# Entrepreneurship Proclivity: An exploratory study on Students' entrepreneurship intention.

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# Acknowledgment

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#### Abstract

This master thesis strives to establish the existence and characteristics of entrepreneurial intention among the students of Agder University. The study is carried out as a prove to put in practice research knowledge and theory acquired in the course of classroom study into practical reality. It is not an exhaustive or rather rigorous study but a mere demonstration of skills and capability of the student in carrying an independent research study. The study follows stage by stage procedures required in conducting any scientific research. The research as well enables a researcher to acquire much of the knowledge on entrepreneurship and intentions. The result of this study provides a detailed explanation of entrepreneurial intentions among students of this University. A model was developed in which the dependent and independent variables were derived from idea mostly borrowed from the theory of planned behaviours and model of entrepreneurial events.

The concept of entrepreneurial intentions has been used in this study as a measure for entrepreneurial behaviours gauged by the trade off a student has to make between two tendencies; being self employed or a job seeker, the former tendency being regarded as entrepreneurship. The study involved five operationalizations of intentions with which five hypotheses were tested. Gender and family background showed a greater statistical influence on entrepreneurial intentions.

The empirical data of this study is derived from a survey strategy. The sample for the survey comprised participants from all five faculties (up to masters level) of the university in which the university is organized. The survey data of 1740 students was used to test the model using logistic regression analysis.

The results of the study show a disproportionate existence of entrepreneurial intention among students. Gender and family background registered a higher influence on entrepreneurial intentions. With male and general population of students from family that have entrepreneurship experience showing much higher inclination towards self employment. On average the faculty of Economics and Social Science has its students indicating greater likelihood of becoming entrepreneurs.

**Keywords**: Entrepreneurship, Entrepreneurial Intentions, Business enterprises, Students.

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# 1 STUDY SETTING

Why, then, do some individuals undertake the thankless tasks of entrepreneurship? First, there is "the dream and the will to found a private kingdom. Its fascination is especially strong for people who have no other chance of achieving social distinction". Next, there is "the will to conquer; the impulse to fight, to prove oneself superior to others, to succeed for the sake, not of the fruits of success, but of success itself." Finally, "there is the joy of creating, of getting things done, or simply of exercising one's energy and ingenuity." The entrepreneur "seeks out difficulties, changes in order to change, and delights in ventures. (Schumpeter, 1934)

# 1.1 Background to the Study

Entrepreneurship has increasingly evolved to such an extent of not only becoming a career but also a desirable employment option for most people these days. There are more small businesses being created. This has been evidenced by the growing number of people specializing in the conduct of small businesses. On the other hand professional or rather office jobs employment is no longer a fashion as people remains with less chances for getting salaried jobs. We have less prospects of being employed in established organizations. Probably this can be taken as a contributing factor that forces many people to seek opportunities for self employment.<sup>1</sup> This has brought about the heuristic characteristics among many people who behave entrepreneurially. It does not matter whether higher learning institutions prepare people for entrepreneurship. People themselves can develop entrepreneurial alertness and utilize business opportunities that fall due. There is an external learning with which circumstances drive certain people to follow a particular career in life. Still political and academic interest in support of entrepreneurship as a career choice is on the rise probably because of the link between new venture creation and the economic development. In Teixeira & Davey, Moore, Klapper and Leger-Jarniou, 2006 are

 $<sup>^{1}</sup>$ As will be shown later in this study self employment, small business and business enterprises operations are synonymously used and are literary taken to mean entrepreneurship. A more clarification follows in the review of literature.

quoted to show that the continued economic uncertainty, corporate and government downsizing and a declining number of corporate recruiters on the education system have been fostering the appeal of self-employment (Teixeira & Davey 2008). But it is also being noted as common for tertiary education to prepare students not only as job seekers but mostly as job creators by becoming self employed (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). No wonder entrepreneurship has a hand in supporting any economy in the world. It is well considered that people who are engaged in business creation are vital in the modern economy. These same people are charged with responsibilities that bring new products in the market and revitalize the disequilibrium of economy. These individuals depict unique behaviors that has drawn academicians' attention for academic researches.

The main argument asserts of entrepreneurial intention as the pre-condition for undertaking entrepreneurship. Signs that people show to behave in a particular way can help in telling the ways in which people will end up behaving. In the same line, we will find an established evidence that someone's intention to act towards something in a certain manner is the most obvious indicator of his actual behavior. Krueger and other colleagues have discussed entrepreneurial intentions to show that people will not indulge in starting new firms as a reflex, but rather they consider the option much more carefully and quite well in advance (Krueger, Reilly & Carsrud 2000, Scutjens & Stam 2006). The drive comes from within an individual who intend to set up a business venture. Even though researchers still tell that situational as well as individual attributes serve as poor predictors of new business formation, the fact remains that it is an individual who personally envisages and articulate into business ideas. As mentioned above, it is apparently normal in course of living for people to choose entrepreneurship as a career. This makes it a norm to conjecture that the entrepreneurship process is or can be regarded as a pre-intended behavior in which people eventually delve in. Following this argument the established thrust for entrepreneurial intentions investigation gathers grounds. The same intentions are regarded as best predictors of planned behaviour which in this study is the act of starting a new business. Entrepreneurial intentions as such have accorded merits and academicians strive in efforts so that it is established on the ground of what trigger people to behave entrepreneurially.

Various societal and organizational attributes as well as organizational and individual aspects are accounted to be of essence in deriving entrepreneurs and entrepreneurship in any community (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). Dutta & L.Thornhill admit that entrepreneurs form a stock of heterogeneous people with regard to setting or even grow business (Dutta & L.Thornhill 2008). Prior theoretical and empirical research show diversity of individual intentions to start business. With this in mind, the following study draws most of its attention on the incorporation of attitudinal factors as well as characteristics of individual students for the assessment of intentions for new venture creation. I believe it is the inherent personal factors of individuals that dispose them to engage in entrepreneurial behaviours. Extant studies on entrepreneurial intentions mostly focus on the impact of business training to determine the level of entrepreneurial skills among students (Gaddam 2008, Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008, Souitaris, Zerbinati & Al-Laham 2007, Raab, Stedham & Neuner 2005). The fact remains that those studies have led to deeper understanding of business intentions among students, but the same studies have not exhausted conclusions on general students to incorporate a dynamic aspect for changes in attitude and economic environment keep on revolving. Established findings on this same subject can contradict with the finding at this yet another moment in time. My study contributes to this ongoing literature by learning and establishing the pre-entrepreneurial variables among students at the university that does not major in entrepreneurship. We are in an age where the entrepreneurial culture should flourish to the extent that entrepreneurship needs to be regarded as a career that is desirable to every individual. It is within this framework that a proposition is made that students and especially university students, form a significant portion of potential entrepreneurs.

We all know now that radical economic changes as well as uncertainties which characterize the contemporary world have resulted into life instability and much worries among individual human beings. This characterization has necessitated the need for actors with capacities and drive to create new organizations or change the market radically. The world now more than ever before need individuals with distinguished capacities to develop new products, new process and revolutionizing market radically. It is people with distinguished characters that will develop the capacity to continuously tackle complex economic tasks that seem to have no obvious or imme-

diate solutions (Mazzarol, Voley, Doss & Thein 1999). This development of events has put entrepreneurship in the limelight. Various scholars upload entrepreneurship research as a facility on the process through which individual identify and exploit opportunities to create much more future goods and services (Hmieleski & Corbett 2006). We have witnessed a dramatic declining of job prospects. A new wind is as well blowing in which most governments believe that private sector (in which entrepreneurship belongs) is the engine for growth. This gives room for more avenues for entrepreneurial ventures in most countries. The bottom line is the fact that proactive pursuit of new opportunities and solutions calls for enterprising, innovative and entrepreneurial people. Universities and other learning/academic institutions should serve as important triggering environments for entrepreneurial spirits. History has proved universities and colleges as breeding grounds for ardent entrepreneurs. Even though today's most cerebrated entrepreneurs such as Michael Dell, Bill Gates and Steve Jobs, founders of Dell computers, Microsoft company and Apple Computers respectively started their entrepreneurial companies as college drop outs, the Economist online<sup>2</sup> confirms school environment as breeding grounds for entrepreneurship by giving some examples such as the founders of Google (Sergey Brin and Larry Page) and Facebook (Mark Zuckerberg, Dustin Moskovitz and Chris Hughes) among others being students when they launched their respective companies. This paper will try and establish in summary the level of entrepreneurial intention among students at Agder University.

This study adopts the psychological characteristics school of entrepreneurship Koh (1996), which views entrepreneurs as individuals in a tiny numerically group with unique values, attitudes and needs which drive them and differentiate them from non-entrepreneurs. I investigate to find out the spirit of entrepreneurship among students, specifically to try and establish if intentions exist for individual students in setting up their own firms. The study is motivated by a number of factors. First, there are significant gaps in the general understanding of entrepreneurial intentions among students of the university that does not major in entrepreneurship as a speciality. Specifically for Agder University, there is no apparent establishment of entrepreneurial intentions among its students. Second, my long term goal is

<sup>&</sup>lt;sup>2</sup>http://www.economist.com/specialreports/displaystory.cfm?story\_id=13216025. Accessed on 4th October, 2009

to develop a career out of entrepreneurship. So I grew with an enthusiasm that by studying students' entrepreneurial intentions would expose me into much more rigorous knowledge and literature on entrepreneurship, on the line of intention to start businesses. Thirdly is the turn of events for the past few years characterized by economic crisis, recession and unprecedented unemployment levels around the world. The world today places much hopes on entrepreneurship shoulders as a revivor of the world economy. Everywhere there is implicit moves to encourage people to engage in entrepreneurship. This I believe would change students' inclinations towards prospects of getting salaried jobs soon after school rather look at self employment in entrepreneurship as an immediate alternative.

## 1.2 Problem Statement

The experience that established large firms are no longer creating a net increase in employment has drawn most attentions into encouraging new business formations as creators of new jobs. Opportunity recognition thus becomes important so that people strive to set business that will pull much more individuals in self employment. This is a talk on entrepreneurship exhibited in the small firm sector that is on the rise with hopes that new created business will bring added value to economic development. This as well has resulted in the academic interest in entrepreneurship as the creator of new independent businesses. It follows that there is a dare need of understanding the stock of people who stand a chance to get involved in entrepreneurship. The same need goes beyond into inquiring and wanting to know what make people establish new businesses. Therefore the study of entrepreneurintention is necessary as it helps and offers a means to better explain as well as predict entrepreneurship.

Business establishment is, however, not every body's cup of tea. It is only few individuals with certain characteristics that can strive and venture into setting business enterprises. Past studies have researched to establish the reasons that drive people to opt for creating new enterprises. But there remains unanswered questions as to why only some individuals prefer entrepreneurial activities yet others do not. The dynamism of the world in which changes keeps on evolving, necessitates a rebirth of events such as entrepreneurship happening every now and then. I still find a gap now in the need to know potential entrepreneurs and factors that can influence them to establish firms. Specifically for students, literature shows that young people are more likely to dwell and engage in entrepreneurial initiatives that would lead them into establishing new business ventures (Kolvereid 1996). The 2001 Organization for Economic Cooperation and Development (OECD) statistics reports that hardly 10 percent of adult people are interested in starting business ventures. Yet students are regarded as being on a critical turning point as they are supposed to make career choices and lifestyles upon graduation. There are a number of studies on students intentions but most if not all of the previous studies have focused on a particular group of students in the line of gender, faculty, speciality such as MBA, engineering students etc, final year student, undergraduate student and a number of other categorization. After learning the established gap, I felt a need to combine all these categorizations and target the whole population of this university students. This study will try to answer the question; what is the structure of entrepreneurial intentions among students at Agder University? I opine that there are always factors that motivate the individual to embark on an entrepreneurial career. Generally I hope to uncover the propensities of students in starting their own business. This will help to establish the existence of trade-off between two options that seem to exist among students in their course of study, that is between job seeking and setting up own firms. It has already been shown that career intention is the immediate antecedent of profession aspiration among students (Krueger 1993, Kolvereid 1996). This means students as such form a feasible sample in studying intention to set up entrepreneurial business. As for this university, a review of researches (master thesis) in the library revealed a gap on the study conducted on students' entrepreneurial intentions. It is only one study that was done as a thesis at diploma level with the title 'Determinants of Entrepreneurial Intention Among students'. The study shows lower entrepreneurial intentions among students at the university. It is important as well to learn and establish entrepreneurial intention among students at this university even at this particular moment in time.

# 1.3 Objective and Scope of Study

This study aims at seeking to understand whether entrepreneurial inclinations exist among students. It strives to help in establishing if the drive toward entrepreneurship prevails among the same students. The research design was developed so as it would help to understand the level at which individual students are likely to engage in entrepreneurship. The thrust is to undertake an empirical study on students' entrepreneurship proclivity by exploring the variables or factors (antecedents of entrepreneurial intentions) that create strong propensity or intentions as indicators to start new firms among them. Basically the study will try to uncover the magnitude of these same intentions. As an exploratory study, it purported to help us know the extent to which students intend to personally employ themselves in self established firms while they are or after they have graduated from university. The premise behind this objective was the fact that the idea of becoming an entrepreneur is not longer an option. It should be more desirable to students to become entrepreneurs as it is the valuable way of engaging in the labour market while keeping self independence of a particular person. Yet, facing new labour market challenges the common values that entrepreneurship and self employment offers among others, includes: independence, positive challenges and self actualization (Teixeira & Davey 2008). To investigate this topical area and especially whether entrepreneurial intentions exist among students of Agder University, it was necessary to:

- 1. To review the literature on entrepreneurship, its importance to any economy as well as showing the link between entrepreneurship and intentions and establish variables that would guide the study analysis.
- 2. To describe and evaluate the role of individual trait variables as a precursor to entrepreneurial intentions.
- 3. To survey a sample of students to find out what they know about entrepreneurship.
- 4. To examine previous research studies and identify gaps in knowledge of entrepreneurial intentions as posited by various researchers.

5. To draw a picture on entrepreneurship potential and make realistic recommendations on how studies on entrepreneurial intentions can help in predicting individual who may end up setting up their own businesses.

The phenomenon of interest is the students' entrepreneurial intentions. In order to keep the thesis manageable, it was important to draw a clear focus of the study and leave other aspects as found in other entrepreneurial intention researches. The empirical study used only students of Agder University as the unit of analysis as a special segment for data collection. The sample frame excluded students that are pursuing PhD. Also in this study the timing of entrepreneurship was not being considered in the sense that this study did not aim at establishing measures to determine or spark entrepreneurship among individuals as an actual activity of setting up a business firm. It did not aim at increasing entrepreneurial intention among individual students. Not everyone with entrepreneurial intention will set up a business venture. The study makes it clear that an intention could be necessary to start ones own firm but that does not guarantees actual business set up or success of such business and it might not be the right choice for the respective individual. The scope of the study limits its tentacles to assess indicators of intentions and establish entrepreneurial potentials among the subjects.

# **1.4 Research Questions**

In this investigation I replicate various previous investigations on the determination of entrepreneurial intentions. In order to establish theoretical and practical importance of the study a clear consideration was important in generating research questions. In the framework of attitudes and behaviours of individuals to determine entrepreneurial intentions, this study will try and answer the following questions:

- 1. What are the entrepreneurial characteristics that exist among students at university?
- 2. To what extent do social influences contribute in shaping entrepreneurial intentions among students?

- 3. Does training in entrepreneurship and formal education have any impact to students' propensity to become entrepreneurs?
- 4. What is the influence of demographic variables especially gender and family background in determining entrepreneurial intention?

# 1.5 Research Thesis Framework

The structure of the thesis is shown on Figure 1. After a brief introduction and basis of the study settings, chapter 2 presents the literature review. This will show the focus of the thesis. This section will show and explain knowledge behind entrepreneurship. The main issues are addressed. Concepts and technical words are explained to entail definitions that guide basic concepts of the study and importance of entrepreneurship. Here is also shown the results of the literature research on the fields in which the research object can be located.

Chapter 3 provides the development theoretical framework in which the theory that guide the study is established. Within the same section the model of the study as well as hypothesis are derived. The theory will be reviewed and hypotheses developed.

An overview of the research design is described in section 4. The main theme is the presentation of the exploratory and the quantitative study, describing the research strategy, methods and of the study. The measures and statistical procedures used to test the hypotheses are described.

In Chapter 5, the empirical test and research findings are explained where also the results of testing the hypotheses are provided. The author places value on providing helpful practical implications which can be used to establish the entrepreneurial potential among surveyed individuals. Therefore, Chapter 6 provides an overview of theoretical discussion with regards to findings and practical implications. Also, recommendations for prediction of future entrepreneurs are provided.

To ensure the transparency of the empirical analysis, the appendix (Chapter 7) includes back up detailed information about the exploratory and quantitative study. The following figure provides an overview of the chapters and their main objectives

on the approach in the conduct of the thesis study.

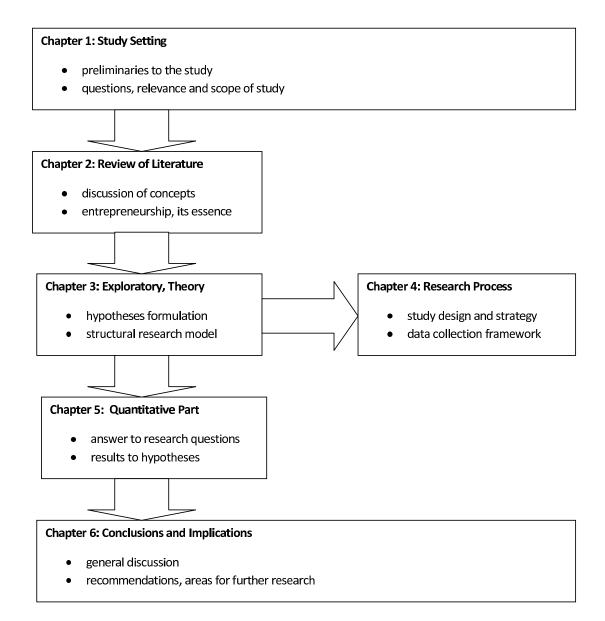


Figure 1: An Overview of the Study Framework

# 2 REVIEW OF THE LITERATURE

The following chapter presents a discussion on entrepreneurship. I review the contemporary literature on the subject by clarifying the concepts underlying entrepreneurship knowledge. More specifically in the chapter I shed light on an ongoing debate on the definition, importance of and the link between entrepreneurship and entrepreneurial intentions. The chapter will end by establishing the guiding definitions to this study.

### 2.1 Literature search

A clear mind while in the process of literature search is of paramount importance in order to come out with trustworthy and quality result of any study. Information and sources used in this study have been carefully studied in support of underlying theories and information associated to entrepreneurial intentions. The framework of basic structure as the first step in the literature search Bryman & Bell (2007) have been established. The theoretical framework of this study covers a range of areas of theories in entrepreneurship and its importance, entrepreneurial intentions as well as trait characteristics that expose nascent entrepreneurs<sup>3</sup>. The sources to unravel knowledge on these concepts are exclusively based on information from articles in academic and professional journals. This type of sources has been endorsed by academicians to be viable and reliable sources as they contain review of the state of knowledge in particular topic area (Saunders, Lewis & Thornhill 2007). Journal articles are more useful even because they are published well focused on the specific subject area and more often than books to contain most of recent knowledge and findings on a particular topic.

Most of the secondary sources have been primarily collected through data base provided by the university library. Ebsco on its Academic Search Complete and Business Source Complete has been my major source. Searching for articles in these data base included key words such as *entrepreneurship models*, *entrepreneurial in*-

 $<sup>^{3}</sup>$ A nascent entrepreneurs is an individual with an intention to create an organization or who is in the process of starting up a business

tention, and entrepreneurial intentions among students. In exercising clear analysis while reviewing literature a number of criteria guided my literature search. I wanted to ensure quality and reliability of my literature. Most articles I cite have been published in what is known as peer reviewed journals. This was so important to ensure consistence and quality of material contained. Another criterion was the frequency of citation of articles to ensure the quality. Famous authors in my topic and their respective citations also guided the selection of literature. For example the article on the Theory of Planned Behavior, by Ajzen (1991) has been quoted 894 times (as on 25th July, 2009) in ebsco as used in intention prediction literature. Other articles such as Implementing Entrepreneurial Ideas: the case of intention by Bird (1988), has been quoted 95 times in entrepreneurship intentions literature and Krueger's The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability has been cited several times. Other renown researchers in the field such as Kolvereid and Davidsson have also been cited mostly on entrepreneurship intentions studies especially in the Scandinavian countries. These same sources, among others, served as guide from which much more literature could be explored. This convinced me of credibility and quality of selected articles in researching for entrepreneurial intentions.

#### 2.1.1 Defining Entrepreneurship

Entrepreneurial intentions which is the basis of this study, is what give birth to entrepreneurship. It was important to shed some lights on the concept and its importance to any modern economy. Given the objective of my thesis, this research primarily focused on student intentions to behave entrepreneurially. It was critical to find and establish in clarity terms of what it means by entrepreneurship so that readers of this report would know the guiding definition, with which this thesis focuses on. There is a wide array of way in which literature is being used to explain what entrepreneurship is to the extent that there is no generally accepted definition of the concept. At one point its is claimed that in defining entrepreneurship<sup>4</sup>, three interrelated functions are mostly emphasized in economic terms:

 $<sup>^{4}</sup>$ (Pozen 2008, p. 4)

"...first, the entrepreneur initiates and organizes a business venture, identifying an opportunity and assembling the necessary tools, skills, and personnel to pursue it. Second, the entrepreneur manages the venture, overseeing its efforts to attract customers and generate revenues, at least for an initial period. And third, the entrepreneur assumes the risk of the venture, generally by investing his or her own capital and reputation and by forsaking a quaranteed income"

The entrepreneur in this case takes the central stage in the definition process. He or she is the one who searches for opportunities. There are facilitating factors in recognition of opportunities that are to be exploited: the active search for opportunities, entrepreneurial alertness, prior knowledge and social networks. The active search for opportunities is facilitated by the acquisition of information which reveals new opportunities (Cromie 2000). Pure information is not enough though; it also takes the ability to notice information which indicates new opportunities, i.e. entrepreneurial alertness, the propensity to notice information, incidents or patterns of behaviour which indicate unmet needs or possible new combinations of resources.

The entrepreneur plays a risky role between the promise of economic gain and the potential for economic loss. This is the trade off that all business operators stand to assume. It is the risk that is being evidenced by the reality that everywhere majority of newly established business ventures stand to or even fail within the early years of establishments. But others succeed outstandingly to the extent that many of the wealthiest people in the world make their success as entrepreneurs.

In efforts to try and establish the proper meaning of the concept researchers have collected various themes to clarify entrepreneurship. There are as yet a number of recurrent themes used in defining entrepreneurship. The term is highly characterized by mostly eight themes, Robinson, Heuner & Hunt (1991); these are: "the entrepreneur (personality traits), innovation, organizational creation, value creation, profit or non-profit growth, uniqueness and owner managers" (p.45). We find individuals heuristically striving to acquire various ways of exercising their business prowess. This is as well called in the way of identifying and exploiting the ideas and processes (Cromie 2000). Cromie quote literature to write that entrepreneurship involves doing things that are not generally done in the ordinary course of business routine, and that it is a dynamic process of creating incremental wealth (p.8). My prior knowledge of the concept could not help me distinguish it with small business. It is now am learning from literature showing that entrepreneurship is not entirely restricted to innovative people starting or operating small firms. In the words of Teixeira & Davey, it is a behavioral characteristic of persons who uses small business to channel their entrepreneurial ambitions (Teixeira & Davey 2008). Pozen (2008) defined entrepreneurship as a dynamic process of vision change and creation. Being a process, entrepreneurship requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. Central to this process is the creation or recognition of opportunities by individuals followed by the will and initiative to seize such opportunities that present themselves. Literature documents entrepreneurship as having to do with an individual's values, attributes and behaviours.

The profile that exhibit variables listed above can be displayed both through creating new organization or businesses as well as enhancing what has already been established. Exclusively for this study, the aim is focused on establishment of new firms. Mazzarol, Voley, Doss & Thein, some of renown researchers working in the entrepreneurship field, have defined the term in a multifaceted ways, as:

"...the ability to create something from practically nothing. It is initiating and building an enterprise rather than watching one. It is the knack of sensing opportunities where others see chaos, contradiction and confusion. It is the ability to build a founding team to complement your own skills and talents. It is the knowledge to find, marshal and control resources Finally it is a willingness to take risks. (Mazzarol, Voley, Doss & Thein 1999, p.1)

The European Union defines entrepreneurship as an individual's ability to turn ideas into action and is therefore a key competence for all, helping young people to be more creative and self-confident in whatever they undertake<sup>5</sup>. Despite an apparent reality that a debate exists when it comes to the consensual definition for

<sup>&</sup>lt;sup>5</sup>http://ec.europa.eu/enterprise/entrepreneurship/support\_measures/training\_education/entr\_highed.pdf. Accessed on 3rd June, 2009

entrepreneurship, there is very little agreement on what entails entrepreneurship and what an entrepreneur does. This study has its focus believing that entrepreneurship often leads to the creation of new business enterprise. This however takes in consideration for other prominent scholars' views in the subject area. Drucker notes entrepreneurship as a topical subject because of its relation to issues such as innovation and business formation as important determinants of economic growth and prosperity (Drucker 2007). Drucker adds that the exceptional with entrepreneurship is its products in the process of upgrading yields from resources, creating new market or additional purchasing power. This researcher is among other authors who considered entrepreneurship being closely linked to innovation. It is from this author with whom a suggestion is strongly derived that innovation is a major tool of entrepreneurship. Schumpter as quoted by Robinson, Stimpson & Hunt distinguished between manager who merely runs and operates business and the entrepreneur who innovates (Robinson, Stimpson & Hunt 1991). In Schumpterian definition, the entrepreneur is an innovator who bring something new in existence. He does so by playing five basic roles: introduces new goods or services, introduces new method of production, operates new markets, finds new sources of raw materials and /or carries out new organization of an industry (Robinson, Stimpson & Hunt 1991, p.20). These variables then distinguishes an entrepreneurial business from other forms of business such as franchising, inherited businesses and the like.

From the above point of view, entrepreneurship is concerned with economic growth through recognition and exploitation of opportunities in economic and social arenas. Herbert and Link 1989 as quoted by Wennekers & Thurik strive to define the term by looking at an entrepreneur where they define an entrepreneur on what he does:

"...the entrepreneur is someone who specializes in taking responsibility for and making judgmental decision that affect the location, form and the use of goods, resource or institutions" (Wennekers & Thurik 1999, p. 31).

The elements of newness and innovation can be seen in all accounts that try to entangles the multifarious nature of entrepreneurship definitions. Cromie tries to clarify the controversy that surrounds the definition of entrepreneurship by highlighting certain behaviour that characterizes entrepreneurs. "Entrepreneurs are likely to:

- have a propensity to create business organization
- proactively scan business environments in search of new opportunities
- seek innovative solutions to problems and opportunities
- take a autonomous and strategic role in identifying, marshalling, and organizing resources to convert opportunities into marketable goods or services
- vigorously strive to achieve profit and business growth
- be willing to bear risk associated with this behaviour" (Cromie 2000, p. 9)

Linked to the functional characteristics of the entrepreneur, other set of personal traits plays an important role in explaining what entails entrepreneurship. Entrepreneurs are also leaders, pioneers, problem solvers, they are diligent, persistent charismatic, dynamic, imaginative and resourceful (Pozen 2008). It follows that not every one can behave in this way. This falls within a suggestion from literature above that entrepreneurs are optimistic, ideas-people, proactive, restless, adventurous and agents for change.

From the review above, it is apparent to regard entrepreneurship as a behavioral characteristic of an individual which has an input and output side-entrepreneurial skills and participation in the competitive process. The term has been accorded such a quality of not being an occupation, or a fixed state of existence but rather the dynamic roles individuals undertake to create and run new organizations. Wennekers & Thurik (1999) identify three types of such individuals: those who are found mostly in small firms, they are innovative and own independent respective firms. These are entrepreneurs as defined above. There is also an intrapreneur or employed entrepreneurial managers who take commercial initiative on behalf of their employer and risking their time, reputation and even their jobs by taking risky decision that can be detrimental to the organization. Sometimes these spin off and start their own independent entrepreneurial firms. The third type is the managerial business owners who are found in majority of small firms. They include franchisees, shopkeepers and

people in professional occupations. It is from the last type of entrepreneurs from which most entrepreneurial ventures grow.

Following the complexities that surround the definition of entrepreneurship, literature has suggested that each study need to specifically define the type of entrepreneurs that is the focus of the respective study. Given the variables of term as highlighted above, no single definition can be formulated succinctly enough to be a criterion variable and at the same time include all the variables that explain entrepreneurship. Thus this study borrow a conclusion from Bird who defines an entrepreneur as an individual who starts (create) an independent new, profit making business venture (Bird 1988). With entrepreneurship I consider the definition put forward by Krueger (1993), and define it narrowly as the process of starting the new business venture.

# 2.2 Intentions Link to Entrepreneurship

The reviewed literature show extensive study that link attitude and intention and entrepreneurship to have been researched by various scholars. This line of study is taken in the same manner as how attitude (intentions) are used to predict the outcome (entrepreneurship). The evidence of this is borrowed from Ajzen among others who happen not to be an entrepreneur scholar in the professional sense but empirically managed to show and verified the link between attitude and intention (Ajzen 1991). His findings that were experimented in social psychology has been practical in studying attitude and behaviour in various specialities, including those that determine entrepreneurial intentions. From this widely accepted piece of work on studying intention, it is admitted that people's attitudes can result into certain behaviour. Taking entrepreneurship as a product of attitude, one's intention towards entrepreneurship can be considered as the primary predictor to becoming an entrepreneur. The perception of ones control can be used to predict behaviour. Individuals are either pulled or pushed towards a particular career choice such as becoming entrepreneur. There should be a driving force, that is, satisfaction of which one expects to derive from his choice of behaviour. Generally an expectation of increased life satisfaction pulls individuals towards entrepreneurship. This however

needs to be facilitated by other variables. For example Krueger, Reilly & Carsrud have shown that even if an individual believes of his capability in going into business creation, the process can be interrupted or even altered if in reality he lacks the knowledge, skills or resources to succeed in the starting phase (Krueger, Reilly & Carsrud 2000). This will have an impact of the realization of intention. Intentions can take a different direction with regard of how business can be formed. One can posit a possibility by either following strategic planning or being a mere heuristic result (Hmieleski & Corbett 2006). In their discussion Hmieleski & Corbett emphasized four situations on which entrepreneurship action can occur depending on the availability of time and resources. Resources and time availability will facilitate an individual to opt for strategic planning as he or she ventures in entrepreneurship. With the opposite situation (limited resources) but with knowledge of the prevailing environment will force an individual into a heuristic approach. Thirdly if the resources are abundant but the circumstance are novely a trial and error approach can take heed so that to gather much more of what is required to set up a business. Lastly is the situation in which resources constraints will force an individual to improvise and sail in the situation of uncertainty to strive and find a way out. From this contention it is apparent that there is no situation that can never be unbeaten for entrepreneurs to realize their dreams so long as intentions to do so exist. This realization can however be hampered if excellent labour market is prevailing. Individual with potential job prospectives will hardly consider the option to choose and become entrepreneurs. The opportunity cost of self employment for this matter will be higher Scutiens & Stam (2006) to hamper entrepreneurial intentions.

#### 2.2.1 Why Entrepreneurship has Become so Important

The proliferation of entrepreneurship over the past few decades has evolved to the extent that the term is no longer confined on its capitalist or economic nature in which the term is associated with new independent business creation. Attention had been drawn to stress the fact that entrepreneurship involves innovativeness, initiative and risk taking even though these could take place outside the realm of business enterprises (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). Today all eyes are on entrepreneurship as the term strands to encapsulate in all human activities

regardless of social categorization of undertakings. Entrepreneurship carries much of expectations as it is from entrepreneurs who are the ones who make life better for humanity. Pozen classifies entrepreneurs in all ways of life in which an entrepreneur strays from the capitalist roots and take more and more functions that have little to do with starting or running a business (Pozen 2008). Pozen outlines five new classes of entrepreneurship, that's social entrepreneurship, policy entrepreneurship, norm entrepreneurship, moral entrepreneurship and failed entrepreneurship. Such a classification categorizes people in various roles of daily lives. Accordingly, it is entrepreneurs who strive to tackle civic problems through innovative methods, promote new forms of legislation in governments, seek to change the way society thinks or feel about an issue, alter the boundaries of altruism or deviance, starting forprofit ventures as well as pioneering an initiative or subsidiary within the existing corporate structure. Further discussion on the classification of entrepreneurship is beyond the size of this report but it suffices to say that entrepreneurship surrounds all undertakings in all walks of life.

The admission that the rise of entrepreneurship is much more apparent in all faculties of life is not surprising. In the same magnitude is globalization growth. We read that following the omnipresence of the globalization phenomena with characteristics of hypercompetition, entrepreneurship and innovation have become increasingly important (Kiessling 2004). All over the world countries are striving to improve their competitiveness and the creation of new markets, technologies and organizational arrangement. Creation of something new is the product of innovation. As explained above, innovation is the hallmark of entrepreneurship. That makes it a fact that transforming ideas into economic opportunities remains the bottom line of entrepreneurship. History shows that economic progress has been significantly advanced by pragmatic people who are entrepreneurial and innovative, able to exploit opportunities and willing to take risks. It is these same people who search for unrecognized or otherwise ignored opportunities for economic growth and development.

The economic growth generated by entrepreneurial individuals is the core engine of a virtuous cycle of development. Entrepreneurship was also considered as the concept of prominence in economic theory by a French economist Jean-Baptiste Say (Wennekers & Thurik 1999). This scholar attributed the concept of uncertainty income to develop an account of the entrepreneur who *shift economic resources out* of an area of lower and into an area of higher productivity and greater yield. Entrepreneurs as such generate new resources. It is not easy to ignore the importance entrepreneurs for they are identified as both maker of markets and creators of economic values. Successful entrepreneurs, through their breakthrough technologies and rapidly growing businesses, create new wealth that can generate even greater economic growth. Most successful entrepreneurs also reinvest some of their wealth in other, new entrepreneurial ventures. They as well, invest with friends or family members, what is called *informal investments*, through local investment networks, and through organized venture capital firms. The importance of entrepreneurship as such is hard to ignore. It channels new small firms formation, new products being brought into market and innovation exercised. It is the way of revitalizing contracted economies by serving as a remedy to most of economic problems (Gurol & Atsan 2006).

Even though large firms have advantages in terms of higher efficiency and superior technology, the turn of 1980s reversed this trend and small firms (in which entrepreneurship is mostly exercised) resulted in competitive advantages (Wennekers & Thurik 1999). Larger firms helped to generate intrapreneurs, individuals who exercise their entrepreneurial ability within an organization that employ them. These individual in turn are the ones who form their own enterprises. Individuals who form these new enterprises produce solutions that evolve in the face of established knowledge. Such people always challenge the status quo. They are risk-takers who pursue opportunities that others may fail to recognize or may even view as problems or threats. Entrepreneurship with its varied definitions, is closely associated with change, creativity, knowledge, innovation and flexibility-factors that are increasingly important sources of competitiveness in an increasingly globalized world economy. Entrepreneurs generally are credited in playing two major important roles: creation, organization and managing new businesses as well as generation of innovation in economic life. These roles result in transforming inventions and ideas into economically viable entities and by doing so fostering entrepreneurship to promote the competitiveness of businesses.

According to Wennekers & Thurik the share of small business and therefore entrepreneurship expanded in 1980s (Wennekers & Thurik 1999). Since the entrepreneurship being the main element of small business, has become the driver of economic and social development throughout the world. The world now is facing one of the historical economic crises that have resulted in enormous downsizing which leaves many people unemployed. The Global Monitoring Report, 2009 gives unprecedented figures that 30 million people have lost jobs all over the world and still 50 million are expected to lose jobs by the end of  $2009^6$ . The report desperately places hopes on entrepreneurship by advocating that entrepreneurship drives job creation, increase productivity as well as facilitating economic growth. Entrepreneurs play roles in private sector, in which jobs created provides most of the income in all countries. Revenue from private sector transactions and income pay for many of the public goods provided by the governments. As more people engage in setting up own businesses, a re-birth of competition occurs. Competition can in turn help spur technological advancement and productivity gains that are the key to sustained long term growth.

The current economic crisis has witnessed credit as hard to come by almost everywhere in the world. Most firms have to downsize, lay off workers and delay if not cancel investment plans. Downsizing however is not a new phenomenon especially in Europe and North America. Big companies and corporations have been substituting capital and technology for labour along with shifting production to lower cost locations. The gross effect of these corporate downsizing is the decrease in the amount of employment in the domestic economy. For example between 1991 and 1995 manufacturing employment in German plants decreased by 1,307,000 while it increased in foreign subsidiaries by 189,000. The chemical sector lost 80, 000 jobs as 14, 000 were created in chemical companies in plants located outside German. The same contrasts are also reported in the electrical and engineering in which 198, 000 jobs were lost domestically same as in automobile in which employment decreased by 161, 000 while 30, 000 were created outside of Germany<sup>7</sup>. Trends of this nature

<sup>&</sup>lt;sup>6</sup>http://siteresources.worldbank.org/INTGLOMONREP2009/Resources/5924349-1239742507025/GMR09\_book.pdf. Accessed on 24th April, 2009

<sup>&</sup>lt;sup>7</sup>http://ec.europa.eu/enterprise/entrepreneurship/green\_paper/literature\_survey\_2002.pdf. Accessed on 20th August, 2009

(that can considered to be taking place in all other European countries) call for job creation at home of respective countries. Therefore job creation and economic development growth is considered as the domain of new venture and the entrepreneurs who create them (Mazzarol, Voley, Doss & Thein 1999). Following these figures it is obvious the contemporary world is faced with fewer job prospects. Today's graduates are faced by fewer alternatives for salaried jobs, entrepreneurship a such will be the most alternative to many.

It sound convincing that people who engage in entrepreneurship as such plays an important role in any economy. These are the same people that serve as agents of change by their entrepreneurial activities. They are the true source of considerable innovative activity, stimulating industry revolution and creating an important share of newly created jobs. They search for unrecognized or otherwise ignored opportunities for economic growth, they probe, explore and develop a country economy, they as well help to maintain a healthy job market by revamping contracted and closed businesses. Wennekers & Thurik outline atleast thirteen roles played entrepreneurs:

- 1. the person who assumes the risk associated with uncertainty
- 2. the supplier of financial capital
- 3. an innovator
- 4. a decision maker
- 5. an industrial leader
- 6. a manager or a superintendent
- 7. an organizer and coordinator of economic resources
- 8. the owner of an enterprise
- 9. an employer of factors of production
- 10. a contractor
- 11. an arbitrageur

- 12. an allocator of resources among alternative uses
- 13. the person who realizes a star-up of a new business (Wennekers & Thurik 1999, p. 31)

# 3 THEORY

This chapter highlights the causal relationship between the concept os entrepreneurship and the underlying intentions. The theory is built on the basis that intention to behave entrepreneurially will produce much more business operators. This is the bottom line of the chapter. Most of ideas discussed are reviewed from the existing literature and mostly borrowed from the theory of planned behaviour and entrepreneurial event model. Hypotheses will also be developed in this chapter.

## **3.1** Entrepreneurial Intentions

The Oxford English Dictionary defines intentions<sup>8</sup> as a plan or desire to do something. Yet Dutta & L.Thornhill in his research observed inconsistence on the definitions. Citing prior researches on entrepreneurial intentions, he argued that the concept is weakened by the "...inconsistent definition of entrepreneurial intent across studies. In some studies, entrepreneurial intent was defined as intent to own one's own business while in other studies, entrepreneurial intent was defined as intent to start a business... Other studies never clearly defined what they meant by entrepreneurial intent" (Dutta & L.Thornhill 2008, p. 310). Apart from the intention to own or start a business, intentions to grow business has been brought into perspective. Growth intention even though not the subject of this study will only be considered in an established business and entails aspiration for the growth trajectory an entrepreneur would wish the business to follow (Ref. Table 1 below). Entrepreneurial intention as such should not necessarily be taken to mean formation of business as an end product of the process. Katz and Gartner 1988 as cited by Scutiens & Stam assert that such intention is the search for information that can be used to help fulfill the goal of venture creation and growth (Scutjens & Stam 2006). On other hand Bird describes intention as a state of mind that focuses a person's

<sup>&</sup>lt;sup>8</sup>As used in this study intention is taken to mean what Ajzen (1991) defined as an indication of a person's readiness to perform a given behaviour, which in this case is entrepreneurship. Ajzen's literature shows that intentions are immediate antecedents of a behaviour. In the same line it assumed that intentions as studied in here will read into entrepreneurship. To make matter easy I clarify further the concept of entrepreneurship by simplifying it to readiness of engaging in self employment activities as opposed to seeking job in established organizations

attention, experience, and behaviour towards specific object or way of behaving. Much more specific to entrepreneurship, it is this state of mind that directs a person's attention and action toward entrepreneurship as opposed to organizational employment (Bird 1988). Simply put entrepreneurial intentions as the commitment to performing a certain act that is necessary to physically start the business venture. Self employment has been regarded as a target behaviour (Kolvereid 1996, Krueger, Reilly & Carsrud 2000, Luthie & Franke 2003). Notwithstanding the above clarification on intentions, the commitment to perform a particular act is akin to starting a business venture. I will not go into bringing in controversy to the concept but rather follow what other scholars in the field affirm. For the purpose of this study I strictly focus on one specific intention, entrepreneurial intentions which form the desire and attitudes towards starting and developing a new business. This desire is determined by the extent to which an individual is prepared and/or wishes to start a business that will fully employ him. I theorize that there is a trade off that a student has to make between looking for a job or strive and set his or her own entrepreneurial business.

With entrepreneurial intentions, we should not take it for granted that all people can affirm to the above argument, but it seems evident that much of what we consider 'behavioural' activity such as entrepreneurship is an intentionally planned outcome. Ajzen in a way has demonstrated to prove that argument (Ajzen 1991). By studying perception and how individuals behave in a particular situation, we can easily predict whether the persons will eventually take certain course of action. Business venture creation is what literature regards purposive behaviour in this regard. Intention towards this purposive behaviour has been singled out to be crucial in determining the end product of what a person will do. What researcher term antecedents of a behaviour (Scutjens & Stam 2006). Investigation on intention therefore is very important in establishing the outcome of purposive behaviours. It can be theorized that if we know such intentions and its level of existence among individuals, we can easily predict whether enterprising students exist in the university population. The idea being behind the assumption that the same students will end up setting up business ventures. It is only supposed possible simply because entrepreneurial intention precedes entrepreneurial behaviour. Bird discussed the same proposition to conclude that intentions play a percussor role before launching an

Attribute	Meaning
Start-up inclinations	<ul> <li>Whether and the extent to which one is interested to start own business</li> <li>Whether someone has actually decided to start a business</li> <li>Whether one will start a business on full-time or part-time basis</li> </ul>
Growth intentions	• How big one wishes the business to be certain years after starting

### Entrepreneurial intention include the following attributes

Table 1: Entrepreneurial intentions attributes

entrepreneurial venture (Bird 1988). Krueger, Reilly & Carsrud has also shown that one's intention to act towards something in a certain manner, say starting a business is the most consistent predictor of actual possibility of entrepreneurship (Krueger, Reilly & Carsrud 2000). Therefore if we manage to establish the antecedents of entrepreneurship it becomes easy to tell the level of entrepreneurial intention among the studied subjects.

# 3.2 Empirical Research on Entrepreneurial Intentions

Students as subjects of entrepreneurial intentions' researches have been elucidated by various studies. Some of the college students and graduates are expected to see founding a firm as an attractive alternative to wage employment. This can be explained as shown above, by the disappearing of traditional occupations in professional job in established organizations. Kolvereid had found this to be the impetus for the desirability of self employment among students (Kolvereid 1996). Students can as well be attracted to entrepreneurship due to potential advantages therein. I can not rule out the established reality that the benefits associated with formal employment in companies such as job security, rewards of loyalty and stability are appealing to a fresh graduate, but the same advantages are no longer attractive, at least for these days (Luthje & Franke 2003). Much more people will seek to benefit from advantages associated with work values such as independence, challenge and self actualization by setting up their own firms. Entrepreneurs enjoy self reassuring joy while they run businesses. There is more flexibility in self employment than in a salaried job. People who trade as entrepreneurs also enjoy a sense of pride in the business they own. They are their own bosses who benefits from the effort they indulge in business by gaining profit. But what characterize people who endeavor to open and set up business venture?

The explanation of intentions in entrepreneurship have evolved with studies of which it is being explained following varied lines of interdisciplinary researches. These include psychological models, sociological and situational or environmental/situational theories (Gurol & Atsan 2006). Psychological model helped researcher in identifying personality characteristics that distinguish individuals from business founders and non-entrepreneurs. The focus is on particular attitudes towards entrepreneurship as antecedent of the career path choice. It is this area of field in which it has been established a number of significant traits such as risk taking propensity, need for achievement locus of control to determine intentions (Kolvereid 1996, Luthje & Franke 2003). In this model rests an assumption that entrepreneurs have unique characteristics attitudes and values that make them stand out of the crowd. These same variables have been taken to be like yardsticks in establishing who will be entrepreneurs. Individual characterized with such qualities are generally potential entrepreneurs. For example a person with risk taking propensity is much more like to venture into business setting. The personality characteristics included in this model are regarded as important in answering a question of which the entrepreneurs are, why they become entrepreneurs as well as giving a profile of successful entrepreneurs. Studies using these traits variables have been confirmed of their essence to determine entrepreneurial tendencies (Cromie 2000, Mazzarol, Voley, Doss & Thein 1999). However there is an admission which tells of the fact that researches in this line helped in the prediction on entrepreneurial intention and did little to help in realizing the same intention (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). Intention to set up a business is something different from the actual act in which the predicted outcome results into a real entrepreneurial activity.

Sociological theories put emphasis on a variety of social cultural and economic contextual variables that may influence an individual into his or her willingness to undertake a new venture. Basically these are the social, economic, and political environments that surround an individual to pose as facilitating or stumbling block into enabling one to set up a business. Economic infrastructures as well as market development can provide a leverage on organizational formation. It is regarded that the respective environment serve as a pool of resources that will significantly influence the start up process (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). What has been established within these models explore factors such as societal attitudes toward entrepreneurship, the availability of fund/capital and the existence of small business incubators (Luthje & Franke 2003, p. 137). The theory goes ahead to incorporate parental role models and the influence of other important people such as successful entrepreneurs, social network and the support of public and semi-public agencies to entice entrepreneurial intention. Favourability of such factors in terms of the stock of resources in the environment will support entrepreneurial intent among individual to such environment. Prospective entrepreneurs have been investigated within the context of their immediate environment to explain their entrepreneurial intent, and these have been found to be important facilitators for entrepreneurial activities.

Intention in the area of situational models considered factors for entrepreneurial decisions as highlighted by some researchers (Cromie 2000, Linan & Santos 2007). The most over represented factor is what is termed as 'displacement' or facing a 'window of opportunity'. Entrepreneurial event as used by researchers as quoted in aforegoing reference, theorized that individuals decide to create a firm when what has been termed as a precipitating event lets them perceive the entrepreneurial activity more feasible or more desirable than other alternatives. The general finding is that people are forced in into forming new firms by circumstances that fall due such as being laid off from job. That is, employment status and its associated changes are the most situational influences (Davidsson 1995). A redundant person will be

forced to find a way that will earn him a living. More so if chances of getting another employment are so slim, it can be posited that this same individual will develop an intention of searching for a possibility of self employment. Davidsson proved in his model that current employment status to affect intention. Other situations such as graduating from school can also influence students into setting up business if they are convinced that as a suitable alternative career to pursue.

Following the three interdisciplinary lines of entrepreneurial intention researches, other academic models to study entrepreneurial intention have been developed and tested. Davidsson put forward a model developed on economic and psychological factors that influence a person's intention to start new venture. Davidsson and other researchers tested empirically the entrepreneurial model put forward by Shapero, 1975 in which the findings show different influences of perceived desirability and perceived feasibility on different business start ups (Davidsson 1995, Krueger 1993). Bird also suggested a model of intentional actions and factors that exerted influence (Bird 1988). Other concepts such as entrepreneurial self efficacy and entrepreneurial intentions (Cromie 2000) have also been brought in the study of entrepreneurial predictions. The theory of Self Efficacy has been well put forward by Bandura, 1986 is regarded as very important component in determining individuals choice for self employment (Delmar & Davidsson 2000). Self efficacy in this contention, advocates of career decision being perceived as individual innermost thoughts that determine whether they have the abilities perceived as important to task performance as well as belief that they will be able and effectively convert their skills into chosen outcome (Wilson, Kickul & Marlino 2007). We find out that higher entrepreneurial self efficacy and higher entrepreneurial intention result in an individual's higher probability of being involved in entrepreneurial activity later in his or her life. It follows therefore that even if entrepreneurial intentions do not result into a person starting a business now, it is still important to prepare future entrepreneurs and can help us distinguish between would-be-entrepreneurs and non-entrepreneurs.

Studies have been done on the relationship between education and entrepreneurship. A varied account of findings have also been presented to show whether entrepreneurship classes have an influence on the entrepreneurial intention or actual entrepreneurial activities. Kolvereid & Moen (1997) showed that students with a major in entrepreneurship have a higher intention to become entrepreneurs and are more likely to found companies. This observation was confirmed by Robinson, Heuner & Hunt (1991), who pointed out that students who graduated in entrepreneurship reached higher scores in entrepreneurial intention and entrepreneurial self-efficacy than students who graduated in other disciplines. Also, Lakovleva & Kolvereid (2009) observed that the intentions of students to become self-employed could be increased through entrepreneurship classes. It is interesting to note that attitudes and intentions towards students becoming entrepreneurs are influenced through entrepreneurship classes. As mentioned earlier, this university does not major in entrepreneurship as a speciality even though entrepreneurship is being taught as a subject to some classes. It is being hypothesized that the exposure to entrepreneurship exist among students and as a result entrepreneurial intention might exist among individuals.

The influence of training in general (those not trained in entrepreneurship) has also being considered in effort to link formal training with entrepreneurship. The finding are of mixed nature. At one end, it has been shown that business founders have a lower than average formal educational attainments yet other findings shows the reverse. It has been found that students with more years in school have fewer attitudes toward self business (Kolvereid 1996). Another admission is made by Kolvereid & Moen, that education is more likely to influence employment status than intentions to start business or venture creation (Kolvereid & Moen 1997). This however contradicts with other findings in the United States. Data indicate that groups with lower education show less of an interest in an entrepreneurial career Davidsson (1995), but Davidsson also shows that business founders in Sweden have less that average education attainment. Still in comparison between Indonesian and Norwegian students, Kristiansen & Indart found more entrepreneurial inclinations among Indonesian graduates than the Norwegians. It is in this study where it is generally concluded that education background has major influence in entrepreneurial intention among individuals (Kristiansen & Indart 2004). Most entrepreneurs have lower or intermediate education level. Education attainment plays a role and has been accounted to have positive effect on self employment at least in some occupations such as knowledge intensive industries, Delmar & Davidsson (2000), in the sense that a person educated as an engineer stands more feasible of setting up a private firm in engineering. The relation between education and entrepreneurship intention could be complex if we agree on the assumption that people with higher education can have better and certain chances of success and attainment of personal goals not only as business owner-managers but mostly as employees in well established organization that fully employe them.

The results above are not surprising given the multi-meaning attached to entrepreneurship. The variability underlying variables and factors on what commonly determine entrepreneurship can help to explain varied results. This study however has its unique objectives to establish if the results will fall in the previous findings. As I reviewed the literature, I found calls for further studies in entrepreneurial intentions. For example Krueger, Reilly & Carsrud (2000) failed to find obvious link between subjective norms and intention. They suggested for much more studies that would use more variables to try and establish the claimed link if it at all exist by using different sample of population. On the other side Kolvereid considered his sample as small while studying undergraduate student at Bodo Graduate School. He advised much more researches to confirm whether his results from a small sample can be generalized to other context (Kolvereid 1996). As I said this study is not done to answer these and other calls but rather it's a kind of replications by using similar variables used by other researchers to find out the propensity that exist among student in their desire to set up their own firms.

### 3.2.1 The Role of Intentions in Entrepreneurship

As new business enterprises emerge over time, pre-organizational phenomena such as deciding to initiate an entrepreneurial career is not only important but also raises questions as to how people manage to set up their own businesses (Bird 1988). To qualify this argument I consent Bird (1988)'s argument that intentionality is typical of emerging businesses. People do generate ideas which stand out to be realized in the course of life. Others have dreams that remain to be fulfilled. There must be a driving force within an individual that will force him or her strive to realize the unfounded outcome. This realization is what set forth the drive of setting up of a business venture. Entrepreneurial intentions are very important in helping us in the understanding the overall process of entrepreneurship. It is what triggers an action within the individual person to establish key initial characteristics for new businesses formation (Krueger 1993).

The prediction of purposive behaviour contrasts certain specific attitudes that predict intention. Ajzen has studied and proved that intentions serve as a channel to better understanding the act itself (Ajzen 1991). Still the act of starting a business venture and potential exogenous influences can not on their own set motion to entrepreneurship. There should be intention that would serve as mediating variables. The understanding of other antecedents towards entrepreneurship facilitate the prediction of intentions. An account has been present above and I need not emphasize the importance of situational role beliefs, subsequent moderators, including the perceived availability of critical resources, and the final consequences, including the initiation of a new venture in this regard.

It is intentions that guide people's goal setting, communication, commitment, organization and all other types of work. An idea need to be generated in a person that will facilitate the manner in which one will behave. We all know of possibilities that the behaviuor can result from unconscious and unintended antecedents, yet the intended act for this matter is the most important. This intended act is the founding of business enterprise. No wonder the study of intentions directs attention towards the complex relationship between entrepreneurial ideas and consequent outcomes of these ideas. Bird (1988) reiterated in literature to show that intentionality as a state of mind directing a person's attention (and thereafter experience and action) towards a specific object (goal) or a path in order to achieve something (means). As outcome elements, entrepreneurial intentions are directed towards either creating a new venture or creating new values in an existing venture (Ref. to Table 1 above). Intentions therefore come from one's mind and operates through a person's attention and a determined desire to achieve something. Kristiansen & Indart show of other researchers concluding that entrepreneurial intentions are independent to individual perception of desirability and feasibility and on propensity to act (Kristiansen & Indart 2004). Persistence, perseverance and courage can be important if people will develop realizable intentions. These are important attributes as people strive and venture into realizing a particular goal. Literature presented by Ajzen, as quoted earlier draws its focus by showing that intentional elements such as expectation,

attention and belief have major influence on behavioral outcomes. It is from this findings that the importance of entrepreneurial intentions can be replicated and shown as planned that can be developed to aim at creating a new venture. On the other hand, literature confirms of other certain personal factors, as will be shown below such as having prior experience as an entrepreneur, personality characteristics, such as need for achievement and the need for control Cromie (2000) and capacity as well as abilities, such as promoting ideas, play roles by predisposing individuals to entrepreneurial intentions.

The development of entrepreneurial intention remains important if people can undertake any perceived entrepreneurial opportunity. This brings in an idea of self perception in which an individual believe that a certain goal, say setting up a new business venture, can be attained. Kristiansen & Indart also believe that intentions are perception based, that's they are learned and can be altered depending on prevailing environment. The incentive to act towards a certain line of act should be the result in which people believe of their actions to produce a desired outcome. This posits as an impetus for perseverance even if an individual is in the face of adversaries (Kristiansen & Indart 2004). It is such an argument which confirms the idea that intention is the product of individual capability to perform a certain task so long as there is a perceived reward. Naturally people will weight the potential rewards against potential risk so as to eliminate the fear of failure. It follows therefore that entrepreneurial intention plays a big role in determining individual propensity to set up a business enterprise. Getting to know the consequences of intentions requires that we understand the antecedents of intention. The mentioned variables should provide a good means of examining the precursors to business start-up

### 3.2.2 Implications of Entrepreneurial Intentionality

If we agree that starting a business is an intentional act, it holds water to argue as Bird (1988) admitted that people take entrepreneurship as a deliberate career choice. In other words people do not engage in entrepreneurship as accidents. It is even more easy for people that have engaged in a particular speciality or occupation to grow with business idea in that line. Such people find it easy to recognize opportunities which are related to the prior knowledge they have acquired during their lives.

Hence, a wide range of experience is therefore a good basis for recognizing business opportunities. For example the founder of ASK Computer System Inc., one of the world biggest computer companies, was a software engineer with General Electric<sup>9</sup>. Accumulated experience in a particular line of an activity (this accumulation can be attained also in studying at say, a university) can entice a person to develop a career in a particular activity. Such a career which can as well be developed in the course of job employment or school environment stand a greater chance into sparking intention in an individual. In the same way of contention we can easily establish for students that the course of study preexposes them to a certain line of future career. I theorize that given the contemporary world, entrepreneurship will draw many students as its subsets. Education exposes individuals to multiple options. Students are most likely to choose entrepreneurship as they feel pulled to it rather than being pushed to it due to increased importance of entrepreneurship in contemporary careers (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). Entrepreneurial intentions for this matter holds substantial implications that affect entrepreneurship. While a belief remains that stimulus-response kind of analysis cannot model intentional behaviours fully, various ways have been designed. As for this study the essence of a testable, theory-driven process models of entrepreneurial cognitions that focus on intentions and their perceptual bases has been recommended (Bird 1988, Dutta & L.Thornhill 2008). The implication here follows an assumption in which entrepreneurial behaviour is regarded as rare and is built within an individual person. So then intention (toward the purposive behaviour) offer important insights into the underlying process such as opportunity recognition. Still however, it can not be taken as a generalization that all intentions will always lead to actual behaviour. Therefore, entrepreneurial intentions are assumed to predict individual choices to form their own firms (Davidsson 1995). Empirically it has been proved that purposive behaviour (entrepreneurship) is often only weakly predicted by atti $tudes^{10}$  alone Ajzen (1991) or by exogenous factors that are either situational (for example, employment status, graduating from school/university or informational

<sup>&</sup>lt;sup>9</sup>http://www.amazon.co.uk/gp/reader/0471271543/ref=sib\_dp\_ptu#reader-page. Accessed on 20th June, 2009

<sup>&</sup>lt;sup>10</sup>Attitude in this case is defined as a dynamic interactive way of relating to the environment in conjunction with a specific person, place, thing, event, activity, idea or lifestyle. It is a person's overall evaluation of behaviour.

cues) or individual such as demographic characteristics or personality traits. Literature admit that predicting entrepreneurial activities by modeling only external factors often results in disappointingly small explanatory power. Ajzen reminds us that exogenous influences usually affect intentions and behaviour only indirectly, through attitude changes. Still, Robinson, Stimpson & Hunt have challenged the application of personality approach and demographic variables in determining entrepreneurial intentions among individuals (Robinson, Stimpson & Hunt 1991). On other hand, Gurol & Atsan, studied students' intention to confirm the applicability of personality traits (Gurol & Atsan 2006). Individuals are dynamic human beings who are not only shaped by personalities and life experiences but rather specific reactions to different circumstances that determine their entrepreneurialism. I remain convinced that intentions variables, those that are embedded within an individual as well as exogenous variables, offer a good opportunity to increase our ability to explain and predict entrepreneurial activity. The implication is that intention, that's attitude approach can help us explain why it appears easier to identify potential entrepreneurs among students.

#### 3.2.3 Entrepreneurial Traits that Affect Intentions

Attempt have been made to establish of what foster individuals engage in entrepreneurial activities. Various studies strived to observe various entrepreneurs in the effort to highlight common personality traits that form the entrepreneurial personality. The evolution of the 'Trait Theory' is accredited to the work of A who identified up to 40 characteristic traits that could be attributed to entrepreneurial behaviour (A 1982). Meredith and his colleagues later condensed A's extensive list down to five core personality traits that he believed underpinned the entrepreneurial personality<sup>10</sup>. The five core traits proposed were self confidence, flexibility, need for achievement, strong desire to be independent and propensity to take risks (Koh 1996). These same traits have been used to distinguish entrepreneurs from the common population, that is people who have already established businesses, it is still convincing to use them in trying to find who stand to be entrepreneurs. Behind the

 $<sup>^{10}\</sup>mbox{http://www.docstoc.com/docs/DownloadDoc.aspx?doc_id=5064210}.$  Accessed on 17th September, 2009

thesis of the trait theory is the fact that our resultant behaviours are deeply affected by our personality, which is regarded as pre-programmed by the personality traits we inherit at birth and circumstances that surround us. As a result traits generate predispositions or tendencies which induce people to behave in a certain way. With this theory therefore, it implies that those individuals who possess entrepreneurial personality traits such as need to achieve, risk taking propensity and a strong desire to be independent, are much more likely to engage in entrepreneurial activity than those who do not posses such traits. The trait theory provides a decent explanation as to why one would engage in entrepreneurial behaviours. Research clearly demonstrates that our personality has a significant impact on our behavioural responses. This theory's strength is in its simplicity to implement and understand what line of behaviour one stand to follow. This is possible since traits are easy to identify within individuals.

Thinking on the other side one would argue against the theory in predicting intentions for trait may underline behavioural tendencies. Such argument can go further to assert that traits do not always manifest themselves into behavioural responses. It is easy to identify several entrepreneurial traits in many individuals who will never become entrepreneurs. Entrepreneurial traits can thus not be essentially predestined to an entrepreneurial career path. They simply make one more likely to engage in entrepreneurial activity. Thus traits mostly are able to provide us with distal indications of behavioural responses. Human behaviours can be complex to the extent that the trait theory can be redundant in predicting one's purposive behaviour. Added to this is the disregard of the environmental effect to an individual. We tend to believe and link the success of an entrepreneur to their personality characteristics rather than the favour that environmental offers. Robinson, Heuner & Hunt have presented a case showing the complexity of individual behaviour in creation of new businesses. They argue that this complexity is the product of interactive processes between individual characteristics and the situational environment (Robinson, Heuner & Hunt 1991). Still personality traits help and play a major roles in studying entrepreneurial intentions. This mainly allow us to establish among the population of the subjects who may or may not be entrepreneurs. Individual personalities have been regarded to be stable across time and situation. Researchers believe that this quality makes personality to exist in much the same way at any point in time or in career stage for a given individual (Robinson, Heuner & Hunt 1991)

As shown above entrepreneurial research has a multitude of definitions of entrepreneurship, defining entrepreneurial traits poses yet another challenge. Traits as a term, is taken to mean 'any distinguishable relatively enduring way in which one individual differs from another' (Sexton & Bowman 1983). However as indicated earlier, there is a strong belief that entrepreneurs have numerous traits that make them unique from others. Some studies reveal essential qualities of entrepreneurs. Lorne Yacuk set out to mention and discuss a varied characteristics of entrepreneurial characteristics but reduced them to 14 traits<sup>11</sup>. It is beyond this study to shed much more lights on all the characteristics as presented by Yacuk. The five most mentioned core traits include self confidence, flexibility, need for achievement, strong desire to be independent and propensity to take risks (Koh 1996). From what follows I present briefly what literatures shows as variables that affect entrepreneurial intentions.

#### Need for achievement

If we consider entrepreneurial intention as a way of striving to achieve something, then need for achievement is the key entrepreneurial attribute. Need for achievement is explained as an intrinsically motivated desire that indicates a person's need to strive hard to attain success. Need for achievement is taken to serves like a yardstick for which people can be easily distinguished in terms of perceived level of achievement. Raab, Stedham & Neuner have made a strong conclusion contending that achievement motivation as a synonym of need for achievement is the main entrepreneurial attribute (Raab, Stedham & Neuner 2005). Murray, 1938 as cited by Raab, Stedham & Neuner characterized it with a variable of factors to include mastering and ability to manipulate or organize not only objects but also people or ideas. It is also measured in the ability to overcome obstacles and attain high standard, to excel one's self, to rival and surpass others and to increase self esteem by the successful exercise of talent (Raab, Stedham & Neuner 2005). Generally it has been confirmed that high achievers set demanding targets to achieve and are bold and proactive about accomplishing objectives (Cromie 2000). Need for achievement is an impetus that forces an individual to struggle for success and perfection. Gurol

<sup>&</sup>lt;sup>11</sup>Yacuk highlights the qualities in the article titled "Qualities Successful Entrepreneurs Posses" in http://www.helium.com/items/564504-qualities-successful-entrepreneurs-possess. Accessed on 2nd October, 2009

& Atsan characterize individuals with high need to achieve as among those who "want to solve problems themselves, set targets and strive for these targets through their own efforts, demonstrate a higher performance in challenging tasks and are innovative in the sense of looking for new and better ways of improving their performance" (Gurol & Atsan 2006, p. 29). This has even proved to positively influence entrepreneurial intentions in that study.

### Locus of control

Cromie quoting Durham Business School, (1988) considers locus of control, need for autonomy, creative tendency, and calculated risk taking as key characteristics of enterprising individuals. Locus of control is a generalized expectation of a person on whether one will be able to control events in life. Various scholars acknowledge Rotter and consider him as the pioneer of the concept. His work has been highly credited on this psychological trait (Raab, Stedham & Neuner 2005). Locus of control refers to the extent to which individual believe that they can control events that affect them (Gurol & Atsan 2006). From the literature we find that personal traits play a role in determining individual carrier choice. People differ in terms of how much personal responsibility they perceive and accept for their behaviour and its consequences. Individuals are classified into two categories with regard to locus of control, internal and external. Some people attribute their sense of worth and accomplishment internally. They believe achievement and setbacks are within their personal control and need no further motivation for pursuance of success. People with such attributes are regarded to stand as strong entrepreneurs. Contrary to that other individuals seek their sense of self worth from external sources. In this category are people who are dependent on others to approve their achievement. Individual with an external locus of control believe that powerful others, fate or chance determine events to affect their performance across a range of activities. They believe success depends on luck, fate or other uncontrollable factors. These are the people who are never satisfied with their work until someone else validates their output. Such people are likely to face challenges in starting their own businesses. The extent to which this locus is high or low set different categories of people. The established fact that would-be-entrepreneurs have higher internal locus of control Gurol & Atsan (2006) need not be emphasized. Such people will always depict such characters as self confidence that push them to persistence and perseverance. Individuals searching for

new opportunities and taking an innovative attitude are also expected to have the capacity to control the events in their lives (Koh 1996). Self confidence apart from the psychology suggestion can be developed as circumstances unfold. Students are regarded as individuals that are being exposed to such circumstances that create images of higher (external) of locus of control to influence them in the direction of entrepreneurial intention. Skills acquired in the course of studying is expected to be exercised in different life context and as a result are expected to pursue different personal career goals entrepreneurship included.

### **Risk taking propensity**

The historical association between entrepreneurship and risk taking need is well known in entrepreneurship studies. Nascent entrepreneurs and not entrepreneurs can be distinguished in the line of risk taking propensity, the degree to which a person is ready or not to face an uncertain circumstance. Uncertainties in decision making environment of whether to step completely in business or not entail risks associated with financial well being, career opportunities, family relations, emotion states as well as psychic well being (Raab, Stedham & Neuner 2005). With employment you have a steady income such as wage but new business can be undetermined. New business establishment can be challenging to call for higher risk taking propensity. Gaddam defines entrepreneurial process as a way of judging and thinking that emphasize chances over threats (Gaddam 2008). But the propensity to take risk as shown by other researchers is depicted almost in anybody on any managerial post. This is what forced some researchers to conclude that the entrepreneurial risk-taking propensity is not distinguished from the manager's or general populations. From this conclusion it is suggested that the willingness of individual to deal with uncertainties should not be taken as an appropriate measure to entrepreneurial intention (Sexton & Bowman 1983). It is as if risk is apparent on whatever cause of action we undertake in life. On a different angle literature suggest that prospective entrepreneurs should not be averse in risk taking. Still risk-taking propensity has been strongly admitted to influence entrepreneurial intention among students (Gaddam 2008, ?). Probably the concept of moderation in risking taking makes the distinction. Moderate risk taking singles entrepreneurs from the above generalization as would be entrepreneurs stand in the middle. They are prepared to take larger risks than wage earners and other ordinary managers in order to achieve high returns but they are keen as they research the nature of risks they are willing to take. They still believe that outcomes are dependent on their own abilities and decision rather than chance.

### Innovation

Innovation, as explained in foregoing discussion entail the creation of something new, new products, new quality, new methods of production, new markets, new sources of supply of raw materials, new organization or new organization structure. Successful innovation calls for an act of willpower. People who are in search of new opportunities are associated with entrepreneurial spirits (Cromie 2000). Trial and error is not an opportunity that would bring entrepreneurial business into being. There should be a kind of struggle to exploit any opportunity. This is an essence of innovation, as a systematic search for the changes that take place in society aiming at exploiting those changes as opportunities for new markets, products or ideas (Drucker 2007).

### Tolerance of ambiguity

We live in a world with which we can not adequately structure or categorize most situation as we lack sufficient cues i decision making. It is chaotic, unorganized and full of mess that can easily make most of us uncomfortable in deciding a particular course of action. Some situation are so complex in which there are a multitude number of cues that need to be taken into account. Still a situation can be contradictory in the sense that many different elements of cues result in many ways of organizing matters. This is an ambiguous situation in which it is difficult to interprete and there is some uncertainty about the outcome. If intolerance of ambiguity is a tendency to perceive ambiguous situation as a source of threat  $^{12}$ , tolerance of ambiguity is therefore a tendency to perceive ambiguous situation in a more neutral way. People with low level of this character will find unstructured and uncertain situations uncomfortable for them and will want to avoid such situations. As mentioned earlier, the world is so ambiguous in nature that organization formation require individual with willingness and ability to cope with uncertainty. As with entrepreneurial styles, tolerance of ambiguity is associated with personal creativity and ability to produce more ideas. The ability to tolerate ambiguous circumstances is also related with risk

<sup>&</sup>lt;sup>12</sup>A clarified definition could be found on http://www.sbaer.uca.edu/researh/usasbe/1999/31.pdf. Accessed on 30th September, 2009

taking, proactiveness in thinking about the future and leadership. People who show a higher level of tolerance in ambiguity appear to be confident about decision made in an ambiguous environment, they are also able to set business as entrepreneurs.

### Other factors

As mentioned earlier, the above list is not exhaustive with regard to entrepreneurial intention characteristics. But atleast those factors have been tested and proved to have a lager predictive power to entrepreneurial intentions. The literature also shows that such other factors as age, gender, educational background, previous work experience religion and minority in ethnicity would arouse entrepreneurial intentions. The political infrastructure and economic environment, information availability and social networks might have positive impacts on entrepreneurial intentions. It was enough to show the quality which we should bear in mind when we talk of people who stand to be entrepreneurs.

### 3.3 Study Model and Research Hypotheses

From the discussion on the strand of literature and the review of other researches on antecedents to entrepreneurial intentions, I decided to adapt Kolvereid and Iakovleva's Integrated Entrepreneurial Intention Model. The revision of this model helped me in a mapping of variables in which attributes of variables come from the merger of two theories, (Theory of Planned Behaviour and The Entrepreneurial Event Model). There is great compatibility of concepts in the two models. Krueger, Reilly & Carsrud, put together the two models in studying intention and their applicability Krueger, Reilly & Carsrud (2000) and argued that the two models compete. The proposed competition between the models has been negated by other researchers (Kuehn 2008). In fact the two models do not compete but rather overlap (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). These researchers show that Shapero's perceived desirability and perceived feasibility equate Ajzen's attitude and perceived behaviour control respectively (p.541). Intentions in both models are explained by willingness and capability. Lakovleva & Kolvereid, went ahead and proved the integration of the same model as predictive theory to study entrepreneurial intentions (Lakovleva & Kolvereid 2009).

TPB		EEM
•	<ul> <li>Attitude toward behaviour:</li> <li>the degree to which a person has favourable or unfavourable assessment of starting a business.</li> </ul>	<ul> <li>Perceived desirability:</li> <li>personal attractiveness of starting a business.</li> </ul>
•	<ul> <li>Subjective nor m:</li> <li>the perceived social pressure to either engage or not engage in entrepreneurship.</li> </ul>	<ul> <li>Perceived feasibility:</li> <li>the degree to which an individual feel capable of engaging in entrepreneurship.</li> </ul>
•	<ul> <li>Perceived behaviour control:</li> <li>the perceived ease or difficult of performing entrepreneurship.</li> </ul>	<ul> <li>Propensity to act:</li> <li>the personal disposition of an individual to act on his decision.</li> </ul>

Table 2: Comparisons of concepts as used in TPB and EEM

Definitions of the concepts in both models form a relational pair of sets by the variable used in explaining the models as shown in table 2 below.

A person's capability to launch a business can not be credible in terms of entrepreneurial intention unless the situation is both desirable and feasible. These two elements will bring about the propensity for an individual to act in a certain way. It was also proposed in the entrepreneurial event model that a certain career path such as entrepreneurship can be considered only if it is perceived of it being desirable and feasible within the circumstances that allow for propensity to act by a person. Such a situation can convince a person that an alternative (e.g setting up a business) is attractive and something that can be done. In this same line of argument, an integrated model of entrepreneurial intention was developed that consolidated the two modes into one predictive model. This model was the product of comparison between the two theories. The both models have also been credited as doing well in predicting entrepreneurial intention in the range of adjusted R-square of .35 and .41 respectively (Krueger, Reilly & Carsrud 2000).

It appears promising to generate entrepreneurial intentions predictors contained in

the two models into a structural equation model of entrepreneurial intent. The proposed theoretical model (Fig.2) captures five constructs to predict students' entrepreneurial intentions, namely, their respective gender status, the background of the family they come from, how easy to behave entrepreneurially (perceived desirability), individual initiatives of students (propensity to act) and the social influence that surround students. As shown in the model, the general proposition is that the competitiveness of these construct will positively influence entrepreneurial intentions.

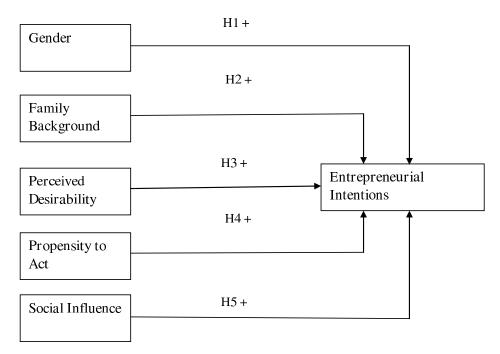


Figure 2: Representation of the theoretical model.

As can be seen on figure 2, I did not borrow or rather use directly the intention models as stipulated by Ajzen and Shapiro, but rather incorporated the concepts in the proposed model for this study. This is not as a result of overlapping of variables as shown but I wanted to also include additional variables. I consider gender and family background as important for this study. These same variables have also been suggested by various researchers of being influential in enhancing the understanding of entrepreneurial intentions. (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008) give an account that such additional variables are mediated in the theory of planned behaviour (p. 541). The model accesses a linear predictive role between dependent variables to an independent variable.

In this study, entrepreneurial intentions of students were analyzed using the variable as shown in the model. Given the assumption that the perception of students on their current context are highly significant to understand their entrepreneurial intention, the generated model aimed at capturing their overall perception of the asked questions in the questionnaire. In the model as well as it will be shown in the logic equation, entrepreneurial intention is taken as a function of gender, family background, individual easiness to start business, proactiveness and the role of social influence.

Personality predictors account for ultimate goal regarding someone's career. Studies from a variety of researchers admit empirical findings about the determinants of entrepreneurial intentions (Davidsson 1995, Souitaris, Zerbinati & Al-Laham 2007, Luthje & Franke 2003, Wilson, Kickul & Marlino 2007). Personal background such as gender has been studied and found to influence entrepreneurial intentions. Thus, the first dimension of the model is gender. There is an array of heterogeneity among male and female when it comes to entrepreneurship. The motivation levels, educational and occupational experiences, risk-taking propensities, women working less hours and access to resources can account for some of these heterogeneities between these two groups of human beings. Women have also much more domestic demands competing for their time, thus having little time for venture creation. It has been documented that males have more entrepreneurial intentions and as such tend to be more likely and have more interest to start businesses leaving their female counterpart less likely to be founder of new businesses (Phan, Wong & Wang 2002, Mazzarol, Voley, Doss & Thein 1999). Professionalism bring in a divide between people and we need to acknowledge the reality that male and female do naturally differ in many more ways. Experience shows that the odds towards business establishment are stacked against women. Plenty of research tells us that female are less likely to access business start up advice, receive equity investment, venture capital or backing from angel investors. Women are also less successful than their male counterparts in acquiring financial support from family and friends. Still, social conditioning means that many female lack self belief, and they posses a smaller appetite for risk than

male. This fear of failure also impacts on male and female in different ways. In females, lack of confidence can restrict entrepreneurial behaviour. In males, that lack of confidence acts as a spur. They often fight longer and harder than female to find a workable solution. Men's pride drives the quest to secure the viability of a social venture; female uncertainty can sometimes undermine it.

The support of the above argument have been documented by various scholars. In Sweden for example male dominated in entrepreneurship. Delmar & Davidsson report that 67% of all businesses in Sweden are started by men, 28% by women and 5% by a joint venture between men and women (Delmar & Davidsson 2000). This contradicts with the finding by Kristiansen & Indart who found no significant differences of entrepreneurial intention between female and male students among Norwegian and Indonesian students (Kristiansen & Indart 2004). Davidson has drawn a conclusion affirming that above contention that men universally are always on high rank to bear attitudes and values favoring them for competitiveness and achievement than women. Efforts to establish this trend has revealed that women have lower perceptions of self efficacy in which they are under-represented (Davidsson 1995). The natural inequalities that prevail among men and women in which women are mainly responsible for children care can be another contributing factor. Also traditional occupations for women do not attract much of entrepreneurship. Still the institutional approach in which patriarchal pressure, even though it can be different in Norway, in most societies hinder women into entering in business. Delmar & Davidsson (2000) for example, have shown this in difficulties women face on getting loan from bank than men. The role of gender as documented by previous studies has prompted me to propose the first hypothesis of this study.

**Hypothesis 1:** The fact that one is a male than a female student will have a positive influence on entrepreneurial intentions.

The second factor in the model is family background. As indicated in previous discussion, family background is also yet another variable that is taken to contribute to entrepreneurial intention. It has been found that socialization impacts an individuals attitude towards entrepreneurship (R & P 1986). An individuals socialization takes place at home, at the place of education and in other spheres of interaction. Socialization includes messages about what is good and positive, what lends status as well as what is valued by others. Family background and parental role-modeling is one of the most prominent factor that affects early socialization and as a result formation of attitude towards entrepreneurship if the family is in that line. Early communication received and imbibed by an individual from the family would impact career choices by inducing individuals to choose a career in which they are viewed positively by the family. We can therefore propose that familys occupational background is likely to impact the preferences of individuals towards entrepreneurs and entrepreneurship.

Generally, individuals who had families with businesses tend to show higher attitude toward entrepreneurship than those that don't have. Davidsson shows that an average of 40% of small business owner managers in Sweden have had a self employed parent (Davidsson 1995, p. 9). This researcher also records of a survey of more 600 respondents in the UK that showed 30 - 47% of entrepreneurs to have had a father in business. We find the established confirmation that there exist a positive relationship between the roles of role models and the perceived desirability, thats an individual's potential of founding a firm. The question remain however if role models really make it possible and affect attitudes such as self efficacy. I propose the following hypothesis:

**Hypothesis 2:** Family background of a student will have an impact on intentions attitude towards entrepreneurship. Therefore, individuals coming from business or entrepreneurial background will have more inclination toward entrepreneurship

In reviewing the intention literature a number of  $models^{13}$  have been used to test

<sup>&</sup>lt;sup>13</sup>Mainly six models are recorded since the 1980s. It is shown that a number of researchers developed various model to study intentions (Guerrero, Rialp & Urbano 2008). These have been quoted by Guerrero, Rialp & Urbano as: The Entrepreneurial Event Model (Sapero, 1982), The Theory of Planned Behaviour (Ajzen, 1991), Entrepreneurial Attitude Orientation (Robinson, Stimpson, Huefner & Hunt, 1991), Intentional Basic Model (Krueger & Carsrud, 1993), Entrepreneurial Potential Model (Krueger & Brazeal, 1994) and Davidsson Model (Davidsson, 1995). Ref. http://www.springerlink.com/contentr316721w810527421/fulltext.pdf. Accessed on 25th October, 2009

individual intentions towards specific acts including to start businesses. Although several scholars have discussed and tested intention models, Ajzen and Shapero and Sokol Krueger (1993), are considered outstanding in terms of models used to study entrepreneurial intentions. In these models the major concern was the determination of what trigger a certain behaviour as an ultimate outcome of intention/attitude. These models led into two famous theories, Ajzen's Theory of Planned Behaviour (Ajzen 1991) and Shapero and Sokol's Entrepreneurial Event Model (Krueger 1993). The development of the models may have had different objectives to achieve but the same models have been applied and proved testable in the field of entrepreneurship. The Entrepreneurial Event Model was designed to find out social interactions that would intervene the steady career path of individuals to determine their fate regarding an action to be taken. The premise behind it was that inertia will always guide a person on the course of action in life. It is until something happens that can force him/her to change a course of direction, this 'something' was called the 'displacement event'. The relevancy of the model in the study of entrepreneurial intentions is apparent in various studies. Behind this models is the establishment as explained above that by studying behaviour and perception of individuals, it is possible to predict whether a person will end up starting a business venture.

Ajzen's theory has been credited of its usefulness and has been practically applied in most studies in psychology, marketing and consumer behaviour among others (Schifter & Ajzen 1985, Doll & Ajzen 1992, Daigle, Hrubes & Ajzen 2001, Vermeir & Verbeke 2008, Hansen 2008). This theory has proved effective to predict and explain behaviour intentions. Within the construct of theory, researchers tested the theory by using entrepreneurial intention as target behaviour in the same line as being self employed (Krueger, Reilly & Carsrud 2000, Luthje & Franke 2003, Kolvereid 1996). Ajzen convincingly argued that actions are preceded by conscious decision to behave in a particular way. The theory postulates of intentions as being the results of attitude developed through life experience, personal characteristics and personal perception a person gather in the course of living. We can think of experience a student gathers in the course of studying. Ajzen defines attitude as the predisposition of a person to respond in a generally favourable or unfavourable circumstances with respect to the object of attitude. Attitude in this case is held responsible for determination of intention which must have an object to achieve (entrepreneurship). It is concluded in the model that intentions and predispositions to behave in particular way toward an object is important in predicting resultant behaviour of a person.

Events are not happening as accidents but actions are preceded by intended decisions to act in a certain way (Ajzen 1991). This scholar conceptualized and argued his case to show that intentions are the results of attitudes formulated through various exposures such as student life in the course of studying, personal characteristics and perception derived from accumulated experiences. The intention is based on attitude towards the behaviour, subjective norm and perceived behavioral control. Each of these being predictors weighted for its importance in relation to the behaviour and population of interest<sup>14</sup>.

Various concepts form the behaviour in which attitude towards the behaviour, such as self employment/entrepreneurship refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of behaviour. Kolvereid defined that as the difference between perception of personal desirability in become entrepreneur and organizationally employed (Kolvereid 1996). This can be balanced between the individual's perception and the actual reality in the assessment of own skills and competencies. Kuehn explains attitude to comprises both, individual cognitive and affective elements to support or deter his mindset towards entrepreneurship as a career activity (Kuehn 2008). Thus, high attitude towards self employment will indicate a particular respondent as being entrepreneurships intentional (Kolvereid 1996).

The attitude is imbedded in someone's desirability which entails individual personal skills to start a business. Entrepreneurship need to be attractive so that individuals find it desirable to start own businesses. This is an attitude towards behaviour that tells whether a person is prepared or to not to start a business, the personal desirability of performing the behaviour, as explained by entrepreneurial event model. It is an individual's innermost cognitive thoughts on whether he/she bears what it takes to be considered as important to task performances including personal belief that he/she will be able to convert personal skill into a chosen outcome. It is an

 $<sup>^{14}\</sup>rm Most$  of detailed explanation on the theory could be found on http://people.umass.edu/aizen/pdf/tpb.measurement.pdf. Accessed on 18th October, 2009

attitude that depends on expectations and belief about an individual's impact of outcomes resulting from behaviour (Krueger, Reilly & Carsrud 2000). If the reality is that the target behavior (say entrepreneurship) is more attractive to the individual, then the intentions to perform such a behavior will be high. I have already shown above importance of entrepreneurship on the contemporary world and the desirability to most students to become entrepreneurs. I hypothesize that personal characters within an individual show an attitude as a predisposition towards an action. Personal characters entail skills that help individual to persevere and develop creativity to detect business opportunity or achieve an objective such as setting a new business venture. This goal can be achieved following a passage of time in which experience, knowledge or perception are formed within an individual as h/she lives. This leads another hypothesis.

**Hypothesis 3:** The degree with which one sees prospects of starting a business should be attractive therefore, perceived desirability of a student to take initiatives will positively influence entrepreneurial intentions.

The model also contained a variable that aims at measuring the individual ability to take initiatives. I equate this to behavioral control which indicates whether the person can easily develop a certain intention or whether behavioral intention is difficult or impossible. In other words, it is the extent to which a person feel able or not able to enact the behaviour in question. This akin to the perceived ability for an individual to become an entrepreneur (Kolvereid 1996). The extent to which a person has control over the behaviour and the confidence that one feels about being able to perform or not perform the bahaviour will determine this ability. Behavioral control is assumed to reflect past experience as well as anticipated difficulties or facilitating conditions. To exploit an opportunity an individual must be able to gain access to resources and information that facilitate the exploitation process. When people feel they cannot access resources or opportunities to perform behaviour, they are unlikely to form strong intentions to perform the behaviour. For a person to start as an entrepreneur, both willingness and opportunity are essential. With resources at disposal it should be possible for a person to become an entrepreneur if he wants to. Students are resourceful in terms of skills and education they acquire in the course of study. I believe in arguments in which I learn of conclusions that the stronger the intention to engage in behaviour, the more likely should be its performance. Furthermore, perceived behavioral control is conceptualized to influence behaviour directly in that even if one intends to do something e.g setting a business venture, s/he may be unable to do so if the behaviour is not under volitional control.

Behavioural control as explained in the model can indicate if an individual feels s/he can easily engage in entrepreneurial venture. The spirit of 'I will do it' (Krueger, Reilly & Carsrud 2000). It is the degree to which a student can feel individually able to start a business. I take in mind the assumption that even the motivation of students to behave entrepreneurial can be high, there is still a possibility that the intention to start business can be hampered due to a low perceived ability to act on ones decision. Literature shows how this propensity impacts intentions (Krueger 1993). This has as well attached risk taking propensity and tolerance of ambiguity (ref. section 3.2.3 above) as basic elements of propensity to act. Collectively, these two terms have been defined in terms of as individuals' willingness to take action when outcome is not very well known (Kuehn 2008). As I study intentions among students I carry with me a belief that in the course of studying, students develop self esteem and confidence to have built a strong sense of external locus of control to control events in their respective lives. It is this quality that will trigger their alertness to take measures and act in circumstances with which there is absolute outcome in future

With the entrepreneurial event model, a person's intention to or not behave entrepreneurial will depend on three elements, that is his or her perception of the desirability, perceived feasibility and propensity to act. The former is reflected in the individual's attractiveness of starting a business, while perceived feasibility entail the level or the extent of someone's personal prowess and competence to establish a business. This competence need to be felt by an individual him/herself. Kuehn argued on perceived feasibility as the measure of uncertainty determined by the perception to control the situation. The latter as posited by the model, reflects a person's predisposition to act on a decision even thought the outcome for the decision taken may not known beforehand (Kuehn 2008). Given choices are open to start a business, this is the same as the willingness of a person to pursue a career in business in which one works as a self employed.

With this model entrepreneurial event or the act of starting a business was regarded as the product of displacement event. The model theorized that the above three elements will entice entrepreneurial intention, but the actual business start up will not take place unless the 'trigger event' happens. The driving argument behind this model is that the perceptions by the individual of the desirability and feasibility of starting a business combined with some propensity to act upon opportunities will spark intentions. But business will only be launched if there is a displacement event in favour of a particular individual. By grave outline three scenarios to comprise such a displacement event, also called window of opportunity. People can venture into setting up a business if they have no career option, or in case on employed one may have passed the promotion level in their place of work. Secondly, a person can be fired and laid off from work. The third scenario is when one takes initiative to entrepreneurship as a deliberate career option (Bygrave 1994). Displacement event in the model is taken to comprise situations that will disturb the equilibrium of the state at hand. If an opportunity present itself facilitated by such factors as favourable economic environment, social business network, government support and market among others, business establishment can flourish. People will find it easy to venture into business establishment. This type of displacement event falls in favour of the prospective entrepreneur which will make him or her venture into entrepreneurship. Literature within this model highlights the displacement event that can take different forms in line with what Bygrave calls window of opportunity. Life has to go on and people need to eke out a living even after being faced by a negative event such as being sacked off from job that sustained ones life. It is also argued that educational institutions have a positive impact in influence career goals among students to the extent of acting as a breeding environments for entrepreneurship (Kuehn 2008). Opportunities therefore whether positive or negative have roles to play before a person execute a particular behaviour, in this case entrepreneurship. The study will aim at testing the hypothesis on this argument formulated as:

Hypothesis 4: The propensity to take action on opportunities by an individual

will positively influence his entrepreneurial intention.

Subjective or social influence refer to the perceived social pressure on a person to perform or not to perform the target behaviour (e.g. starting a business). It is determined by two important factors, individual belief about how other people who may be close would like him to behave and positive or negative judgment of ones self about the belief outcome. Krueger, Reilly & Carsrud, have shown the perception of what important people in respondents' lives think about them becoming entrepreneurs, weighted by strength of the motivation to comply to them as an influence to arouse entrepreneurial intention (Krueger, Reilly & Carsrud 2000). Social network in terms of an individual relationship with other members of the society plays a role here. A person is most likely to be influenced by a particular group of individuals such as family, friends, peer and other close ones in one's life. For example people who grow up around a society or family that runs business or where business entrepreneurship is highly valued are likely to learn and model this tendency, perceiving it to be feasible, more socially desirable and rewarding than formal employment in an established organization. The desire to start or not to start a business may also be influenced by the meaning that one attaches to business, which in turn is socially generated and sustained. As for students they may be at the stage with which to decide on their career choices preferences (Hmieleski & Corbett 2006).

Influences of other people that are close to a person can have an influence on his or her intention to act in a certain way. The theory of planned behaviour terms this as subjective norms 'the perceived social pressure to perform or not to perform the behaviour'. It is impacted by social background that comprises broader cultural influences such as family friends and personal exposure to entrepreneurship. Social influence entails the environment with which people around the individual and what they think about his/her career inclination. It affects this particular individual on how he/she should perform in terms of target behavior. In this study this (entrepreneurial) behaviour of students is expected to be influenced by attitudes of particular people that cause an impact in respondents' lives. Such people can be close friends and members of the family, or other people that have established en-

trepreneurial business. Social networks can serve as a valuable source for new ideas and interesting opportunities as well. Especially, networks with a large number of loose connections to individuals outside the network seem to be a valuable source. It can be the individual family expectation to become entrepreneurs that influences the desirability of the same individual in setting up an own business. The influence of role models for this matter remains important but it is expected to have a positive influence as well. The more supportive the social norms are, the higher the intention (Wilson, Kickul & Marlino 2007). Social influences have been extended to include connection that seems important predictors of entrepreneurial activities. Kuehn concludes that individuals with stronger social ties will have stronger performing ventures (Kuehn 2008, 93). Yet career choice preference of an individual could be at its highest point at student life and as such the influence of others can result in determining entrepreneurial intention (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). Social elements could be controversial with regards to entrepreneurship inclinations. Things could be against this expectation if society around the individual emphasize on something different. For example if a society that surrounds students emphasizes on getting good education for the purpose of getting good jobs, entrepreneurship would then be regarded as less desirable as a career option. On the opposite, students from entrepreneurship friendly environments will have their intentions strengthened and reinforced (Kuehn 2008). Still Krueger, Reilly & Carsrud (2000) indicated that the existence of external locus of control reduces the impact of social norms. I still believe that better connection provides resources in terms of information and other elements called 'social capital' important for business creation. In general the social influence results in the following hypothesis:

**Hypothesis 5:** The social influence in students' life will increase entrepreneurial intentions.

# 4 RESEARCH METHODOLOGY

This chapter explains the research procedures in data collection and analysis. It provides explanation on the research strategy, sampling method, questionnaire design, validity and reliability as well as methods of analyzing the data.

## 4.1 Participants and Procedures

This study uses data collected from the Agder University. The unit of analysis was the students from all faculties into which the university is organized. The target for the whole population was justified on the ground that it would increase the response rate. It was as well appropriate to administer the questionnaire because it was an online survey with which respondents got questions in their UiA respective email addresses. With internet administered questionnaire; it was not only convenient but also cost effective in reaching all students. Entrepreneurial intent was considered as dependent construct in the model presented in literature review. Considerable efforts were devoted in developing of intention scales so as to map out the predictive power of independent variables.

## 4.2 Research Strategy

This cross-sectional study was designed to explain the exploratory relationships on what constitute characteristics of entrepreneurial intention between individual students and their propensity to establish business. As it was not yet clear beforehand of the students' intentions, it was assumed appropriate to adopt exploratory study in order to clarify the understanding and the nature of the research problem. The survey strategy guided this study since the research adopted the deductive approach. Saunders, Lewis & Thornhill suggest such a strategy in researches that seek to establish the predictive capacity of independent variables to dependent variable (Saunders, Lewis & Thornhill 2007). Since the study involved the collection of data from the whole population of students (atleast to the masters level), survey was considered appropriate as the same strategy has been endorsed of its popularity for making it easy in collection of large amount of data using questionnaire administered method (Saunders, Lewis & Thornhill 2007, Bryman & Bell 2007). This research strategy also facilitated easily the collection and analysis of data quantitatively. The data collected through the same strategy proved efficient to suggest particular relationship between the variables used in the study to explain the research model.

### 4.2.1 Sampling Method

Sampling refers to the process of selecting units such as people or organizations from a population of interest so that by the studying the sample one may fairly generalize his or her results back to the whole population from which they were chosen<sup>15</sup>. The basic essence of sampling is the fact that at times it proves difficult to study the whole range of subjects in question, so a selection is used in order to describe the characteristic result of the whole population of interest. The sampling frame for this study comprised of students of Agder University studying in Kristiansand up to the masters level. Sampling can be determined either probabilistically or nonprobability (Saunders, Lewis & Thornhill 2007). This study borrowed the nonprobability sampling with which the self selection method was used. The need of the research was addressed to the whole prospective respondents but the freedom for student to identify their desire to participate in the survey remained to them. The data used in the research thus came from only those who responded. At the end the response rate turned into 22 percent.

### 4.2.2 Data Collection

The subjects were surveyed with which the data collected on mono method. With closed ended type of questions, the use of self administered questionnaire proved the only means appropriate. Questionnaire as a means of data collection has been approved to be the most appropriate tool in exploratory research (Saunders, Lewis & Thornhill 2007). The construction of this self-report questionnaire consisted of twenty-three (variables) items. Each of the first four questions had five respective elements containing seven choices. Responded were asked the extent to which they

<sup>&</sup>lt;sup>15</sup>http://www.socialresearchmethods.net/kb/sampling.php. Accessed on 19th October, 2009

agree or not agree with underlying statements on each item. For each statement (for example, i am able to deal effectively with unexpected events), respondents had to choose from a seven-point Likert-type scale. The scale included the choices 1 (strongly disagree), 2 (disagree), 3 (slightly disagree), 4 (neutral), 5 (slightly agree) 6 (agree) and 7 (strongly agree). The questionnaire also included basic demographic descriptors (such as age, gender), experience in self employment undertakings, job, training in entrepreneurship and parents' experience in entrepreneurship. Students' status was also explored in the questionnaire for it was felt necessary to establish various classifications such as faculties, level of study, year and whether someone has taken courses in entrepreneurship

The questionnaire was reviewed and approved by the supervisor. Earlier on the supervisor registered the need to administer the questionnaire in the native language that would serve the interest of the students. This necessitated the need for translation as the default language was English. The questionnaire was translated from the original English language into Norsk<sup>16</sup>, by native speakers who are very conversant with the English language. The process involved five different individuals who did the translation. It was subjectively done this way in order to increase consistence of translation that would convey clarity in the intended message to respondents. After minor adjustments in translation, the questionnaire was afterwards translated to English by different translators in order to confirm the language consistence and compatibility. The questionnaire was pre-tested of the translation within 20 native students. The pretest was done by sending the questionnaire which was answered by the 20 students. The feedback showed a greater understanding of questions for responses went in line with expectations, a sign that the translation was okay. It proved in line with best standard of both languages and was as both comprehensible and clear. The final translation was reviewed and endorsed by my supervisor.

Given that email and internet communication are popular among students, the questionnaire was published online and sent softly to respondents via their respective email addresses. Earlier it was learnt that the official university email lists are used by the university to disseminate important official information of the institution. This fact posed as a hurdle as my published questionnaire was considered unqualified

<sup>&</sup>lt;sup>16</sup>the native language of Norwegians

as it belonged to 'an outside' website source. It was after a long consultation between my supervisor and the university officials that it was agreed for the questionnaire to be emailed. The students' office administration directed that email directorate be used as a complete list of students at the university. This again was to be done by a member of the university staff. It was the supervisor who mailed the published questionnaire.

The questionnaire was designed in such a way that the student received an email with a short explanation of the survey attached with a hyper-link to the online questionnaire. By clicking on the hyper-link, the questionnaire would open and ready to be filled in. Moreover the questionnaire gave a language option of which respondents were free to choose whether to answer in either English or Norsk. This was done purposely so that even some international students who can not speak Norsk would answer the questionnaire. The original online questionnaire contained a pre-formulated reminder of which students would be reminded to answer one week after if one did not answer the first mailing. This online service enabled me to tag question in such a way that students would answer all questions.

### 4.2.3 Reliability and Validity

While designing the data collection tool, a concern was on the consistence of the measurements. In research a measure is considered reliable if it would give us the same result over and over again. "The extent to which data collection technique or techniques will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data" (Saunders, Lewis & Thornhill 2007). The main goal of any researcher has always been to reduce the measurement error. In this study cronbbach's alpha was used. Most researches use this diagnostic measure of reliability test. As a measure a rule is drawn that the higher the value of Cronbach'a alpha the higher the degree of intercorrelation among items in the scale. This leads to a conclusion of a measure being reliable. (Hair, Money, Samouel & Page 2007, 244) provide a rule of thumb about reliability and the size of Cronbach's alpha,  $\alpha$  as shown in table 3.

Alpha Coefficient Range	Strenght of Association		
<.6	Poor		
.6 to <.7	Moderate		
.7 to < .8	Good		
.8 to < .9	Very Good		
>.9	Excellent		

Table 3: Rule of thumb about Cronbach's alpha coefficient size

In analyzing the validity and reliability of items used to test the hypotheses SPSS facilitate the measurement by using alpha statistical test.

# 4.3 Measurement and Variables

Measures were drawn from past studies on entrepreneurial intent among individuals. Most of ideas to develop the questionnaire were borrowed from a manual for researchers on the Theory of Planned Behaviour (Francis, Eccles, Johnston, Walker, Grimshaw, Foy, Kaner, Smith & Bonetti 2004). The idea developed in mind was to predict whether subjects of this study intend to do something, entrepreneurship. Entrepreneurship for this matter is the desired action.

### 4.3.1 Dependent variable

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Entrepreneurial intention was constructed as the ultimate dependent variable in the model. For this matter intention was defined as a person's motivation with a drive to follow a particular plan or a decision to exercise a behaviour, such a behaviour in this study is establishing a profit making business. As a measure of intentions, this could be determined by the desires where questions such as 'do you want to start a business? preferences in which subjects are asked of the trade off between seeking

for formal employment or going for self employment (setting up an own business) but also the individual personal plan (e.g do you plan to start a business?) and the behavioural expectation in which one is asked of the probability of setting a business at a future date (Gelderen, Brand, Praag, Bodewes, Poutsam & Gils 2008). To measure the intention in this study the questionnaire contained questions that tracked students' preference on self employment (intention to set a business one day) as contrasted with a choice that one can make in seeking employment in established organisation. Specifically item #5 was the dependent variable for the purpose of this study. The item read:

If you were to choose between being self employed (owner manager of a business) and being employed by someone else, what would choose?

- 1. Being owner manager
- 2. Being employed by someone

Responses to this question (the dependent variable) were related to all other questions (the independent variables). Responses affirming an individual in need to being an owner manager showed entrepreneurial intentions.

### 4.3.2 Independent variables

In this study the predictive power between the dependent and independent variables could be ascertained as a direct effect. For theoretical reasons the study accommodated characteristics of the population for the study. This allowed for the use of different dependent variables. The subset of independent variables would help and provide behavioural expectancies. Perceived desirability was supposed to be measured by using five items asking their respective skills in dealing with challenges of facing occurrences of problems and difficulties in handling unexpected events, ability to solve problems through personal efforts, maintenance of calmness in difficult situations and ability to think individually of solution when facing problems. The aim was to establish the stability that students have in maintaining their focus for the unforeseeable future. On the same design, propensity to act (reasons to become self employment) was constructed to measure personal disposition of individual students in their ability to act entrepreneurially. This is in line with the literature of perceived behaviour control as elucidated above. The items aimed at measuring the level of perseverance, entrepreneurial alertness and efficiency among students. Respondents were supposed to rank themselves in areas of ability to strive and set up independent businesses.

Another measure of independent variable was termed as social influence. This was expected to reflect the impact of opinion of others in students' decisions. This would be measured using items validated by Kolvereid. To gauge the influences of others such as friends and family member on student intention to act entrepreneurial.

Another item that was used as an independent variable was family background. In this case a family was considered entrepreneurial if it was carrying on self employment activities. Gender was gauged in whether one is male or female.

### 4.4 Data Analysis Methods

To facilitate the analysis, tabulation of data will be adhered to and the descriptive analysis presented. That will be followed by evaluating the score of variables in the research model. Each independent variable's score will be easily established through the calculation of respective averages from the score of each item. Regression analysis especially the logistic will be run in effort to answer research questions and hypotheses testing. Given the dichotomous nature of the question in the dependent variable, logistic regression will help answering hypotheses. Such analysis help to determine the effects of each independent variable on dependent variable. While using the technique measure will be taken to get rid of matter concerning multicollinearity and outliers so that to bring about the desired effect while running the logistic regression.

Correlation analysis will be used to explain the effect of independent variables on a dependent variable. It is anticipated that Pearson product moment correlation will be used to assess the strength of relationship among the variables. This analysis accounts as being useful in checking inter-dependability among independent variables and makes it easy to see the extent to which a variable has the possibility to affect another variable. The questions were developed in the quantitative nature. This qualifies for the use and application of a Statistical Package for the Social Sciences, SPSS in that analysis of the data.

# 5 RESULTS

The general as well as specific results are presented in this chapter. The study model is reviewed practically to assess its fit applicability in answering the hypothesis. The analysis is done so as to find out the picture depicted by the data. The discussion of the study findings mainly is what guides this chapter.

### 5.1 Descriptive Findings

Of all students targeted, one thousand seven hundred and forty (22%) answered the questionnaire. All participants qualified for analysis as the survey was designed in such a way so as to eliminate outliers. The only slight error was on age on which some respondents answered by indicating their year of birth. Earlier respondents were asked to indicate their respective ages. Yet other nine students could not indicated clearly their respective ages, so this is indicated as missing item in the age column. 106 responded reported to have having business in operation by the time they answered the questionnaire. Considering the original purpose of the study, these would have been disgualified from the analysis but I decide to retained them on the ground that intentions can extend within the existing business as well as expanding to establish other more business (recall Table 1 above). In the end no response was dropped. The sample included respondents from female category as 1010 (58%) and a total of 726 (42\%) males. The mean age was 27 years old. Responses in faculties composition included Faculty of Economics and Social Science 578 (33%), Faculty of Humanities and Education 385 (22%), faculty of Engineering and Science 391 (22%), Faculty of Sport and Health 322 (19%) and Faculty of Fine Arts 64 (4%). For over all sample (male and female) respondents age ranged between 17 years old and 79 years old (mean age=27.34). 1024(59%) of respondents studied for bachelor degree, 444(25%) studied for masters and 272(16%) report to be studying in a group categorized as 'others' that comprised continuing students and all others studying in different level such as certificate and/or diploma. See also a summarized results indicated in table 4 bellow.

Preliminary findings show varied results on what would influence entrepreneurship

Age	Gender	Status	Faculty	Parents' self	Entr. training
				employment	
0-25 60.1%	M 41.7%	Bachelor 58.9%	Economics 33.2%	Yes 42.8%	Yes 19.6%
26-35 22.1%	F 58.3%	Masters 25.5%	Humanities 22.1%	No 57.2%	No 80.4%
36-45 12.8%		Other 15.6%	Engineering 22.5%		
> 46 5.2%			Health 18.5%		
			Fine arts 3.7%		

Note: M=Male, F=Females, Entr. =entrereneurship

 Table 4: Information about respondents

intentions among students. Out of all respondents, only 228 (13%) students have been getting involved in self employment undertakings. We would think of those as being engaged in various exposure of entrepreneurship. With regard to parents' entrepreneurial experience 744 (43%) of respondents showed of their parents being in entrepreneurship. It is only 341 (20%) of all students who have undergone formal training in entrepreneurship. Out of these 117 (7%) received training from this university. Probably this can account on the fact that only 79 (4%) of all respondents are involved in setting up businesses by the time they answered the questionnaire.

## 5.2 Assessment of Regression Assumptions

I conducted an assessment to evaluate the extent to which the measures contained in the questionnaire are valid for the predicted outcome. The results are shown on table 5 below. The concern was on the value of alpha ( $\alpha$ ). Literature gives the range of up to .05 but value closer to 1 is better (Field 2009). (Field 2009, p. 675) quoting various authors explains the factors behind the range of alpha including if many items on the scale and different structure of variables. The variables used in this study have alpha ranging between .07 and .09 (Table 5)

The relationship between the variables to predict intentions was investigated using

Variable	Mean	Standard deviation	α
Perceived desirability	5.252	1.127	0.879
Propensity to act	2.864	1.763	0.949
Social influence	3.458	1.656	0.777

Table 5: The Cronbach's alpha of independent variables

Pearson moment correlation coefficient. This followed a preliminary analysis performed to ensure no violation of assumptions of normality, linearity and homoscedasticity.<sup>17</sup> The results showed a small correlation score ranging between r=-.60 and r=-.55. This finding concluded of the model being a good measure for it does not have problem with multicollinearity,<sup>18</sup> the absence of correlation between two or more independent variables. The correlation makes it difficult to determine the separate effects of each individual variable. The Pearson product moment correlation coefficient table has most of its estimates as low as  $\rho < .15$  with none being higher than .36 as shown in table 6. This also assured that multicollinearity as not an acute problem for the model estimate.

# 5.3 Validity Test Analysis

Validity as an assessment was conducted to establish how valid are the measures. The concern was on whether the measures really measure what they are purposed to measure and whether the content of a measure covers the full domain of the content. This could be established as shown in correlation but also necessitated the

<sup>&</sup>lt;sup>17</sup>homoscedasticity refer to the extent to which data values for the dependent variables have equal variance.

<sup>&</sup>lt;sup>18</sup>(Bryman & Cramer 2005) pose a caution on the correlation '...it is important to ensure that the independent variables are not too highly correlated to each other. The Pearson's r between each pair of independent variables should not exceed .80; otherwise the independent variables that show a relationship at or in excess of .80 may suspected of exhibiting multicollinearity, p. 302.

Variable	Mean	S. dev	1	2	3	4	5	6
1.Intentions*	1.572	.495	1	.211**	.044	151**	554**	357**
2. Gender	.583	.493		1	.065	.000	.000	.000
3.Family background	1.572	.495			1	088**	259**	151**
4. Perceived desirability	5.252	.928				1	069	098
5. Propensity to act	2.952	1.662					1	.259**
6. Social influence	3.375	1.379						1

\*\* correlation is significant at the .01 level (2-tailed)

•

\*intention is measured by either being an owner manager or being employed in organisation S. Dev = standard deviation

 Table 6: Pearson Product Moment Correlation

operation of factor analysis on fifteen items that formed part of dependent variables. Judging by the result of factor analysis, the internal validity is established if an item's scores is highly correlated with the total item score. The Kaiser-Meyer-Olkin measure sampling adequacy (KMO) and Bartlett's test for Sphericity were used to evaluate the strength of the linear association among fifteen items comprised in the independent variables. The Bartlett's Test was significant at  $X^2 = 23,375.455\rho < .001$ . The KMO statistics<sup>19</sup> (.889) showed validity, (cf. table 7). Field (2009) gives a rule of thumb that the KMO value close to 1 shows the pattern of correlation to be relatively compact and so for factor analysis should yield a distinct and reliable factors.

 $<sup>^{19}{\</sup>rm The}$  KMO statistics varies between 0 and 1 with which the value between 0.5 and 0.7 are 'mediocre', value between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and value above 0.9 are superb (Field 2009, p. 647)

Kaiser-Meyer-Olkin Measure	.899	
Bartlett's Test of Sphericity	20375.455	
	df	105
	Sig.	.000

Table 7: KMO and Bartlett's Test

## 5.4 Factor Analysis

In the study, exploratory factor analysis was performed to determine the underlying factorial structure of scale. Specifically the principal component analysis (PCA) was conducted. Earlier the KMO measure verified the sampling adequacy at .90 (refer the aforegoing section) showing correlation between the items were sufficiently large for PCA. The preliminary procedure obtained eigenvalue for each component in the data. The fifteen items of entrepreneurial intention measure were subjected to the PCA. This was done after accessing the suitability of data. The principal components analysed confirmed the loadings to the presence of three components. The three components had eigenvalues over Kaiser's criterion of over 1 explaining 41%, 20% and 9% of the variance respectively. Further inspection was extended to the screeplot that revealed clear break after the third component. The three components solution explained a total of 71% of the variance, with component one contributing 41% and component two contributing 20% (cf. table 12 in appendix). To aid interpretation of the components, oblimin rotation was performed. The rotated solution revealed a sequential structure showing a number of strong loadings an all variables in a respective manner (Table 8). This justified the retention of the three components (ref. also the cree plot on fig. 3 in appendix).

	(	Component	
	1	2	3
My professional goal is to become an entrepreneur	.902		
I am determined to create a business venture in the future	.898		
I have got the intention to start a firm one day	.880		
I have got the intention to start a firm within five years of graduation	.865		
I prefer to be self employed	.848		
Please indicate: I am resourceful and can handle unexpected challenges		.866	
I can think of solutions if faced by several problems		.817	
I can solve problems with my personal efforts		.816	
I am able to deal effectively with unexpected events		.814	
I have ability to solve and remain calm on facing difficulties		.764	
People who are important to me think I should start my own business			.855
My friends and classmate think I should start my own business			.854
My closest family members think I should start my own business			.842
I know successful business operators I can follow as role models			.504

# Rotated Component Matrix<sup>a</sup>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

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# 5.5 Results of Logistic Regression

Using SPSS version 17 a binary logistic regression was performed using five independent variables that were regressed on the dichotomous dependent variable. These variables included gender, family background social influence, propensity to act, personal desirability and social influence. The equation used to estimate the model was

 $(y) = \tfrac{1}{1+e^{-z}}$ 

where:

 $z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... \beta_n X_n$   $X_n = a$  set of independent variables  $\beta_n = a$  set of parameters for the independent variables e = the natural base logarithms y = the dichotomous dependent variable of being either an owner manager or employed in formal firms.

The Logistic regression analysis served as an aid in developing the study model. A total 1740 responses were used to estimate the model. The stepwise method was considered appropriate for the study was an exploratory (Field 2009). The final model contained five significant items, perceived desirability, propensity to act, social influence, gender and family background, ref Table 10. All items were statistically significant for the model  $X^2(5, N = 1740) = 1764.6, \rho = <.001$ . That indicated the predictors, as a set, reliably distinguished between students who showed interest in entrepreneurship and those with no intentions. The model thus, was able to distinguish between the variable in approving or otherwise of the hypotheses. Further, the model was explained between 30% (Cox and Snell R square) and 40% (Nagelkerke R squared of entrepreneurial intentions and correctly classified at 75.4%.

#### 5.5.1 Goodness of fit of the model

With the logistic regression the goodness of fit of models is assessed by examining the -2LL measure (Field 2009). Field explains that in the logistic regression procedure SPSS calculates the value of -2log likelihood each time a model is developed. The value of -2LL is the judging criteria that tells that the model fits perfectly. This also enables an estimation of the level of improvement gained by adding the model terms. The two values for -2LL for this model are 2375.53 and 1764.61 for the constant and for full model respectively. The same procedure is done for the model containing the constant only to enable a clear estimation of level of improvement gained by adding by adding by the model terms.

Seeing how well the model classifies the data is yet a different way of determining the way logistic model performs in general. In doing this I compared the observed number of cases for each state of the dependent variables with the predicted number of each state as delivered from the model. (Pallant 2007) advices that a comparison of the observed number of cases for each state as derived from the model. Table 9 clarifies the classification performance of the model<sup>22</sup>. The constant probabilities show the probability of a case correctly classified into one of the two groups before the model is applied to that data. From the operation the relative sizes of the two populations in the current model determined the value of 57% for the prior probabilities. Another important point to note is the indication that the probability for every case to fall in a particular group as determined by the chosen model. The result are included in table 9. Clearly the result (cf. table 9) show that the model specifically classifies 76% percent of the 1740 cases indicating the over all goodness of fit of the model.

#### 5.5.2 Hypotheses Testing

In predicting entrepreneurial intentions, the result from the logistics regression helped to answer the hypotheses. The study was designed to test five hypotheses. Logistic regression as performed on five predictor variables, gender, family back-

 $<sup>^{22}\</sup>mathrm{Please}$  note that "own manager" stand for entrepreneurial intentions and "seek employment" for those with no intentions

Actual	Pred	Predicted	
	Manager	Employment	(%)Correct
Prior Probabilities			
own managers	744	0	100
seek employment	996	0	0
Classification accuracy of prior probabilities			57.2
Current Probabilities			
own managers	507	237	68.1
seek employment	187	809	81.2
Classification accuracy of current probabilities	794	1046	75.6

Note: Sensitivity (507/ (237+507))%= 68.1%, Specificity (808/ (187+809))%=81.2%, False positive (187/ (187+507))%=26.9%, False negative (237/ (237+809))%=22.7%

 Table 9: Observed and Predicted Frequencies for Entrepreneurial Intentions

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ground, perceived desirability, propensity to act and social influence to ascertain whether someone is likely to behave like an entrepreneur. All variables predicted whether or not entrepreneurial intention existed among respondents. Values of logistic coefficient, Wald test and odds of each predictor were generated. Perceived desirability, propensity to act, social influence, gender and age are shown as significant.

Table 10 below show regression coefficients, wald statistics, odds ratios and 95 percent confidence interval for odds ratios for each of the five predictors. To test the hypotheses of this study, the model equation (formulated above) was referred to. The model yielded  $X^2 = 611.88$ , df = 5, N = 1740,  $\rho < .001$ . Hypothesis one stated that the fact the a person is a male or female will have an impact on his or her intentions. According to odds ratio criterion, the value  $e^{\beta}$ , for gender and family background reliably predicted the entrepreneurial intentions with the value of 1.55 and 1.04. Models run with gender and family background omitted were not reliably different from a constant-only model, yet the same models proved reliably different from the full mode  $(X^2 = 582.94, df = 5, N = 1740, \rho < .001 and X^2 = 598.34, df =$  $1, N = 1740, \rho < .001$  respectively). This confirms proposals in hypotheses one and two. Based on this we can easily conclude has a significant contribution in the determination of entrepreneurial intentions. This falls in line with the value of the standardized regression coefficient,  $\beta$  .42 and .03, positive numbers indicating that gender and family background influence the entrepreneurial intentions to the desired direction. Furthermore the crosstabulation to entrepreneurial intentions rejects the null hypothesis.

In terms of the research hypotheses posed as, perceived desirability to positively influence entrepreneurial intention, the hypothesis has not received much support. The levels of significance, the odds ratio  $(e^{\beta})$  fall bellow 1 with associated values of  $\beta$ as a negative outcomes -.075 with the model summarized at F=(5, 611)=9.597. That indicated the predictive power toward the opposite direction. In particular while drawing this hypothesis the aim was to find out individual attitudes, this attitude came out with a unique influence with a Beta of -.075. This imply that students who are willing and feel easy to face uncertainties have less favourable attitude toward running own business. On the same line, perceived desirability bring in a negative

								95% C.I.f	or EXP(B)
		β	S.Ε (β)	Wald, X <sup>2</sup>	df	Sig.	Exp(B)( $e^{\beta}$ )	Lower	Upper
Step 1 <sup>a</sup>	GENDERTI(1)	.424	.119	12.640	1	.000	1.528	1.210	1.931
	FAMILYBD(1)	.033	.119	.076	1	.783	1.033	.818	1.305
	PEDBILIT	075	.068	1.209	1	.272	.928	.812	1.060
	PRPACT	791	.050	245.455	1	.000	.453	.411	.500
	SOCNM	076	.056	1.841	1	.175	.927	.831	1.034
	Constant	3.070	.390	61.964	1	.000	21.547		

a. Variable(s) entered on step 1: GENDERTI=Gender, FAMILYBD=Family background, PEDBILIT=Perceived desirability, PRPACT=Propensity to act, SOCNM=Social Norms.

Table 10: Hypotheses testing

effect on the inclination towards entrepreneurship, rejecting hypothesis 3.

In order to answer the 4th and 5th hypothesis, the propensity to act and social influence to positively influence entrepreneurial intention, I examined variables in an individual to act and the social elements with direct effect on intentions. I wanted to use devised technique that will identify correlation to show the presence or absence of relationship. This entailed regression of each model variable on all prior variables to control for spurious correlation. The result indicated the standardized regression (beta) coefficient comprising the weights to show the relatively small impact of predictors. There was no significant correlations between propensity to act and social influence to intentions. Thus confirming the null hypotheses 4 and 5. Refereing to table 10 above the variables scores on odd ratio slightly less than one and were not correlated well as shown in the Pearson correlation matrix.

# 6 DISCUSSION AND CONCLUSION

This is the last but one chapter. In the chapter efforts have been made to summarize the outcome of results and findings with reference to empirical presentations from the survey. I attempt to revise the general discussion as well as linking the findings to the pronounced previous and existing studies on entrepreneurship intentions. The parts also aims at showing how the main objectives of the study have been met as well as and research questions answered. The chapter ends with limitation of the study, theoretical implications, suggestion and identification of gaps and areas for further studies.

# 6.1 General Discussion

The model that guided the study borrow most of element in the integration of the theory of planned behavior and entrepreneurial event model. The model developed for the study did fit as evidenced above by the adequate level of Hosmer and Lamehow test (Table 15 in appendix), accepting the null hypothesis. The five tested hypotheses would not negate the fact that personal desirability, and social influence impact entrepreneurial intentions. But these factors could not correlate well as anticipated in influencing entrepreneurial intentions among students. Gender and family background emerged out as quite significant in predicting entrepreneurial intention of students towards the anticipated direction.

The study aimed at establishing the structure of entrepreneurial intentions that exist among the students of Agder University. The result of the analysis above has helped answer the research question that aimed at establishing the structure and level of entrepreneurship intention among students. Considering all students' responses, 744 students stated that they would like to start their own business or rather to be exclusively self employed. Still the data show a total 106 being entrepreneurs in the sense that are having their own business in operation, and a further portion of 79 students, are in process of setting up business enterprises. With gender line female revealed a much lower propensity for entrepreneurship than their male colleagues. Contrary to Teixeira & Forte who found senior students in the Portuguese largest university more likely to be potential entrepreneurs, this study found that entrepreneurial intention was inversely related with years in study (Teixeira & Forte 2009). Students in the 4th year and above indicated much more desires to seek jobs rather than entrepreneurial undertakings (cf. table 12 in appendix). From what follow below I present a brief specific discussion on the findings.

#### Gender

In studies of entrepreneurial intention, gender has received a much attention to become a topic of considerable focus. This study did not came out with surprising results with regard to gender. In general, female are statistically not significant and are less entrepreneurial than male (see table 13 in appendix). Out of those who showed interest in entrepreneurship there is an average of 46 percent of female students who would choose and wish for self employment rather than seeking opportunities in employability compared with a higher score of their male counterpart. Female scored highly in job seeking, 67 percent in contrast to 37 percent of male who registered interest in seeking for salaried jobs. Such results fall in line with other studies Martnez, gins Mora & Vila (2007) that indicate entrepreneurial undertakings are more related to male, even though this contrasts with what Ede, Panigrahi & Calcich (1998) who registered indifferences in gender showing that there is no clear differences between male and female.

The observed underepresentation of female in entrepreneurial intentions can also be explained on the ground that elements included in the questionnaire to test intentions seem to universally favoring characteristics for male than women. We can also consider the level of aggressiveness between male and female. This however be should true if we agree that this element adds to potentiality for entrepreneurship and much more possessed by male than female. This can single out most female as potential establishers of business and as a result less entrepreneurial inclined.

When it comes to female entrepreneurs in Norway we get a discouraging picture. Lesser females dwell on small business. Yet Norway is among the top nations in the world when it comes to female participation in the workforce (salaried jobs). However, Norwegian women represent the minority amongst entrepreneurs. With 2007 figures<sup>23</sup> it is reported that only 4.3 percent of the women versus 8.6 percent of men are involved in so-called early stage entrepreneurial activities. This source also records other facts such that figures from Statistics Norway show that in 2007 women represent barely one third of the new business start-ups of sole enterprises, and that only constitute one sixth of entrepreneurs of private limited companies. Private ownership is also imbalanced amongst genders: in 2007 only 26 percent of owners of sole enterprises and 27 percent of owners of private limited companies were women. One is forced to believe the same trends evolves with the student population indicating not a promising future entrepreneurship aspirants as it seem much more female will seek office jobs. This underrepresentation of females amongst entrepreneurs represents an unutilized potential for the Norwegian economy with future implications. If conditions can be improved and especially concerted efforts in support of female entrepreneurship, it can make women a vigorous part of business and trade to contribute and enhance economic diversity, increased job opportunities for women and further economic growth of the country.

#### The family background

The family background factor was devised within the limits of students' parents to have taken an engagement in self employment activities. It can include the extent to which the experience of parents in starting up business, building of an additional venture or adding new product line and the overall family business experience. This study limited the breath of this element to family members having experience in self employment. The positive impact of this is the inspiration one gets from his or her parents. The relationship between a child and parent stand out as one of the most important aspect of family environment during childhood and plays a role in determining a child future desire in a career goal. Most of us emulate what our parents specialize in. Our desire towards a particular line of specialization can be reinforced within family life which as well play a role for the initiation of characteristics generally associated with entrepreneurship. 43% of all students had parents in entrepreneurship. Considering students who expressed their desire to self employment the result fell in the same magnitude, 43%. This is a notable findings since it supports the thesis that the inclination for entrepreneurship is affected by

<sup>&</sup>lt;sup>23</sup>These data are contained in the Ministry of Trade and Industry website, http://www.ssb.no/english/subjects/10/01/ner\_en/ Accessed on 23rd November, 2009

family culture.(Gurol & Atsan 2006) come out with the same findings. Literary, this can partly be explained by role of role models as discussed and stressed in literature review. Such a finding is in line with other results that affirm family background in favour of entrepreneurialism R & P (1986), Krueger (1993) who distinguished students from entrepreneurial families in favour of business start up attitudes that those from non entrepreneurial families. Judy Drennan and MdAbu Saleh<sup>20</sup> also find that family business background, what they called 'the breadth of family business background' influenced the feasibility to start business of siblings.

From this study we can learn and establish that greater knowledge of entrepreneurship may have been acquired from acquaintanceships mostly from family members. Those students from business background are inline with options such as greater entrepreneurial action leading to greater independence, as a means to realize potential or make more money. However, they can be most positive about the decision to become entrepreneurs. It is possible that people from business background have a better exposure to entrepreneurial efforts. They may be aware of the challenges of starting their own enterprise from family members. On the other hand the knowledge is second hand and therefore their perception is likely to be based on success stories of their parents. These results clearly point to the influence of early exposure to entrepreneurship. In setting up programs and designing intervention to encourage entrepreneurship it may be best to provide inputs at levels when individuals spin off from their parents rather than after the person in university or has completed professional/graduate level education.

#### Perceived and desirability to entrepreneurship

Perceived desirability aimed at assessing individual prowess toward entrepreneurship. The result based on the estimated model shows laxity within individuals. This take into account of the fact that I did not explore the explicit objectives but rather a 'perceived' contextual interpretation for answers to the questionnaire. Propensity was also not a factor for this matter in determining entrepreneurship. The findings in this perspective characterize most students at this university of not have entrepreneurial qualities discussed in section 3.2.3. It is possible a myriad of

<sup>&</sup>lt;sup>20</sup>The Dynamics of Entrepreneurship Intentions of MBA students: An Asian Development Country perspective. //:www.pbfeam2008.bus.edu.au/papers/documents/MdAbuSalah\_Final.pdf. Accessed on 30th October, 2009

reason contribute to this phenomenon especially the reality that in this country there are chances of getting a salaried job to most graduates but we would expect different results following the world economic crisis. Evidenced from this study, is the realization of the fact that almost all students have had a job somewhere within their course of study. The findings indicate only 137 (8 percent) of all students have never had an employment opportunity. The potentiality and availability of jobs can account on laxity towards individual initiative-taking, risk taking and tolerance of ambiguity among other features of entrepreneurs, in seeking for opening self run businesses. The result is so unfortunate given the focus that previous studies on entrepreneurship, as shown in the literature, place on these variables.

#### Entrepreneurial training

As reported earlier, it is only a total of 341 of all students have received practical entrepreneurial training. Surprisingly the majority of these received the training from other places. Another observation from this study is that not all the university students' recipients of entrepreneurial intentions were pleased by the training. Considering the students who admitted training in entrepreneurship, its slightly above half of them (59%) that are interested in entrepreneurship (ref. table 16 in appendix). Furthermore the study showed a less significant relationship between entrepreneurial intention and the extent to which students registered the essence of training, r=-.19 < .05. Students did not show much inclinations on the training in entrepreneurship being good in preparing someone for entrepreneurship. According to the wald criterion, the level of being pleased by the training was predicted  $at(X^2(N = 1740) = 3.44\rho < .001$ . This is as well unfortunate considering the weights placed on training in determining entrepreneurial intentions as elucidate earlier in which it is shown that empirical theory would determine the opposite. To this surprise, some other studies still on investigating the impact of entrepreneurial training (e.g (Hostager & Decker 1999, Luthje & Franke 2003)) also found no relationship. It remains to be confirmed as to whether it is true that even though entrepreneurs training always aim at increasing entrepreneurial skills, the entrepreneurial spirit is more than the outcome of training. However teaching the individual to engage in undertakings similar to entrepreneurship may produce entrepreneurs if it aims at both art and science part of business added to the active role of students in the learning process. Such training need to be associated with trigger event as discussed earlier if one is to be inspired to the benefits that he or she will derive from entrepreneurship. This same findings negate the proposition that the university environment being a breeding ground for entrepreneurs.

#### General level of entrepreneurial intentions

On average and considering all faculties at university, 59% (cf. table 14 in appendix) of the students who answered the questionnaire registered their wish to start their own business. A clear picture is depicted in table 16 in the appendix below in which intention was measured among faculties is summarized. There is a clear classification in which we find the relatively higher propensity of faculty of Economics and Social Science (51%) and Faculty of Science and Engineering (50%) for entrepreneurship. The corresponding relative low values are observed for faculty of Education and Humanifies (32%), Faculty of sports (31%) and faculty of Art (47%). There is a slight gap as figures indicate within faculties entrepreneurial propensities. If we focus on faculty rather than courses of study we observe that faculty of economics and social science is the most potential entrepreneurial led averaging over a third (of all) of all faculties' students would desire to become entrepreneurs. This result fall in line with other findings (Robinson, Heuner & Hunt 1991, Lakovleva & Kolvereid 2009, Levenburg, Lane & Schwarz 2006) that show students that undertake entrepreneurship or business subjects are more entrepreneurial. The results based on my study model clearly demonstrate that the course and area of study matters with regards to entrepreneurial intentions. As can be clearly seen this is apparent to the faculty of economics and social science in which business courses are taught, showing that the course or area of study is important for assessing entrepreneurial intent. No wonder an explanation can be inferred as to why students enrolled in the faculty of economics and Faculty of Science and Engineering show that they would prefer self employment to other office jobs.

The dispersed differences above would be explained slightly by the economic built up of Norway. This country is characterized by a healthy economic structures. One can argue that entrepreneurship for individual is not a necessity compared with elsewhere where an individual can be forced to engage in entrepreneurial adventures out of necessity following a situation such as being hard for example to secure job. On general, results further show that senior students, prospective graduates, mostly in 4th, 5th and more year are not interested in self employment but rather would like to look for employment.

# 6.2 Theoretical Implication

The present survey gives a clear picture evidencing that the role individual personality predictors play a significant part for the entrepreneurial behaviour among students of this university. More specifically, the question of personality structure, gender and family influence for this matter. The perceptions that led to this findings assert discriminately the role played by the university in preparing future entrepreneurs. I have a feeling that this should serve as a waking up call even if it is not in the university's plan to inspire students towards entrepreneurship. I have limited my investigation on self employment, but enterprising spirits is needed in all walks of life, more so to keep up with unexpected changes that keeps happening in the contemporary world. Public policy and universities would thus be advised to put in place infrastructures that would nudge and intensify activities and research programs to enhance entrepreneurship at the university. Moreover the image of entrepreneurship should be displayed so that the concept is perceived as a career alternative.

To what I can tell, this study has served the purpose to investigate the role of perceived intentions in determining entrepreneurship. My study therefore offers contributions to the literature on entrepreneurial intentions Krueger & Shephard (2002) and entrepreneurship as a career choice (Kolvereid 1996). One reason for the large impact of family background and gender compared to other factors could be that these concepts are more proactively oriented than factors such as perceived desirability and social influence. While these factors might be good indicators for why students will see entrepreneurship as a feasible employment alternative, qualities of an individual may more specifically and proactively influence entrepreneurial behavior in terms of vicarious experience rather than what the university can offer. Since gender and family background appear to be strongly associated with entrepreneurial intentions, future studies might benefit from drawing upon the rich literature on individual experience and other variables that target a student as an in-

dividual. The roles of family members and other social networks could be nurtured if the aim is to enhance entrepreneurship. Female students would benefit and increase their entrepreneurial inclination if concerted efforts are designed to increase their desirability to entrepreneurship. These and other studies offer intriguing opportunities for future research on the intersection of characteristics and entrepreneurial intentions.

## 6.3 Limitation, Gaps and Future Research

This study accomplished its task in showing the existence and the levels of entrepreneurial intentions among students. The overall outcome has gone slightly astray from the anticipated findings showing a lesser magnitude of entrepreneurship among students. While designing the study a picture was in mind that given the contemporary economic situation the world is facing now, much more students would be inclined into engaging in entrepreneurial activities. Despite the accomplishment of the objectives, the research was limited by a number of factors.

In the first place the this research did not bring in the well cerebrated elements of psychology and attitudes in determining entrepreneurial intentions. Even though personality was discussed in literature review, the same study would not include personality elements in the questionnaire. We all know of the fact that someone's entrepreneurial inclination is propelled by a myriad of factors not only traits but also attitude, perceived behavioural control, contextual, environmental and situational variables to mention just a few. Culture that seem important in scrolling the individual's path through was also not considered. A comprehensive study should be designed so as to incorporate all these elements in the future studies.

Following the fact that I did not collect my data overtime poses as a limitation and I feel that there is a gap remaining somewhere for I can not make definitive causal statements. Much more study should be done employing longitudinal approach by following individual over time, this would serve as the best approach for understanding the process of becoming self employed. Moreover designed other studies in that manner would help as future follow up of respondents in the survey. This could shed much more lights in determining entrepreneurial intentions. As my data was collected from this only university, I don't rule out a possibility that there may be some concern as to the generalizability of my findings to other settings. So future research should include data from other institutions as well. Much more interest if I would suggest, should be focused to students of faculty of economics and social sciences and engineering because the study stand to benefit from exploring data from exclusive students enrolled in these faculties as they seem to be at the heart of business (and as such entrepreneurship).

One of the findings is that most of students have not received entrepreneurship training. Even those who got exposed to such training most of them were trained elsewhere. Its only a tiny minority that showed to have trained by the university. I think its high time that the university should think and strategize on entrepreneurship by imparting entrepreneurial skills to individual students. Entrepreneurship is being embraced by most universities around the world. As this university teaches courses in business, incorporating the course in the curriculum would add more value to its business teaching.

I collected data for this research using survey methodology. This method may be susceptible to bias and various error in responses. Accounts have been presented showing that survey as a means of data collection is common in entrepreneurship researches (for example see Crant (1998) and Mitchell, Smith, Morse, Seawright, Peredo & Mckenzie (2002)). This is not an admission for method variance as an alternative but I suggest that future research to incorporate and employ triangulation in data collection for examining entrepreneurial intentions rather than depending solely on survey questionnaire as used here.

This study specifically targeted students. The findings may not fit for generalization to other populations. I recommend the findings of this study be validated with a much more large-scale randomly selected data. There remain other potential areas for research in the extension of our knowledge on entrepreneurial intentions. It was not easy to get to know the real entrepreneurial profile of Norway as a country. The Global Entrepreneurship Monitor that profile most countries' entrepreneurship structure could not help me as i could not get it translated. There is need to try and establish the influence of exogenous variables such as government policies and culture on venture creation and entrepreneurship. Yet my statement that we all entrepreneurs sound naive for it is unrealistic to expect that all individuals will pursue entrepreneurship given considerable external environments. There is a need to deeply study the relationship between psychological attribute of an individual and entrepreneurship.

Another limitation of this study is related on sampling techniques. Self selection proved convenient but the interpretation of these findings would have enhanced if I was able to conduct sampling randomly from the relevant sample population. Data collection entirely relied on the perceptions of students. This stands a chance to pose as a limitation for there might be differences between perception and reality of what answers to the questionnaire contained. What students perceived might have been difference with the reality that a study stood to find.

Perfection is relative but we have a general statement saying no one is perfect. Regardless of the above concerns, I still can conclude that my results provide a new insight into students' entrepreneurial intentions studies. I need not overemphasize the crucial role entrepreneurship plays in the economies around the world. It remains important for scholars to explore more of characteristics of entrepreneurs especially among students which might influence their entrepreneurial aspirations and ultimately their decision to start business. Findings from the present study provide but a stepping stone for which further research can be launched. As it was well elucidated above attitude towards entrepreneurship change over time, future studies of a longitudinal nature could help to unpack most dimensions across time particularly the reassurance behind students' ardent start ups, timeliness and goals as well as industry preferences. Saunders, Lewis & Thornhill present various research paradigms, this study followed and adapted a functionalist. Further studies adapting alternative approaches such as interactivity, radical structuralist and radical humanist perspective paradigms may yield different and useful results (Saunders, Lewis & Thornhill 2007).

# 7 Appendix

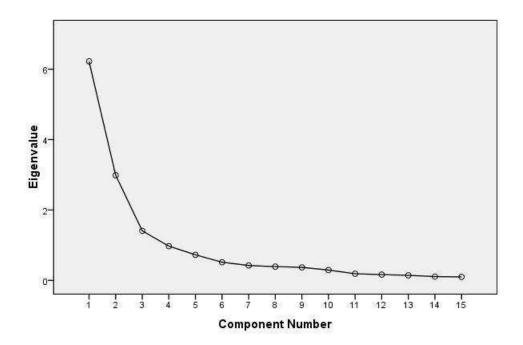


Figure 3: Scree plot

	Initial Eigenvalues			genvalues Extraction Sums of Squared Loadings Rotation Sums of Squared Lo				
					% of			
Component	Total	% of Variance	Cumulative %	Total	Variance	Cumulative %	Total	% of Variance
1	6.220	41.470	41.470	6.220	41.470	41.470	4.351	29.003
2	2.987	19.911	61.381	2.987	19.911	61.381	3.471	23.138
3	1.407	9.379	70.759	1.407	9.379	70.759	2.793	18.618
4	.972	6.481	77.240					
5	.725	4.833	82.073					
6	.514	3.428	85.501					
7	.423	2.817	88.318					
8	.390	2.599	90.917					
9	.369	2.463	93.380					
10	.293	1.953	95.333					
11	.188	1.255	96.587					
12	.163	1.088	97.675					
13	.143	.951	98.626					
14	.107	.714	99.340					
15	.099	.660	100.000					

Extraction Method: Principal Component Analysis.

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Table 11: Total Variance explained .

	Crosstabulation											
			In which year are you studying?									
			1st year	2nd year	3rd year	4th year	5th year	or more				
Intentions	own manager	Count	291	127	149	81	68	8 28				
		% within Intentions	39.1%	17.1%	20.0%	10.9%	9.1%	3.8%				
	seek employment	Count	371	188	188	106	79	64				
		% within Intentions	37.2%	18.9%	18.9%	10.6%	7.9%	6.4%				
Total		Count	662	315	337	187	147	92				
		% within Intentions	38.0%	18.1%	19.4%	10.7%	8.4%	5.3%				

Table 12: Intention as per year of study .

Entrepreneurial Intentions	Male %	Female %
Own manager	55.1	33.9
Seek employment	44.9	66.1
	N=726	N=1014

*Note: X*<sup>2</sup>= 77.48 S, *p*<.05.

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Table 13: Entrepreneurship intentions rated by gender .

		Entrepreneurship training		
		Yes	No	
What would you choose?	being owner manager	200(58.7%)	544(38.9%)	
	seek employment	141(41.3%)	855(61.1%)	
Total		341(100)	1399(100%)	

Note: X<sup>2</sup> = 43.765 S, ρ < .001

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Table 14: Entrepreneurship rated by training in entrepreneurship

	1.Model Summary									
Ī		Cox & Snell R	Nagelkerke R							
Step	-2 Log likelihood	Square	Square							
1	1764.609 <sup>a</sup>	.296	.398							

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

 Table 15: Study model summary

				Which faculty are you studying in?						
			Faculty of	Faculty of	Faculty of					
			Economics and	Humanities and	Engineering and	Faculty of Health	Faculty of Fine			
			Social Science	Education	Science	and Sport	Arts	Total		
Intentions	own manager	Count	294	123	197	100	30	744		
		% within Which faculty are you studying in?	50.9%	31.9%	50.4%	31.1%	46.9%	42.8%		
	seek employment	Count	284	262	194	222	34	996		
		% within Which faculty are you studying in?	49.1%	68.1%	49 <b>.</b> 6%	68.9%	53.1%	57.2%		
Total		Count	578	385	391	322	64	1740		
		% within Which faculty are you studying in?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Intentions \* Which faculty are you studying in? Crosstabulation

Table 16: Intentions by faculty

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