important factors (Wu et al, 2007) and indeed, many of the graduates we interviews thought — even before they started the program — that entrepreneurial careers were both attractive and realizable to them. Here is an example of the ways an entrepreneurial career was considered desirable by one of the graduates:

"Definitely, everyone wants to be their own boss in the traditional American sense, and it was a very attractive prospect...Managing your own time, control what direction projects take, accountability to yourself as opposed to others, freedom" – Graduate5 (flexible/hierarchic)

However, some also found the idea of an entrepreneurial career daunting, especially the uncertainty that surrounds it. For this hierarchic/hierarchic graduate the idea of uncertainty made the idea of an entrepreneurial career less attractive:

"...uncertainty... I'm unfortunately easily scared off by a process that is a little bit of a black box." – Graduate15

In contrast to this, some of the graduates saw the risk and uncertainty as an appealing challenge and found that it was a way for them to prove themselves

"...I like to compete in some way, or prove myself being someone who could make companies grow, to see people grow, very interested in leadership" — Graduate7 (hierarchic/flexible)

Several of the interviewed students reported that their attitude towards entrepreneurial careers had remained the same throughout and after their studies, but a few pointed out how it had become more desirable or had been altered in other ways. For this integrative/flexible graduate the new awareness strengthened the desirability of an entrepreneurial career, but also stressed the challenges it entails

"I actually felt stronger, and also more aware of the challenges in building a successful entrepreneurial career" — Graduate10

Whereas this graduate realized the need for more experience in order to pursue this career:

"It was still attractive, but I needed more tangible real life experience" — Graduate5 (flexible/hierarchic)

For this graduate the concept of being an entrepreneur became much more real upon graduation and the upcoming hurdles manifested themselves:

"...it was time to commit, to take action, and when you take action you need to sacrifice and compromise things, and when you compromise things then you can lose, then you think about the affordable risk and loss" — Graduate9 (hierarchic/integrative)

4.3.4 Previous Start-Up Experience

The students also varied very much in their experiences previous to their entrepreneurship studies. Only 9 graduates of the 26 that took the questionnaire answered that they had start-up experience before they enrolled in the program. Contrary to findings discussed in our literature review, where Adomako et al (2016) identified past (work) experience to be positively related to persistence, no such correlation could be identified in our research. No difference could be identified between those with previous start-up experience and those without when pursuing an entrepreneurial career. However, it could be argued that an education in entrepreneurship would account for previous experience, even it is not strictly work related, which would then reflect in the high number of people who actually did pursue an entrepreneurial career after their graduation.

4.3.5 Impact of Entrepreneurship Education

Further, when looking at the answers given in the in-depth interviews it seems that, truly, entrepreneurship education has a significant impact on the students' career path (Charney & Libecap, 2000). This became particularly evident when interviewing the 13 graduates. Some described that the courses and contents of the program made them more aware of their career preferences, such as *Graduate3* (*decisive/decisive*):

"I think in Lund I really liked the marketing course and that has really made me look more at positions, careers and roles that have more to do with marketing... So, that definitely changed my choices in terms of what kind of job I would want to get."

Others were simply reinforced in their paths, such as *Graduate13* (*decisive/integrative*). When asked whether something significant happened throughout his studies that either manifested or changed his intentions, he answered:

"Not necessarily, if anything, it just sort of validated what I wanted to pursue."

4.3.6 The Pursuit of an Entrepreneurial Career after Graduation

Particularly evident becomes the impact of the entrepreneurship education when it comes to the formation of new ventures (Charney & Libecap, 2000). Against the expectations sown by Wadhwa et al (2009), who state that less than one quarter of students with entrepreneurial intentions start a company within five years, our study found that a surprisingly high number of graduates *did* pursue an entrepreneurial career. Out of the 26 people that filled in the two self-completion questionnaires 85% — 22 in total — did pursue an entrepreneurial career within three years after their graduation. 12 started one or multiple new ventures. 5 worked as an intrapreneur for an employer. 5 graduates actually did both: they started one or multiple new ventures *and* worked as an intrapreneur. Only 4 graduates did not pursue an entrepreneurial career within three years after their graduation.

This is further underlined by looking at the data gathered through the deep interviews. 11 of the interviewed graduates started a business project as part of their degree, out of which 7 further pursued it after their graduation — at least for a while; and for 4 of them the school project turned out to be the foundation for the actual start-up they are running today. The action based approach of the program, seems to have provided the groundwork for many to start up a new venture.

As can be seen in our correlation matrix, there is a positive correlation of .34 between decisive role style and graduates who have pursued an entrepreneurial career after their graduation. This seems fitting, as decisives are very action-oriented and have a strong drive to complete their projects (Driver et al., 1993, p.89), especially if — in their role style — they believe that others expect them to do so, such as their teachers or team members.

The hierarchic role style (-.36) and operating flexible style (-.32) on the other hand have been negatively correlated with pursuing an entrepreneurial career within three years after graduation. While the latter can be attributed to the fact that flexibles often try to avoid overcommitment to a particular course of action (Driver at al., 1993, p.13), the former can be explained by the hierarchic's moderate concern for time: to them it matters not how fast, but instead how well a plan is put forth, as, on a very conscious level, they prize quality above all else (Driver et al, 1993, p.89). However, as *Graduate1* (hierarchic/hierarchic) acknowledges: quality takes time.

"There is nothing wrong with abandoning a project when you see that this will not yield success, but you have to give it a little time."

That this can pay off, is demonstrated by the fact that out of the 4 graduates that are still currently running the business that they started in university, all of them have either a

hierarchic operating or role style.

This also confirms that entrepreneurship graduates have varying timelines regarding the actualization of their (entrepreneurial) intentions. Some of the graduates waited before turning their business ideas into reality, mentioning lack of funds, lack of time, differing schedules with team members or other commitments as reasons for waiting. Others embarked on their entrepreneurial journey straight after their graduation and in two cases among the interviewees the graduates had already started their business shortly before they commenced the program. It is especially this high level of immediacy that the interviewed graduates displayed in starting their businesses that made for an intriguing finding. In his interview *Graduate1* (*hierarchic/hierarchic*) elaborated that he thought waiting for the right moment to start up a business might be a big mistake. He thinks a lot of potential is lost when people jump into the corporate world, saving their entrepreneurial intentions for later:

"That is something we (...) hear a lot actually, 'I'm not experienced enough, I'm not ready, I don't have the skill set', neither do I, but just because you start a little later and work in the meantime doesn't mean you acquire the skills in the meantime..."

Graduate13 (decisive/integrative) offered a similar insight:

"I saw the opportunity, no reason to wait."

4.3.7 Pursuing Different Kinds of Careers

When comparing the career paths of the graduates from the in-depth interviews, we see that the entrepreneurial field does indeed provide boundary-less career options (DeFillippi & Arthur, 1994). Several types of careers are represented and the graduates work within a number of different industries and businesses; ranging from online retail to catering to real estate. Between their graduation and now the graduates had very heterogeneous paths; some stuck with one business idea, some had several projects, some worked as intrapreneurs, some worked in more traditional jobs and some worked both as an entrepreneur and an intrapreneur. *Graduate1* and *Graduate5* both worked on one venture and their sole focus was to develop said venture into a viable business. Both of these graduates have a hierarchic role style which is logical as hierarchics prefer working towards one goal and using all the information and resources available to reach that goal.

"I have two traits which are favorable for these situations, which are patience and resilience." – Graduate1 (hierarchic/hierarchic)

Graduate2 and *Graduate6* also persisted in their entrepreneurial endeavors, but followed a more open path where they worked on several business projects:

"...three main ones, then I have one NGO, but it should become a company soon..." – Graduate2 (flexible/hierarchic)

Both have flexible as their primary role style, which explains their urge to explore multiple options, and hierarchic as their primary operating style, which can be used to explain why they persisted in their entrepreneurial career path;

"...when you start building something you invest so much in it...you're building your own company and it's not easy throwing that away" – Graduate2 flexible/hierarchic

Several graduates worked as intrapreneurs, but no specific decision style stands out here, and all styles are represented amongst the intrapreneurs. An interesting discovery is that the number of graduates with a secondary integrative decision style is noticeably high. Almost all the graduates had in one form or another an integrative style as either a secondary role or operating style, thus bringing an element of innovation to their unique decision style combination as integratives are particularly known for their innovative mind and creative skills. As the integrative style is known as the most creative style this could suggest that in the graduates' cases it is an underlying force that drives their creativity and innovation.

4.3.8 Displaying Persistence

According to Wu et al (2007) persistence "...implies a firm and steadfast purpose in adhering to a course of action despite risks and difficulties". While we have already looked upon and discussed the students' persistence in pursuing an entrepreneurial career within three years after their graduation, it is further interesting to look at who is currently running a start-up or working as an intrapreneur.

Out of the 26 people that filled in the questionnaires about 75% of the graduates, 18 in total, are (still) currently pursuing an entrepreneurial career. 11 of those are currently in the process of starting up or running a new venture. 6 work as intrapreneurs and 1 graduate answered that he is currently doing both. Only 8 graduates are not pursuing an entrepreneurial career at the moment. Even when we omit those who graduated within the last three years the percentage remains the same. Only looking at those who graduated before 2013, we are left with 16 graduates that have embarked on their paths more than four years ago out of which 12 (75%) persisted in their pursuit of an entrepreneurial career. The correlation matrix showed strong positive correlations of .41 between having started an entrepreneurial career within three years after graduation and currently pursuing such a career, which underlines the notion of persistence. Also positively correlated with 0.33 was the hierarchic operating style, indicating that the characteristics of persistence and following through associated with this

decision style (Driver et al. 1993, p.30) do make a difference.

In our theoretical framework the importance of goals in relation to persistence has been established (Shane et al, 2003; Wu et al, 2007). What the absence of clear goals can mean for persistence shows the following scenario described by interviewed *Graduate3* (*decisive/decisive*), who did persist in starting a business with two of her friends post-graduation, but eventually discontinued it. When asking her why, she answered:

"...because we didn't have a proper goal set in mind and we didn't really reach our timeline goals and because we had other priorities, so I guess that's the most important [reason]. We were busy taking care of ourselves more or less"

Self-efficacy, too, has been linked to persistence, as it affects our efforts and whether or not people choose to persevere (Mau, 2000). 19 graduates out of 26 graduates who took the questionnaire answered that upon their graduation they did believe that they had the skills and abilities needed to pursue an entrepreneurial career. Meanwhile 7 graduates answered that they did not. It is interesting to mention though that despite the lack of self-belief in their own skills and abilities all of the 7 graduates still pursued an entrepreneurial career within the first three years after their graduation.

If persistent behavior is being viewed as someone's "ability to initiate and maintain intentions" (Thunholm, 2004, p.935), it makes sense to relate the graduates' intentions to their actions. When looking at the data from our questionnaire we can see that out of the 21 graduates who started the program with the intention of pursuing an entrepreneurial career afterwards 19 did indeed do so within three years after their graduation. Special mention must be made of the fact that additionally, 3 of the 5 graduates who started the program without the intention to pursue an entrepreneurial career after finishing the program, still did within three years after their graduation, possibly suggesting that their intentions changed throughout their year of studies.

As our aim is to look at persistence amongst entrepreneurship graduates, we wanted to hear how the graduates viewed their own level of persistence; here there was a variety in the replies, most felt like they had done so, whilst others realized that they could have been more persistent.

"I'm dedicated and motivated to seeing something through" – Graduate25 (Decisive/integrative)

"I would say that I am not sufficiently persistent" – Graduate10 (integrative/flexible)

4.3.9 Strong Entrepreneurial Intentions and Actions

All this confirms Kolvereid and Moen's (1997) notion that entrepreneurship students are more likely to have stronger entrepreneurial intentions and also act more entrepreneurially than other graduates. And while this is true for those who persisted in their entrepreneurial pursuit, it is also to some extend true for those who are not pursuing an entrepreneurial career at the moment as exemplified by the two interviewees, who are currently neither working as an entrepreneur or intrapreneur. It is interesting to note that both of them share exactly the same primary operating and role styles: decisive/decisive. Still, when talking about her current occupation, *Graduate3* (*decisive/decisive*) described entrepreneurial behavior despite working in a job, she does not think to be "all that entrepreneurial":

"I managed to make an operational process for how to contact a client and talk with them, how to respond to them, and then I work with some of the marketing, copywriting staff as well and I work with so many aspects... I work with financing as well; it's nice because I get to do more than one thing all day long. So in a sense it's entrepreneurial."

4.3.10 Counterinfluences and Enticing Opportunities

The entrepreneurial field is influenced by risk and uncertainty, and there are many challenges in pursuing an entrepreneurial career; this might in turn cause entrepreneurs to doubt their career path and make other job opportunities seem appealing (Holland and Shepherd, 2013).

When asked about the challenges of an entrepreneurial career and how they face these, in particular the risk and uncertainty, the graduates provided different responses. Overall, the graduates seemed aware of the challenges and willing to face them. However, many of the graduates found the challenges quite daunting:

"...then I start doubting, not the idea, but our ability to, or especially my ability to deliver, to execute, and that is a psychological thing, and a moral thing, that can be a huge low." – Graduate1 (hierarchic/hierarchic)

"...it was quite scary actually, because everything was uncertain" — Graduate4 (hierarchic/integrative)

Despite doubts and challenges, most of the graduates remained optimistic stating that the positive aspects of entrepreneurship outweighed the negative:

"...there's always doubts, but not to an extent to where I wanted to change." — Graduate2 (flexible/hierarchic)

"Yes, often I think it's occupational hazard, because you can't turn of your head...you feel the plus side is more than the negative side, free in deciding and basically the impact you can have with your decisions..." — Graduate5 (hierarchic/flexible)

When pursuing an entrepreneurial career there is a lot of uncertainty, and this can cause entrepreneurs to drift towards other jobs, in particular jobs that offer things that an entrepreneurial career struggles to provide; namely security and stability. Some of the graduates acknowledged this, but pointed out that the belief they had in the business idea counteracted this doubt;

"The financial side is definitely a point, I could basically earn as much in a large company as I earn now after 5 years, but I felt confident that I could come to the same salary within a reasonable amount of years." — Graduate5 (hierarchic/flexible)

In addition to the reservations that come with the many challenges and obstacles found within the entrepreneurial field, it is also normal that when entrepreneurs experience positive life changes such as getting married, settling down and having children, it can cause them to have doubts and consider jobs with a more stable income. However, in one of the interviewees we found a completely different outlook on this matter, and when asked about whether having a baby caused him/her to doubt their career choice he/she replied:

"I got even more confidence about pursuing my dreams because now I have someone who is looking up to me, so if I just quit on my dreams then what is the message I am giving my son?" – Graduate4 (hierarchic/integrative)

Overall, in the group of interviewees we found that a majority persisted in their entrepreneurial journey despite challenges, tempting job offers and positive life changes.

4.3.11 Uncertainty, Time Pressure and High Complexity

Uncertainty is one of the most challenging factors in entrepreneurship (Burke & Miller, 1999) and it is therefore both important and interesting to investigate how this affects the graduates in their pursuit of an entrepreneurial career. Many of the graduates use ways of organizing and collecting information, as well as past experience, in order to battle this uncertainty:

"I try to rely on processes and strategies that have worked in the past, outline what needs to happen, and work with people I trust, and also knowing which parts I have to do myself." – Graduate5 (flexible/hierarchic)

"...getting as much information as possible, basically you stop focusing on uncertainties, you focus on what you know... there's always a solution to every problem." — Graduate10 (integrative/flexible)

Whereas others choose a more relaxed approach:

"...I've gotten better, basically just don't care, because if you care you drive yourself stupid... whatever's going to happen is going to happen... there are so many other

variables, that sometimes you just let it slide" — *Graduate4 (decisive/decisive)*

Here, one can see how their individual decision styles shines through in their approach. Those with a maximizing decision style (hierarchics and integratives) turn to gathering more data in order to reduce the uncertainty. Those with a satisficing style (decisives and flexibles) rely on what they already know, dealing with one problem at a time before moving onto the next (Driver et al, 1993).

Time pressure is also an important factor to consider, because it is so prominent in the entrepreneurial field (Blank, 2013). Some thrive under such pressure:

"I actually need it...the best work day for me would be a workday where I would be in three different places and having overlapping appointments in my calendar. I tend to zone out if I don't have enough to do." — Graduate15 (hierarchic/hierarchic)

"I love it! I'm a huge time optimist." — Graduate16 (flexible/hierarchic)

Whereas some thrive, others perish under pressure and need to plan well in advance in order to avoid last minute work and missing deadlines:

"I like to plan ahead and make sure that I will have enough time to both complete what I have to complete but also get multiple rounds of feedback from people that need to comment on it" – Graduate5 (flexible/hierarchic)

It seems like time pressure helps especially those with a hierarchic operating style by forcing them to take action, when — if they could — they would rather take things more slowly in order to ensure the highest possible quality (Driver et al, 1993).

Similarly to uncertainty, high complexity is a factor that often can't be avoided and it is interesting to learn about how the graduates deal with this, especially in reference to their decision style. Equally, when compared to uncertainty we see that it is also often handled by using prior knowledge, or by collecting as much information as possible:

"...that's one of the biggest challenges, but you deal with complexity with knowledge, if you have experience and you have knowledge within key functional areas in a company you realize the things you should do and the things you shouldn't do and by doing that you are preventing bad things from happening" – Graduate9 (hierarchic/integrative)

Further the graduates emphasize the need for acceptance and realizing you can't do everything:

"...two things, first to accept that no matter how hard you try it's almost impossible to keep track of everything, secondly learn to prioritize...take a complex task and break it down to manageable pieces" – Graduate4 (decisive/decisive)

4.3.12 Distraction, Hesitation and Maintaining Intentions

When displaying decisive behavior, meaning the ability to identify a course of action and persistently implement it, it matters how easily a person is distracted, how hesitant they are in getting started and how capable they are of maintaining focus until the task is completed (Thunholm, 2004). A person's decision style can make a big difference in this. Those with a unifocus role style, like *Graduate13* (decisive/integrative), remained very focused:

"I'm not very much influenced by other options or influences" — Graduate25 (decisive/integrative)

Whereas others with a multifocus role style remained open-minded when they thought it could benefit the task or project at hand:

"I can change the approach if one approach is not working, but it is very important that you finish the job." — Graduate12 (integrative/flexible)

In regards to hesitation, we see from the interviews that despite uncertainty and risk, a high number of the graduates do *not* hesitate; only 2 out of the 13 interviewees stated that they are hesitant to take action. In our data we could not identify a direct link between hesitation and decision style, however there are a few cases where the decision style is particularly prominent; when looking at some of the interviewees with a decisive decision style, the fast paced and efficient working methods came through;

"No, once something is decided I just go and get it done" – Graduate10 decisive/decisive "No, not really, I love to get things done, and done quickly" – Graduate13 decisive/integrative

When it comes to maintaining focus, many of the interviewed graduates answered that they tend to set deadlines and goals, but change them when necessary; highlighting the fact that flexibility is a crucial part of entrepreneurship:

"I would say I change it constantly; I'm constantly trying to find a more efficient way to do certain work" – Graduate10 (integrative/flexible)

However, looking at previous findings in this study, we were also able to identify the hierarchic's commitment to a long-term vision, which helps them greatly in staying persistently on the course of action that they have set for themselves.

4.3.13 Thoughts on Decision Styles

Overall there are several character traits that go with the graduates decision styles and a lot of their behavior and entrepreneurial journey can be explained in relation to their decision styles; however these are mere observations that show interesting connections, not established facts.

4.3.14 The Paradox

One of the last, nonetheless most important findings of this thesis concerns the identified paradox that we addressed in our literature review, where two decision styles namely decisives and hierarchics, and two styles are more likely to be entrepreneurial, flexibles and integratives. The solution, it turns out is quite simple and elegant: The majority of graduates, a little over 60% (16 out of 26), unite with their primary role and operating styles a unifocus with a multifocus style thus in one form or another combining at least one "persistent" decision style with an "entrepreneurial" decision style.

With the exception of one, those who have a satisficing primary style (14) balance it out by having a maximizing secondary style (13). This does not apply to those with a maximizing primary role style. Here, 7 have a secondary role style that is satisficing (3 decisives, 4 flexibles), but there are also 5 graduates who fortify their maximizing primary role style by backing it up with a maximizing secondary role style (4 integratives and 1 hierarchic). Further, it seems that here, too, those who are satisficers in their primary operating style (16), balance it out with a maximizing secondary style (14) — with the exception of two graduates. Further, out of those with a maximizing style (10) only 3 fall back on a satisficing, but instead also fortify it with a maximizing secondary operation style.

4.3.15 Important to Consider

One of the biggest limitations of this study is that decision styles can be changed (Driver et al, 1993) and that we do not know whether the graduates' current decision styles are the ones they have had since their graduation. In order to acknowledge this we asked all interviewed graduates whether they believed their decision-making had changed. And indeed, several of the graduates saw drastic changes in the way the make decisions, such as this flexible/hierarchic:

"I was a risk taker to the full... I was just doing and doing and doing...now I think twice" - Graduate3

For most of the graduates the main reason for changing the way they make decisions was simply that they had to; as they moved forwards in their careers they had to make bigger and more important decisions:

"...it becomes more complex the higher you go the more at stake you have so I can't make my decisions the way I used to anymore, you have to consider more factors, because the cost of wrong decisions has increased dramatically" – Graduate21 (hierarchic/flexible)

This goes in line with Driver et al.'s (1993) insight that sometimes it is necessary for people to change their decision styles in order to advance in their careers. It would most certainly be interesting to employ a longitudinal study that could take this important finding into consideration.

5 Conclusion

With our research we intended to from a bridge between entrepreneurship students, decision styles and persistence by answering our research question: "In what ways does an entrepreneurship student's decision style influence his/her persistence in pursuing an entrepreneurial career after his/her graduation?" The explorative approach allowed us to stay open to unexpected findings and try to fully understand the entrepreneurship students' vocational journeys after their graduation, while also acknowledging their reasoning and feelings behind their choices and attitudes. There are several findings that confirm results from other scholarly works, such as that, indeed, (graduate) entrepreneurship students make up for a very heterogeneous group of people with varying characteristics, disciplines, previous experiences and interests (Duval-Couetil et al., 2014). Even more importantly, contrary to our original expectations a significantly large number of graduates seem to persist in their entrepreneurial intentions by translating them into action post-graduation. A vast majority of graduates showed tenacity and persistence in following their entrepreneurial intentions within three years after their graduation and many still do so until the present day.

Particularly interesting was to uncover and recognize the large number of graduates with a decisive or hierarchic role style, which has been linked to a higher likelihood in displaying persistence. Hierarchics in particular make for a very intriguing group as many, quite fittingly with their style, seem to pursue their career path under the banner of their long-term vision. Another interesting finding was the large number of entrepreneurship students that have a flexible operating style, as this shows that many of them possess the entrepreneurial qualities associated with the flexible style such as adaptability and speed and use it in embarking on an entrepreneurial career, even though their vocational paths look very different from those who are hierarchic. Instead of focusing on only one project, they juggle multiple, different ones at a time, diving deep into the entrepreneurial experience.

Further, there seems to be a very important underlying element that is crucial to the entrepreneurial journey, which is the vast number of graduates with the integrative style as their secondary styles. This evokes the notion that, somewhere lingering under the primary

role style is always the element of innovation and creativity, classic traits of the integrative style, which fuels entrepreneurs and intrapreneurs alike. As far as the identified paradox is concerned where the hierarchic and decisive styles were found to be more related to persistence, whereas the integrative and flexible styles were found the be more related to entrepreneurial behavior and innovation, most graduates' individual style combination of operating and role style gracefully solved this, by simply uniting one style that has an element of persistence with another style that has an element of entrepreneurship.

By having related the students' vocational journeys post-graduation to their decision styles, we have gained some very interesting insights that will hopefully prove to be beneficial to decision making research, especially regarding entrepreneurs. Further, we succeeded in adding relevant insights to what is known about entrepreneurship students. Even though this study is not representative, its discoveries shed light on what actually happens to entrepreneurship students after graduation, what kind of career paths they choose and whether they persist in their entrepreneurial intentions or not. Lastly, we were also able to add to what is known about entrepreneurial persistence by opening up the discussion of decision styles as being an important factor when it comes to the pursuit of an entrepreneurial career.

5.1 Research Limitations

The main research limitation with our research lies in the small sample size regarding the quantitative data. With only 26 participants to base our correlations on, our data is unfortunately not representative and thus does not offer statistical validity.

Moreover, it is important to acknowledge the possibility that those research candidates, who did not participate in the questionnaires and interviews, were those who did not persist in their entrepreneurial endeavors. This could be because they were too proud to admit their self-perceived failure to another generation of students — namely us — or because they saw no point in dealing with this part of their academic past again. Also, the graduates' decision styles could have to do with who took the test and who did not. However, this is purely speculative and merely a possibility to consider.

Another main limitation lies within the fact that we only know the test subjects' current decision style, and decision styles can change over time; meaning that the decision style they had before their studies might have been different from their present one.

Further, the danger of hindsight bias needs to be acknowledged as has been mentioned in the methodology part of the thesis. Lastly, as we only sampled entrepreneurship graduates from Lund University, the findings cannot be generally applied to other entrepreneurship programs, as they might only apply to this specific environment.

5.2 Practical Implications

Our study generates interesting implications for three main groups; entrepreneurship students, educational facilities, and researchers. In regards to entrepreneurship students, the results provided by our research strongly indicate that there is a link between decision style and persistence; it is therefore valuable for students to become aware of their own decision styles and how it affects their persistence as this can aid them in their pursuit of a satisfying career. Brousseau and Driver (1994) argue that this is especially important as many lack a basic understanding of careers and their own preferences upon entering the work forces; thus limiting them in identifying job opportunities that can lead to fulfilling and rewarding careers. By becoming more aware of who they are, how they make decisions and how these decisions impact their career paths, entrepreneurship students will find themselves better equipped to make better career choices.

Furthermore, our findings have implications for universities, business schools and other educational institutions as decision styles are learned habits that can be altered by utilizing the right tools and teaching techniques (Driver et al, 1993, p.86). As our education helps form us and prepare us for our future careers it could be extremely valuable for educational institutions to provide students with information regarding their decision style and help them use their knowledge to strengthen or weaken said decision style in relation to their career goals. Through awareness teaching facilities can adapt their curriculum to better cater to their students' needs and thus better prepare them for their vocational journeys. In addition to educational institutions, our study also carries implications for mentors, counsellors and tutors as it enables them to provide the students with better guidance.

Regarding implications for researchers, our study contributes to the limited existing research done on entrepreneurship students and persistence; particularly in regards to decision making, offering new insights and starting points for future research. In addition to the three main groups, our research also carries implications for students in general, entrepreneurs and others who work in fields that entail similar aspects to entrepreneurship such as risk and uncertainty.

5.3 Future Research

The intriguing findings from our research as well as the fact that the research evolving around entrepreneurship students is still young call for further exploration. First, it would be interesting to see whether a large-scale quantitative study offering representative results would confirm or refute our findings. Further, it would be interesting to conduct such research at other educational facilities in order to see if the results are different in other environments. Lastly, it would be compelling to employ a longitudinal study, which follows the graduates on their individuals' journeys, mapping out changes in their entrepreneurial intentions and decision styles as they occur along the way.

6 Bibliography

Adomako, S., Danso, A., Uddin, M. & Damoah, J. O. (2016). Entrepreneurs' optimism, cognitive style and persistence. *International Journal of Entrepreneurial Behavior & Research*, 22, 84-108.

Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16, 495–527

Bandura, A. (1986). Social foundation of thought and action. Englewood Cliffs, NJ: Prentice Hall.

Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention. *The Academy of Management Review*, 13, 442-453.

Blank, S. (2013). Why the Lean Start-Up Changes Everything. *Harvard Business Review*, 91(5), 63-72.

Brown, A. (2005) Proceedings of the 4th European Conference on Research Methods: In Business and Management Studies, *Academic Conferences Limited*

Brousseau, K. R. & Driver, M. J. (1994). Enhancing Informed Choice: A Career-Concepts Approach to Career Advisement. *The Magazine of the Graduate Management Admission Council*, Spring, 24-31.

Burke, L. A. & Miller, M. K. (1999). Taking the mystery out of intuitive decision making. *Academy of Management Executive*, 13, 91-99.

Charney, A., Libecap, G. D. & Center, K. E. (2000). The Impact of Entrepreneurship Education: An Evaluation of the Berger Entrepreneurship Program at the University of Arizona, 1985-1999. Tucson, AZ, USA: University of Arizona.

Cohen, J. (2013). Statistical power analysis for the behavioral sciences: Academic press.

Coombs, M. W., Pate, L. E., Driver, M. J., Gatewood, E. & Goodman, J. P. (1990). Decision Style and New Venture Success: An Analysis of INC. 500 and YPO Executive's Environments. *Babson Entrepreneurship Research Conference*.

Decision Dynamics (2007). Validity and reliability in behavioral & social sciences. Lund: Decision Dynamics

Decision Dynamics (2016). *About Us* http://www.decisiondynamics.se/en/about-us [Accessed 2016/03/15]

DeFillippi, R.J. and Arthur, M.B. (1994), The boundaryless career: a competency-based perspective. *Journal of Organizational Behavior*, Vol. 15 No. 4, pp. 307-324.

Driver, M.J. (1979) Individual Decision Making and Creativity. In S. Kerr (Ed.), *Organizational behavior*. Columbus, OH: Grid Publishing

Driver, M.J. (1983) A human resource data base approach to organizational design, *Journal of human resource planning*, 6, 169-182

Driver, M.J. (2000) *Decision Style: Past, Present, and Future Research*. In Riding, RJ. & Rayner S.G. (Ed.) (2000) *International Perspectives on Individual Differences: Volume 1 Cognitive Styles*, Stamford, Conneticut: Ablex Publishing Corporation, Chapter 2, pp.41-64

Driver, M. J., Brousseau, K. R. & Hunsaker, P. L. (1993). *The dynamic decision maker: Five decision styles for executive and business success.* San Francisco, CA, USA: Jossey-Bass.

Driver, M.J., Larsson, R. & Svensson, K. (1995). Who is the Successful Entrepreneur? – It Depends on the Decision Style and Situation! *Risk & Kapital*, no. 1, 4-10

Driver, M. J. & Mock, T. J. (1975). Human Information Processing, Decision Style Theory, and Accounting Information Systems. *The Accounting Review*, 50, 490-508.

Driver, M. J. & Streufert, S. (1969). Integrative Complexity: An Approach to Individuals and Groups as Information-processing Systems. *Administrative Science Quarterly*, 14, 272-285.

Duval-Couetil, N., Gotch, C. M. & Yi, S. (2014). The Characteristics and Motivations of Contemporary Entrepreneurship Students. *Journal of Education for Business*, 89, 441-449.

Edelman, L. F., Manolova, T. S. & Brush, C. G. (2008). Entrepreneurship Education: Correspondence Between Practices of Nascent Entrepreneurs and Textbook Prescriptions for Success. *Academy of Management Learning & Education*, 7, 56-70.

Farrington, S., Gray, B. & Sharp, G. (2011). Perceptions of an entrepreneurial career: Do small business owners and university students concur? *Management Dynamics*, 20, 2-17.

Fayolle, A. & Gailly, B. (2015). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence. *Journal of Small Business Management*, 53, 75-93.

Fiet, J. (2000). The pedagogical side of entrepreneurship theory. *Journal of Business Venturing*, 16, 101–117

Francioni, B., Musso, F. & Cioppi, M. (2015). Decision-maker characteristics and international decisions for SMEs. *Management Decision*, 53, 2226-2249.

Gabrielsson, J. & Politis, D. (2011). Career motives and entrepreneurial decision-making: Examining preferences for causal and effectual logics in the early stage of new ventures. *Small Business Economics*, 36(3), 281–298

Gati, I., Landman, S., Davidovitch, S., Asulin-Peretz, L. & Gadassi, R. (2010). From Career Decision-Making Styles to Career Decision-Making Profiles: A Multidimensional Approach. *Journal of Vocational Behavior*, 76, 277-291.

Gedik, Ş., Miman, M. & Kesici, M. S. (2015). Characteristics and Attitudes of Entrepreneurs Towards Entrepreneurship. *Procedia - Social and Behavioral Sciences*, 195, 1087-1096.

Glaub, M. E., Frese, M., Fischer, S. & Hoppe, M. (2015). Increasing Personal Initiative in Small Business Managers or Owners Leads to Entrepreneurial Success: A Theory-Based Controlled Randomized Field Intervention for Evidence-Based Management. *Academy of Management Learning & Education*, 2015, 21-46.

Groot, H., Nijkamp, P. and Stough, R. (2004). *Entrepreneurship and regional economic development*. Cheltenham, U.K.: Edward Elgar.

Harren, V. A. (1979). A model of career decision making for college students. *Journal of Vocational Behavior*, 14, 119-199.

Holland, D. V. & Garrett, R. P. (2015). Entrepreneur start-up versus persistence decisions: A critical evaluation of expectancy and value. *International Small Business Journal*, 33, 194-215.

Holland, D. V. & Shepherd, D. A. (2013). Deciding to Persist: Adversity, Values, and Entrepreneurs' Decision Policies. *Entrepreneurship: Theory & Practice*, 37, 331-358.

Hough, L. M. & Dunnette, M. D. (1990). *Handbook of industrial and organizational psychology*. Palo Alto, CA, USA: Consulting Psychologists Press.

Hunt, R.G, Krzystofiak, F.J., Meindl, J.R., & Yousry, A.M. (1989). Cognitive style and decision making. *Organizational Behavior and Human Decision Processess*, 44, 436-453

Hunt, S. D., Wood, V. R. & Chonko, L. B. (1989). Corporate Ethical Values and Organizational Commitment in Marketing. *Journal of Marketing*, 53, 79-90.

Hytti, U., Stenholm, P., Heinonen, J. & Seikkula-Leino, J. (2010). Perceived learning outcomes in entrepreneurship education: the impact of student motivation and team behaviour. *Education* + *Training*, 52, 587-606.

Kanfer, R. (1990). Motivation theory and industrial and organizational psychology'. *In:* Dunnette, M. D. & Hough, L. M. (eds.) *Handbook of industrial and Organizational Theory*. Palo Alto, CA, USA: Consulting Psychologists Press.

Kirkwood, J., Dwyer, K. & Gray, B. (2014). Students' reflections on the value of an entrepreneurship education. *International Journal of Management Education*, 12, 307-316.

Kling, K.S., Driver, M.J. & Larsson, R. (1999). The Human Side of the Banks' Credit Management of Small Firms – A Cognitive Approach to Corporate Evaluation. In Kling, K.S. (1999). *Credit Intelligence and Banks – Managing Credit Relationships with Small Firms*, Lund: Lund Business Press, pp. 115-154

Kolvereid, L. & Moen, O. (1997). Entrepreneurship among business graduates: Does a major in entrepreneurship make a difference? *Journal of European Industrial Training*, 21, 154-160.

Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship: Theory & Practice*, 29, 577-597.

Kwong, C. & Thompson, P. (2016). The when and why: Student entrepreneurial aspirations. *Journal of Small Business Management*, 54, 299-318.

Larsson, R., Brousseau, K. R., Kling, K. & Sweet, P. L. (2007). Building motivational capital through career concept and culture fit: The strategic value of developing motivation and retention. *Career Development International*, 12, 361-381.

Larsson, R. & Kling, K. (2015). The Engaging Ways to Career Development – Find your most inspiring Direction within the Engagement Compass. Decision Dynamics Lund.

Larsson, R. & Kling, K. (2015). The Engaging Ways to Leadership – Five Key Steps towards Greater Sustainable Performance. Decision Dynamics Lund

Leutner, F., Ahmetoglu, G., Akhtar, R. & Chamorro-Premuzic, T. (2014). The relationship between the entrepreneurial personality and the Big Five personality traits. *Personality and Individual Differences*, 63, 58-63.

Lisa, A. B. & Monica, K. M. (1999). Taking the Mystery out of Intuitive Decision Making. *The Academy of Management Executive (1993-2005)*, 13, 91-99.

Lumpkin, G.T. and Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, Vol. 21, pp. 135-72

Lüthje, C. & Franke, N. (2003). The 'making' of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT.

Maine, E., Soh, P.-H. & Dos Santos, N. (2015). The role of entrepreneurial decision-making in opportunity creation and recognition. *Technovation*, 39-40, 53-72.

Markman, G., Baron, R. and Balkin, D. (2005). Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking. *Journal of Organizational Behavior*, Vol. 26, pp. 1-19

Mau, W.-C. (2000). Cultural differences in career decision-making styles and self-efficacy. *Journal of Vocational Behavior*, 57, 365-378.

McKenney, J. L. & Keen, P. G. W. (1974). How managers' minds work. *Harvard Business Review*, 52, 79.

Mehrabi, R. & Kolabi, A. M. (2012). Investigating Effect of Entrepreneur's Personal Attributes and Cognitive Heuristics on the Quality of Entrepreneurial Strategic Decision Making. *Global Business & Management Research*, 4, 178-192.

Mitroff, I. I. (1983). Stakeholders of the organizational mind. San Francisco, CA, USA: Jossey-Bass.

Mohamad, N., Lim, H. E., Soon, J. J. & Yusof, N. (2015). Estimating the effect of entrepreneur education on graduates' intention to be entrepreneurs. *Education and Training*, 57, 874-890.

Morris, M. H., Kuratko, D. F. & Covin, J. G. (2011) *Corporate Entrepreneurship and Innovation*, 3. Ed., Mason, OH: Thomson/South-Western Cengage Learning.

Nabi, G., Holden, R. & Walmsley, A. (2010). From Student to Entrepreneur: Towards a Model of Graduate Entrepreneurial Career-Making. *Journal of Education and Work*, 23, 389-415.

Olson, P. D. (1986). Entrepreneurs: Opportunistic Decision Makers. *Journal of Small Business Management*, 24, 29.

Parker, S. C. & Belghitar, Y. (2006). What Happens to Nascent Entrepreneurs? An Econometric Analysis of the PSED. *Springer*.

Phillips, S. D., & Pazienza, N. J. (1988). History and theory of the assessment of career development and decision making. In W. B. Walsh & S. H. Osipow (Eds.), *Career decision making* (pp. 1–31). Hillsdale, NJ: Erlbaum.

Reymen, I. M., Andries, P., Berends, H., van Burg, E., Mauer, R. & Stephan, U. (2015). Understanding Dynamics of Strategic Decision Making in Venture Creation: A Process Study of Effectuation and Causation. *Strategic Entrepreneurship Journal*.

Robinson, P. B. & Sexton, E. A. (1994). The Effect of Education and Experience on Self-Employment Success. *Journal of Business Venturing*, 9, 141.

School of Economics and Management (2016) *Master's programme in Entrepreneurship and Innovation*

http://www.lusem.lu.se/study/masters/programmes/entrepreneurship-innovation/overview [Accessed 2016/03/24]

Schroder, H. M., Driver, M. J. & Streufert, S. (1967). *Human information processing: individuals and groups functioning in complex social situations*. New York: Holt, Rinehart and Winston, cop. 1967.

Scott, S. G. & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure. *Educational & Psychological Measurement*, 55, 818.

Shane, S., Locke, E. A. & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13, 257-279.

Smith, K. & Beasley, M. (2011). Graduate Entrepreneurs: Intentions, Barriers and Solutions. *Education & Training*, 53, 722-740.

Thunholm, P. (2004). Decision-making style: Habit, style or both? *Personality and Individual Differences*, 36, 931-944.

Thurik, A. R., Stam, E. & Audretsch, D. B. (2013). The rise of the entrepreneurial economy and the future of dynamic capitalism. *Technovation*, 33, 302-310.

Vesper, K. H. & Gartner, W. B. (1997). Measuring progress in entrepreneurship education. *Journal of Business Venturing*, 12, 403.

Wadhwa, V., Aggarwal, R., Holly, K., & Salkever, A. (2009). The anatomy of an entrepreneur: Family background and motivation. Kansas City, MO: Kauffman Foundation

Wilson, F., Kickul, J. & Marlino, D. (2007). Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education. *Entrepreneurship: Theory & Practice*, 31, 387-406.

Winborg, J. & Landström, H. (2001). Financial bootstrapping in small businesses. Examining small business managers' resource acquisition behaviors. *Journal of Business Venturing*, 16, 235-254.

Wu, S., Matthews, L. & Dagher, G.K. (2007). Need for achievement, business goals, and entrepreneurial persistence. *Management Research News*, 30, 928-941.

Zikic, J. & Ezzedeen, S. (2015). Towards a more integrated view of entrepreneurial careers qualitative investigation of the three forms of career: capital and their relationships among high tech entrepreneurs. *International Journal of Entrepreneurial Behaviour and Research*, 21, 756-777.

APPENDIX

Languages	English	•

Background Information

Please answer the following questions about yourself.

4	Gender:		Fema		Male
1	Gender:		0	9	0
2	Age (NN):				[1]
3	What year did you graduate? (YYYY):				
4	If applicable: Were you enrolled in the New Venture Creation Track or Corporate Entrepreneurship track of Lund University's Entrepreneurship Program?	N/A			•
	What year did you graduate? (YYYY): If applicable: Were you enrolled in the New Venture Creation Track or Corporate Entrepreneurship track of Lund University's			Yes	No
5		intent of purs	uing	0	0
6		ation at Lund		0	0
7		eeded to pur	sue	0	0
8		venture or		0	0
9	Are you currently working as an intrapreneur / corporate entrepreneur for	an employer	?	0	0
0	Within three years after your graduation: Did you, alone or with others, stamultiple) new ventures?	art one (or		0	0
11	Within three years after your graduation: Did you work as an intrapreneur entrepreneur for an employer?	/ corporate		0	0
		1	N/A	Yes	No
12	Between three years after your graduation and now: Did you, alone or with start one (or multiple) new ventures?	h others,	0	0	0
13	Between three years after your graduation and now: Did you work as an intrapreneur / corporate entrepreneur for an employer?		0	0	0

Cancel Save

© 2016 Decision Dynamics AB | Info@decisiondynamics.se | +46.46.181530



Professor Michael J. Driver

Decision Dynamics is a leading creator of strategic human resource and personal development systems that illuminate and enhance the interface between people and organizations. Our scientifically based approach is built on more than 30 years of continuous research and practical use in organizations. Our clients have used our solutions to profile and develop more than 1 million employees around the world.

Decision Dynamics AB
IDEON Science Park, Ole Römers väg 16, SE-223 70 Lund
Tel: + 46 46 181530, Fax: + 46 46 181539
E-mail: info@decisiondynamics.se
www@decisiondynamics.se

Page 1



INSTRUCTIONS

This questionnaire consists of a series of phrases describing various points of view and ways of behaving. Some of the descriptions will strike you as being extremely characteristic of you. Others you will have the exact opposite reaction to, feeling that the description does not fit you at all. And a number of the phrases may strike you as being somewhere in-between these two extremes, i.e., as being moderately characteristic or uncharacteristic of you.

Please read each description, then blacken on your answer sheet the one number from the scale to the right which best indicates how characteristic that description is of you.

		HOW CI	IARA(CTERIS	ттс о	F Y0U?
		Not at al	I			Extremely
		characteris	tic		cha	racteristic
		of me				of me
 Your motives and plans are complicated compared to the average person. 	o those of	1	2	3	4	5
2. You feel we have little control over what happens to	us.	1	2	3	4	5
 You feel one can develop successful personal qualiti times, influence events and persons which strong one's career. 		1	2	3	4	5
 In forming impressions of others, you use basically few, reliable categories. 	the same	1	2	3	4	5
In forming impressions of others, you use many of that vary from person to person.	categories	1	2	3	4	5
 In solving problems, you function extremely well w the problem and solutions are clear-cut. 	hen both	1	2	3	4	5
In solving problems, you function extremely w neither problem nor solution is clear.	ell when	1	2	3	4	5
8. You tend to view the world as being too simple.		1	2	3	4	5
You tend to view the world as being as complex as it.	you like	1	2	3	4	5
10. You are strongly attracted to very complicated person	ns.	1	2	3	4	5
 You are strongly attracted to somewhat uncor persons. 	mplicated	1	2	3	4	5
12. You are strongly attracted to very uncomplicated per	sons.	1	2	3	4	5
 You enjoy being in groups with few fixed rules a diverse personalities. 	and many	1	2	3	4	5
 You enjoy being in groups with relatively fixed diverse personalities. 	rules but	1	2	3	4	5
 You enjoy being in groups with relatively fixed similar personalities. 	rules and	1	2	3	4	5
 In considering problems and situations, you are h solve problems that involve many points of view. 	esitant to	1	2	3	4	5
© Copyright 1971, 1982, 1	1990 Decision	Dynamics.				



		HOW CI		CTERIS		F Y0U? Extremely
		characteris				ractoristic
		of me			-	ofme
17.	In considering problems and situations, you are moderately attracted to problems that involve many points of view.	1	2	3	4	5
18.	In considering problems and situations, you greatly enjoy and seek out problems that require many points of view.	1	2	3	4	5
19.	In confusing or ambiguous situations, you put off decisions indefinitely. $ \\$	1	2	3	4	5
20.	In confusing or ambiguous situations, you consider all aspects of the problem and then reach a tentative decision which might be changed as you reconsider the problem.	1	2	3	4	5
21.	You feel extremely happy when you have a large number of related but distinct projects underway.	1	2	3	4	5
22.	You feel extremely happy when you have many distinct, unrelated projects going.	1	2	3	4	5
23.	You feel extremely happy when you have a few related projects underway.	1	2	3	4	5
24.	In social activities, at gatherings and at work, you like dealing with one person at a time, and preferably with a person like yourself.	1	2	3	4	5
25.	In social activities, at gatherings and at work, you like dealing with one person at a time, but each can be quite different.	1	2	3	4	5
26.	In social activities, at gatherings and at work, you like trying to blend people who are quite different.	1	2	3	4	5
27.	In social activities, at gatherings and at work, you like mixing individuals of vastly different make-ups in the same situation.	1	2	3	4	5
28.	When someone suggests that you should change your behavior, you listen, sometimes out of courtesy, but rarely do anything about the suggestion because most people are not justified in their criticisms.	1	2	3	4	5
29.	When someone suggests that you should change your behavior, you change if you think the other person is justified or has the proper authority, otherwise you reject the suggestion.	1	2	3	4	5
30.	When someone suggests that you should change your behavior, you go along if, after careful consideration of the various interpretations of what the person said, the suggestion makes sense in terms of your own view.	1	2	3	4	5

Page 3



		HOW CI		CTERIS		F Y0U? Extremely
		characteris	tic		cha	racteristic
31.	If two people are disagreeing with each other, you tend to point out to them that if they saw the parts of their argument more objectively they would find that the parts add up to the real solution.	<u>of me</u> 1	2	3	4	of me 5
32.	If two people are disagreeing with each other, you tend to try settling it as quickly as you can in order to avoid people's feelings being hurt.	1	2	3	4	5
33.	In evaluating a new or changed situation, you generally avoid discussing the situation with persons who have different points of view, since this just clouds the issue.	1	2	3	4	5
34.	In evaluating a new or changed situation, you look for diverse points of view, and often form several possible judgments that may or may not modify your previous outlook.	1	2	3	4	5
35.	When a considerable amount of new and apparently contradictory information becomes available on a topic about which you have a strong opinion, you pay little attention, because when you have a strong opinion it is usually well founded.	1	2	3	4	5
36.	When a considerable amount of new and apparently contradictory information becomes available on a topic about which you have a strong opinion, you are not affected by the new information, since you rarely take strong positions in any area.	1	2	3	4	5
37.	When a considerable amount of new and apparently contradictory information becomes available on a topic about which you have a strong opinion, you use the information to generate even more points of view about the issue, which could lead to seeing the issue in a new light.	1	2	3	4	5
38.	You easily sense the way in which the motives and ideas of others operate.	1	2	3	4	5
39.	You understand the motives and ideas of others only after thinking about them for a long time.	1	2	3	4	5
40.	You have considerable difficulty in understanding the motives and ideas of others.	1	2	3	4	5
41.	In making friends, you prefer those who are somewhat more similar to you in values and opinions.	1	2	3	4	5
42.	In making friends, you prefer those who are somewhat more unlike you in values and opinions.	1	2	3	4	5
43.	In making friends, you prefer those who are quite dissimilar from you in values and opinions.	1	2	3	4	5
	© Copyright 1971, 1982, 1990 Decision	Dynamics.				

Page 4



44. In making friends, you prefer a mix of some similar and some dissimilar in values and opinions. 45. In selecting acquaintances, you use many criteria, with similarity in values and opinions not being of great consequence for you. 46. In selecting acquaintances, you enjoy being with individuals somewhat like yourself in personality. 47. In selecting acquaintances, you enjoy being with individuals quite dissimilar in personality. 48. In selecting acquaintances, you enjoy being with some similar and some quite dissimilar. 49. In selecting acquaintances, you use many criteria, similarity in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solutions. 55. You prefer situations where there are a number of different kinds of problems, each with more than one possible conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization. 57. Suppose that you had an opportunity to take an executive have responsibility for the entire organization.			HOW CI		CTERIS		F Y0U? Extremely
44. In making friends, you prefer a mix of some similar and some dissimilar in values and opinions. 45. In selecting acquaintances, you use many criteria, with similarity in values and opinions not being of great consequence for you. 46. In selecting acquaintances, you enjoy being with individuals somewhat like yourself in personality. 47. In selecting acquaintances, you enjoy being with individuals quite dissimilar in personality. 48. In selecting acquaintances, you enjoy being with some similar and some quite dissimilar. 49. In selecting acquaintances, you use many criteria, similarity in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with none possible solution. 53. You prefer situations where there is a single problem with a number of possible solution. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconclable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.				tic		cha	
similarity in values and opinions not being of great coasequence for you. 46. In selecting acquaintances, you enjoy being with individuals somewhat like yourself in personality. 47. In selecting acquaintances, you enjoy being with individuals quite dissimilar in personality. 48. In selecting acquaintances, you enjoy being with some similar and some quite dissimilar. 49. In selecting acquaintances, you use many criteria, similarity in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	44.			2	3	4	of me 5
somewhat like yourself in personality. 47. In selecting acquaintances, you enjoy being with individuals quite dissimilar in personality. 48. In selecting acquaintances, you enjoy being with some similar and some quite dissimilar. 49. In selecting acquaintances, you use many criteria, similarity in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solution. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	45.	similarity in values and opinions not being of great	1	2	3	4	5
quite dissimilar in personality. 48. In selecting acquaintances, you enjoy being with some similar and some quite dissimilar. 49. In selecting acquaintances, you use many criteria, similarity in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	46.		1	2	3	4	5
similar and some quite dissimilar. 49. In selecting acquaintances, you use many criteria, similarity in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	47.		1	2	3	4	5
in personality not being of great consequence to you. 50. In a discussion, you like taking a different point of view from your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	48.		1	2	3	4	5
your own. You learn more about your own view as well as others' in this way. 51. You feel it is all right for different people to have different views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	49.		1	2	3	4	5
views. However, you feel they should keep these views to themselves and not bother others with them. 52. You prefer situations where there is a single problem with 1 2 3 4 5 one possible solution. 53. You prefer situations where there is a single problem with a 1 2 3 4 5 number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	50.	your own. You learn more about your own view as well as	1	2	3	4	5
one possible solution. 53. You prefer situations where there is a single problem with a number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	51.	views. However, you feel they should keep these views to	1	2	3	4	5
number of possible solutions. 54. You prefer situations where there are a number of different kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	52.		1	2	3	4	5
kinds of problems, each with more than one possible solution. 55. You prefer situations where there are a number of different kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	53.		1	2	3	4	5
kinds of problems that can be solved in the same basic manner. 56. Suppose that you had an opportunity to take an executive 1 2 3 4 5 position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	54.	kinds of problems, each with more than one possible	1	2	3	4	5
position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to have responsibility for the entire organization.	55.	kinds of problems that can be solved in the same basic	1	2	3	4	5
57. Suppose that you had an opportunity to take an executive 1 2 3 4 5	56.	position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to	1	2	3	4	5
position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to run one department and represent this department on many interdepartmental committees. © Copyright 1971, 1982, 1990 Decision Dynamics.	57.	position with an organization that had many departments, each of which had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to run one department and represent this department on many interdepartmental committees.		2	3	4	5

Page 5



	HOW CI	IARA(CTERIS	STIC O	F Y0U?
	Not at all characteris of me	•			Extremely racteristic of me
58. Suppose that you had an opportunity to take an executive position with an organization that had different and sometimes irreconcilable conflicting interests, needs and personalities. (Assume your income is unaffected by this decision.) You would like to run one department with no participation in interdepartmental committees.	1	2	3	4	5
59. In the field of international affairs, you agree that your country should maintain sufficient power to assure that its interests are protected in all areas.	1	2	3	4	5
 In doing work, you have liked having no direct supervision, but someone to talk over problems with. 	1	2	3	4	5

THIS COMPLETES THE QUESTIONNAIRE.

Please check to make sure that you have answered all items and that you have marked 60 items on your answer sheet.

THANK YOU!



Driver Decision Style Exercise

(Version 4.0)

Professor Michael J. Driver

Decision Dynamics is a leading creator of strategic human resource and personal development systems that illuminate and enhance the interface between people and organizations. Our scientifically based approach is built on more than 30 years of continuous research and practical use in organizations. Our clients have used our solutions to profile and develop more than 1 million employees around the world.

Decision Dynamics AB
IDEON Science Park, Ole Römers väg 16, SE-223 70 Lund
Tel: + 46 46 181530, Fax: + 46 46 181539
E-mail: info@decisiondynamics.se
www.decisiondynamics.se

© Copyright 1974, 1983, 1990, Michael J. Driver. Published by Decision Dynamics Group.

Driver Decision Style Exercise



INSTRUCTIONS

This exercise looks at how people make decisions.

The exercise consists of two parts. PART I is a short case in which a situation in a fictional company is described. Following the description, some additional facts are given.

PART II asks some questions about the case. First, you make a decision based on the information from PART I. Then, indicate how you used the additional facts in reaching your decision. Next, you make another decision based upon some new facts. Finally, indicate how you used the new facts in reaching the new decision.

There are no right or wrong answers. No one response is "better" than another. Work quickly and answer whatever comes into your mind first. There is no time limit.

Answers are to be marked on the accompanying answer sheet. Please be certain that all 45 questions are answered and that only one answer is marked in each space. No stray marks should be made on the answer sheet.

PLEASE DO NOT MARK IN THE BOOKLET

PART I - HALERVILLE CASE

You may continue to refer to this case as you wish in answering the questions on the next page.

The Vice President in Charge of Personnel has just told you that you have been transferred from a position in the home office of Rush Drugs, Inc., to a managing position in the Halerville branch. Nominally, the two positions are of exactly equal importance, but you have cause to wonder why you should have been transferred. About four months ago you made a decision for the company that was essentially a risky gamble and it came off well. You were never able to find out exactly what your superiors thought of your move but you do know that they do not all agree in their opinion of it. You are wondering whether your transfer constitutes a reprimand or an encouragement. The facts at your disposal are:

- Item A. Hallerville is a large city with, as yet, small drug sales.
- Item B. The previous branch manager of Halerville, who was a man of strong decisions, was very much liked by his employees. They seem to think that "there's no one like him".
- Item C. Sales to smaller towns around Hallerville are very badly organized. It is with just such a problem that you took your gamble.
- Item D. There is a probability of a trucking strike in Hallerville. This would involve long drawn-out negotiations for transportation.
- Item E. You have heard the Second Vice President say that what the Halerville branch needed was a "good strong hand".
- Item F. This change in position involves a salary cut of \$1.000, but there is a slight possibility of making this up or even exceeding it on a commission basis.

Page 2 **Driver Decision Style Exercise** Decision Dynamics PART II - QUESTIONS ABOUT THE CASE Do you think the transfer is an encouragement? ... a reprimand? 2. How confident do you feel about the choice you made in question 1? extremely extremely certain uncertain 3 5 How relevant do you think the items are to your choice in question 1? completely very irrelevant relevant 3. Item A 5 7 Item B 2 5 Item C 7 2 5 6 Item D 2 7 7 7. Item E 2 3 5 6 2 3 5 7 Item F To what degree do you feel that these items support your choice in question 1? strongly opposes strongly supports my view my view 1 7 Item A 2 10. Item B 2 7 11. Item C 2 5 7 6 12. Item D 2 5 7 13. 7 Item E 1 2 3 4 5 6 Item F 2 3

Driver Decision Style Exercise



PART I - HALERVILLE CASE

You may continue to refer to this case as you wish in answering the questions on the next page.

The Vice President in Charge of Personnel has just told you that you have been transferred from a position in the home office of Rush Drugs, Inc., to a managing position in the Halerville branch. Nominally, the two positions are of exactly equal importance, but you have cause to wonder why you should have been transferred. About four months ago you made a decision for the company that was essentially a risky gamble and it came off well. You were never able to find out exactly what your superiors thought of your move but you do know that they do not all agree in their opinion of it. You are wondering whether your transfer constitutes a reprimand or an encouragement. The facts at your disposal are:

- Item A. Hallerville is a large city with, as yet, small drug sales.
- Item B. The previous branch manager of Halerville, who was a man of strong decisions, was very much liked by his employees. They seem to think that "there's no one like him".
- Item C. Sales to smaller towns around Hallerville are very badly organized. It is with just such a problem that you took your gamble.
- Item D. There is a probability of a trucking strike in Hallerville. This would involve long drawn-out negotiations for transportation.
- Item E. You have heard the Second Vice President say that what the Halerville branch needed was a "good strong hand".
- Item F. This change in position involves a salary cut of \$1.000, but there is a slight possibility of making this up or even exceeding it on a commission basis.

Page 4 **Driver Decision Style Exercise**



To what degree do you feel that these items could be used to support either choice in question 1?

		could east BOTH Ci mine and	HOICES	5-					ould only su ONE CHOI nine or the o	CE -
15.	Item A		1	2	3	4	5	6	7	
16.	Item B		1	2	3	4	5	6	7	
17.	Item C		1	2	3	4	5	6	7	
18.	Item D		1	2	3	4	5	6	7	
19.	Item E		1	2	3	4	5	6	7	
20.	Item F		1	2	3	4	5	6	7	

How similar do you thing these pairs of items are in the information they gave you about the problem in PART I? For a part of the part of theexample, if two items seem to say nearly the same thing about the case, you would rate them either 1 or 2; if they seem only somewhat alike, you would rate them either a 3, 4, or 5. If the items imply very different things, you would rate them either 6 or 7.

		highly similar					á	highly lissimilar	
21.	Items A and B	1	2	3	4	5	6	7	
22.	Items A and C	1	2	3	4	5	6	7	
23.	Items A and D	1	2	3	4	5	6	7	
24.	Items A and E	1	2	3	4	5	6	7	
25.	Items A and F	1	2	3	4	5	6	7	
26.	Items B and C	1	2	3	4	5	6	7	
27.	Items B and D	1	2	3	4	5	6	7	
28.	Items B and E	1	2	3	4	5	6	7	
29.	Items B and F	1	2	3	4	5	6	7	
30.	Items C and D	1	2	3	4	5	6	7	
31.	Items C and E	1	2	3	4	5	6	7	
32.	Items C and F	1	2	3	4	5	6	7	
33.	Items D and E	1	2	3	4	5	6	7	
34.	Items D and F	1	2	3	4	5	6	7	
35.	Items E and F	1	2	3	4	5	6	7	

61

Driver Decision Style Exercise



PART I - HALERVILLE CASE

You may continue to refer to this case as you wish in answering the questions on the next page.

The Vice President in Charge of Personnel has just told you that you have been transferred from a position in the home office of Rush Drugs, Inc., to a managing position in the Halerville branch. Nominally, the two positions are of exactly equal importance, but you have cause to wonder why you should have been transferred. About four months ago you made a decision for the company that was essentially a risky gamble and it came off well. You were never able to find out exactly what your superiors thought of your move but you do know that they do not all agree in their opinion of it. You are wondering whether your transfer constitutes a reprimand or an encouragement. The facts at your disposal are:

- Item A. Hallerville is a large city with, as yet, small drug sales.
- Item B. The previous branch manager of Halerville, who was a man of strong decisions, was very much liked by his employees. They seem to think that "there's no one like him".
- Item C. Sales to smaller towns around Hallerville are very badly organized. It is with just such a problem that you took your gamble.
- Item D. There is a probability of a trucking strike in Hallerville. This would involve long drawn-out negotiations for transportation.
- Item E. You have heard the Second Vice President say that what the Halerville branch needed was a "good strong hand".
- Item F. This change in position involves a salary cut of \$1.000, but there is a slight possibility of making this up or even exceeding it on a commission basis.

Driver Decision Style Exercise



PLEASE NOTE

If you regard the transfer as a reprimand (and you chose 2 on Question 1), go to page 8.

If you regard the transfer as an encouragement (and you chose 1 on Question 1), read items G and H below and answer the following questions.

YOU SEE THE TRANSFER AS AN ENCOURAGEMENT

Item G. The Vice President in Charge of Personnel strongly favors conservative policies.

Item H. The Operations Manager of the branch is known to be extremely stubborn and is supposed to be in almost complete control.

36. Given the new information as well as the original items (you may wish to refer to the case again) do you still see the transfer as an encouragement?

Yes (1) No (2)

37. How confident do you feel about the choice you just made?

extremely extremely uncertain uncertain

Without consulting your previous ratings, how relevant do you think all information items are to your choice in question 36?

		completely irrelevant						very relevant
38.	Item A	1	2	3	4	5	6	7
39.	Item B	1	2	3	4	5	6	7
40.	Item C	1	2	3	4	5	6	7
41.	Item D	1	2	3	4	5	6	7
42.	Item E	1	2	3	4	5	6	7
43.	Item F	1	2	3	4	5	6	7
44.	Item G	1	2	3	4	5	6	7
45.	Item H	1	2	3	4	5	6	7

END OF EXERCISE

Please check to make sure that you have answered all 45 questions and that you have marked your answers in the correct spaces on the answer sheet.

THANK YOU!

Driver Decision Style Exercise



PART I - HALERVILLE CASE

You may continue to refer to this case as you wish in answering the questions on the next page.

The Vice President in Charge of Personnel has just told you that you have been transferred from a position in the home office of Rush Drugs, Inc., to a managing position in the Halerville branch. Nominally, the two positions are of exactly equal importance, but you have cause to wonder why you should have been transferred. About four months ago you made a decision for the company that was essentially a risky gamble and it came off well. You were never able to find out exactly what your superiors thought of your move but you do know that they do not all agree in their opinion of it. You are wondering whether your transfer constitutes a reprimand or an encouragement. The facts at your disposal are:

- Item A. Hallerville is a large city with, as yet, small drug sales.
- Item B. The previous branch manager of Halerville, who was a man of strong decisions, was very much liked by his employees. They seem to think that "there's no one like him".
- Item C. Sales to smaller towns around Hallerville are very badly organized. It is with just such a problem that you took your gamble.
- Item D. There is a probability of a trucking strike in Hallerville. This would involve long drawn-out negotiations for transportation.
- Item E. You have heard the Second Vice President say that what the Halerville branch needed was a "good strong hand".
- Item F. This change in position involves a salary cut of \$1.000, but there is a slight possibility of making this up or even exceeding it on a commission basis.

Driver Decision Style Exercise



YOU SEE THE TRANSFER AS A REPRIMAND

Read items G and H below, then answer questions 36 - 45.

Item G. The Previous branch manager had established good relations with the trucking company.

Item H. The sub-managers who will be working under you feel (unlike the rest of the employees) that the previous manager was removed due to some inefficiency and lack of initiative.

36. Given this new information as well as the original items (you may wish to refer to the case again), do you still see the transfer as a reprimand?

Yes (1) No (2)

37. How confident do you feel about the choice you just made?

 extremely
 extremely

 certain
 uncertain

 1
 2
 3
 4
 5
 6
 7

Without consulting your previous ratings, how relevant do you think all information items are to your choice in question 36?

		completely irrelevant						very relevant
38.	Item A	1	2	3	4	5	6	7
39.	Item B	1	2	3	4	5	6	7
40.	Item C	1	2	3	4	5	6	7
41.	Item D	1	2	3	4	5	6	7
42.	Item E	1	2	3	4	5	6	7
43.	Item F	1	2	3	4	5	6	7
44.	Item G	1	2	3	4	5	6	7
45.	Item H	1	2	3	4	5	6	7

END OF EXERCISE

Please check to make sure that you have answered all 45 questions and that you have marked your answers in the correct spaces on the answer sheet.

THANK YOU!

QUALITATIVE INTERVIEW QUIDE

Confirm Information:

When did you graduate?

Which track?

Age?

Gender

Previous start-up experience before studies?

Additionally:

Does your family have an entrepreneurial background (parent or family member)?

Need for achievement?

- I need to meet the challenge
- I need to continue learning
- I need personal growth
- I need to prove that I can succeed

Who were you when you entered the program?

What kind of educational background (major) did you have?

Why did you apply and enroll? (Motivation)

- Have a general interest in topic
- Broaden career prospects and choices
- Want to examine own qualifications (Am I cut out to be an entrepreneur?)
- Want to become an entrepreneurr/intrapreneur
- Earn additional educational credential
- Have an idea for a business or product
- Interested in taking business classes
- Other?

What was your attitude towards entrepreneurial careers at the begin of your studies?

- desirability
- feasibility

Upon the start of your studies: What were your intentions/goals for post graduation? (Intentions, Career Goals)

- Start own business
- work in a large-sized corporation (as regular employee or intrapreneur?)
- pursue further studies
- work in a medium-sized business (as regular employee or intrapreneur?)
- work in a small-sized business (as regular employee or intrapreneur?)
- work for a nonprofit organization (as regular employee or intrapreneur?)
- work for the government
- other?

Who were you when you graduated?

What was your attitude towards entrepreneurial careers after your studies?

- desirability
- feasibility

Upon your graduation: Did you believe that you had what it takes to pursue an entrepreneurial career? Please elaborate. (Self-efficacy)

Upon your graduation: Did you (still) have entrepreneurial career goals/intentions? If so, what were they? (Intentions, Goals)

- Start own business
- work in a large-sized corporation (as regular employee or intrapreneur?)
- pursue further studies
- work in a medium-sized business (as regular employee or intrapreneur?)
- work in a small-sized business (as regular employee or intrapreneur?)
- work for a nonprofit organization (as regular employee or intrapreneur?)
- work for the government
- other?

Upon your graduation: Did you have a formed, specific venture idea in mind? With what level of immediacy did you intent to develop or pursue it? (entrepreneurial maturity)

- did you stick with your business project that you started throughout the program?

What happened between your graduation and now?

What did you do after you graduated?

- in the process of starting own business
- owner of own business

- work in a large-sized corporation (as regular employee or intrapreneur?)

- pursuing further studies

- work in a medium-sized business (as regular employee or intrapreneur?)

- work in a small-sized business (as regular employee or intrapreneur?)

- work for a nonprofit organization (as regular employee or intrapreneur?)

- work for the government

- Other?

If you have started your own business: Only few people start a business right after their graduation, when did you? (If applicable) Why did you wait until this point in time?

Did other careers look appealing to you?

Were you offered other job opportunities? If yes, were these job offers attractive?

Were there difficulties or challenges that made you doubt your career choice or even made you switch to another career? Were there positive factors that made you switch to another career?

Do you feel you displayed persistence in your career choices (coherence)?

Who are you now?

What do you currently do now?

What kind of business and what kind of industry are you in?

Assessment: Do you think you still make decisions they way that you used to?

Did something significant happened throughout your studies? Manifest intentions, change intentions?

You work in an entrepreneurial field...How do you deal with:

Uncertainty (because of insufficient information)

Time Pressure (due to the need to maintain a high tempo in order to keep an retain the initiative over the opponent)

High degree of complexity (because the battlefield activities are influenced by a great number of factors, such as people at different levels, and also due to the need to coordinate a large number of units and activities)

How much time of your job are you in the spot light, present in front of others? Need to make a good impression?

How do you work on your tasks, when you are all by yourself?

Do you have a deadline, determined course of action? Do you change your approach a lot? Or do you stick with one?

Would you consider yourself as someone who displays decisive behavior (arrive at decision quickly, then persistently implement the plan)?

Do you easily get distracted by other options, influences, opportunities?

Are you hesitant to get started once you have decided on an action?

Did you reach all your goals so far? Did you maintain all your intentions? Also regarding other parts of your life?

Is there anything I have not asked you, you would like to add?

SPSS CORRELATION MATRIX

		robador	Corr	Correlations	Ac-2440.2E	A264040	Tenal	M Manual	opel of contract	adoles.	oonoire	- HE HE AND AND	orinio C	Delliorarabia	Doffeethle	Contraction	Calculation	oidorarabia	oldinoi	Cultivacation
Oncormonie rho Gondor	Correlation Coefficient	ogilnei 4	- 1	400	Age311033	Age3010+0	11 den	odileiling 204*	de la	450	whenlence 400	477	NODECISINE ODD	Noniel all till t	2	No.	1	Opmerarciiic	Oprientine	Opiniegranye
opearmans mo cender	Sig /2-failed)	000'L	795'-	U8T,	710.	0.00	707'-	186	929	061,-	081	771.	680'-	,020				150	243	100
	Z Z	. 26	26	26	26	26	26	26	26	56	26	26	26	,324				26	267	26
Age20to25	Correlation Coefficient	-,362	1,000	-,310	-,337	-,154	-,019	-,178	-,114	-,062	980'-	-,019	101.	980'-				-,208	-,118	
	Sig. (2-tailed) N	92	. 26	,123	,092	,453	925	,385	,580	762	929	,925	,623	979,				308	,566	000,
Age26to30	Correlation Coefficient	190	-,310	1,000	.575	-,263	510,	-,040	-,138	-,055	-,020	,207	7.00-	,150				,260	680'	-,355
	Sig. (2-tailed) N	,354	,123	. 96	,002	,195 AC	943	945	,502	789	924	,311	710,	,464	,502	7,195	,943	961,	,664	970,
Age31to35	Correlation Coefficient	7.70,	-,337	-,575	1,000	-,286	850,	184	118	185	680'	850,	-,138	680				910'	188	,015
	Sig. (2-tailed)	,710	,092	,002		157	677,	,367	995,	,365	,664	677,	:203	,664				940	359	940
0.000	N Noneinterior	26	26	26	26	26	26	26	26	26	26	26	26	26	1			26	26	26
Agesolu40	Sia (2-tailed)	0 FU.	-,154	195	157	000,1	880.	070'-	453	529	010,-	060	305	195				389	157	389
	Z Z	202,	26	26	26	. 26	26	256,	26	26	26	26	26	26				26	26	26
Track	Correlation Coefficient	-,207	-,019	510,	850'	880'-	1,000	000'	610,	.659	510,	350	-,318	510,				,267	205	,267
	Sig. (2-tailed) N	311	,925	,943	922	92	. 92	983	925	000,	943	080'	114	,943				781,	900'	781,
Currentiv	Correlation Coefficient	391	-178	- 040	184	-020	030	1.000	409	308	135	167	013	040				325	013	860
	Sig. (2-tailed)	048	385	845	367	,922	883		038	,124	.512	414	948	845				105	949	635
	Z	26	26	26	26	26	26	26	26	26	26	26	26	26				26	26	26
Within 3y	Correlation Coefficient	980'-	-,114	-,138	,118	,154	610,	,409	1,000	333	-,138	-,234	,337	-,362				,208	-,320	-,062
	Sig. (2-tailed) N	929,	92	502	995,	,453	925	920	. 90	760,	,502	,251	260,	690,				308	111.	762
Intentions	Correlation Coefficient	.,150	-,062	990'-	185	-,129	.659	308	333	1,000	990'-	,428	-,216	150				.238	.417	238
	Sig. (2-tailed)	,465	,762	682'	396,	,529	000'	,124	760,		687,	,029	,289	,465				,241	,034	,241
	Z	26	26	26	26	26	26	26	26	26	26	26	26	26				26	26	26
Experience	Correlation Coefficient	190	980'-	-,020	680	010,-	510,	,135	-,138	-,055	1,000	510,	680	-,020				-,150	680	990'
	Sig. (z-talled)	26	9/9,	9.24 2.6	400,	298,	26	21.6,	2005	26	. 26	248	26	924				26	26	26
SelfEfficacy	Correlation Coefficient	177	910,-	,207	890	-,374	350	-,167	-,234	428	910	1,000	.130	,207	L			960	.130	267
	Sig. (2-tailed)	387	,925	,311	677,	090	080	414	,251	,029	.943		,527	,311				.863	,527	187
	Z	26	26	26	26	26	26	26	26	26	26	26	26	26				26	26	26
RoDecisive	Correlation Coefficient	680'-	101.	7.00'-	-,138	,209	-,318	.013	,337	-,216	680	-,130	1,000	-,575				-,386	881.	915
	Sig. (z-tailed) N	,064	,623	710	26	305,	,114 26	948	260,	26	26	776,	. 56	,002 26				260,	359	940
RoHierarchic		,020	980'-	150	680'	-,263	510,	.040	.362	150	-,020	,207		1,000				990'	7.00	990'
	Sig. (2-tailed)	,924	929'	,464	,664	195	943	,845	690'	,465	,924	,311	,002					982'	,710	789
PoFlevible	Correlation Coefficient	240	782	120	104	220	26	97	26	26	26	250	222	26				97 803	110	200
	Sig. (2-tailed)	123	374	505	.623	453	251	796	280	762	929	251	092	123				100	999	308
		26	26	26	26	26	26	26	26	26	26	26	26	. 26				26	26	26
RoIntegrative		-,243	,180	-,263	-,038	,246	198	-,020	,154	176	-,010	-,374	-,286	-,263				-,176	-,038	,129
	Sig. (2-tailed) N	781	92	795	,854 9.0	,225	333	922	76	986,	962	090.	761,	,195 76				988.	924	529
OpDecive	Correlation Coefficient	177	-,234	-,015	-,245	.659	.083	-,228	,234	980'	-,015	-,133	,130	-,015				-,267	433	-,267
	Sig. (2-tailed)	,387	,251	943	,227	0000'	989	,262	,251	,863	943	,516 ac	,527	943	,251			187	,027	187
OpHierarchic		150	208	.260	015	-,176	.267	.325	308	.238	-,150	.036	-386	250.			L	1,000	-386	- 238
		465	308	199	940	388	187	105	308	241	465	863	,052	789					,052	241
	N	26	26	26	26	26	26	26	26	26	26	26	26	26				26	26	26
OpFlexible	Correlation Coefficient	,243	-,118	680'	,188	-,286	-,505	,013	-,320	- 417	680	-,130	.188	-,077				-,386	1,000	-,386
	Sig. (2-tailed)	,232	995,	,664	,359	751,	800.	949	£. 2	,034	,664	,527	9359	710			,027	,052	. 8	,052
aviterpetralino	Correlation Coefficient	97	97	97	015	971	272	97	97	97	720	267	7015	97				97	97	1 000
		199	100	920'	940	388	187	935	762	,241	789	187	940	789				,241	,052	
	N	26	26	26	26	26	26	26	26	26	26	26	26	26				26	26	26
* Correlation is significant at the 0.05 level (2-tailed)	9 0.05 level (2-tailed).																			

Questionnaire Invitation Email

Subject: Master Thesis Entrepreneurship Students Lund University

Dear ...,

Our names are Selina-Marie Voss and Ida Elen Mogstad. Just like you once, we are Master students of LU's Entrepreneurship Program. Only few weeks away from reaching the finish line, we need your help to make it across: Please help us with our thesis "Entrepreneurship Students, Persistence and Decision Style" by answering our questionnaire. Read further below WHAT YOU GET OUT OF THIS to learn more about how you are rewarded for your time and efforts.

Please follow these instructions by Friday, 14th of April 2016:

- 1. Go to Decision Dynamics Webcenter via the link below
- 2. State the registration number below in the cell "Registration Number"
- 3. Register your own user profile and accept the "Personal Information Agreement"
- When your registration is confirmed, click on "Continue"
- 5. Select "Assessments" in the menu to the left and complete the following:
 - a) Background
 - b) Questionnaires ODQ (the demographic questionnaire in the end is optional)

Link to the Decision Dynamics Webcenter:

https://hr.decisiondynamics.se:443/

Registration Number: 117LTCNY7L

ABOUT THE QUESTIONNAIRE

There are two parts to the questionnaire and for our thesis it is important that you **complete both sets of questionnaires**: In the "Background" questionnaire we will ask you questions regarding your background and professional development after your graduation. In the "Questionnaires ODQ" your decision style is being determined with the help of a questionnaire designed by Decision Dynamics; a renowned company that specializes in decision styles and career development, helping managers and leaders manage their employees and businesses in a way that makes them thrive. Naturally, we will present the collected data in the thesis with the **promise of anonymity**.

WHAT DO YOU GET OUT OF THIS?

Depending on your answers the questionnaire will take somewhere between 20-35 minutes. To make it worth your while you will receive a **personal report** once you have completed the questionnaire that gives you scientific and detailed insight into your own decision making style; **worth 1500 SEK** this test is based on years of scientific research and provides valuable knowledge that enables you to understand your strengths and weaknesses and offers you insights of how to **reach your full potential**.

DEFINITION

When taking the questionnaire there will be a question focusing on being an **intrapreneur** / **corporate entrepreneur**. Since you have undergone the Entrepreneurship Program at LU, we are certain that you have a good understanding of what we mean by this, but to be on the safe side, we define intrapreneurs / corporate entrepreneurs as individuals who are involved in developing new business activities for their employer. Their use of entrepreneurial skills within a company encompasses the development or launch of new goods or services, but it can also be setting up a new business unit, a new establishment or a new subsidiary.

WHAT DO WE HOPE TO ACHIEVE?

Diamanto Politis has been kind enough to provide us with the email addresses of all former graduates as we hope to explore the relationship between your decision style — the way you make decisions — and your entrepreneurial career development after your graduation. It is our aim to find answers that will make it easier for future entrepreneurship students to make decisions regarding their future careers. If you are interested in this, we would be happy to share the results!

We hope to receive your response and thank you very much for your help!

Best regards,

Selina-Marie Voss and Ida Elen Mogstad

You can read more about Decision Dynamics and what they do here: http://www.decisiondynamics.se/en