

# **UNIVERSITY OF KWAZULU-NATAL**

## **INSTITUTIONAL AND LEARNING IMPACT ON STUDENT ENTREPRENEURIAL INCLINATION AT THE UNIVERSITY OF KWAZULU NATAL (UKZN)**

By

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## **DECLARATION**

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## ABSTRACT

This study investigated the institutional environment and learning impact on student entrepreneurial intention at the University of KwaZulu Natal; one of the notable universities in South Africa ranking in the top 3% of the world top universities. The high declining entrepreneurial intent among South African students as compared to the international sample is a matter of concern. Literature has pointed the role of institutional environment as well as learning in entrepreneurial intent development. To what extent these variables among others influence entrepreneurial intent is a subject that this thesis addressed. An entrepreneurial behaviour is preceded by an entrepreneurial intent.

The feared unemployment crises that left over 25 countries with job strikes after the economic recession that begun in 2008 spells out the untold significance of entrepreneurship as a remedy. The role of entrepreneurial employees in organisations is something of significance. The global economic slowdown that begun in 2008 does not seem to be promising with a global job growth rate of 1 % per annum. This is against the backdrop of where two out of five globally earn \$2 per day and are at a poverty threshold. The dire global unemployment outlook is not only apparently worsened by the present 200 unemployed millions but by the projected rise of 41.4% youth employment to population ratio in 2018 from 12.6% in 2013. These findings have also been supported by the fact that unemployment among the youth is two to three times the adult rate.

Some authors have called for urgent attention over the unemployment of university graduates, school leavers, tertiary level graduates and other vulnerable societies in Africa. This is augmented by the reality that whereas the global average of youth unemployment is 14.4%, Africa has 21%.

Through an online quantitative study, the College of Law and Management final year undergraduate students participated in this research. The data was analysed using the Statistical Package of Social Sciences (SPSS) for its descriptive narration as well as inferential analysis. Along SPSS, Warp Partial Least Squares (PLS) in Structural Equation modelling (SEM) was used in the model performance and development for the entrepreneurial intent of learners. The model enabled the interaction between the predictor latent variables and criterion latent variable to be performed. Two preliminary empirical models were developed: model 1 tested the relationship between the predictor

latent variables against each other and the criterion latent variable [student entrepreneurial Intent]. Model2 performed an interaction of each predictor latent variable and the criterion variable directly.

This study found that the institutional environment of the University had a higher impact on entrepreneurial Image of the learners but this was not the case with the learning latent variable; though respondents reported that the University course as an indicator of the learning latent variable had enhanced their entrepreneurial intent. Although previous studies have indicated that there is a gender difference in entrepreneurial intention, yet this study did not find any such difference. This affirms a research in social psychology which holds it that personal values are responsible for behaviour performance. The less impacting learning entrepreneurial environment will call for policy measures to foster creative learning methods. There is also a need to consider an equal emphasis on all the identified components that influence student entrepreneurial intention as pointed out by the SEI model developed through this study.

This study could not conduct a comparative analysis between private universities and public universities. It is a limitation future studies may address among others. Furthermore, though this study was done in a premier University with an international ranking, yet their environment and learning may need comparative studies with other international universities of the same magnitude. Nonetheless, in spite of these limitations, the study has been able to contextualise the findings and develop a model that is relevant for decision making in fostering entrepreneurial inclination.

Further research should focus on a comparative analysis on the various institutional entrepreneurial ecosystems impact on student entrepreneurial intention. This study should be conducted in the entire country with universities that lie within the same category. Further comparative studies with established institutional entrepreneurial ecosystems would be desirable so as to analyse the effective components in various institutional entrepreneurial ecosystems. Other recommended studies would need to explore the unexplored strategies necessary for the development of an institutional entrepreneurial ecosystem.

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Today marks another day in an academic history of the writer. The destiny of a long journey can best be acknowledged after some reflections. Life is punctuated with episodes of all sorts. Some unspeakable, some incomprehensible and even some incredible. Should readers find this page wet, let them not be alarmed; a mist of gratefulness led to some tear shedding. In an unspeakable appreciation, I tearfully wrote. Let the readers read this slowly as I present a thing or two in the history blackboard.

It was once in primary school that one of my teachers, Mr. Erionu Erinayo, seemed to prophetically speak, when he remarked that *'this one will go very far'*. As to whether he commented then due to my academic successes or had an intuition, I don't know. Certainly I had received a number of awards that would often be given to the best academic performer each term. I acknowledge those small days today with gratitude unspeakable. To those who saw my ability and gave me motivation at a time no guarantees were available....I say thank you!

The time and tide blew at my academic endeavours when security concerns overwhelmed us as our territory became a battle-field in Uganda. Life became dear than any human achievement. It was a fragile item that nothing else could hold except God. It would be irresponsible of me if I failed to register my deepest gratefulness to my life guardian, even God, for all His unspeakable grace that has seen me write this today. Through it all, I learnt to depend upon His grace.

I am yet to see a father or a mother like the one I was blessed with. I remember when circumstances lowered their living standards, how they conducted themselves sacrificially to get us education. At one time I remember how my father sold his most expensive shoes that had been given to him as a gift so as to put us through school. On another occasion, my mother, sold her lovely apparel to fund our schooling. I wish they were here to acknowledge my gratefulness. They never spared a dime! My inexpressible thanks are forever indebted to their sacrificial gestures. Their seed of kindness and hard work lives on and glows abroad.

The perspiration is now replaced with inspiration at the conclusion of this project. I am inspired today to help others realise their dreams in spite of all kind of odds. The

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.0 INTRODUCTION**

This chapter embodies the significance of entrepreneurship, the research problem, justification thereof, the aims and objectives as well as the hypotheses and assumptions. The institutional and learning impact on student entrepreneurial inclination at the University of KwaZulu Natal (UKZN) is a subject under study. It is also important to state from the onset that the word ‘institutional’ used in this study is used with the understanding of a university institution or an educational institution as such and so is learning. It is understood that some businesses have a greater market impact, with higher growth levels coupled with higher job creation possibilities due to the available ecosystem (Davidsson, 2004). This may also be applicable in terms of a University or institutional environment and learning in inclining learners towards becoming entrepreneurial. Moreover entrepreneurship has been recognised as a product which depends on the interplay of institutional and individual variables (ACs and Szerb, 2010). Finally this chapter also lays a foundation for the subsequent sections of the study and ends with a conclusion.

### **1.1 Significance of Entrepreneurship**

The Global Entrepreneurship Monitoring (GEM) Organisation has noted that there are 400 million entrepreneurs globally and hence interest in entrepreneurship and entrepreneurship education is rising among the academia (GEM 2011). An encouragement of an entrepreneurial mindset, behaviour and activities is the pedagogical procedure leading to an entrepreneurship education (Binks, 2005:2). It is of note to recognise the holistic approach exhibited by Binks towards entrepreneurship which includes mind-sets and behavioural encouragement towards entrepreneurship. The behaviour is well pointed out in this understanding, which does include venture creation. Nonetheless, if venture creation becomes the only and mainly notable aspect of entrepreneurship, it becomes less desirable on the whole, since it would get confined to a particular group of those simply in need of business start-ups!

Interest in entrepreneurship has been recorded by various authors. The phenomenal interest towards entrepreneurship by academia, students and policy makers is in various

writings. This has been stipulated by authors such as Bechard and Toulouse (1998); Schaper and Volery (2004) Matlay and Westhead (2005). In the development of any nation, entrepreneurship has been considered as the best strategy in economic development. In the period of globalization, characterized by high competitiveness, there lies one main tool at the hand of nations-entrepreneurship (Schaper and Volery 2004 Venkatachalam and Wafiq 2005). Notable in various writings is the fact that entrepreneurship brings about economic development as well as social growth. The following authors have attributed the popularity of entrepreneurship to its positive influence on wealth and job creation; Postigo and Tamborini (2002), Gurol and Atsan (2006).

## **1.2 Research Problem**

The level of the Total Entrepreneurship Activity of S.Africa has been noted as low by the Global Entrepreneurship Monitor (GEM) survey. In 2002, GEM (2002) found that the entrepreneurial effort was declining in South Africa. This was supported by the fact that in 2001, South Africa's total entrepreneurial activity was recorded at 9.5%; in 2002 it dropped down to 6.5% and in 2003 it hit a second low of 4.3%. South Africa's entrepreneurial activity worsened over the 3 year period of all the countries that were under investigation globally. According to the GEM (2006) South African report, the low level of entrepreneurial activity was partly attributed to the low proportion of South Africans that have completed tertiary studies. Following a report by GEM (2012), it can be deduced that although entrepreneurship career was desirable in South Africa as was nearly the rest of Sub Saharan Africa at 74%, yet the fear of failure made South Africa the 4<sup>th</sup> fearful country and ranked them next to the turbulent Ethiopia on average in the Sub Saharan Africa study in venture start-up aspiration. In addition to this, a survey done by Brijlal (2011) on the knowledge and perception of final year students in University Of Western Cape, South Africa, revealed that less than a half of the students showed interest in becoming entrepreneurs. The findings of this study were on the background that in spite of the knowledge of entrepreneurship by learners, the intent was lacking a great deal.

A survey done by the Global University Entrepreneurial Spirit Students' Survey (GUESS) originally developed in St Gallen University in Switzerland for purposes of

examining, explaining and discussing students' behaviour and intentions in starting entrepreneurial activities across countries has also unfavourable news for the South African students. The GUESS survey (2011) as depicted in the table below shows a sharp decline in the intention for venture creation for South African Students as compared to international students:

Table 1.1: *Student entrepreneurial intention.*

Intention to start a new Business	South African Sample 2011	South African Sample 2008/9	Change	International Sample 2011	International Sample 2008/9	Change
Directly after Graduation	12.6%	25.0%	-12.4%	11.0%	15.4%	-4.7%
Five Years After Graduation.	43.8%	61.3%	-17.5%	34.4%	42.2%	-7.8%

Source: **Guess (2011:82)**

Niemen (2001:445) cited in the Global University Entrepreneurial Spirit Students' (GUESS) Survey report (2011) pointed out entrepreneurship education incoherency following the confusion that is manifested between the training in small business and that of entrepreneurship education. Also the survey report by GUESS 2008/9, noted that although South African students so much valued entrepreneurship, they were not aware of the available provisions that were already available in their universities such as start-up coaching and start up finance or even had awareness of availability of contacts at campus for general questions. The role that institutional environment as well as learning is therefore essential in understanding how intent can be developed in learning environment as this thesis attempts to underscore. The fears expressed above can be curtailed by a necessary learning as well as institutional environment afforded by institutions. The findings of this study therefore help validate this important expectation in as far as potential entrepreneurs are concerned.

South Africa according to Macgregor (2007) is credited with 3 of her universities in the world top 500 universities, namely the University of Cape Town (UCT); The University of Witwatersrand (WITS) and the University of KwaZulu – Natal (UKZN). In spite of this status, the South African education system is challenged with high student dropout

rates, a high rate of graduate unemployment and an absence of entrepreneurial intent. The Human Sciences Research Council (HRSC) in the student Pathways study revealed that there is a 40% student drop out at university in their first year and that only 15% complete their studies in the specified time in South African universities (Macgregor 2007).

The global economic slowdown now in its fifth year since the global financial crises has had spill over effects in the employment arena records ILO (2013). Uncertainty weighing down heavily on the economic global outlook, has chiefly been realised as countries constrain themselves by cutting public spending, exercise protectionist measures with temporary benefits and use beggar my neighbour policies through tariffs and wage cuts. Moreover, it is now noted that the policy incoherence in different country contexts has led to heightened uncertainty, consequently preventing stronger investment and faster job creation (ILO 2013). This therefore calls for entrepreneurial mind sets to be developed and there is no better environment than the institutional environment and its learning in this important endeavour of intentions. The unbecoming circumstances in the economic arena can best be met through the development of potential entrepreneurs by an enriched environment and learning in institutions. The students in a way become the potential entrepreneurs in this case.

The recent global events point the need to underscore the preparedness at every level to handle economic challenges that may be unpredictable. In the global financial crises that began in 2008 with a 30 million job loss, it's worth noting that the present global job growth rate of 1 percent or less a year is inevitably insufficient to counter the job needs. Moreover the situation before the global financial crises was no better. In desperate need for an alternative option, workers in their millions have often taken jobs that are part time. Two out of five worldwide live in poverty threshold of \$2 per person per day. The unemployment among the youth is two to three times the adult rate and hovers just below 80 million! Protests that are job related have already affected over 25 countries. The global economic slowdown since mid-2011 could make the situation go worse, commented ILO director general Juan Somavia in his November statement (Somavia 2011). Entrepreneurship is the alternative to help cope with this situation as a remedy to unemployment and economic crises. Entrepreneurship is particularly important as it secures employment in national economies (Picot&Dupuy,1998:110-139). Somavia

(2011) notes that the world employment outlook is dire given that the current unemployment which stands at 200 million is currently rising.

Nafhuko and Muya (2010) have called for urgent attention in regard to vulnerable societies in Africa, including the unemployed graduates from tertiary and university levels as well as school leavers. They further point out that 21% of the youth in Africa are unemployed as compared to the world average of 14.4%. The global youth unemployment is certainly bleak following the youth unemployment trends globally as pointed out by the International Labour Organisation (ILO 2013). In their submission, young people are three times more unlikely than adults to be employed and unfortunately the upward trend being presently experienced hits at them more strongly than adults. Following the global employment trends for youth 2013 (ILO 2013) it can be deduced that although there was a decrease in youth global unemployment in 2009 to 2011 from 12.7% to 12.3% respectively; yet again it increased from 12.4% in 2012 to 12.6% in 2013. However, the pre crises level in 2007 was 11.5% and this supports the understanding that the trend has been growing than otherwise. Presently the projected global youth unemployment for 2018 is 12.8%, as of now the global youth unemployment stands at 73.4 million for 2013, which represents an increase of 3.5 million since 1997 and a 0.8 million number since 2011. The observation is that there was a decrease in global youth employment to population ratio to 42.3% in 2013 as compared to 44.8% in 2007. Nonetheless, the projected youth employment-to-population ratio is again projected to rise to 41.4% in 2018. However, the decrease observed in 2007 and 2013, in spite of the fact that it is marginal is credited to the rising enrolment in education. The word dire may then be rightfully used to describe the state of the youth employment expectation following the dismal hope of employment solving the dilemma of survival of expected graduates. Education in this instance is marginally helping in reduction of unemployment levels, leaving the question of what is the contingency plan? It is at this point that entrepreneurship inevitably becomes the remedy as more youth enter into uncertain career future after their studies. It goes without doubt that the environment as well as the learning can have or should have an impact that goes a long way in inclining one towards an entrepreneurial mind-set, at private as well as organisational level.

More or over, it should be noted that entrepreneurial flair is not necessarily vital for those starting business only, but can be source for organisational sustainability as it encourages innovation, pursuit seeking and creativity. Organisations that employ are likely to grow if there is an entrepreneurial mind-set among workers, which gives an opportunity for company security as well as job security. Most of the work above has delved so much on the start-up at an individual level but it should be noted that there are also company start-ups that keep the company vibrant in a competitive market environment. In a study where 142 countries participated on the employee entrepreneurial activity in companies, South Africa ranked as one of the lowest with a 0.32% ranking (Bosma et al 2012). Following the understanding of creativity as an entrepreneurial effort, the sustainability of organisations in difficult economic times likely to depend on an entrepreneurial mind-sets of employees. Most organisations depend on higher education institutions to cater for their training needs; therefore understanding whether institutional and learning environment impact on learners is vitally significant in this context as well.

The security of wage employment is no longer guaranteed to graduates after completing their studies argues Brown (1999). This school of thought is augmented by the writings of authors such as Kamau-Maina (2006). The role of the university environment is of significance in as far as entrepreneurial inclination of its learners is concerned.

Institutions provide the pedagogy that builds a dominant entrepreneurial ecosystem within the institution itself (Engel and Charron, 2006). Herrington, Kew, J. and Kew, P., (2011) define entrepreneurial ecosystem as the entrepreneurial facilities, resources, people and atmosphere necessary to help establish entrepreneurship. Major institutions such as University of KwaZulu-Natal (UKZN) has held partnerships with industry and academia in entrepreneurial events, not least among which has been the hosting of the 19<sup>th</sup> International conference on SMEs, and the largest ever week-end start up workshop in the half of 2013.

Frank and Luthje (2004) assert that entrepreneurship education has been noted for its role in fostering an entrepreneurial inclination in students. Similarly, Keat, Selvarajah and Meyer (2011) in a study on Malaysian university students confirmed a hypothesis that the university role in promoting entrepreneurship as well as the content and learning increased the likelihood of students becoming entrepreneurially minded. In this empirical

study, it was also found that students with self-employed mothers were entrepreneurially inclined as opposed to earlier studies that affirmed an influence of self-employed fathers in entrepreneurial inclination of students (Dunn 2004; Auken, Stephens et al 2006) as well as Keat et al (2011). Also, a study on student inclination to entrepreneurship in Western Cape University in South Africa showed that less than a half of the respondents were interested in becoming entrepreneurs (Brijlal, 2011).

The state of entrepreneurship education in the South African Universities is unexplored. According to the GEM report, the two elements pointed out as constraints are education and entrepreneurship in particular (Herrington, Kew, J., Kew, P., & Monitor, 2009). Authors such as Ijeoma and Ndedi (2008) have argued that universities in South Africa have not fostered job creation through entrepreneurship education. This statement is in harmony with what Mitchell and Co (2006) pointed out regarding the fact that the universities in South Africa have weak linkages to government besides poor commitment to outreaches. This is in spite of the fact that no less than 60% of the universities are offering some entrepreneurship courses in the country. This also is further augmented by the GEM (2010) observation that only 12% of the South African adult population has received entrepreneurship training compared to an average of 20% associated to developing economies.

It is worth noting that the research on entrepreneurship has been noted to be extensively done with special focus in Europe and North America and less is available on the African Universities (Bruton, Ahlstrom, & Obloj, 2008). This is evidenced by the fact that the leading entrepreneurship journals have scarcity of articles relating to entrepreneurship research in Latin America, Middle East and Africa, according to the entrepreneurship research review conducted by Bruton et al. (2008).

Though a lot of research has been done on entrepreneurs, so much attention has concentrated on existing and pre-existing entrepreneurs rather than potential entrepreneurs- students (Autio, Keeley, Klofsten, Ulfdtedt, 1997; Krueger, 1993; Davidsson, 1995; Reitan, 1997). It is in the process of focusing on existing ventures that a great pool of potential entrepreneurs is missed (Rasli, Khan, Malekifar and Jabeen, 2013). This thesis therefore undertook the task of investigating the impact of institutional



environment and learning among others in entrepreneurial inclination/intention of learners at a premier university of African scholarship, the University of KwaZulu-Natal.

### **1.3 Justification of the Study**

Entrepreneurship has been widely written on and spurs reflective moments for the author. To understand the reason/s why in spite of all the information on the subject, there still remains a wide gap between those that take up the subject seriously and those that do not grips the writer with a view to an inquiry of this nature. UKZN has enriched its entrepreneurial environment through its contact with industry players, hosting of entrepreneurial events, not least among which has been the largest ever start-up weekend supported by financial institutions like ABSA and Sigma in October 2014. If indeed institutional environment is vitally important, can it be verified in one of the well-known institutions such as UKZN, which is also one of the top world 500 ranking universities?

Another aspect that motivated the author is the global trend of interest that the subject of entrepreneurship has evoked both in academic and governmental institutions. Presently the United Nations has one of its millennium development goals as Poverty eradication and further offers help to any effort by nations to eradicate poverty (UN 2000). In the Millennium declaration adopted by the general assembly, Part 111 (11) the assembly categorically stated: “We will spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty, to which more than a billion of them are currently subjected. We are committed to making the right to development a reality for everyone and to freeing the entire human race from want.

“ 12. We resolve therefore to *create an environment* – at the national and global levels alike – which is conducive to development and to the elimination of poverty.

15. To grant more generous development assistance, especially to countries that are genuinely making an effort to apply their resources to poverty reduction.” (UN 2000)

In the year 2000, 189 nations made a promise to free people from multiple deprivations and extreme poverty. It is these declarations that turned out to be the eight millennium development goals. The millennium development goals developed by the nations were:

1. Eradication of extreme poverty and hunger

2. Achieve universal primary education
3. Promote gender equality and women empowerment
4. Reduce child mortality rate
5. Improve maternal health
6. Combat HIV-Aids, Malaria and other diseases
7. Ensure environmental sustainability
8. Develop global partnership for development. (UN 2000)

While considering the millennium development goals above, it can be noted that the first goal is about the eradication of poverty and hunger. Entrepreneurship gives nations a potential for the achievement of this goal through capacitating the nationals of both rich and poor countries. It can also be underscored that the declaration of the assembly intends benefitting countries that devote their resources in poverty eradication as noted in Part 111(11) point 15 of the declaration. One of the challenges that entrepreneurship faces is the acquisition of resources for new venture success. This therefore is being remedied by the declaration as noted in this particular presentation.

Every millennium development goal ranging from goal 1 can only be addressed by a viably healthy economy and welfare of the nationals in each country. The entrepreneurial effort is the other attempt necessary for the achievement of this aspiration/s besides job creation which is not so much reputed for wealth creation as compared to entrepreneurship.

Owing to the importance of entrepreneurship in contributing to economic growth and development, the Malaysian government in pursuit of “a developed nation” by 2020 is stimulating entrepreneurial activity to foster economic growth. In the hope of raising 5% entrepreneurs from among graduates, the government plans to make entrepreneurship courses compulsory for all public universities.

There would not be any other alternative to wealth creation than entrepreneurship and the readiness or likely readiness of students who are going to be part and parcel of solutions to the province and nation of South Africa. By conducting this study, awareness is

thereby created on the role of institutional environment and learning in stimulating entrepreneurial intents of learners. As has already been understood, intent precedes action in venture creation. The stimulus for intent today is the forerunner for an entrepreneurial activity of the nation. Entrepreneurship as the literature in this study affirms is a source of wealth creation, let alone poverty eradication and job creation.

At another level the study is based in an area that is termed as the economic hub of Africa. As to whether the institutional environment is comparable to a hot spot for entrepreneurial aspiration/s remains a desirable adventure to the author. The very contextualisation of the institutional environment and learning intrigues the writer at this stage.

#### **1.4 Significance of the Study**

This study hopes to create awareness for the contextualization of learning and institutional environment in the realization of students' inclination towards entrepreneurship. An institutional impact is thus assessed through this kind of study, hence contributing towards the knowledge emphasis on institutional environment for policy makers.

It is within the confines of this study to verify the expectation of educators in as far as the role both the learning as well institutional environment have played in the lives of learners and may thus be useful for necessary modification where need be. In this understanding the study contributes to further appreciation of institutional role in entrepreneurial aspirations of stakeholders in a formal setting with specific reference to one of the 500 world top ranked university based in African setting.

The University of KwaZulu Natal is a premier university and as such its choice for this research shall have implications for the province and the country. Lessons discovered in the study may be copied by other universities/institutions and the upcoming institutions shall benefit as they emulate the strides shown in a premier university.

Given the fact that the study is conducted in an institution which is ranked among the World top 500 universities, the findings may be helpful to other stakeholders especially in the academia as well as industrial spheres.

## **1.5 Aim**

The research aims to investigate the impact of institutional environment and learning on student inclination to entrepreneurship along other factors.

## **1.6 Objectives:**

- ❖ To investigate the impact of institutional environment in developing entrepreneurial inclination of students.
- ❖ To investigate whether learning stimulates students towards entrepreneurship.
- ❖ Analyse a relationship between role models and entrepreneurial inclination.
- ❖ To investigate whether entrepreneurial image increases entrepreneurial inclination/intention.
- ❖ To assess whether demographic variables such as gender, race and parental factors have any relationship with entrepreneurial inclination.
- ❖ To propose a model for the contextualization of an institutional environment and entrepreneurial inclination.

## **1.7 Hypotheses**

*Hypothesis 1:* The University Of KwaZulu - Natal (UKZN) plays a role in stimulating the entrepreneurial intents of the learners.

*Hypothesis 2:* The entrepreneurial inclination of students is likely to be increased by the nature of learning at the University.

*Hypothesis 3:* The availability of entrepreneurial role models increases the entrepreneurial inclination of students.

*Hypothesis 4:* Entrepreneurial inclination in students is stronger for: Gender, Father's occupation and Mother's occupation.

## **1.8 Assumptions (Postulates)**

The following assumptions have been considered for the successful completion of this study:

- That all respondents shall participate actively in responding to the questions.
- That finances shall be available for coordinating the research activities deemed important for the completion of the study.
- That there will be no circumstances that will impede the progress of the study.

- That there will be corporation accorded from every responsible source for the completion of the study.

## **1.9 Dissertation Structure**

This study shall have the following outlook in its presentation and layout:

**Title page:** this page shall depict the title of the study, the researcher and the supervisor as well as the year of the study. This therefore provides an identification phase for the work presented.

**Abstract:** A snapshot of the findings of the study shall be featured in this section as well as other key issues that the study entails. The abstract plays the role of giving the reader the description of the work in a nutshell before attempting to read the work.

**Table of Contents:** The contents that comprise the full thesis shall be featured in this section. Each of the contents gives the opportunity for the reader to look forward to the layout that is already in place.

**Acknowledgements:** Gratitude will be registered to individuals as well as institutions in this section. Key individuals will be noted by name. This will be one way; the researcher will acknowledge his indebtedness to the timely kindness received.

**Table of Figures:** Any table of figure used in the study will be shown in this section. The table of figures is thus used in bringing to view the location of the figures in the thesis.

**Chapter 1:** The chapter provides the background on the ongoing issues on entrepreneurship in relation, the entrepreneurial ecosystem, the justification of the study, its significance, the aim and objectives, the hypothesis guiding the study as well as the assumptions for the completion of the study. This chapter concludes and introduces the rest of the study.

**Chapter 2: Literature Review:** This chapter lays down entrepreneurship concepts and debates, perspectives as well as the challenges. The chapter plays an important role of navigating the literature that surrounds the entrepreneurship atmosphere of the study. It is also within this area that the hypotheses are delved into, thus guiding the study.

Chapter 3: Literature Review on Entrepreneurial Ecosystems, its pillars and the guiding theories. The use of the entrepreneurial ecosystem enables the light on an entrepreneurial environment to be understood and more so the theories that guided this study are thus illuminated.

Chapter 4: Methodology: In this section of the study, attempts are devoted to the research paradigms available, the rationale for the chosen research paradigm, the population involved in the study, the statistical instruments employed and the nature of analysis applicable to the study. It is thus through this chapter that chosen paradigms for this study are clearly indicated as well as statistical analysis used in the study. The section shall also address itself to the problem statement and the limitations of the study.

Chapter 5: Presentation of Results: Results of the study are presented and analysed in this section following the process undertaken in the previous chapter. The results that are aligned to the objective of the study are thus presented in the way they are and hence permitting the reader an opportunity to look into the actual findings as per the field study.

Chapter 6: Discussion of Results: Results are analysed and discussed in relation to the literature of the study while mapping the way forward for the forth coming chapter. The discussion of the results therefore enables the work to fully reflect on the both the primary and secondary findings of the data.

Chapter 7: Conclusions and Recommendations. This also forms the final chapter of the study as it gives conclusions based on the literature findings as well the empirical field findings. Recommendations are provided in submission to the findings of the study. Areas for further study are pointed out in this section.

References: The details of all references used in the study will be appended to the study in this section. The Harvard method of referencing is employed in the presentation as well as bibliography.

## **1.10 Conclusion**

Chapter one has given the understanding for the study pointing out the benefits of entrepreneurship to institutions, society and the learner. This section also underscored the aim, objectives, significance, hypotheses and assumptions that enables this study to be

realised. The South African Universities entrepreneurial environment has not been explored, though literature has pointed the role of university environment as well as learning in entrepreneurial intent development. This thesis therefore calls for the need of understanding whether the institutional and learning environments of a premier University of African scholarship such as the University of KwaZulu-Natal impacts the entrepreneurial intents of her learners. Chapter two in the next section shall address issues on entrepreneurship concepts, types of entrepreneurship, University and entrepreneurship and the debates and perspectives on entrepreneurship.

## **CHAPTER TWO**

### **LITERATURE REVIEW ON ENTREPRENEURIAL CONCEPTIONS AND HYPOTHESES.**

#### **2.1 Introduction**

This study investigates the institutional and learning impact of the University of KwaZulu Natal on student entrepreneurial inclination or intention. Scholarly articles obtained from sources such as google scholar, ebso and other data bases were used besides library books in the university. This section addresses the entrepreneurial concepts in regard to issues in the context of definitions, differentiation of small business and an entrepreneurial one, an entrepreneurial economy, entrepreneurial success factors, the types of entrepreneurs, the entrepreneurial leadership learning and concludes with globalisation and the entrepreneur with the attendant challenges. The debate in terms of whether there are necessity based and opportunity based entrepreneurs is attended to in this section. The basis of the section is to introduce perceptions of entrepreneurship identity under the above guidelines in order to enhance and appreciate the setting of the subject to which an individual may be inclined to at any given level. Boote and Beile (2005) have noted that the less focus given on literature review is the cause of weak research as researchers focus on the methodological aspects. The oversight on literature review is based on the narrow concept of the role literature plays in research. It is imperative that the researcher understands what has been written on the subject before engaging on a productive discourse, the authors postulate. One of the challenges an individual is faced with in an academic writing is that of a diverse audience that may not share the commonalities of the subject understanding (Boote and Goudelli, 2002). It is for this reason, that the author endeavours to explain the differences and definitions of entrepreneurship as well as the types of entrepreneurs along with the spheres of entrepreneurial landscapes involved. This part therefore deals with the literature review subdivided into two sections, with the present section dealing with the perceptual understanding and the next section-chapter three, dealing with the applicability of the ecosystems, its pillars, learning and intention theories among others.



## **2.2 OPERATIONALISATION OF KEY CONCEPTS**

The following concepts below underpin the study.

### **2.2.1 Defining entrepreneurship**

Bygrave and Hofer (1991:5) have asserted that a good science begins with good definitions. It is with the understanding that the legitimacy of a research field is built by differentiating itself from neighbouring fields of study that a research field welds its credibility. The boundaries of a research field must be defined and however fuzzy they are, its ability to assert its presence shall then be realised in the long run. Entrepreneurship as an area of study has had a fair share in definition attempts with no singularly accepted definition by its own right. Definitions have been drawn from various perceptions even as noted by authors below:

Nieman, Hough and Nieuwenhuizen (2008:9) consider that entrepreneurial activities are motivated by profit and these activities lead to emergence and growth of new businesses. An entrepreneur according to the above authors is defined as someone who sights an opportunity, gathers resources, creates and grows a business venture in order to meet these needs. If he /she succeeds, he or she then gets rewarded with profit for the risk previously borne.

Bruyat and Julien (2000:167) have considered that although the debate in defining entrepreneurship is not over, yet the economic foundations laid by Turgot, Say, Cantillon and Schumpeter have been dominant over the several periods. According to Cantillon an entrepreneur as someone who risks and legitimately appropriates any profits.

While Turgot and Say assert that an entrepreneur is different from a capitalist, who assumes the risk or uncertainty, but one who obtains and organises factors of production to create value.

However, Schumpeter stated that an entrepreneur does an innovative work and such work is achieved by allowing the liberal system to prevail beyond its contradictions. The definitions above have an economic foundation. In the defining characteristics below, inclusive is the element of opportunity identification which is intuitive, or rather psychological, thus taking another dimension by which an entrepreneur is viewed. Bruyat and Julien (2000:167-168) have postulated that a definition is not good by itself unless it

is a construct at the service of research questions which the scientific community is facing at a given time. It is at this point that it can be considered as 'transitory' or 'biodegradable'. It therefore becomes useful if it allows theories to be built upon which the phenomenon can be further explained for better quality predictions through empirical research and if it is shared with researchers in the field with a view to promoting knowledge.

Niemen and Bennett (2002:58) identified 7 defining features that identify entrepreneurship and an entrepreneur as follows:

*Identifying opportunity:* Signalling that there must be a real business opportunity.

*Innovation and creativity:* there is something new and different required. In this case, business required is not the usual one, since it involves something that has not been in existence.

*Getting of resources:* Among the needed items are capital, labour and operating equipment and these needs to be found.

*The creation and growing of a venture:* Herein the conversion of an existing business or starting of a new one is required. The growing or creation of a new venture is therefore characteristic in defining entrepreneurship.

*Taking of risk:* The person starting the business is ready to bear both the personal and financial risks involved or associated with the venture.

*Getting rewarded:* The person will look forward to being rewarded as part of a free market system phenomenon. The reward is likely to be in form of a profit or increase in the value of business.

*Business Management:* A successful venture will require that planning, organising, leadership and control of the business functions shall be part of the founder's effort.

Whereas, Bannock, Baxter and Davis (2003:4-5) did define the term entrepreneur as an economic agent, perceiving market opportunities and proceeds to assemble factors of production in exploiting them in the organisation, the aspect of venture creation and business management is left out in this case. So far the foregone definitions point out the

role of opportunity pursuit by the individual considered as an entrepreneur besides resource management.

On the other hand, Venter, Urban and Rwigema (2011:5) point to the fact that entrepreneurship has often been linked to new venture creation which in itself is a process and so have a number of authors as depicted below:

Bateman & Snell (1996:208) denote entrepreneurship as an act leading to the formation of new organisations and so does Bartol and Martin (1998:672) and Dollinger (1995:7).

In further consideration of understanding entrepreneurship, it is notable that opportunity pursuit and new venture creation have been emphasised by various authors. Hisrich & Peters (1998:9) likewise emphasise a similar perspective to that of Venter, Urban and Rwigema (2011) where creation of something new, having devoted time and effort while bearing the financial, psychic and social risks in return for monetary, personal and independence as satisfaction is a defining attribute of entrepreneurship.

Entrepreneurship is a subject that encompasses aspects of opportunity pursuit as well as innovation. Stevenson and Jarillo (1990) consider the ability and willingness to detect and pursue an opportunity as a characteristic of entrepreneurship. The emphasis notable in this definition involves the psychological aspect 'willingness', the issue at hand is the understanding derived in observing the conduct of an entrepreneur. Entrepreneurship research has a richness of approaches so that the whole is realised. Low and MacMillan (1998) who have also defined entrepreneurship as "creation of a new enterprise" contend that there are macro and micro aspects of entrepreneurship that need to be embraced right from individual to institutional level. The aspects involved in researching on entrepreneurship are complimentary to each other.

Bob Reiss, who is successful entrepreneur and author, states: "Entrepreneurship is the recognition and pursuit of opportunity without regard to the resources you currently control, with confidence that you can succeed, with the flexibility to change course as necessary, and with the will to rebound from setbacks." (Bob, Jeffrey, and [Stevenson](#), 2000)

The above definition also relates to the understanding of an entrepreneur by Nieuwenhuizen, Le Roux and Jacobs (1995:1) who consider an entrepreneur as someone

who is always on a look out for new opportunities in an existing business or in creating a new one.

Venter, Urban and Rwigema (2008), however, link entrepreneurship to the protestant work ethic and the spirit of capitalism and in the process turn attention to innovation. The emphasis on hard work and shunning of self-enjoyment is said to have become a motivation for entrepreneurial activity in America. This then made an entrepreneur to be an innovator.

Others see an entrepreneur from a more managerial point of view, Marriotti and Glacklin (2012) regard an entrepreneur as a person who organises and manages business with the readiness to encounter risk for the sake of potential return. The return can be immense and multifaceted but the issue of risk though undesirable is an essential element of an entrepreneurial venture.

Van Aardt, Hewitt, Bendeman, Bezuidenhout, Rensburg, Bank and Visser (2011) consider that the ability of an entrepreneur to manage and assume risk as a definition to entrepreneurial role is changing to long term continuity commitment than a single act or acts to fulfil a particular need.

The definitions of entrepreneurship do vary a great deal and there has been a concern in the lack of a generally acceptable definition of entrepreneurship as pointed out by Sharma & Chrisma (1999) cited in Jennings & Lumpkin, (1989); Stopford & Baden-Fuller, (1994); Wortman, (1987); Zahra, (1991) and Aldrich (2011) who categorised the various definitions into four groupings:

1. The setting up of high-capitalisation firms and high-growth organisations (as opposed to low-growth and low-capitalisation 'lifestyle' businesses);
2. The use of the Schumpeterian tradition in innovation and innovativeness resulting in new markets and products.
3. The understanding based on the tradition of Kirzner in opportunity recognition.
4. Founding of or creating new organisations.

The contention by Aldrich is that all the above categories of definitions confine entrepreneurship to only one aspect of its nature and could as well affect the policy necessary for entrepreneurial support. These aspects indeed affect the impact of decisions, for example, if policy makers consider high growth firms to be entrepreneurial, then support will be limited to businesses perceived to be so, though there is no guarantee that high growth indicates innovation. Innovation is one of the important aspects of entrepreneurship. A more comprehensive definition seems to emanate from the European Commission. The nature and role of entrepreneurship is well encapsulated in the European Commission report (2008) on the definition of entrepreneurship which states thus: *‘Entrepreneurship refers to an individual’s ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day to day lives at home and in society, makes employees aware of the context of their work and better able to seize opportunities, and provide opportunities for entrepreneurs establishing a social or commercial activity.* ‘The above definition dispels the often misunderstood notion that limits entrepreneurship to simply creation of a new business venture. This then brings to light the role of entrepreneurship as a purposive factor which engenders a behaviour that embraces analytical problem solving while networking in any given context. The spin offs can be evidently seen as comprehensive and include wealth creation at an individual, community, national and international levels.

### **2.2.2 Small Business and Entrepreneurial Venture**

The need to understand the difference between small business and entrepreneurial ventures is captured by Nieman, Hough and Nieuwenhuizen (2008:10), who argue that though both are important for the development of the economy, yet there is a need to distinguish the two. The pursuit and creation of new opportunities is not the same in each case, supports Wickham (2001) and this presents different challenges to policy makers. Whereas both need entrepreneurial start up, yet unlike entrepreneurial ventures, small business ventures stabilise at a certain stage and then end up growing with inflation. Small business owners have also been noted for the personal goals and security aspiration in furthering their business. Examples of small business ownership can be noted in characteristics of artisans, manager, craftsman, and administration and family businesses among others (Watson 2001:50). In understanding the difference, Carland J.W., Hoy,

Boulton., & Carland, J.C (1984:358) assert that small business can be generally termed as any business owned and operated independently, and yet it is not dominant in its field of speciality and at the same time does not engage in new marketing and innovative practices.

It is equally important to record the defining characteristics of the South African small business in the National Small Business Act, Act 102, of 1996. The definition provided covers all sectors of the economy and covers all types of enterprises while focusing mainly on two sections: the qualitative and quantitative criteria.

The qualitative criterion does relate to the ownership structure of the business and it does consist of the following:

It has to be a distinct and separate business entity.

It includes any subsidiaries and branches when measuring the size.

It is not part of a group of companies.

Has to be managed by the owners.

It has to have a natural person in form of sole proprietorship, partnership and yet at the same time it can be a legal person, such as a close corporation or a company.

The quantitative criterion does categorise businesses into very small, small and medium in accordance with the different sectors of the economy. The guidelines dealing with this area as are follows:

The total asset value which is calculated in exclusion of fixed asset value.

The total number of fulltime employees.

The annual total turnover.

The small businesses are said to support the lifestyle of the owner and therefore the issue of security and autonomy are much more emphasised. Growth as an objective is not the primary goal of small businesses. It is also considered that if the earning is a smaller even when it could be lower than when they were employees, this may be satisfactory to the business owners.

Entrepreneurial ventures on the other hand express a fundamental objective of profitability and growth. One of the objectives of an entrepreneur asserts Nieuwenhuizen, Machado, Jacobs, et al (2004:9) is the favourable difference between expenses and income referred to as profit. This is the cornerstone of a free market system. Wickham (2001:24) points out three characteristics that distinguish entrepreneurial ventures from small business as follows:

Entrepreneurial ventures set out themselves in *strategic objectives* regarding the target markets, market share, market position and market development. Small business often is often limited to profit target, sales and survival. It is for this reason that entrepreneurial ventures end up creating employment.

The second aspect by which entrepreneurial ventures are distinguished from small business is the area of *innovation*. Entrepreneurial ventures thrive on innovation. Innovation can be described as a new way of producing or the new product itself, it could as well be a in terms of the service offering, marketing or distribution and at times it can be a way in which the organisation is managed or structured. Small business is mainly involved in delivering an established product or service without the consideration of the above. It is equally important to note that innovation may be erroneously termed as the new product development only. However, the various aspects noted in this understanding are worth taking into account, namely that it can be innovation in terms of service offering, or marketing, or distribution let alone organisational management or structure. Organisational structure may for example limit or enhance the productivity and perhaps the profitability of an enterprise and so could other factors like service offering and distribution channels.

The third area characteristic of entrepreneurial ventures is the *growth potential*. These ventures have a potential for growth as compared to small business due to their innovative approaches. Not only does it create a niche in the market but it has the potential to create its own market. Venter, Urban and Rwigema (2011) consider that traditional management is functionalist in design, whereas entrepreneurship entails a discovery of new skills for organisational development. The emphasis on growth and new venture creation become the fundamental principles of entrepreneurship. While the venture is still small, an entrepreneur plays the roles of management, however, after

attaining growth, professional managers are hired to deal with the functional design of the organisation. Gorman, Hanlon & King (1997) have stipulated that business entry is an entrepreneurial activity. Its scope does include the following:

The exploitation and detection of opportunity.

Tendency to exercise more creativity.

Developing self-reliance.

The bridging of gaps in functional areas.

The fostering of entrepreneurial behaviour.

Process-oriented and multidisciplinary approaches.

Projecting into the future and so plan in detail to a greater extent.

### **2.2.3 THE CONCEPT OF A MANAGED ECONOMY VS ENTREPRENEURIAL ECONOMY**

In underscoring this section, the understanding of an entrepreneurial economy Vis a Vis the managed economy is addressed. The background of entrepreneurial intentions is on the understanding that the prevailing environment is understood on the grounds that the present economy is either managed or entrepreneurial. The economy till the 80's was dominated by the capacity of capital and labour (Coarse 1937). The future of the world economy according to statistical evidence was supported by the existence of large scale enterprises in accordance to the procurement costs, predictable technological advances and consumer preferences (Caves, 1982; Tees, 1993; Brook and Evans 1983). The visibility of large scale giants in enterprise development associated with the managed economy pointed out the vulnerability of self-employment as well as the waning of small business enterprise. The managed economy known for its stability in managing capital, labour as well as exploitation of resources gave economic assurance for those with capital and higher levels of investment in developed and developing economies. Solow (1956; 1957) even developed models that supported the understanding that capital and labour were the main economic drivers for economic efficiency. Nonetheless, Romer (1986, 1990) and Lucas (1988) discovered that in explaining the long term growth, labour and capital were not the sufficient factors required. At a later development Jones (1995) and



Young (1998) agreed to this proposition. These discoveries led to the understanding that long term growth was embedded in endogenous growth models where knowledge was crucially significant. In the neoclassical theory, the development of technology was only seen as an exogenous factor. This also pointed out the failure of explaining long term labour productivity in an economy. The futility of small business had already received its unfavourable predictions from academia on the basis that further development in knowledge as a component of global competitiveness in global markets would unfavourably point to the futility of small business and self-employment. Knowledge which has been measured by research and development, patents and human capital would energise those in control of managed economies was the understanding. Conclusions by Chandler (1990) indicated that for one to compete globally, one had to be a big business. This was in conformity with the writings of Vernon (1970) whose prediction was that an increased globalisation would create a very hostile environment for small business. The firms that would be dominant would basically deal with the exports and would drive small business into a hiding. The number of global players would as well be reduced as the consolidation through mergers and acquisitions took place. Contrary to this understanding, small business has turned out to be an engine for economic development and growth. The sources of competitive advantage in a managed economy were the political, economic and social aspects of production with large scale production with mainly unskilled labour and capital, whereas the entrepreneurial economy is not dominated by capital but knowledge in a social, economic and political platform with the previously overlooked complementarities of entrepreneurial capital. (Audrestch and Thurick, 2001a; 2004)

An entrepreneurial economy as considered by some analysts is not limited to small business or its ownership. Its omnipresence provides a socio-economic mind-set that is pervasive and calls for the thinking aligned to opportunities than resources. The basis of an entrepreneurial economy is linked to the concept of absorbing uncertainty. Knowledge and ideas form its foundations much as investment may and it is not organisationally based but upon persons or individuals. Whereas the command or planned economy is based exploitation, the entrepreneurial economy is based on exploration. The thriving of an entrepreneurial economy is engendered on the development of an entrepreneurial culture rather than regulation.

The characteristic elements of a command economy have often included the hierarchical, bureaucratic structures in organisations. Organisations created varieties with predictability of future changes, life time employment was available and good relations were enjoyed with the gigantic trade unions. Although, business schools have been busy training for their learners for corporate organisations, it was discovered that an interesting data existed in favour of small business and its role in the economy. In the United States alone it had been observed that the average real GDP per firm had increased by nearly two-thirds from 1947-1989 as evidenced by the monetary value of \$ 150,000 - \$245,000, this in essence reflected on the fact that firms were growing larger and bigger and at the same time providing no room for small enterprises. Nonetheless, in a seven year period there was a sharp decline of no less than 14% leading to a value of \$210,000 (Brock and Evan 1989). The rising of the small firms was also noted, for example in 1976, the small firms had risen to a fifth of manufacturing sales in the United States, this growth continued and by 1986 it had risen to over a quarter ( Acs and Audretsch 1993). Further research to this effect is confirmed by a study in which the 2007 observations were taken into consideration using the per capita income and the innovation index and it was discovered that there was a strong U shape relations between entrepreneurship and economic development (Thurick and Reynolds 2007).

The dominant factors for the command economy as mentioned above are capital and labour. The mobile capital moves to where labour is considered cheaper and such labour can be in form of hardware. This is very well contrasted with the entrepreneurial economy where knowledge is the dominant production factor. Such knowledge isn't confined to technical and scientific categories. This kind of knowledge may include creativity, communication and emotional intelligence abilities. The knowledge thus acquired can lead to innovative activity. Entrepreneurial economy is known to thrive on change and strives towards it as opposed command economy that envisages continuity. In both economies, the aspect of innovation is observed, however, in a planned economy, it is gradual where as in entrepreneurial economy; it is radical with the creation of new start-ups. The aspect of new innovations can take the trend of going beyond the boundaries considered as core to the business or organisation even on the existing technological boundaries of an organisation.

Another aspect of an entrepreneurial economy is that high employment levels can be coupled with high wages as opposed with the managed economy where high employment results to lower wages, Small firms have been known for their productive ability as well as their ability to create employment (Erken, Donselaar and Thurik, 2008). It has also been observed that the creation of new enterprise has been associated with high wages. In the managed economy job creation by smaller firms is also associated with lower wages as opposed to an entrepreneurial economy where jobs and higher wages can be created together (Acs, Fritzo and Smith 2002; Scarpetta, Hemmings, Tressel and Woo 2002).

The observation of firms in both economies and the modalities of their operations is of note. For example the managed and entrepreneurial economies have characterising traits for firm operations as evidenced in either control vs. motivation, firm transaction vs. market exchange, the competition as well as corporation as opposed to complements, finally scale vs. flexibility. The former of the characteristics attributed to the managed economy and the latter to an entrepreneurial economy. Labour is considered as one of the factors of production that is replaceable under the managed economy and therefore it is under the command and control approach of management whereas in an entrepreneurial economy motivation of labour is necessary for the creation and implementation of ideas. For this reason, the nurturing of relationships becomes important.

Due to high uncertainty firms tend to be more efficient in entrepreneurial economies than in managed economies. The intra firm transactions costs increase through uncertainty and imperfect information points out Coase (1937) and Williamson (1975), however, Knight (1921) argues that intra firm transactions become efficient when low uncertainty is combined with information predictability and transparency. From the mid 70's, the economic landscape has become uncertain and unpredictable, this has led to a decrease in firm size and conglomerations (Carlsson 1989).

The pervasive linkages are presumed in a managed economy among firms, competition and collaboration therefore serve as substitutes in moments of uncertainty. In the entrepreneurial economy firm's independence is considered since each firm specialises in the market product. Substitution is the major motivation for the entrepreneurial economy, rather the competition is and cooperation is high. This is due to the fact that there are

many firms and the interface or competition is high. The managed economies curb their costs of production through the economies of scale that are associated with the large scale production associated with the predictable demands and consumer tastes and so the exploitation of resources serves the purpose, ( Chandler, 1977), however, under the entrepreneurial economy, the available option to lower cost of production is the flexibility (Teece 1993). The changing demand of products can best be addressed by flexibility.

The entrepreneurial economy has been known to thrive on turbulence, diversity, innovation, flexibility, linkages and clustering whereas the managed economy on the other hand is focused on specialisation, scale, homogeneity, predictability and stability. It is therefore no wonder that the entrepreneurial economic environment is occupied with heterogeneity, diversity and turbulence which is in contrast to the managed economy which has stability, homogeneity and specialisation. The homogeneous product demand in the managed economy leads to the stability in the context, along with that comes the issue of jobs and firms having a low turnover. This is very much unlike the entrepreneurial economy where the degree of turbulence is high. Though many firms are started each year, only a few survive (Nelson and Winter 1982).

Although a number of aspects seem to be shared in both the entrepreneurial economy and a managed economy, it should be understood that aspects such as the diversity and selection which are at the heart of change are done differently. For example Nelson and Winter (1982) argue that under managed economy, a firm may have research and development department, the research activities are scheduled to take place in the routinized firm environment and therefore the findings must conform to the accepted norm. This may not be compared to an entrepreneurial economy where managing such a venture leads to start-ups as opportunities emerge.

On the other hand, schools of thought have been advancing arguments related to the specialisation efforts of the managed economy as well as the diversity standpoint of the entrepreneurial economy. Specialisation in production has been associated not only to lower costs but also efficiency in firm production, whereas the dynamism of diversity in entrepreneurial economy has also been advocated to enable heterogeneity of ideas to be developed and thus a level of efficiency as this ideas turn into innovation through the

spill overs of opportunities. The lower transactions costs are therefore given up for the sake of knowledge spill overs of knowledge generated through diversity that is permitted.

In homogeneous settings associated with a managed economy, communication is simplified between individuals as opposed to the entrepreneurial economy where communication based on heterogeneity is costly. This leads to the understanding that the transaction costs are likely to be higher and the efficiency power is lower. Yet at the same time, the ideas generated in the heterogeneous settings associated with the entrepreneurial economy have a novelty and innovation unequalled in the homogenous setting of a managed economy (Acs, Fitzroy and Smith 2002).

The area of government policy is also an important area where the two economies are not same. In the managed economy, the government develops constraining other than enabling policies. This is much evidenced as in the case of public policy towards business, encapsulated in the three aspects of the antitrust policy dealing mainly with the competitive behaviour of entities, public ownership and regulation. The main government question directing policy in these contexts is how can the government help stop the abuse of market power by the players? The making of excessive profits and the abuse of market dominance feature the question policy of government in a managed economy. The guiding question for a government under the entrepreneurial economy is how can the government create and foster the viability of firms? The stimulation of the firms, with the intent of creating international opportunities, growth and employment are the guiding questions in this context. The targeting of the knowledge inputs is characteristic of entrepreneurial economies as opposed to managed economies where emphasis is on capital, land and labour. In the process the managed economies also face the situation where the government is grappling is the uncertain issues of what to produce, who to produce it and how it should be produced. This is likely to lead to wrong firms being targeted with government policy. The outputs are targeted in a managed economy. Entrepreneurial economy policy targets the inputs, such inputs will target the creation and commercialisation of knowledge. It is within this circumstance that the government becomes the facilitator for networks, leading to forms social innovation, incentivising firms and knowledge institutes and more so encouraging the flexibility of labour functionally.

The managed economy has been characterised with a national locus for its control in the policy function, at times, however, the policy making institutes may be localised at regional level, this contrasts with the entrepreneurial economy where the decentralisation of policy is operationalized at regional and local levels. The need to understand the characteristics that are region specific is said to motivate the decentralised policy approach for the entrepreneurial economy as well as the job creation prerogative and growth.

Another important factor differentiating the two economies is related to the financing policy. The policy in a managed economy is targeted at financing institutions providing mainly liquidity and investment to existing companies since there is certainty in the outputs and inputs in the economy. Firms and banks have a direct link in growing the economy; this is different in entrepreneurial economy where uncertainty calls for various modes of financing. This therefore calls for venture and informal capital markets to cater for high risk capital with the innovative firms. The homogeneous image of liquidity is said to lose its setting in this context as it gets coupled with advise, changing levels of involvement and knowledge taking place in form of business angels, incubators etc. (Audretsch, Grilo and Thurik 2007). The understanding of an entrepreneurial economy is an important aspect in the context of entrepreneurial flair development. It is possible that if this study doesn't find out that the institutional environment wasn't responsible for inclinating students towards entrepreneurship other factors such as the economy may be credited pending further study. This may act as external factor which doesn't get investigated at this moment but it also helps form the background of the subject matter of entrepreneurship as a subject under investigation.

### **2.3 REVIEW OF RELATED LITERATURE**

The section below deliberates the various literature regarding entrepreneurship aspects. The entrepreneurial debate is discussed as well as the entrepreneurial university and the related hypotheses to the study.

### 2.3.1 FACTORS FOR ENTREPRENEURIAL SUCCESS

According to Nieman, Hough and Nieuwenhuizen (2008) entrepreneurs ought to assess themselves in order to know their strengths and weaknesses. There are factors that emanate from the strengths of each entrepreneur that is successful. Without doubt these factors are necessary for the development of an entrepreneurial flair in learners, and it therefore follows that learning should inculcate the aspects noted below. Learning is of importance and without doubt it is significant in the development of entrepreneurial aspects in an individual/s.

One of the success factors is *innovation and creativity*. Application of new ideas can be considered as an innovative act. Bird (1989:56) postulates that creativity is used for problem identification, refining of ideas and accompanying remedies. Creativity and innovation have been associated with entrepreneurship as in a study done by Schein (1977:55), where three career anchors were identified. The anchors were associated with the roles of entrepreneur, manager and professor. The study that comprised 44 graduates was done before qualifications were attained and the study was repeated 3 -5 years later. The career anchor for managers was found to be competence and effectiveness, whereas professors exercised autonomy and time control but entrepreneurs as pointed out above had a career anchor of innovatively and creativity. Along with Bird (1989), Amabile (1996:36) considers creativity as idea generation that is good and useful for any problem solving. Problem solving in a unique manner is within the domain of entrepreneurial mind-set. It is through the generation and implementation of new ideas that the success of a business is realised in the long run. The very art of being open to new ideas and approaches, with a focus of doing things differently constitutes a creative success in itself. The art of taking initiative to solve problems in a unique manner is one of the defining elements of an effective entrepreneur (Nieman, Hough and Nieuwenhuizen, 2008). For innovation to take place in any enterprise, the preliminary is the creativity of an individual asserts Glynn (1996:1098). Unique products or services can be traced to the creative thinking of individual entrepreneurs; innovation then becomes a subsequent element in the utilisation of the creative ideas of individuals. If innovation is of importance, it then follows on the fact that with it, a forward progress is unachievable. This realisation is therefore of importance and for one to emphasise on it requires the same understanding which can be thus gained by being informed or learned. The

environment or the learning itself can thus constitute to such a development. Students are potential entrepreneurs and thus their learning environment is of significance in innovative entrepreneurial development. It for this reason that this study aims in understanding the institutional and learning impact on entrepreneurial intent of learners in a premier institution of learning.

Another success factor for effective entrepreneurs is *risk taking*. Risk need not be considered on financial terms only. Firstly risk can be in terms of risking the required incubation period of the idea, if the product or service is taken to the market much earlier than required with the aim of beating prospective competitors. Bird (1989:88) considers that hasty actions can involve risk, due to insufficient time in the incubation of the idea and consequently poor time calculation. By presenting the product or service to the market, the risk of competition is reduced, although, the conceptualisation of idea and its marketing may require a time healthy time difference.

It is argued that a relationship does exist between innovation and risk taking. The use of ideas that have been attained through creativity, requires risk taking efforts, in their implementation, even if it means financial loss points Nieman, Hough and Nieuwenhuizen, (2008:15).

Taking one advantageous action can lead to a risk of another, even if not deeply considered. This may be well typified by the example given by Nieman, Hough and Nieuwenhuizen, (2008:15) of reducing financial loss by introducing investors to an enterprise. The privileged information access by only specific individuals of the enterprise previously is likely lost. Effectively, there is loss of control to some extent.

Failure to take calculated risks in itself, could lead to being unsuccessful argues Boeyens (1989:80). He also notes one element associated with unsuccessful entrepreneurs namely taking up decisions impulsively that may be expensive without thinking through their decisions or not to take any risks at all! Hesitation to take risks hampers innovation.

Inspite of insecurity, Crous, Nortje' & Van der Merwe (1995:55) denote that entrepreneurs positively assess themselves on problem solving, ambiguity, conflict tolerance and stress and finally make calculated choices in the midst of factors. These calculated choices are calculated risks, when it is all said and done. Cox and Jennings



(1995:7) agree to the element of calculated risks as they consider an entrepreneur as a person who investigates the situation and as well calculates the probable results before they take action or decisions. Although reward is important, yet successful entrepreneurs, often avoid opportunities with a high probability that they may be unsuccessful (Osborne 1995:5). In making use of the opportunities thus identified, it is imperative that risk taking takes its course, without risk taking, new ideas are unlikely to be innovated. The potential entrepreneurs which are students in this case may be able to adapt risk taking abilities as they learn of stories associated to risk taking in the ecosystem of the university participants. It is therefore important to record that the environment thus helps in motivating such an environment related to aspects such as risk taking through the communication of entrepreneurs in their contact with the university learners.

The aspect of *leadership* plays a pivotal role in successful entrepreneurs. The role of interpersonal behaviour in the development of an enterprise is crucial to its success states Nieman, Hough and Nieuwenhuizen, (2008:16). Leadership entails various functions among which is the ability to be amenable to differences on opinions, giving recognition where it is deserved, being comfortable with people and the ability to confront problems while not forgetting the aspect of trust. The nature of leadership in large organisations may somewhat differ from small and medium enterprises in that direct influence is required from the owner, since the owner is responsible for all the functions of the enterprise. To this end, Kinni (1995:2) argues that decision influence in Small and Medium enterprises is greater and more time is spent in bringing out the best in people than in giving directions. Pendley (1995:4) has compared leadership in an enterprise to the role a music conductor plays in harmonising musicians in bring out the best from the instruments and themselves so that the audiences are willing to come and listen to their music as though coming from one entity. The conductor has the challenge of selecting the right music for the audience firstly; thereafter there is now the need to select the right musician for each instrument. The conductor's job proceeds in that he has to get the sounds to blend together, so that it forms a single entity, which the audience is willing to queue and pay for. Various factors are necessary for success, not least among which are the team effort and cross functional approaches for the success for an enterprise. All this are at the ambit of good leadership. A potential entrepreneur who happens to be a student in this case needs the attributes related to leadership. This is especially related to opinion

seeking as well as teamwork which can be used for entrepreneurial capacity development. It should be within the parameters of learning that a potential entrepreneur then develops.

It is considered that effective entrepreneurs are team builders hence leading to the *good human relations* as a principle aspect for the business success. The art of making people feel that they are worthy by entrusting them with responsibility can be motivating to the efforts that is put in to the organisation's success (Nieman, Hough and Nieuwenhuizen, 2008). The long term good will is generated by developing good human relations in clients, and the building of a network that can be comprehensive and could be used in the future. Vega (1996:56) identified 4 types of human processes that are significant in effective management of people: Conflict management, Communication skills, team building and motivation. The 200 respondents involved in a study conducted by Eggers & Leahy (1995:72) confirmed and rated interpersonal, intrapersonal communication and motivation as critical skills to them as owners of small businesses. This study also helped confirm that motivation of the business owners was not as more important than the motivation of others in the achievement of the enterprise goals. Barrier (1995:42) supports this element by his postulation on self-motivation being crucial at the foundation phase, whereas motivation of employees being important during the growth phase of the business. Owners of Small and Medium enterprises have been known to stress the importance of business relations by developing networks, ensuring that ownership becomes available to those involved in the enterprise. Behaviours that have been considered interpersonal such as persuasion, team building, motivation and conflict management have been employed. Besides, effective entrepreneurs have instituted a variety of performance management appraisals while focusing on developing human relations. It is possible to realise this potential through the environment an individual finds themselves in. A learner could be inclined to good relationships as they learn in an institution and so such an environment can thus be useful in entrepreneurial development.

Among the factors for successful entrepreneurs is *positive attitude*. The attitude the entrepreneurs' exhibit towards their business has to be positive. If an entrepreneur is not sure about his business or is negative, he cannot expect others to believe in their business asserts Zeelie (1998:15). In a study that tested the cognitive processes of entrepreneurs and others, done by Palich and Bagby (1995:425), a series of imaginary business

scenarios were read. It was observed that entrepreneurs observed more strengths than weaknesses, and more opportunities than threats as compared to their non-entrepreneurs colleagues did. The aspect of positive attitude is an important area, however, as to whether learning or institutional aspects impact on it remain as areas that need further investigation beyond the presentation of this work. Nonetheless, it is an important aspect as noted above in this presentation.

The need to achieve goals without distraction is captured in the element of *perseverance* in an entrepreneurial mind. Setbacks tend not to set back entrepreneurs, perseverance being the most important element in the success curve of venturing out in business. The small motor manufacturers of the Ford Motor Company is said to have started in Henry Ford's garage, after enduring many setbacks and challenges, the enterprise achieved a success! (Brady 1995:46). The need to overcome the challenge of the unknown motivates entrepreneurs, and true entrepreneurs have the inborn intuition for perseverance (Nieman, Hough and Nieuwenhuizen, 2008). Among the components of perseverance is energy and determination that enable entrepreneurs to rise up against various odds that may be physically or psychologically related to the success of their business. Although the term determination is often used in literature, Nieman, Hough and Nieuwenhuizen, (2008:17) contend that perseverance should be used instead given that it borders the very attribute of self-confidence that entrepreneurs exhibit. Earlier authors like McClelland (1986:227) did consider perseverance as an indicator exhibited by the entrepreneurs in taking up repeated or different actions in problem resolution or in overcoming an obstacle. Entrepreneurs often succeed after a certain number of attempts, this also follows on the understanding that unsuccessful entrepreneurs are those who try once and quit, whereas their counterparts, the successful entrepreneurs persevere through every obstacle. The art of education in itself involves perseverance of some sort, and therefore being a learner can be considered as part of developing an aspect that is of perseverance.

One of the authors that pointed out the power of *commitment* of entrepreneurs is McClelland (1986:225). The role of involvement and commitment often leads to personal sacrifices and extraordinary efforts in dealing with the task at hand. At times they work together or in place of employees to conclude some business tasks. The level of confidence to business is also shown by the willingness of entrepreneurs to commit their personal resources for business use! (Nieman, Hough and Nieuwenhuizen, 2008:17). The

role of commitment is certainly important and it may be realised that through the conclusion of a student's study they would have exercised some sort of commitment to the course of their study. It therefore follows that such a characteristic is important in entrepreneurial setting which has been incalculated through a discipline of study and hence an asset for a potential entrepreneur.

The above have been considered as personal factors that influence the success of an entrepreneur. However, there are other factors that are necessary from the functional side to enable the success of an entrepreneur to be achieved as stipulated below:

The factors in this section have also been termed as managerial factors. One of such factors relates to the *planning* in as far as the enterprise is concerned. Significant issues about planning will touch aspects on what should be supplied, where the enterprise is to be located, the market targets, the profits involved and the expected turnover. Moolman (1996:5) asserts that the financial aspects of the business are critical to the success of the business and it is the reason that entrepreneurs analyse them or get experts to analyse their financial statements for better adjustments to their operations. A good business plan does not have to be a written one, but must basically ensure that required research and planning has been done (Nieuwenhuizen, 1997:15). Since planning is pivotal to growth, entrepreneurs need to factor in this element in their operations as a yardstick of business leadership. Reuber and Fischer (1998:36) have noted that no less than 80% of successful enterprises have had strategic plans for a period of up to one to two years. The learning environment to a certain degree requires planning on the side of the learner and if this is agreed, then it becomes part of an accepted principle for an inclination of the learners in their endeavours in entrepreneurial development.

*Competitor awareness* is said to be a critical factor in the success of the business enterprise. The knowledge of who the business competitors are, what they are offering and their market share is of significance (Nieman, Hough and Nieuwenhuizen, 2008:18). The establishment, continued existence and future growth of the business cannot be attained without the knowledge of competitors. In order for the business to act proactively, exercise strategic planning and well consider adjusting their plans, constant evaluation and monitoring of competitors is necessary. The need to create a competitive

edge, offer unique products and enhance their market image may at times be appropriated using the knowledge of stakeholders that may include the competitors.

There is also need for a successful entrepreneur to have *market oriented outlook* in his/her services. Essentially, the entrepreneur exists to meet the needs of the clients in the market. It is the role of a market oriented entrepreneur to create a competitive advantage by product or service differentiation to ensure profitability of an enterprise. The focus of the market is the consumer and therefore the products or services must be adapted to meet those needs. (Nieman, Hough and Nieuwenhuizen, 2008:18). It is understood that product oriented entrepreneurs tend to get into problems as they focus on more on the product instead of the needs of the client. Effective entrepreneurs on the other hand focus so much on the market demographics, the market segment, and what the market wants. In view of this, they articulate their communication with the market. Market orientation and performance in large companies is related argues Appiah-Adu (1997:1) and this element is also found in small business enterprises. Market orientation has a positive influence on performance in Small and medium enterprises just like in large organisations. The role of marketing management in an enterprise has been attributed to the success of an enterprise as denoted by a study done by Luk (1996:71) Production and general management factors were not identified as most important factors in this study and incidentally, one of the most important aspects regarded for successful entrepreneurs was the good personal sales techniques. A creative learning environment is likely to encourage opportunities being sought and hence it is one of the aspirations of a study in this nature to underscore the institutional and learning impact on student entrepreneurial intent.

Another important success factor is *Client service*. The meeting of clients' expectations produces clients' satisfaction which is a marketing tool itself. Good service for the clients will encompass a number of aspects which include: parking facilities for clients and the location of enterprise, the layout and appearance of the enterprise, the standard and availability of the products, politeness and friendliness, delivery and credit facilities. A good client service incorporates administrative and technical factors, such as record keeping and filing system for reference purposes, diary for planning and making appointments, stock control records, target dates for contracts, the work chats for clients to help improve your service for your clients (Moolman, 1996:5). Learning seems to incorporate a number of aspects among which are planning as well as delivery of required

issues at appointed times. If this aspect is inbuilt on potential entrepreneurs as expected within education system, then there is a development that can benefit the potential entrepreneurs as such.

The prioritisation of *high quality work* is among the critical success factors for successful entrepreneurs. Quality products may not necessarily be expensive; the clients look forward to the product that is suitable to the price. The controlling of costs by an entrepreneur in order to supply quality product but affordable is the challenge the entrepreneur has to meet often. The role of quality products or services can lead to the marketing of the company without costing the company itself. The marketing of the enterprise through satisfied customers comes into play as services and products front the organisation's image. (Nieman, Hough and Nieuwenhuizen, 2008:19). It is within the scholarly paradigms that the work of the candidates meets high quality work and since this aspect is found in the entrepreneurial world, it becomes an important aspect to be developed as such.

In pursuit of business health, the keeping of *financial records* is an ideal factor for the success of an entrepreneur. Business decisions often reflect on the financial stand of the enterprise. Brady (1995:46) argues that to a greater extent the business success depends on cost control. Sound principles of managing finances in enterprise, can be followed by the business even if the entrepreneur is not well versed with book keeping; this can be done by getting experts in that field. It is however notable that there are other factors necessary for business success alongside financial controls, such as expertise in certain products or services for which people are willing to pay the price (Farrel 1997:6). The art of record keeping is no strange task to students and therefore in a way this aspect seems to lend a hand in the fact that learning environments can induce a learner towards being entrepreneurial as such.

Among the functional factors for success is the *business knowledge and skills*. Luk (1996:70) points out that a large number of entrepreneurs started a business following the industry they worked for in the past for a number of years. Successful entrepreneurs are aware of their limitations and have skills and knowledge necessary for the success of the enterprise. It is within their discretion to keep core activities within the business and outsource non-core activities of the business. The business knowledge is so far available

in business schools as well as in non-business schools, thus providing a rich environment of learning for learners. This can also translate that the potential entrepreneurs have a basis by which they can advance their intents in their desire for entrepreneurial activity.

The ability to seek *experts* is one of the factors that characterises successful entrepreneurs. By using experts inside and outside their enterprise success is enabled, besides attending of seminars and training sessions. Boeyens (1989:79) considers the use of experts as a creative attitude of effective entrepreneurs. Interviews with effective entrepreneurs revealed how successful entrepreneurs often got significant information from experts over the years. Bird (1989:288), however, postulates that the value the advice of accountants, lawyers, bankers and business consultants adds to smaller businesses needs calls for a research inquiry. Leslie, Magdulskie & Champion (1985:22), however, contends that entrepreneurs must be helped to implement the advice, since the way advice is given coupled with limited financial capacity could lead to business failure. It is also known that 50-60% of enterprises fail within the first three years due to incompetence or mismanagement of the enterprise. The idea of getting or seeking experts can be related to the understanding that learning is progressively gaining ground as such and therefore it may be related to that learning tends to continue as a result of knowledge seeking opportunities of the learner. The experience of being at varsity and an intermingling with experts as in the case for premier institutions like University of KwaZulu-Natal indicates that there is a potential for an entrepreneurial intent development. This study which aims at understanding the institutional and learning impact on student entrepreneurial intent does provide an opportunity to understand to certain extent how such factors play a role as such.

### **2.3.2 TYPES OF ENTREPRENEURS**

Entrepreneurs have been termed as the catalysts for business. (Nieman and Bennett 2002:57). Entrepreneurs are said to be in different levels of entrepreneurial categorisation depending on the activities they are performing. Adhikary, Rai & Rajaratnam (1999) have made the following classification of entrepreneurs:

The *Basic Survivalists*, which are characterised by isolation and individualism with less contact within their social network. These types of entrepreneurs also have limited knowledge of the market, and are not fully aware of their own potential. The income

generating activities are normally few and the person may be illiterate. This can be exemplified by someone holding out a placard of washing cars with a small minimal fee. The informal sector is largely made up of the survivalist and micro enterprises. This group of entrepreneurs have many challenges among which are their ability to raise sufficient capital for their operations. Qua-Enoo (2001:3) notes that this group of entrepreneurs are denied basic inputs including banking facilities, with little training and education. Although they are considered as a nuisance since a number of them operate in the streets, yet the street vendors contribute to a nation's economic development as they help redistribute services and goods affordably and thus helping middle income earners. (Maharaj 1998:16).

The *Pre-entrepreneurs* often noted for their ability to do what everyone else is doing. The person has a welfare oriented approach. The tendency to sell the same product everyone is selling at the same price is one of the entrepreneurial activities that this type of entrepreneur engages in. These kinds of entrepreneurs require training in entrepreneurial competencies.

The other type of entrepreneurs is called the *subsistence entrepreneurs*, who normally operate a temporary stall in the market. They are thus self-employed and independent income generating group. The need for general management is required for this group and training in technical skills besides managerial skills is essential for this type of entrepreneurs.

Whereas the micro entrepreneur has some foundation, normally they employ 0-9 persons, they also can afford the licence to operate, nonetheless, they face the problem of securing loans from banks. A residential run saloon may be better suited to exemplify this. The assistance projects normally focus on credit than the technical assistance that they would need.

Another group of entrepreneurs pointed out is the small-scale entrepreneurs who employ between 0 to forty nine persons. This group often qualifies for a loan. The owners are well educated and have collateral to acquire a bank loan.

On the other hand, Van Aardt, Hewitt, Bendeman et al (2011:393) have identified the following emerging types of entrepreneurs:



A *family owned business*, where one or more members of the family have significant commitment and interest in the success of the business. Such interest is also noted in the voting rights, where at least 20 percent of such rights are vested with a family individual. Tutelman and Hause (2008) have considered that a family business needs the following skills to lay a solid ground network for it to favourably compete with the market place: conflict resolution, communication, family systems, finance, legal accounting, insurance, investing, leadership development and strategic planning. When the family members agree as to who owns what percentage of the business, the business can be formalised. A formal agreement is essential in the operation of the family business, with an exit strategy available for any member who wishes to do so. A desirable legal form of the business may be chosen in either the form of a partnership, a limited liability company, or a corporation if need be. Should a family member or a friend want to invest in the business, there is need to draw a legal agreement, for the protection of the member and the business through an attorney. The day to day running of the business should as well be discussed.

The family business has been noted to have the advantage of loyalty by the family members. This is an important strength in times when the business is not doing well due to external circumstances. This support may be necessary to pull the business through a tough economic tide as it lends credence to it. Nonetheless, there are challenges when one of the family members wants to become the president, irrespective of their competence- this could cause the health of the business to suffer and could as well cause family feuds. One of the areas where family conflict arises when one of the family members want to sell his/her investment of the business to an outsider. Another family member may object to this because such a member hopes to have their children in the family business and is feeling the risk of future cooperation with outsiders.( Van Aardt, Hewitt, Bendeman et al (2011:394). The share may also be sold at a higher value than deemed to be, in which case, the new investor may claim to have more capital and thus more voting rights than those originally in business. Alderson (2009) notes that most first generation owner of family business make the majority of decisions over the business, during the second generation, its done through consultations, its however, on the third generation owners that most decisions are made rationally by having family members cast votes.

Arieu (2010) states that even if the revenue is strong in a family business, it may still be in its infancy stages. There are challenges for example where one of the family members

who may have 4 children and only 2 are working in the business, wants to transfer the business to his children. The issue at hand will be that how will the other 2 children be, handling the business issues given that they did not express commitment or interest in the business? This calls for mechanisms to handle these anomalies, when they arise. Cooperation and commitment to open communication is necessary to handle arising challenges in family business.

The other group of entrepreneurs have been termed as *Information entrepreneurs*. These type of entrepreneurs offer both traditional and non-traditional formats of products-these may include printed books, e-books, videos online and offline. They may use internet in marketing and promoting information products like you-tube.

Skills essential for this type of entrepreneurial venture include computer literacy and the ability to use online resources as well as marketing skills. The challenge if getting a niche is important for this entrepreneurial venture. If one went about writing on growing mushrooms, as opposed to how to grow mushrooms in your kitchen, the response would be different, given the saturation of this type of message in the market already. Information entrepreneurs will further need to search for necessary designs, domain names, the payment systems, the accessibility of their sites, how the social media can be connected fully to their site as well as distribution. It has been noted that one of the advantages of information entrepreneurs is the price of their products that tends to be less expensive, besides the time of the entrepreneur is not so much wasted as they may consider using part of their time. However, due to abundance of information, sometimes freely available online and the many products that are questionably available online, this entrepreneur has a fierce market competition to distinguish their true presence. The market at times is saturated and the consumers are aware of how their attention is fiercely competed for. (Van Aardt, Hewitt, Bendeman et al 2011:395)

There are also what has been termed the '*Divas entrepreneurs*', derived from the Italian word, for 'goddess'. Smith (2009:149) considers that this was originally used to describe a woman of rare talent that was considered outstanding. The word has also been used for female singers, at times, celebrity stars and it is now used for those that transform a music career into an entrepreneurial career. This has been evidenced by lady singers who started

out as singers and later ended up making recording labels, such as Miriam Makeba and Ronel Erasmus in South Africa.

The term diva entrepreneur has been defined by Entrepreneurdex (2010) as a female that is distinguished, who manages and organises business and family along with environment in a passionate way and style. It is argued that most women are choosing a 'diva style' of entrepreneurship. There is a need to enter a steep learning curve for business divas and the advantages are that the growing networks are available for women.

A new world of communication has led to the existence of a new group of entrepreneurs, popularly known as *Technology entrepreneurs*. These entrepreneurs have been responsible for the launching of computer industry and the internet usage with the marketing it welds. Among those well-known in this area are the Bill Gates, (Microsoft), Steve Jobs (Apple), and Larry Page (Google). The main personal assets that have been of great value to technological entrepreneurs are; curiosity, ability to learn, innovation, and the understanding of the market principles. The pricing advantage of technology entrepreneur makes it possible for companies to cut down costs, they would not have otherwise cut down. After the social media explosion in about 2010, companies begun marketing on Facebook, twitter, and you tube making use of the unique qualities in each of the platforms available. One disadvantage though for this type of entrepreneurial endeavour is that a number of stores are still not electronically placed to distribute their products or services in the globe. There is therefore need to ensure that the clients are as well directed to where the geographical places of the product or service is. The online sales can subject a company to a global competition as a disadvantage as prices can be compared by clients. The need to be well informed of the changing trends is important for technology entrepreneurs for their success to be sustained. (Van Aardt, Hewitt, Bendeman et al 2011:398)

The importance of technology entrepreneurs in business is of no doubt argues Wickham (1998:21), but they always have the challenge of offering to the world the benefits of new scientific developments in relation to information technology, the engineering science and biotechnology to the wider world. They furthermore have to help the technopreneurs in creating a sustainable market advantage. To this end, Ntsika Enterprise Promotion

Agency (1999:4), have produced a program with the following four elements for technopreneurs:

Opportunity analysis

Skills audit

Holistic development of the SMME sector.

A network that is supportive for the entrepreneurs in the process of developing ideas.

*A franchise entrepreneur is* also one of the important groups of entrepreneurs. The franchise entrepreneurs have gained significance in the market place in the distribution of their services and products. Normally the franchisor and franchisee have vested interest in the success of the given brand. Lesonsky (2011) considers that the person with the original vision of the franchise is the entrepreneur. This however is opposed with the understanding that a franchisee also carries the risk as he operates and markets a business where if the owner fails to make it in a competitive market jeopardises his capital and investment. A franchisee is therefore considered as an entrepreneur. There are no specific requirements or skills needed for a franchise business but it has been noted that most of the entrepreneurs have extensive school backgrounds. An industry background, in itself can be good enough skill for a franchise start up. Market research, however, is of great importance in this area. Constant review of newspapers articles in terms of where the best location and industry is important. There is need to review the accounting books, manage the employees, in addition to other overheads like construction and supplies that may be associated with the enterprise. Franchising entrepreneurship has been associated with the advantage of an established recognition of a business name for the franchisee. There is also training provided by the franchisor to the franchisee which is necessary for the venture establishment in the given area. Due to the large buying power of the franchisor, the franchisee is enabled to buy necessary equipment and products easily. Whereas the above serve as advantages for the franchise entrepreneur, there is a disadvantage of the franchisee, losing power of the business in the creativity of the businesses since its controlled. There is also a difficulty in negotiating any favourable terms for the franchisee.

Another group of entrepreneurs is known to be the *social entrepreneurs*. These kinds of entrepreneurs are known to run non-governmental organisations. The social entrepreneurs in the UK are said to employ ten times the business entrepreneurs in spite of the capital limitation that both kinds of entrepreneurs face. (Mojapelo 2002 cited in Nieman, Hough and Nieuwenhuizen, 2008:39) Other authors like Venter, Urban and Rwigema (2011:15) have considered social entrepreneurship as change agents for innovatively addressing the social pressing issues just like conventional entrepreneurs are ‘change agents’ in an economy. Their role is also distinguished by the understanding that entrepreneurship is not essentially about the new venture creation rather its in value creation, allocation of resources, innovation and opportunity identification that its essence is based on. (Dees 1998:1). The understanding that entrepreneurship is not essentially about venture creation, seems to underscore the social entrepreneurial efforts. If this concept is fully emphasised then entrepreneurial flair to all categories will inevitably become something to be looked at in a different light. Venture creation is far more emphasised by the several definitions as seen already in literature more than any aspect thus far.

The National Centre for Social Entrepreneurs (2001:5) has spelt out the differences between conventional and social entrepreneurs as follows:

The individual talent, skill and stamina lies within the organisation as a whole. This is contrasted with the conventional entrepreneur whose strength, energy, knowledge and wisdom is in an individual.

When risk occurs in social entrepreneurship, it is not personal; it is entirely against an organisation’s assets and image as well as the society’s trust. Whereas in conventional entrepreneurship, risk is personal since it affects the personal investment of an individual.

There is a focus on the long-term strength of the organisation in social entrepreneurship as opposed to short term financial gain in the conventional entrepreneur.

In social entrepreneurship, profit is a means to an end, in that it is meant to achieve the objective. In conventional entrepreneurship, however, profit becomes the end objective.

The aim of social entrepreneurship is to make the organisation sustainable and therefore capacitate it in handling its own destiny; the conventional entrepreneur on the other hand, handles his own destiny and is not obligated to an employer.

Should there be any profits in social entrepreneurship, they get ploughed back to the organisation to foster the mission objectives of the organisation, while the conventional entrepreneur pockets or distributes such profits to shareholders.

Social entrepreneurs confine their ideas and ventures to the mission of the organisation, unlike the conventional entrepreneur whose limit of ventures and ideas is the sky.

In further emphasis for social entrepreneurship, Dees (1998:4) postulates that the conventional entrepreneurs conditionally create value. Value creation is based on the fact that the clients or customers will pay more than its cost of production. Social entrepreneurs, on the other hand, may undertake profit making ventures simply to allow for the sustainability of the organisation, since they normally work under extremely limited resources. The pursuit of opportunities in social entrepreneurship is with the aim of meeting their objectives and so continuous learning, innovation and adaptation are a commitment process to their agenda. It is within this understanding that their sense of accountability is increased toward the constituencies that they serve in the outcomes created.

Social entrepreneurship is noted to have categories by Fowler (2000:645-647). The following kinds of social entrepreneurship are known to exist:

The *integrated social entrepreneurship*. This type of entrepreneurship is an income generating activity with social benefits created. An example of the homeless and vulnerable purchasing a local newspaper for say R5 and selling it for R8, with the difference being left for their private use, is a vivid illustration of this scenario.

Another form of entrepreneurship is the *reinterpretation*, where there is generation of income or reduction of the cost of the activities. A suitable example of this is notable in an American organisation who organised meals for the infirm but considered the idea of doing so with the parents of the affluent middle class parents of working youth. Although the parents were not infirm, their children became willing to pay for these meals with the peace of mind that their parents were being checked on. (Fowler 2000:646)

The third form of social entrepreneurship is termed as the *complementary social entrepreneurship*. In this type of entrepreneurship, income is not generated but the cross subsidisation is envisaged in the activity. It is known that a number of universities in

South Africa have set a fund in generating additional income through research and teaching for the long term sustenance of the university in question. This fund offers benefits to both the staff and the university. Income generated from training and consulting opportunities are shared between the staff and the university as in the case at the University of Witwatersrand in pursuit of sustaining university affairs using an entrepreneurial venture ([www. Enterprise. Wits.ac.za/mission.html](http://www.Enterprise.Wits.ac.za/mission.html)>).

*Women entrepreneurs* is another category of entrepreneurs. The informal sector in developing nations is large and has been estimated at 40 to 80 of the urban workforce. The majority of the informal sector happens to be women (Maharaj, 1998:16).

A woman entrepreneur that is successful, according to Adhikary et al (1999:59) is one that has been in business for more than two years and has more than five employees, having a profitable venture with less than 30 employees, and has achieved growth and expansion in her infrastructure. The economic role of women is said to be changing in South Africa, due to the shift in responsibilities that are financially related for the family upkeep. The traditional role of women in past had limited their responsibilities to the home, but the roles of women have changed as evidenced in the numbers of women in boardrooms.(Nieman et al 2008:34)

Women entrepreneurs were categorised by Goffe and Scase (1985:24) into the following categories:

Those women that start a business due to economic conditions at home termed as the *traditional women business owners*. This category of women is committed to the entrepreneurial ideals as well to their gender roles. This group of women have a basic concern of keeping costs as low as possible, as well as overheads and wages while maintaining profits.

The next group is said to be commonly associated with frustration at work place due to career prospects that are limited in large organisations. This causes this group of women to develop a business related ambition. This group is termed as the *innovative women business owners* which have been noted to be more committed to entrepreneurial ideas than to their gender roles.

The third category is referred to as the *Domestic women business owners*. These women run home businesses with the emphasis on high quality goods and services being produced at home, while they attend to traditional gender roles. Normally such women give up work to have children. The entrepreneurial growth initiative is not the main driving force in the business.

The fourth group of women entrepreneurs are the *radical women business owners* who are noted to have little commitment to entrepreneurial ideas as well as to the gender roles. They are not seen as entrepreneurial venture seekers, since they are young, without children, well-educated but inexperienced at work place.

The above categorisation has similarities in as far as the reasons for undertaking a business venture is concerned across the board regard less of gender difference. The push economic factors that cause people to start business is a common behaviour associated with the need based entrepreneurs. Therefore the traditional women business owners do not have a significant difference to their male counterparts who have parental or family roles to fulfil when taking up a business venture unless so specified in particular contexts.

Likewise the innovative women business owners as well seem to have a commonality with other pressures that force a business venture among entrepreneurs regardless of gender. Limited career prospects in large organisations as well as the need to reengineer organisations to improve competitiveness is a common process that has its causalities by way of limited career progression, which is frustrating and can lead to venture creation if opportunities are available.

It can, however, be argued that the domestic women business owners are distinct since they particularly leave gainfully paying jobs to fulfil the traditional gender roles such as to have children. This therefore seems to be a uniquely distinguishing factor in that regard and the outstanding aspect of this category is that they chose to produce high quality products in limited quantities while running the business at home. It therefore follows that these kinds of women entrepreneurs can exercise the growth aspect of the business if managerial skills of planning and organising business affairs are attended to. There is therefore a potential of growth in this type of entrepreneurs upon further guidance. This in itself may call for further innovation in terms of sustainability of the business and its growth potential. The business owner can continue to further the growth



and expansion of the enterprise as she gets others to run the managerial tasks of the business, while she explores the entrepreneurial aspects.

The fourth group of women which the authors have pointed out, as the radical women business owners have similarities with the traditional women business owners in that the push economic factors are the cause in either case to start a business venture. It may be significant to understand whether generalities can be made in terms of gender where the roles may be less significant as well as entrepreneurial commitment at the same time, on the basis that they are young, without children, having limited working experience and yet well educated.

The next group of entrepreneurs are termed as the *Youth entrepreneurs*. In countries like S.Africa, the government has backed the youth entrepreneurial initiatives such as Umsombomvu Youth Fund. The fund was created after the government demutualised Sanlam and Old Mutual companies. This is an initiative meant to motivate youth entrepreneurship in giving them access to finance and markets. The need to respond to economic challenges has led to the creation of the youth entrepreneurship and some of the schools have included entrepreneurship into their syllabi. Some of the notable institutions in South Africa like University of Pretoria have exhibited the entrepreneurial spirit of minority effort of entrepreneurship among the youth through formation of student entrepreneurship club. The club was formed to foster entrepreneurship among the youth. The club is termed as the South African Student Entrepreneurship Club (SASEC). It is through connecting the successful youth with strategic partners, investors and clients that an economic contribution is achieved on the efforts advanced by the youth in entrepreneurship (Nieman et al 2008).

The realisation of ideas into companies or viable businesses can be an important aspect of learning institutions such as universities and technikons. Nieman et al (2008:38) have cited the University of Cape Town (UCT) in South Africa having an initiative for student entrepreneurship at campus through an establishment of a bookshop by student entrepreneurs with the University having a minority stake on it. The trust is to encourage entrepreneurship in the tertiary sector via the four following programs:

Innovative educational programs

## Business Development

### Special Projects

And Student Businesses.

The Youth entrepreneurship is indeed an important aspect of entrepreneurship, nonetheless, given there is need to expand the understanding of what constitutes entrepreneurship in its entirety, this holistic approach is necessary to allow for a broader approach of entrepreneurship. If it is limited to new venture creation, with factors such as capital limitation, on the way- this will bottleneck the efforts necessary for the development of an entrepreneurial flair among the youth. Opportunity identification, pursuit and proactivity can be pursued if emphasised and so help such youth get absorbed in existing companies or organisations and with that experience set up their own establishment, with the capital they earned while working for a particular company.

There is also the *tourism entrepreneur*. According to Koh (1996:30), tourism entrepreneurship can be defined as activities for operating a legal tourist enterprise. There is a need to meet the expectations of the tourist and visitors as well as meeting the legal requirements in the tourist industry. In the need for meeting the various needs, there arise associated enterprises related to the tourist industry. Generally, the following enterprises have been associated with the tourist industry: the guest houses, particularly associated with the accommodation for visitors and tourists, travel agencies, hotels and tour guides or operators. In operating these enterprises, opportunities for employment arise and business developments arise as well. The guest house industry has been noted for example to have grown in South Africa. This has included camping grounds, holiday camps, hotels, motels, chalets, the bed and breakfast services, and so forth. The level of service innovation can be an area that will require a study as well development in its own right.

In the area of transport, there arise needs for potential entrepreneurs who may become tour operators. The entrepreneurs can network and so provide a linkage of services to the clients as well as improve the level of service accorded to the guests and tourists using the tourist services.

What has also been considered entrepreneurial in the tourism industry has also been associated with the man-made attractions such as zoos, the water front developments, theme parks, and wedding and conference venues among others. Nieman et al (2008:39) have reported that the largest industry in the world and also the biggest employer is the tourist industry, which is the fastest growing industry. The industry of tourism in South Africa, has had market changes including services like the viewing of traditional dances or shabeen experiences which have gained popularity (Saayman and Saayman, A. 1998:3).

So far the types that have proceeded have embarked on the various types of entrepreneurships as in the context of business or individual background. It is imperative that attention is drawn to entrepreneurship in organisations. Entrepreneurship in organisations is necessary for the revitalisation of the parent company. Entrepreneurship in companies according to Venter et al (2011:499) has been given different labels, such as intrapreneurship, innovation entrepreneurship, innovation management, venture entrepreneurship, corporate entrepreneurship, internal corporate venturing and strategic entrepreneurial venture. Corporate internal venturing or intrapreneurship is primarily concerned with advancement of the company's performance in gaining it a competitive advantage. The innovation of services, processes and products is centrally important for business operations. Bartol and Martin (1998:694) consider that *intrapreneurship* is the art of new product development, services and processes while still being part of the organisation. The use of intrapreneurship revitalises weak performers in industry and helps reinforce strong companies in the market. Bartol and Martin, however, admonish that centralised bureaucracies will not have better prospects of benefitting from intrapreneurship as opposed to autonomous high performers.

Intrapreneurs have the role similar to the entrepreneurs, except that they are confined to an organisation. Normally they are motivated by opportunity and are self-starters which as well have to bear in mind the restraints in regard to resources and other odds they have to cross, for example getting top management to buy into the idea. Among the odds faced with an intrapreneur is the ability to change the mind-sets of colleagues for the viability of innovating a creative idea. In certain instances, suspicion and hostility may be part of the obstacles, the task of outwitting opponents and persuading others becomes central in such situations. Normally this situation calls for relentless commitment and

passion. The success of such proposition could lead to the intrapreneur being rewarded with bonuses or shares, yet it is of note that this was not the basic objective of the intrapreneur. On the other hand, failure of the venture may be detrimental and could cost the intrapreneur his career and future. Intrapreneurs have often been known to step forward even when the organisations continue stagnating, but the hopes of the intrapreneur is bring or make a difference by turning things around. The changing of the existing paradigms can be achieved through an intrapreneur. There is need for bureaucratic organisations to exercise flexible decision making as well as shorten communication channels. There is also need for intrapreneurs who are impatient with the protocols that drag time to help the company change the status quo. (Venter et al 2011).

Hisrich and Peters (2002:46) identified four characterising elements in intrapreneurship under the following categories:

The *internal new venture creation*: This refers to the creation of new venture within the corporate environment. Sometimes new ventures may exploit the need for the sale of new technology or product. In some of the instances, the processes may be less dramatic as such they will be gradual.

*Innovation*: the element of innovation does not necessarily refer to creation of new products as such but could also refer to redesigning of a service or a product in a profitable manner.

*Self-renewal*. The aspect of self-renewal which at times has been termed as *internal rejuvenation* of the organisation does involve an improved use of ideas, markets, products and processes in the individual units of the organisation or in the organisation as a whole. This can be an important element in organisational development.

The *proaction or Anticipation* element: Intrapreneurs are often proactors than reactors to situations. It is in this sense that they lead as opposed to follow. Intrapreneurs anticipate and hence plan for a change.

The above four elements have similarity with the interest of entrepreneurs as such and can be instrumental in bringing about change in any enterprise. The elements can effectuate the growth potential of an organisation. The significance of intrapreneurship to organisations regardless of their size is emphasised by Venter et al (2011:504). The new

start ups overtake established organisations because as organisations settle down, they end up in routine processes which are meant to conserve the status quo and defend the waning privileges through bureaucracies. It therefore takes an intrapreneur to nudge the organisation into new directions while pointing to them the changing strengths and weaknesses in the face of evolving opportunities and market threats. The change required may involve administrative effectiveness, where for example, office systems are automated or better supply chains are improved and at times reengineering the internal services.

In the bid to retain innovative employees, the Xerox Corporation in the United States of America, unleashed the creative potential of its employees by allowing experimentation and innovation to take place within the organisation. In 1998, its US\$30million budget funded no less than twelve projects with two becoming failed projects. (Hisrich and Peters 2002:45). The Xerox Company would have risked losing her employees to her competitors or having direct competition from the employees themselves, if it hadn't given independence to intrapreneurial workers.

The future of an organisation is said to be proportional to the flow and quality of internal start-ups. The challenge is to retain the best brains while at the same time improving the profit base. Such start-ups can also help diversify the parent organisation. The rate of return on start-ups is in the region of 30 per cent annually and this has led to the growing level of revenue and profits. (Venter et al 2011:505)

The development of intrapreneurship is said to be easier in new organisations than in old organisations, however, in either case, there is need to use multiple initiatives to enhance it. Dorf and Byres (2008) have noted that the sharing of knowledge in an organisation can foster a firm's competencies, yielding its competitive potential through its new products and novel applications realised through intrapreneurship.

***Policy Entrepreneur:*** Spurring changes in the area of policy is fundamental to achieve success as well as transformation. It has been observed that billions of dollars are spent each year without consequent impact on policy states Overseas Development Institute (ODI) (ODI 2009). Policy entrepreneurs are defined as individuals who take up a cause and enable it to become a political agenda. These kinds of entrepreneurs, however, have not been given much attention in the policy literature in regard to their definition. An

example of policy entrepreneurship has been noted for their authority in placing on the legislative agenda school choice even when there was no compelling merit evidence and with the use of social networks, a shift occurred in policy debates as policy issues got reframed. (Mintrom 2000). Crow (2010) defines policy entrepreneurs as advocates for policy proposals and such advocates may be insiders or outsiders yet are willing to invest their time, energy, resources, and sometimes money with some hope of future return. Kingdon (1995:122-123) stipulate that such return may come in form of approved policies, satisfaction resulting from participating or career promotion or job security as such. The risk taking element of entrepreneurship is encapsulated by King and Roberts (1992:173) who consider policy entrepreneurs as political risk takers that end up in *generating creative policy solutions, redesigning government programs and implementing new management approaches*. Policy entrepreneurship has been compared to private sector entrepreneurship, with the exception that the entrepreneurs in the public sector often alert others regarding policy innovation possibilities, and just like their private entrepreneur counterparts, take advantage of new discoveries or new benefits consequent there upon. The desired policy outcomes are often put forth by policy entrepreneurs; this then upsets the political equilibrium, however, after the change and evolution of policy, the communities move back into the state of equilibrium. (Schneider and Teske, 1992). According to Layzer (2002), policy entrepreneurs may include actors within and outside the government power and such include experts, policy elites as well as citizens. When elected officials cannot deliver the changes that are demanded by the citizens, the city managers with their experience and technical knowledge of city management normally weigh in and changes are likely to be realised. Sometimes elites act as policy entrepreneurs due to the expertise they have, however, elites have been accused of exercising myopia in that they at times fails to seek collaboration across different specialisations as was the case with the US climate policy (Hart and Victor 1993). One other problem associated with policy entrepreneurs is that they can easily abuse their power in the name of public interest. In certain circumstances they also misguide people as well as policy and may as well be pressured into ethical challenges (King and Roberts 1992:173). Though these misdeeds are notable, there remains the need to understand the indispensable role of policy entrepreneurs as catalysts for the renewal of the public sector as well as innovation of social learning (King and Roberts 1992:189). It has also been noted that groups can act as entrepreneurs and have more power than an

individual. Their influence is likely to be greater because the various resources available to them, political influence and their size. Groups have the capacity to act in entrepreneurial manner. (Crow 2010:302). Policy processes are normally complex and do not follow any logical or linear pattern. The need to acquaint oneself with the learning and monitoring of policy engagement is paramount for policy entrepreneurs. This therefore calls for the ability of the policy entrepreneurs to be strategic, flexible and systematic in their approaches towards policy. In the process of achieving a consensus a number of actors come into play, this as well can cause delays from the time of getting the agenda on board, the decision making processes, the necessary implementation and evaluation. The simple presentation of information or ideas to policy makers has not been proven to work. The complexity associated with policy entrepreneurship is based on the fact that at any given time many actors may be involved in a given scenario; this may include civil servants, parliament, civil society, ministers, private sector, the development sector, the media and the donors. In most occasions the need to influence each other and the processes is entailed in the policy shifting of the policy framework and debate. Trying to find a place to gap in ideas becomes essential and as such Clay and Schaeffer (1984) have described the process as a life of chaos of purposes and accidents. This understanding is no less than opportunity recognition in a business venture, with the attendant risks if the endeavour is not accepted or may jeopardise ones position. The recognition of the nature of forces involved in policy engagement by policy entrepreneurs is something essential, though it is multifactorial and non-linear. If these complexities are treated in a simplistic manner, it can easily undermine the achievement of a desired outcome. The dynamics of the ever changing policy context may only be adapted to by use of strategies that are flexible which must be at par with the policy windows for effective monitoring and learning of the policy paradigms ( Ramalingam, Jones, Reba and Young 2008). The research based evidence has also been found to be too weak to influence the policy processes. In one of the studies conducted by ODI on the factors responsible for chronic poverty in Uganda, the findings were that just two of the 25 were related to information gaps (Bird, Pratt, O'Neill and Bolt, 2004). The challenge that faces the research based evidence in the policy platforms is found in following 5 Ss':

Decisions have always to be made speedily in the policy contexts - *Speed*.

Due to that fact that many things are to be tackled, the normal practice demands that a wide brief and not necessarily a deep investigation is covered hence leading to – *Superficiality*.

The need for the policy context is to stick to one decision within at least a reasonable period of time hence leading to the need to –*Spin*. This may mean that a conclusion is not fully achieved within certain time and any understanding based on what is current may be misleading in research based evidence.

A number of policy decisions are made in secret, this points to the element of - *Secrecy*. This affects the evidence of research based evidence.

There is also the element of ignorance on the scientific role by policy makers, hence they do not realise the need for them to test hypothesis- *Scientific ignorance* (Cable 2003).

Policy makers have been known not to be necessarily influenced by evidence rather their values, judgment and expertise, the lobbyists, pressure groups as well as the pragmatism involved in a given situation. This orientation leads to loggerheads on the understanding or perception on what constitutes good evidence by the researchers. Researchers have been known to be reluctant to admit anything as evidence unless it is proven to be underpinned by theory and scientifically proven. The policy makers on the other hand, will not admit anything unless such a thing is able to aid them in reasonably clear decision making process and is made available at the right time. (Davies, 2005). Policy entrepreneurs need to realise that there will be a challenge to their contribution if there is no understanding of the dynamics that influence both the researchers and policy makers. Research based evidence has been profound in understanding issues that directly affect lives. This kind of evidence can be exemplified in many research scenarios, such as the surveys undertaken in Tanzania by the Tanzania Essential Health Interventions (TEHIP). In this survey it was discovered that there was a reduction in an infant mortality in two districts in 2003 and 2004. This results informed on the reform by the health services project. The research based evidence has often played a crucial role in highlighting issues that need emphasis as in the case of the Ghanaian neonatal rates. In the study it was reported that the infant mortality rates had decreased by 22 per cent based on the simple fact that women breastfed their babies in as early as from one hour of giving birth to the new born. To influence policy is the role of the policy entrepreneurs; nonetheless, it is an



uphill battle unless there is a willingness to venture out with the right understanding on the politics and key players (ODI 2004). This will need to be accompanied by an ability of good storytelling while synthesizing research results with compelling stories.

There is also need to understand the external influence on what may be taking place by the policy entrepreneur. In highly indebted countries donors tend to play a significant role on what happens within and so does culture and social factors. Another factor that needs to be underscored is the very quality of evidence presented by the researcher, how it is communicated and its contestability. The political context is also very important since it constitutes the institutions, people and processes in decision making, and hence have to be taken into account while undertaking an entrepreneurial policy. The need for multidisciplinary teams and new skills acquisition is necessary for policy entrepreneurship research. This comes along with changes in spending and establishment of internal systems and incentives, the production different outputs other than academic outputs and concentration of dealing with partnerships and networks. Developing a research agenda with a lot more focus on the policy community and a reorientation from academic to policy platform is vital for policy entrepreneurship to be realised (ODI 2009).

***Academic Entrepreneur:*** So far the rest of the types of entrepreneurs have been largely concerned with some sort of industry or environmental setting. Academic entrepreneurship has not achieved a unified definition in the scholarly context. Nonetheless, there is an understanding that this type of entrepreneurship has also been termed as an intellectual entrepreneurship. The three main domains of academic entrepreneurship relate to the commercial, knowledge transfer and value addition definition. Shane (2004) relates academic entrepreneurship to a commercial viability of business start-up option with reference to companies started by the academia in terms of the university spin offs being the output. This definition limits an academic entrepreneurship to the monetary limitation. Entrepreneurship is not necessarily limited to monetary gain. Academic entrepreneurship is also concerned with the transfer of knowledge from the university parameters to the market place which enables monetary value creation to the business entities that may be enlisted as the contacts of the university to be realised. Alongside the traditionally accepted roles of publishing, grant seeking and contract research; activities like patenting, licencing and spin offs can be

considered entrepreneurial. However, the legislative setting in some contexts is likely to narrow the context of commercial entrepreneurship by universities, in one sense or another. This can be exemplified by the Swedish regulation which intends to give equal rating for a collaborative research effort between academia and industry to training and research at universities.

Academic entrepreneurship can also be seen as societal value addition. This view is associated to the social sciences position, where the value to the society is more emphasised than the monetary gain. Botes (2005) considers entrepreneurship as a risk taking activity which unfolds one's ability to see an opportunity where chaos exists, with the value creation, enhancement as well as enrichment not being limited to simply the owner but other stakeholders as well. The author contends that the university does not have to deal directly with the problems but to look into the capabilities of the community, its activities and assets, which can be capitalised to empower the community to come off its poverty cycle as opposed to dealing with community problems hence making the community become dependent on the University. In this understanding therefore, the university builds a bridge between itself and the community and then introduces discussions on research oriented to needs or strengths. Academic entrepreneurship has been denoted by the emphasis on the inductive analysis of entrepreneurial activities as opposed to the deductive ones inferred as per the entrepreneurial university, since this implies preservation and enrichment of the universal and national culture with the view to fulfilling the aspirations they may be contextualised to using the guidance of training and specialists. It is therefore notable that academic entrepreneurship is presented with the understanding that is parallel to entrepreneurial university (Bratianu and Stanciu 2010). The issue that encapsulates the value addition is an aspect that yields itself in community learning even as Winfield (2004:9) presents it: *the work in the community makes the academic study relevant and the academic study directly informs the work in the community*. The University becomes an anchor as it establishes the community through its method of teaching and this engages the society. Academic entrepreneurship is considered as proactive as opposed to social entrepreneurship since it can produce results where there are no social problems associated to it. In the need to gain professional capital the scientific or academic entrepreneurship may be conducted in the need to gain university hierarchy as in the case of conferences, publications, professional certifications

and administrative activities. The outcome of an entrepreneurial endeavor need not specifically refer to profit creation, for even if the activity were to fail it would nevertheless be of value since it can be a cause for further investigation (Austin et al.2006:2). In an emerging field like academic entrepreneurship, the entrepreneurial ideologies are developed by successful and failed attempts, so that the progression is based on all attempts as a whole.

Academic entrepreneurship has its own dimensions in terms of opportunity identification and creation, the operational context and people as well as resources they get or offer in the realization of their objective. Knowledge creation, its use and eventual diffusion becomes an important imperative for academics. Krucken (2003:316) points out the fact that knowledge institutional producing sites have become depleted in the societal environmental view point and thus it seems knowledge has become embedded in society.

The understanding that academic entrepreneurship occurs within a setting makes it comparable to intrapreneurship or corporate venturing in terms of employing a methodology which makes individuals in an established organisation with its own ideals to display their entrepreneurial skills. With this understanding, Krucken (2003) denotes the three spheres that may imply in the academic entrepreneurship: Firstly that of an academic who takes matters personally as an academic rogue; Secondly of a group or a team of individuals in the achievement of an organisational culture and thirdly the combination of personal attributes with the organisational regulatory framework and norms to arrive at an entrepreneurial result regardless whether organisational support was given or not. The third aspect needs a measure of institutional and personal merger as these shape each other towards both institutional and personal characterization of the effort so achieved.

Universities are now faced with the need to develop dialogic literacy which pertains to the productive engagement in generating new knowledge and understanding which has been considered as a fundamental literacy component of the knowledge environment in a world of knowledge economy. (Bereiter and Scardamalia, 2005:11). Moreover, academics have been accused of confining their interests in the ivory tower setting, though their existence is profoundly inseparable from their environment. Prominent scholars like Merton (1973) and Humboldt cited in (Albittron, 2006) have proposed that

nascent entrepreneurial endeavors are likely to remedy the aloofness observed in academic circles.

The potentialities of academic entrepreneurship have also been brought to the core in different contexts in different countries. The social, economic and legal environments among others have been responsible for the pressure exerted towards universities wherein universities have been called upon to help form the triple helix comprising of the government and industry (Etzkowitz, 2003). It may be noted that in countries like the US, Bayh-Dole act, that permits academics to patent and sell their research easily to companies was promulgated (Grimaldi et al., 2011; Aldridge and Audretsch, 2011); in the French legislation academic scientists were given the opportunity for their creativity in business ventures with enabling legal instruments (Shinn and Lamy, 2006) ; there has also been an encouragement for researchers to develop collaborations with private companies in the UK (Geuna, 2001). The general practice has often been that the academicians send their products to the market or environment and others have to activate them to produce value. These products essentially are in form of their labour, namely; the knowledge, the graduates and research which differ from actual mediatory involvement where the academicians would enrich their environment as well as classroom experience. Murray (2006) has pointed out that the academic capacity in diffusing the tensions of academia and commerce in rewriting the rules that allow the academic world and commerce world to mold, thus permitting the two different and distinct logics to complement each other. The introduction of patents to the academic world in a way curtailed the powers of commerce, which predominantly used it for income and enhanced a limitation for exchange among academics. It has been argued that the perception between academia and industry in terms of their interests tends to differ a great deal. Academicians consider that industry is just after profits and exercise a narrow minded view towards issues, whereas the industry considers academicians as a lot that simply uses a different and difficult language without comprehending the actual realities of the environment they are operating in. There is also an understanding that the blending of academia and commerce, eludes the basis for which academia had the main responsibility and autonomy of knowledge production on the basis of truth in the past in ‘ ivory towers’ and now this might shift the research reigns to business and communities. Nonetheless, academicians have restraining factors in different settings, an exemplary situation in

French based context can be cited; where an academic scientist who engages in business is only free to do so within a certain period of time, and since academics are employed by institutions, they have rules to abide by. Access to finance can be among such restrictions, where their industry counterparts have a wide range of access, as opposed to academicians who have limited interaction between their students and projects (Manifet, 2008). Academic entrepreneurship is unique in its own right in that it benefits the wealthy organisations as well as the agentless impoverished communities. It may also be noted that this entrepreneurship enhances the image capital as well as the economic capital of the institution and yet on the other hand it can be a threat in its own right as it may lure academics to the social or commercial world with the likely impact of quality education realised consequently. This section has dealt with the different types of entrepreneurs that one may be inclined to. Thus, the various types of entrepreneurships provide a wide array by which the appeal is expected to vary in as far as intentionality is concerned. The understanding of start-ups business in terms of consumer goods is perhaps more common than not and the image given portrays the view that the hard-ups are finally getting up to something in their lives. This in itself destroys the robustly attractive image of entrepreneurship and therefore its possible choice by learners.

### **2.3.3 Benefits of an Entrepreneurial Mindset**

The benefits of an entrepreneurial mind-set can be social, academic and professional (HEA 2013). It is undebatable that an entrepreneurial mind-set can lead to venture creation but according to HEA (2013) the following benefits as well will be reaped by the institution/s:

- Institutional ambitions are likely to thrive in a competitive globalised environment in the context of uncertainty and complexity.
- The institutional creative and innovative capacity is fostered and new synergies are developed.
- More entrepreneurially minded students are created.
- More entrepreneurially minded staff is developed.
- Knowledge transfer is enhanced in and out of the university.
- Research outputs and the creative use of knowledge is fostered.

- The trans-disciplinary use of knowledge is enhanced as increasing use of cross-disciplinary and multi-disciplinary activities of the institution prevail.
- The ethos of learning by doing becomes more founded and developed.
- Student satisfaction, improved graduate placement and alumni relations get more developed.
- The student experience at campus becomes enriched through a range of diverse subjects from the multidisciplinary learning experiences and activities of students and staff.
- As the commercial enterprises, the community, the public service, the wider society and external stakeholders interact with the institution regularly the institutional engagement becomes enhanced with its environment.
- The deployment of knowledge and the institutional expertise in the general areas such as incubation centres, student placement services and students unions and associations, careers and support services become prominently evidenced.
- The local, regional, societal, national and global economic objectives will be served in the process.
- A deeper appreciation and understanding of the Small and Medium enterprises will be developed and their support is likely to be improved.
- The standing as well as the institutional reputation and its competitive position shall gain prominence.

Although the above may seem to be aligned to an institution, yet a more entrepreneurial society as well can reap the following benefits:

- It can become strategic and opportunistic.
- It will always evidence the growth of new indigenous enterprises.
- It will have the capacity to provide employment.
- Its adaptability will be developed by coping with uncertainty and complexity as it exploits and embraces opportunities.

- Its knowledgeable base as well as its being innovative and creative power shall lead to its prosperity and enhanced productivity.

The following benefits were noted to accrue to youth that participated in entrepreneurship programs as per the findings of the National Foundation for teaching Entrepreneurship Programs (NFTE):

- ❖ College attendance increased by 32 per cent.
- ❖ Occupational aspirations were increased by 44 per cent.
- ❖ Reading capacity was also increased by 4 per cent.
- ❖ Leadership behaviour was increased by 8.5 per cent.
- ❖ 99 per cent of the alumina of the program recommended its continuation. (NFTE 2013).

Further to the above learners were observed to gain an empowerment with organisational skills, time management, as well as interpersonal skills. The skills led to academic attainment as performance was improved academically, so was job readiness as well as self-esteem and self-efficacy improved. It was also observed that the problem solving and decision making abilities were favourably improved. These skills are critical for organisational management in economic crises that have been a trend in recent times.

The realisation of an entrepreneurial mind-set calls for an enterprise and entrepreneurship education in Higher learning institutions and at the institutional strategic levels which should be adaptive internally in order for it to engage with a wider society and be externally responsive. According to HEA (2013), this will call for a cultural change and internal business processes of the institution. The acknowledgement of the significance of engagement activities in resource allocation, the kind of metrics used to assess institutional progress regionally and nationally will need to be given a great amount of consideration. A strong institutional leadership will be a necessary requirement in this aspiration. The central feature of entrepreneurial system of education is an enhanced collaboration and engagement with industry, community groups and other stakeholders. There is a need for institutions to become more deeply embedded in the social and economic contexts of the communities they serve and live in. Pursuing this objective

increases institutions' diversity and distinctiveness while enhancing their relevance through the level of their responsiveness in the contexts of their operation. The present corporation enjoyed by universities like University of KwaZulu-Natal may signal the fact that the institution is well embedded within the society upon which it is founded. This study therefore is fitting to the context of the institution.

#### **2.3.4 ENTREPRENEURIAL LEADERSHIP LEARNING**

The discussion on the success factors of an entrepreneur in page 30 of this work attributes leadership as one of the factors critical for the success of an entrepreneur. The development or the learning required for the factor has not been explored though. This section strides into the aspect of understanding entrepreneurial leadership given the fact that leadership and entrepreneurship tend to be separate in theoretical terms. The definition of entrepreneurship leadership is well captured by the four areas noted by Cogliser and Brigham (2004) which are: the vision, the influence on the followers and the constituency at large, the creative and innovative leadership of the people besides planning. It is a concern that previous studies have simply postulated the similarities between leadership and entrepreneurship in areas such as strategic initiatives, decision-making, and the risk taking aspect, problem solving and vision. It is in this understanding that Muhammad and Pegham (2011:5) argue that these studies have not expressed the why and how these qualities can be learned or developed. There is need for an analytical consideration of these qualities so that knowledge may be added to the understanding of why must an entrepreneur is in need of these fundamentals. Cohen (2004:20) cited in Muhammad and Pegham (2011) defined entrepreneurship leadership with two aspects of climate and determination to interplay in creating entrepreneurial leadership behaviour. The definition states thus entrepreneurial *leadership is any leadership that creates a climate of entrepreneurial behaviour*. This definition, however, would be brought to negligible strength once entrepreneurial leadership is understood as something that occurs at any level of the Organisation and depends on the position of the individual as noted by earlier authors like Gibbs (1993:19). The context therefore is of paramount importance in entrepreneurial leadership. The aspect of education in developing entrepreneurial leadership asserts Muhammad and Pegham (2011:7) is critical and can be learnt through experiential methods or on the job.



The definition of entrepreneurial leadership has been approached from the psychological approach, contextual approach as well as the holistic approach. Brokehouse (1982) and Nicholson (1998) have taken on the psychological approach in defining the entrepreneurial leadership. The definition is based on the character traits or personality traits such as, the thick skinned, single minded, dominant individuals unlike the managers. The definition is thus juxtaposed to the managerial position of an individual. Others, however, have emphasised on the inherent traits to define entrepreneurial leadership. In this category are authors like Ensley, Hmielesky and Pearce (2006a; 2006b). The strong psychological traits are considered by the authors and learnt behaviour is not brought under consideration. Another perspective is that of Gupta, Macmillan and Surie (2004) who take into account what an individual does and not who they are-the traits. Communicating a vision and the ability to influence others in helping them is the characteristic factor defining entrepreneurial leadership according to these authors. These authors developed a dataset for their empirical study in which the leadership effectiveness was tested and developed reliable results that were generalised but did not apply themselves to the analytical question of how it can be taught or even learnt.

In the contextual approach of entrepreneurial leadership, less attention is paid to the inherent factors but more on the environment that conditions a specific mode of entrepreneurial leadership. In this school of thought are Eyal and Kark (2004) who in their study did confine themselves to the leadership of schools and not companies. Earlier on Swiercz and Lydon (2002) did a study in which they contextualised the notion of entrepreneurial leadership to hi-tech firms. A two phase model was developed in which a leader was integral in the transitory development of an organisation from start-up to a point it steadies. The recommendations were that a founder of an initiative needed to evolve with the organisational changes and complexities other than relinquishing the managerial roles to a professional manager. Chen (2007:246) agrees with Swiercz and Lydon (2002) after looking into the context of hi-tech industries, to the notion that effectiveness of a leader is determined by the capacity in interacting with the creativity of the team as evidenced by the measurement of patents. He argued that to stimulate entrepreneurial teams in a creation process of patents, a leader needs proactiveness, innovativeness and a high level of risk taking. The authors consider that raising these

kinds of behaviours in a leader will increase the creativity of teams; however, they haven't explained how such behaviours can be raised. (Muhammad and Pegham 2011) Nonetheless, learning entrepreneurial leadership in teams has been noted by Harrison and Leitch (1994) as well as Henry, Hill and Leitch (2003) cited in Muhammad and Pegham (2011) for its effectiveness in entrepreneurship training. It is therefore important to note that through learning such skills can be developed. It is for this reason that this thesis investigates such issues in relation to a premier institution of learning, University of KwaZulu-Natal.

The other context of entrepreneurial leadership understanding is on the holistic approach. The climate and the context are merged in this understanding of creating a leadership style. Muhammad and Pegham (2011) have contended that among the many leadership styles, the transformational leadership style is suited for business performance; however earlier studies haven't pointed out how entrepreneurial orientation and leadership could yield a higher firm performance (Navahadi 2002). Transformational leadership however has been admitted as better than other leadership styles, such as the transactional leadership style where the end result is emphasised by the legitimate leader operating in the bureaucratic ladder of the organisation. Emphasis is often laid on the outcomes, rewards and punishment (Burns, 1978; Kotter, 1990; Mullins, 2002). The status quo is often regulated by strict adherence to the existing norms and hence employees work under the observance of rules and regulations. Transformational leaders are often said to transcend themselves for the organisation to be altered. (Robbins 1984). The characteristic features of these leaders are their charisma and visionary posture. The task of overturning the status quo of the organisation is the main concern of the transformational leaders and this, however, is often sought through a major change asserts Burnes (2004). Transformational leaders tend to encourage and empower others towards a shared a vision and in the process do motivate others to do more than is expected. What makes transformational leadership differ uniquely from transactional leadership is that the leader does not wait for change to take place but rather supports organisational change.

Surie and Ashley (2007:236) affirm the above understanding on entrepreneurial leadership with the perspectives on transformation, team focus and value based leadership an entrepreneurial leadership. On another note the understanding that

entrepreneurship is *one type of leadership orientation* is presented by Robonson, Goleby and Hosgood (2006:1) cited in Muhammad and Pegham 2011. This view is well supported in the argument of Vecchio (2003:322) who asserts that entrepreneurship is typical of a leadership that occurs in a particular setting. This position would indicate that leadership includes entrepreneurship. Kuratko (2007) however, asserts from another opposing angle that leadership is a type of entrepreneurship and that effectiveness for leaders today depends on being entrepreneurial. The '*ability to evoke extraordinary effort*', from those in the team has been ascribed to entrepreneurial leadership (Surie and Ashley 2007). It is therefore clear that there is a blending of the psychological and contextual factors in realising a definition that is holistic on entrepreneurial leadership. The ability or capacity that enables the evoking of extraordinary effort has to occur within a particular context, thereby bringing into the platform the synergy of psychological and contextual factors into the definition of entrepreneurial leadership.

The importance of entrepreneurial leadership is well postulated in a UK study in which weaknesses of entrepreneurial education in 131 Higher Education Institutions (HEI) was done in a comprehensive study. The findings of this study pointed issues related or connected to entrepreneurial leadership that needed consideration as an educational perspective and initiative. The following factors were identified in the study:

- ❖ The conceptualisation of leadership and entrepreneurship had a high variability across the country.
- ❖ The program design also had similar variability.
- ❖ Recognition of effects of investment on educational outcomes was lacking.
- ❖ It was observed that there was a correlation between enterprise and leadership education as well as entrepreneurial leadership propensity.
- ❖ Finally that activity growth would require corresponding growth in the institutional support, the capability of teachers, the curricular and pedagogic innovation. (Hanon, Scott, Sursani et. al 2006 cited in Muhammad and Pegham 2011).

A number of sources have written about the role leadership and entrepreneurship being integral such authors have included the following: Chell, Karata-Ozkan and Nicolopolou,

(2007); Jack and Anderson, (1999); Klapper (2004); Matlay, (2005a); Smith, Collins and Hannon, (2006); Muzychenko and Zalan, (2008); MckeOwn, Millan, Sursani, et.al. (2006).

Though the link between entrepreneurship and leadership has been noted by several authors, yet there is no literature addressing how this can be learnt. Okudan and Rzasa (2006) have presented a well-tested and practical course for entrepreneurial education to be realised. In the development of leadership skills, the proposition is to engage the use of actual experience, reflective observation, the use of abstract conceptualisation coupled with an experience of experimentation that is considered active. The second aspect of the course involves the use of active experimentation in developing a business plan and its implementation. Their work lays emphasis on certain aspects in the teaching design that include exercises that lead to the development of skills, workshops designed specifically for team formation and observation of team dynamics as well as critical project appraisal in its evolution. Entrepreneurial leadership learning may act one of the elements in an institution to likely impact on the intentionality towards entrepreneurship in learners. It is true that the leadership role is necessary to champion initiatives or even defend ideas that lead to innovation in organisations or individual venture setting. The initiator of the venture or creative idea that can be innovated leads the notion and those that will adopt or adapt the ideal dreamt of. The role of creating a required environment that encourages entrepreneurial development of intents is significant in a sense that it provides the role an entrepreneurial institution to be realised. The learners become are potential entrepreneurs.

### **2.3.5 GLOBALISATION AND ENTREPRENEURSHIP**

Entrepreneurship has often been thought to be confined to a local context. Nonetheless, developments in information technology and changes that have occurred in trade affairs have been some of the factors that have changed the location context of entrepreneurship. Venter et al (2011:465) have noted that the barriers in the geographical location as well as time have now been broken as entrepreneurs enter into global markets regardless of the size of their business. This therefore has offered opportunity in the expansion of channels for the distribution of goods and services. Moreover, e-commerce, which allows data to be carried in seconds throughout the world (Rayport and Jaworski, 2001:413), has stimulated the new venture growth in countries like South Africa and has also been a

significant driver in a business expansion that is considered global. Kuratko and Hodgetts (2001:14) have defined e-commerce as "...the marketing, promoting, buying and selling of goods and services electronically particularly via internet..." Internet has been considered as the most influential medium, by which transactions are carried out, other media, however, is also in use such as ATMs and telephone banking.

Sprano and Zakak (2000:114-115) have pointed out the following ways by which e-commerce has transformed business:

Through internet business can be conducted around the clock. Business can now be conducted at any time of the day or night depending on the convenience of an individual or organisation. It is clear that internet has transcended the boundaries of time and space.

The penetration of global markets has often been difficult and new ventures would be hardest hit due to logistical barriers. However, internet has made it possible for effective penetration of global markets even by new venture organisations. Along with market penetration is the advantage of opportunity identification and creation of innovative ideas as people socialize through the accessible internet media.

The hassle of acquiring administrative staff as well as other costs and the attendant infrastructure in order to offer products or services outside the physical perimeters of an organisation has been removed by the use of internet service.

Through internet a level ground has been reached where even small business is able to effectively compete with bigger organisations by distributing and marketing their goods and services on a global scale. Market entry for all types of entrepreneurs is now made easier. This practice was not possible before internet was in place.

Communication between the buyers and sellers has been greatly improved. Quick and easy contact has been developed easing the costs for transacting and information respectively.

It is for this that internet enhances the competitive advantage of business. South Africa is said to have 5.1 million internet users and this amounts to 11 per cent of the population also noted as 28 per cent of the economically active population. The online users of internet form potential consumers of goods and services. World over, online users of

internet services is high. Just in 2003, Australia had 54 per cent of the population using internet as opposed to 2011 where 76 per cent of the population is using internet. South Korea which had 53 per cent online users has ended up with 69 per cent of the population using internet. The South African population has been slow with a reported increase of 4 per cent in the last 5 years. Besides air tickets, the amount of money spent on online goods is in the record zone of R929 million in South Africa as opposed to R341million in 2003. Among the many shops that are online is Woolworths, Pick n Pay, and the largest auction site in South Africa, Bid or Buy. These and others amount to 75 per cent of the online sales.

It is notable that most of the students today are involved in the usage of internet and therefore connectivity to global markets is no difficulty. At the same time the access to knowledge is made easier as such. Ideas can then be modified upon citation in one particular source.

Globalisation has been enhanced through a number of factors thereby affecting the position of entrepreneurs at all levels. The reduction of trade barriers through tariff reductions in fulfilment of the World Trade Organisation (WTO) requirements has made it possible for businesses to cross over to other places where their services and goods are most sought out for.

In addition to the tariff reduction another development that has been instrumental for trade barrier reduction is the free trade zones. European Union and the North American Free Trade Agreement between United States and Mexico, and Canada is aimed at removing barriers for trade in countries hence facilitating free trade which is necessary for opportunity identification as well as competition. The aim of these agreements is to help achieve a significant trade policy among the several countries in that zone. The European Union for example has 15 countries besides another 13 candidate nations (Kuratko and Hodgetts 2001:527). These kinds of agreements spur business activities since product and service prices are affected by the tariff component of trade. The context of business will be necessary for strategic moves that are entrepreneurial as the policy environment may motivate. Cassim et al (2002:14) cited in Venter et al (2011) reports of South Africa's agreement with the European Union in 2000. In that agreement, South Africa agreed to reduce her tariffs by up to 86 per cent for all European Union imports in

a period of 12 years while European Union agreed to reduce all tariffs on all South African imports by 2010. Another agreement that South Africa made was with Southern African Development Community(SADC) Trade protocol. This agreement that was signed in 1996, called for a 99 percent of tariff lines of the 97 percent SADC imports by 2005 and with 69 percent of all the SADC imports being zero rated after the protocols implementation. The liberalization policy protocol was expected to have been implemented to the proportion of 85 percent in 2008 pending for full-scale liberalization in 2012.

While the above is essential for all forms of business ventures, another aspect that has been instrumental in enhancing the entrepreneurial role in global markets has been the opening up of formerly closed economies. Such economies have included among others the Taiwan, The Asian Tigers, Japan, Singapore and South Korea. Other opportunities for trade have been opened up by the Asian dragons, which are Malaysia, Thailand, Indonesia as well as the Philippines (Cassim et al, 2002:14 cited in Venter et al, 2011).This essentially leads up to the opening of market opportunities necessary for growth of an enterprise or further development of an existing organisation.

### **2.3.6 CHALLENGES FOR ENTREPRENEURS IN A GLOBALISED ECONOMY.**

Entrepreneurs have to overcome a number of obstacles and such obstacles range from exchange rates to labour supply if need be, besides the cultural aspects addressed in this section. In the process of exporting, the rate at which the currency is to be exchanged is of great concern to the entrepreneur. For goods or services to appear cheaper so as to enhance the competitive advantage, calls for a weak currency in the host country. The weakness of the currency in the country of the exporting entrepreneur makes the goods price to be appealingly cheap and affordable to the country they are being exported to. Venter et al (2011) consider that the converse is true for imports.

One of the challenges that entrepreneurs may face is for a favourable tariff imposed on their goods or services. It should be noted that although tariffs are being reduced by various policy measures yet how favourable they are is determined by those entrepreneuring and the customer base that finally bear the brunt if any. Generally the lower the tariff, the cheaper the imported goods will be.

The information technology era has been noted for its role in the production process, which has lowered the cost of production. Nonetheless, there is still need to underscore the fact that there are some equipment to be bought in some businesses and how expensive or cheap they are will depend on the prevailing rates of interest. The finance loans which essentially contribute towards the cost of capital will depend on the interest rates. This may incapacitate the production processes of some of the enterprises if the interest at which loans are availed is high. Incidentally entrepreneurs may have to face up to this challenge when they may need to borrow additional capital for further investment into the venture growth.

Another challenge that entrepreneurs face is the varying political landscape that is available in different countries where business is to be conducted. The stability of the political environment is essential for business security and further business investment. The stability of politic at regional level is necessary for investment at international levels. Where there is a possibility that the firms may be expropriated by the government, companies may face the risk of losing their investments.

There is also the aspect of the infrastructure in the foreign country where an entrepreneur is exporting the goods to. To avoid disruptions in the delivery of goods, the logistical aspect related to infrastructure may need efficiency modes of operation. The rails, road and air transport systems that are efficient will be an advantage in the timely delivery of goods and service to the consumers.

In some countries corruption may be rife and as such when an entrepreneur is to process documents for the business, 'kick backs' may be required. This coupled with unfavourable laws and customs effected by the legislation may thus discourage investment. In certain scenarios the government may want a majority share in the company or conditions such as having a certain percentage of the local community employed in the company may hinder an interest in the investment by the entrepreneur.

In the production process, labour is no small component, and its availability and suitability to the enterprise is of great significance. The cheaper the labour, the more attractive it is to establish operations abroad. The local pools of labour may be under skilled, leaving entrepreneurs with no choice but to import labour for their operations from elsewhere (Venter et al 2011). This may be contrary to the country's policy and



require strong justification with attendant risks of losing business ground in some circles. These are challenges that an entrepreneur may face, but it is supposedly against the several odds that entrepreneurs conquer by which they can bring about change where it was not possible through ordinary means. Their ability to rise against risks that may vary causes them to stand out in the business world.

Other challenges that are faced emanate from the cultural perspective as elaborated by Hofstede (cited in Venter et al 2011). National cultures have been classified in 5 dimensions. Each of the dimensions may pose certain challenges that may complicate business operations and as such certain risks may be available in each case.

Power distance is one of the cultural dimensions that differ in national cultures. The high powered distance societies have unequal distribution of power. In such scenarios, subordinates have no power and have to wait for an authoritative figure's directive. The consultation with employees in this kind of scenario is limited. South Africa is said to have undergone some changes in its power dimensions after apartheid, which was characterised by high power distance relationships. Apparently there is low power distance with equitable power distribution.

Another dimension that shall be faced by entrepreneurs entering different contexts is that of either individualism or collectivism cultural dimension. The individualistic culture centres their interest in self and specific interest that affect an individual as opposed to collectivism where the bonds between an individual and the community are strong. The collectivist culture has the role of individual in a broader context; hence extended families are cherished in the form of uncles, cousins, and aunties. The South African context is said to be heterogeneous depending on the cultural setting in question.

The masculinity vs. femininity culture is engendered on the aspects based on the masculine or feminine categorisation. The masculine culture is evidenced by assertiveness, aggressiveness and patriarchy as opposed to feminine culture where sensitivity, care and tolerance is evidenced. Some countries like South Africa have a mixture of both. The aspect of communication and relationship is thus different between a collectivist and individualistic culture in a sense that high context relationships tend to occur in collectivist settings and the building of relationships is important before setting out exchanging information on the business contracts. This is well contrasted in low

context relationships which are connected to individualistic culture; the exchange of information timeously is more important than development of relationships.

The uncertainty avoidance is a cultural association that varies according the level of uncertainty that is acceptable. It is in this context that we have high uncertainty avoidance and low uncertainty avoidance cultures. Tolerance of uncertainty and ambiguity is critical in this factor. Communities with high avoidance of uncertainty avoidance are said to be resistant to unstructured environment, which is regulated and kept by laws. There is intolerance to other people's opinions and beliefs societies with high uncertainty avoidance as opposed to those with low uncertainty avoidance. The challenge with high uncertainty avoidance communities is that new ideas may not be easily taken, leading to lesser creativity and eventually innovation. These elements are necessary for frequent start-ups in the organisation of new venture creation.

The Short term vs. the Long term orientation: this particularly refers to an area where a short term goal is given precedence over the long term gains. Venter et al (2011:560) have pointed out that the short term orientation is characterised by the concern in tradition, social spending and the fulfilment of social obligations. This is opposed to the differed of gratifying oneself.

### **2.3.7 MISCONCEPTIONS OF ENTREPRENEURSHIP**

The importance of entrepreneurship in learning institutions has been endorsed by the World Economic Forum (WEF, 2009) and the call for it to be extended in all Higher Educational Institutions (HEIs). A number of countries have been known to support entrepreneurship education as directed by top level policies in each case.

Examples of countries that have taken this call seriously include Finland, where entrepreneurship is treated at thematic level, other than subject level. The education ministry of Finland developed an Action plan in 2004, together with the Ministry of Trade and Industry that covered every level of education system. A working committee was also appointed, entitled 'From *Higher Education Institutes to Entrepreneur*'. A steering committee was further appointed to ensure the implementation of the action programme (Higher education Institutes 2008).

This trend of serious development towards entrepreneurship education is also evidenced in Norway where an action plan was developed entitled ‘*Entrepreneurship in Education and Training- from compulsory school to Higher education 2009-2014.*’ The plan aims at strengthening entrepreneurship education and making Norway the leading force in that respect. Three government departments, namely Ministry of Education and Research, Ministry of Trade and Industry and Ministry of Local Government and Regional Development are responsible for the delivery of the program at all educational levels. In the need to depart from traditional methods of teaching, and more specifically develop the competencies of young people and at the same time develop an entrepreneurial culture, partnerships have been developed between directorates and businesses as part of the action plan (Ministry of Education and Research, 2009).

In Denmark, the emphasis for entrepreneurship education is well noted in their statement which denotes that the determination of future training of entrepreneurship being expedited through the future law, the executive orders as well as performance and development contracts addressing the need for training in entrepreneurship wherever relevant (Ministry of Education, Ministry of Culture and Ministry of Economic and Business Affairs, 2009)

Another country where policy has been strongly developed is Scotland. An action plan was developed with a policy named ‘investing in Scotland’s future: Creating a culture of enterprise in our schools, 2008-2011’. This policy was introduced with a detailed action plan for entrepreneurship to be embedded in the national schooling system. There was a section where the measurement of the program would be attained in the action plan which indicated how the future would be (Scotland, 2013). In the UK higher education institutions have been described as part of the entrepreneurial environment. The National Centre for Entrepreneurship Education (NCEE) described the status of entrepreneurship education as optimistic in that all the higher education institutions have the mission and vision of entrepreneurship in their action plans, mission statements and strategic policies and students are receiving the support they need in their clubs. (NCEE, 2013) A number of countries have embarked on introducing entrepreneurship to learning environments at an inter-disciplinary level.

In most recession times, economic recoveries have been attributed to entrepreneurs. In the United States, it was observed that in the 1980's, companies that were less than five years old accounted for all the net new jobs created. Furthermore it was noted that more public companies were made to exist during those recession periods. It is also argued that more than half of the 2009 Fortune 500 companies were founded during those hard recession moments. The present state of affairs, however, has been different, signaling some challenges that have responsible for decline in creation of firms. The creation of the companies then will by no means gain its credit from the ecosystem that played a role and the ingredients thereof (Stangler 2009 and Pedrosky 2008). Entrepreneurs have been known to play very significant roles that include the transformation of innovation into young and dynamic organisations. The renewal of economic growth and job creation as noted in the above observation and the stimulation of creativity and dealing with global challenges using new approaches. (Wilson 2013) The role of entrepreneurship is further noted in a study conducted by Babysen College and London School of Economics, where it was noted that there was an above average economic growth for the 21 countries that had high entrepreneurial activity (Reynolds, Hay, Bygrave, Camp and Autio 2000). In developed economies small firms contribute up to two thirds of the GDP, it is however, estimated that the South African counterparts contribute only about a third of the GDP (CSI 1990). According to the Global entrepreneurship (GEM) report of 2004, there is a relationship between the nation's GDP and the Total entrepreneurial Activity (TEA) of the nation. Entrepreneurship has been a subject that has existed for a while with different understandings which are stipulated below and can thus be considered to be mistaken conceptions. These conceptions could be responsible for the choices made in either personal or corporate levels let alone educational settings such as higher levels of learning. In spite of the findings of entrepreneurship benefits, its attractiveness as a company concept or a career choice is likely to be dependent on the underlying understanding in communities and individuals.

The mistaken understandings of entrepreneurship may be captured in the observation of Wilson (2013) in as far as entrepreneurship is concerned. Below are some of the 'myths' observed regularly whenever entrepreneurship is mentioned:

- ❖ Entrepreneurship is just 'business'. Following this assumption, entrepreneurship is offered in most business and economic departments yet the reality is that, it is

cross disciplinary and needs to be taught that way. The reality is also that many high growth entrepreneurs do come from science, engineering, arts and medicine.

- ❖ Entrepreneurship is about start-ups and as such most universities neglect to teach learners how to grow companies. The starting of companies is perhaps rather easy as opposed to growing them.
- ❖ The measure of entrepreneurship is by how many students become entrepreneurs on graduation! This is another myth, as denoted by studies done by Kauffman research that most of those who enter entrepreneurial activities is of an average of 40 years and above. This then calls for the teaching of entrepreneurial skills attitudes and behaviours applicable throughout one's life.
- ❖ Another myth is that building dedicated start-ups will result in creation of more firms. In the process, policies have been enacted towards increasing the infrastructure on incubators, science parks, etc. This may be done at the expense of building the key connectors and entrepreneurial teams in the entrepreneurial ecosystem that help entrepreneurship to thrive. The reality is that the need for social networks surpasses infrastructure.
- ❖ Innovation is evidenced by Research and Development endeavours. This myth has been disapproved by OECD where it has been shown that there are often large amounts of non-technology innovation.
- ❖ Technology transfer has been considered as the 'gold mine' of entrepreneurial endeavour, notwithstanding that it is simply a few universities that can manage this approach, and even then this can at times become a bottleneck in themselves.

There is also a need to understand that there has often been a disconnection between innovation and entrepreneurial policy. Innovation tends to put more emphasis on research and development at the expense of commercialisation of such technologies.

Entrepreneurship policies tend to emphasise more on startups and at the same time there is often no link between innovation and entrepreneurship departments and they tend to exist as different entities to a significant disadvantage.

### **2.3.8 DEBATE ON ENTREPRENEURSHIP CATEGORISATION**

There has been a classification of entrepreneurship that has led to the debate as to whether an individual can be classified as an opportunity based entrepreneur or a necessity based entrepreneur. Opportunity based entrepreneurs start business due to reasons such as available market opportunity and not necessarily responding to personal challenges found in ones setting. This understanding is said to be connected to the World Global Entrepreneurship Monitor's [GEM] descriptions (Reynolds, Camp, Bygrave, Autio et al 2002). GEM is said to have developed the idea of necessity and opportunity based entrepreneurship during its data capturing occasions. Others have, however, supported the idea that there is such a thing as necessity based entrepreneurs who start a business as a result of having no other options to current life circumstances. Opportunity based entrepreneurs seek to align themselves to opportunities that exist in the market. This may be related to a network to be exploited or an innovative idea to be exploited. These authors further argue that the necessity based entrepreneurship is mainly based on the informal sector, whereas the opportunity based entrepreneurship is based on the formal /modern sector ( Coliendor and Kiritkos, 2010; McClelland, 1961; Shane et al 1991; Storey 1991; Clark and Drinkwater, 2000; Birley and WestHead, 1994; Wagner 2007; Naude, 2011; Gries and Naude, 2010; Desai 2011). As to whether GEM started the terminology of Necessity and Opportunity based entrepreneurship remains in balance if an examination is taken critically on the present sources cited above for the terminologies in question. The reality and perhaps the origin in regard to calendar time for the two words above remains a topic for another occasion. Authors such as Rosa, Kodithuwakku and Bulunywa (2006) have argued that the presence of necessity based entrepreneurs does vary directly with the poverty levels of the country. Besides the aspiration of growth and personal satisfaction, the need to improve living standards accompanies necessity based entrepreneurs. This is in contrast with developed countries where most of the population is working points Benzing and Chu (2009). If jobs were to become available for the necessity based entrepreneurs, they would not even start business in the first place (Evan and Leighton, 1990; Storey, 1991; Masuda, 2006). These kinds of criticisms have been labelled on necessity based entrepreneurs. Other criticisms labeled against necessity based entrepreneurs are that they simply hire themselves and do not create employment for others. It is for this reason that they do not generate ideas for

future business growth and that they are ill equipped to launch a business (Coliendor and Kiritkos, 2010). As a result of being ill equipped they are likely to be prone to the risk of business failure (Carrasco 1999; Pfeffeifa and Reize, 2000; Adersson and Wadensjo, 2007). The long term survival of necessity based entrepreneurs is as well criticized for marginal business expansion, insignificant capital investment, hence leading to minimal earnings and failure to create additional jobs (Vivarelli and Audretsch, 1998; Santarelli and Vivarelli, 2007; Shane 2009; Hamilton, 2000; Adersson and Wadensjo, 2007). Reynolds et al (2002) denotes that the difference as to whether it is a necessity based or opportunity based entrepreneurship is of contextual nature by concept. Individual behaviours can often be influenced by environments such as economic, social as well as political. Bruno and Tayebjee (1982) once recorded the empirical and conceptual evidence regarding entrepreneur's environmental perception which in turn played a role in the firm's success chances. The number of those who classify themselves as opportunity based entrepreneurs as opposed to those who classify themselves as necessity based entrepreneurs is significantly notable. The global assessments so far have indicated that no less than two thirds of entrepreneurs classify themselves as opportunity motivated entrepreneurs as opposed to a third for the necessity based ones ( Reynolds et al 2002).

Although the classification of either the necessity or opportunity based entrepreneurs is given much attention and debate, other findings have differed substantially. As to whether available opportunities drew one to business or unemployment got one to business cannot be guaranteed as unchallengeable phenomenon. Other studies for example have generated findings that indicate the employers' size was related to unemployment and self-employment among low ability workers. In longitudinal study of 1978-1983, and 1993-1995 using the data of Panel Study of Income Dynamics (PSID) and local unemployment rates, there was a negative correlation between local unemployment and self-employment or personal job creation among low and high ability workers (Deli 2011). Nonetheless, upon firm size control, it was discovered that the employers' firm size had a positive impact between self-employment and unemployment rates (Deli, 2001). This understanding reflects on the possibility that it is not necessarily that unemployment leads specifically to self-employment through business venture development. Local unemployment did not lead to self-employment in any case in the scenario above. In this case, the necessity based entrepreneurship isn't seen as a

phenomenon. For policy makers the understanding between opportunity entrepreneurs and necessity based entrepreneurs has helped shape policy. This is well noted in developed economies such as Germany. Entrepreneurship in Germany has been basically used to help promote employment leading to the concept of necessity entrepreneurship being advanced (Bergmann and Sternberg, 2007). Academic discussions have however focused on the macro perspectives in terms of the impact of each of the classifications of entrepreneurship (opportunity and necessity entrepreneurs) to an economy (Wennekers, Stel, Thurick and Reynolds, 2005). There is also need to understand the distinguishing features between simply business and entrepreneurial ventures as discussed below. The dynamism embedded in entrepreneurial ventures is considered different from simply business as usual in small business ventures.

## **2.4 Entrepreneurial University**

The need for universities to innovate and adapt to a changing environment necessitates changes in their operations. A number of authors have noted that the environment universities are embedded in is dynamic. This dynamism is reflected in the social, economic, legal- political, demographic, environmental as well as technological spheres pressuring these institutions' governance, leadership and management structures towards increased effectiveness, efficiency and flexibility (Carbone, 1994; Conceicao and Heitor, 1999; Etzkowitz, Webster Gebhardt, Terra, 2000; Clark, 2001; Sporn, 2001; Axley and McMahon, 2006). The issue of innovation and restructuring at universities has been associated to being entrepreneurial in an effort to encourage entrepreneurship and innovation in both industry as well as society (Aranha and Garcia, 2014). It is argued that for the university to effectively contribute to the nation's social and economic growth, it is mandatory that it transitions from modern to post-modern levels. This can be achieved through investigating and understanding the new organisational forms as well as engaging its stakeholders in their roles and propositions (Clark, 1983; Etzkowitz, Ranga, Dzisah, 2012; Martin, 2012; Goddard, Robertson and Vallance, 2012; O'shea et al 2007; Bathelt, Kogla and Monro, 2010). In the realisation of such an endeavour, it is paramount that an environment is thus created that impacts on the learners to a certain degree and prepares them in relating with the social and economic fabric of their context. The roles therefore of a university environment and learning become important in the discourse of their duty and other obligations to their stakeholders. Among the closest stakeholders are



the learners who may help replicate the universities efforts even when they are no longer learners in the University for that Matter.

Other authors have considered it that an entrepreneurial University is a natural incubator that adopts a coordinated approach across activities that are critical. Such activities include research, teaching and entrepreneurship. The University community which is thus constituted of staff, academics and students ought to transform ideas to economically and entrepreneurially benefit society through idea exploitation, exploration and evaluation (Kirby, Guerrero and Urbano, 2011). It is for this reason that entrepreneurial universities engage with a wide variety of networks and develop relationships. These relationships encompass both the public and private sectors and organisations to help serve as a collaborative umbrella for enhanced corporation points Inzelt (2004).

Entrepreneurial Universities have had their share of challenges across the board. The similarity of such challenges across various entrepreneurial universities has been noted in terms of creating development space for the society while at the same time focusing on its research capacity. The art of maintaining critical, independent knowledge and thinking and the social identity and values is a task that such universities face (Guerrero, Urbano, Cunningham and Organ, 2012). There are environmental conditioning factors that entrepreneurial universities face such as the structure of governance. The areas of special interest will often be the organisation and structure of governance in an entrepreneurial university. The traditional, hierarchical and bureaucratic structures may not advance the higher levels of autonomy necessary for favourable integration on the intellectual, financial and physical resource base. It is the latter that is necessary for an effective entrepreneurial university (O'shea et al 2007). The various areas in an entrepreneurial university need some support measures if they are to thrive. The support thus is related to the nature of structure of governance in a particular university. The university structure will influence such support given to research facilities, research groups, small businesses, university business and the new firm creation ( Link and Scott, 2005; Grandi and Grimaldi, 2005). The support accorded has been considered as an important step in possible conflict scenarios between being an academic and entrepreneur points Lockett and Wright (2005). As a result of this support and freedom, academic entrepreneurs are thus enabled in creating links between markets and external agents (Vohora, Wright and Lockett, 2004). The emergence of an entrepreneurial university has been linked to the

primary actors who are the administration, faculty and students. The attitude towards entrepreneurship by the primary actors is considered significant in an entrepreneurial university (Guerrero, Rialp and Urbano, 2008). It is for this reason that this study investigates respondents' attitudes in the University of Significance such as the University KwaZulu-Natal. Attitudes to entrepreneurial tendencies can be developed by management as well as staff and students. The facilitation of key activities central to the entrepreneurial mission is certainly a management's responsibility. This is necessary for the development of entrepreneurial teams and various spinoffs (Vanaelst et.al 2006)

In understanding issues on the role of universities in enhancing entrepreneurial behaviour, Aranha and Garcia (2014) point an example of the Brazilian higher education system which has three illustrative examples. In the need to promote entrepreneurship and develop policies, an initiative was undertaken by the institutions of higher learning in Brazil in 2010 where an entrepreneurship standing committee for the national association of the federal institutions of higher education directors' was formed. A student population under this arrangement was estimated at more than one million two hundred students in the 59 federal universities and higher education institutions.

The second illustration is noted to have been by the deans' forum for the extension of Brazilian public universities in an entrepreneurial university seminar, held in 2010. This aimed at stimulating and reflecting on the entrepreneurship at public universities, whilst formulating a systematic set of actions for the public universities. The seminar offered an opportunity for the deans to reflect on the given model's impact in Brazil.

The third illustration refers to the ongoing entrepreneurial practices in some of the Brazilian universities for the last ten years. These practices had not been entrenched in the academic administration studies in Brazil. Universities noted in this category included Universidade Federal de Itajuba (MG), Fundacao Getulio Vargas in Sao Paulo (FGV) as well as Pontificia Universidade of Rio Grande do Sul (PUC-RJ and PUC-RS).

It was also understood that there were some programs, actions and projects that were not getting the attention of the researchers from the universities in Brazil. This indeed would as well amount to the understanding that there are ways in which the learners can be impacted by the institution such as University of KwaZulu-Natal, given its historic

existence that may not be understood unless a study of this kind is undertaken to comprehend the impact so far involved on the learners.

There are elements involved in transforming a University which have been known to enable a trajectory characterised by elements of the analysis model which have included among others the expanded developmental periphery, a diversified base of funding, a strengthened steering core, an entrepreneurial culture and an academic heartland that is stimulated. These steps were identified by Clark (1998) in five of European's universities undergoing change and have also been termed as entrepreneurial. In the adoption of the entrepreneurial steps above, Sporn (2001) records how the universities became adaptive to the external environment. Following the observations on the above steps, Clark (1998) configured the steps of an entrepreneurial university which outlined the significance of establishment of interconnectedness with innovation, energy, leadership and opportunity pursuit. These aspects incidentally are considered as an inherent behaviour of persons with entrepreneurial intent. Nonetheless, it has also been argued that an entrepreneurial university that is like any emerging organisation, having the disruptive ability in the reorganization of the academic as well as the administrative processes (Clegg and Hardy, 1999; Clark, 2001).

The transformation envisaged in an entrepreneurial university is normally brought about by individuals with their entrepreneurial skills. The issue of ownership and even belonging has to be strong. This aids in enhancing the sense of freedom and autonomy with a strategic intent of maximizing opportunities that surround them as well as encouraging learning from stakeholders (Gibbs, 2002; Lumpkin, Lichtenstein, 2005).

The elements identified by Clark (1998) are indeed pivotal in the behaviour of an entrepreneur and have also been found to be necessary in the external and internal environment of the university (Dutta and Crossan 2005; Lumpkin et al 2005; Short, Ketchen, Shook and Ireland, 2010). It is these characteristics that are inherent in an entrepreneurial individual thus enabling an educational institution becoming an entrepreneurial university. In the need of deepening the role of the university in the catchment area, the strengthening of the University's individuals at the core of leadership, with the basic skills for opportunity identification becomes significant. It is the role of a strong core that enhances the integration efforts towards the environment that the

institution finds itself in. This provides an occasion where the academic members develop projects that are targeted at the community beyond the campus call of duty.

Eztkowitz (2001, 2004) is said to have developed the framework for an entrepreneurial University emphasizing the structure that is based on a triple helix. This is capacitated by innovation as one of the driving vectors between government, university and industry. Basically the triple helix is in the order of government-university-industry. Due to the position the post-modern university occupies, the economic and social development is integrated into an entrepreneurial university. This development is related to the understanding that was based on the revolution of the second academic which occurred in the 20<sup>th</sup> century in the early 50's. Education, till up to the 40's, was the single main mission of the Universities and therefore the research and teaching remained as the fundamental responsibilities of Universities added in the 50's and only later were teaching and social development added into the university's mission (Eztkowitz, 2001).

The 5 elements in the framework of an entrepreneurial university as identified by Eztkowitz (2004) are: Interdependence, Reflexivity, independence, capitalisation and hybridization. These elements are integrated as well as interconnected. It is in the process of innovative knowledge transformation that capitalisation is thus employed. This in essence stimulates economic development as well as social development in the process. Through the notion of interdependence, the interaction formats and models are achieved with industry and government hence fostering innovation in the process. In order for the university to fully observe her independent mission, distinctive governance and distinguished objectives, the relationship between government, industry an entrepreneurial university must be guarded with independence (Eztkowitz 1998).

In the process of relative independence, there will be an emergence of formats and models from the university, as a result of close relationship between industry and government with the university- hence the hybridization achieved. This according to Eztkowitz (1998) has to be kept within the spheres of the operating institutions. Relationships that have been developed between industry and government are necessary for innovation to be fostered by an entrepreneurial university through organisational formats and models (Clegg and Hardy, 1999). The transformation of academic research into processes, products, services, leading to new venture creation and technologies can

then be realised from the relationship between University-Industry-Government. It is this development that leads to social and economic development of the region and nation (Clark, 2004; Ezzkowitz, 2001).

An entrepreneurial university, according to Rothaermel, Agung and Jiang (2007) needs to have creation of new businesses, networks of innovation environment, technology transfer centre productivity and university research. The four elements identified by the above authors serve to help serve as an entrepreneurial stimulation of the university and create an environment that is as such conducive. In stimulation of entrepreneurship, Kirby (2006) considers that a university needs eight actions that are strategic. Such actions are: communication, encouragement, endorsement, support, recognition and rewards, incorporation, implementation, organisation and promotion. This therefore follows that the university needs to encourage internally and externally an entrepreneurial atmosphere. It is in the art of publishing and disseminating entrepreneurship that the strategic action of communication is achieved (Arancha and Gracia, 2014). For an innovative environment to exist, the university needs to offer supportive infrastructure and material resources such as entrepreneurship laboratories, technology parks, incubation science, pre-incubation, environments for raising seed capital for the stimulation of an innovative environment (Kirby, 2006). For the encouragement of career development, the strategic action of recognition and rewards is pivotal, in enhancing compensation and equity sharing. The richness of the environment at the University is very well pointed out in the sense that there is a multi - disciplinary entrepreneurship center with educational partnerships and other mechanisms which exercise multidisciplinary research activities. The promotion of entrepreneurship in a University is an all-important affair. To this end, Kirby (2005) and Bernasconi (2005) point out a key factor regarding the reward systems. Are there any reward systems in place which are both monetary and non-monetary? Such systems include funds, use of resources and scholarships on the monetary aspects while promotion and recognition systems can be considered as non-monetary. The use of rewards is augmented by authors like Landry et al, 2006; Wright et al 2007 in support of the fact that when an academic entrepreneur takes up commercialisation activities as well as research and teaching rewards often aid in balancing the costs incurred.

A university's entrepreneurial environment is further enriched by promotional activities which serve as a strategic action plan through entrepreneurial competition activities using case studies and business plan competitions. The university environment in terms of entrepreneurial frameworks have been captured through various pieces of literature (Bratianu and Stanciu, 2010; Clark, 1998; 2004 Etzkowitz, 2001; Sporn 2001; Rothaermael et al.2007; Yosof and Jain, 2010; Gibb et al., 2009; Nelles and Vorley, 2009). According to Aranha and Garcia (2014), this various frameworks have led to a densification that is conceptual in the field of entrepreneurial university literature. These at the same time has led to non-converging elements and converging elements, which hopefully may be integrated into a single model in the future. Whereas this aspect will be subject to debate and further analysis, this study takes a special understanding on how an existing university such as university of KwaZulu Natal, considered a premier institution of scholarship has impacted on its learners. This in a way may then be necessary to add to the debate how the institutional framework can thus be improved or sustained in the realisation of the university's entrepreneurial impact at various levels.

#### **2.4.1 UNIVERSITY ENVIRONMENT AND ENTREPRENEURSHIP**

According to Co and Mitchell (2006) the societal and regional economies can be greatly influenced by universities through entrepreneurship education. Owing to the fact that universities are seedbeds for entrepreneurship Roffe (1999) along with Autio, Keeley, Klofsten & Ulfstedt (1997) concluded after a study of technology and science students in four countries that students' entrepreneurial convictions can be deeply impacted by the university teaching environment. The students' decisions are expected to be shaped in a culture of entrepreneurship created by the university. In the Ethiopian study by Buzeye (2013) it was revealed that there was a positive impact that the university exerted in promoting entrepreneurial inclination of learners. This supports hypothesis 1 of this study which asserts that the University Of KwaZulu - Natal (UKZN) plays a role in stimulating the entrepreneurial intents of the learners.

#### **2.4.2 UNIVERSITY LEARNING AND ENTREPRENEURSHIP**

Falkang and Alberti (2000) and Raichaudhuri (2005) have contended that the debate as to the uniformity regarding how, what and whom to teach entrepreneurship is far from over in terms of contextual and conceptual understanding, however, there is an

understanding that its multidisciplinary in nature as noted by Kent (1990). Bechard and Toulouse (1998: 318) state that the contextual and conceptual understanding of entrepreneurship is fundamentally viewed by four different views of the stakeholders of this aspect; the educator's view point, student entrepreneurs, programme designers and the evaluators. The dichotomy of approaches in entrepreneurship is well captured by Levi (1999) who found in his study that there are two approaches for entrepreneurship teaching and education in England. The approaches are courses about entrepreneurship and courses for entrepreneurship. If transformation of students' entrepreneurial competencies in a practical way is to be achieved, then there is need to closely centre on courses *for* entrepreneurship as opposed to *about* entrepreneurship (Gibb2002 [a]). It is for this reason that Edwards and Muir (2005) postulate that entrepreneurship develops differently across different universities with others specifically categorizing courses for entrepreneurship or courses about entrepreneurship. Nonetheless, there is need to have a connection between the academic learning and the real world in order to realise formation of new businesses as well as creation of jobs. For this to be achieved Robinson and Haynes (1991:51) call for a learning that is designed such that it is creative, imaginative and innovative to help link academic program to the real world out there. The teaching methodology therefore shall depend on the teaching objective.

There are also 4 types of knowledge:

The general business knowledge which applicable to new ventures or firms;

The general venture knowledge, applicable to most firms including new ones;

Opportunity-specific knowledge-knowledge of unserved existing market nonetheless, there is a need to venture into the resources;

Knowledge that is entire specific - knowledge to produce a particular product/good. Knowledge as noted in the various areas above is necessary for an entrepreneurial inclination. The learning content can impact the learners. Studies have observed that the learning and content of university learning as well as the image of entrepreneurship were correlated to entrepreneurial inclination of students (Buyeze 2013). The way such knowledge is being learnt in as far as it is being taught is fundamental in inclining the learner towards entrepreneurship and thereby is the next hypothesis drawn: The

entrepreneurial inclination of students is likely to be increased by the nature of learning at the University.

### **2.4.3 ROLE MODELS AND ENTREPRENEURSHIP**

Among the challenges business schools face is the ability to produce enterprising individuals. There is an argument that the traditional educational system stifles than fosters the necessary skills for entrepreneurial development of learners. Moreover, the very association of entrepreneurship need to be changed from simply small business creation or venture creation to creativity and change (David, 2004). Business schools are expected to stimulate the entrepreneurial processes more than the thought processes. The understanding is that both the analytical processes on the left on the left side of the brain as well as the entrepreneurial processes associated with the right brain need to be stimulated and developed. The environment therefore for this is necessary.

Through the provision of useful business related information, guidance and moral support, the role models influence the individuals career choice of entrepreneurship. Rajkonwar (2006) considers that role models are imperative in that they provide individuals a training for socialization. There is also an assumption of seeing someone successful in business becoming a motivation for entrepreneurial intention (Caputo and Dolinsky 1998). The role of teachers in shaping an inclination towards entrepreneurship is indispensable argues Boyle (2007:12). Peterman and Kennedy (2003) and Wong and Lena (2005) consider the role of educators and university friends in influencing students' inclination towards entrepreneurship as inarguably important. The responsibility by educators in moulding student personality and character, apart from imparting knowledge has significant effect in the minds of students as they absorb whatever they are taught by the educator states Bligh (1998). Role models are considered as individuals that influence an entrepreneur's career choice and style (Hisrich, Peters & Shepherd 2005:68). Friends, never-the-less, have also been considered as influential in entrepreneurial inclination, Nonetheless, the part played by role models is significant in entrepreneurially inclining a student and hence the next hypothesis is thus drawn: The availability of entrepreneurial role models increases the entrepreneurial inclination of students.

### **2.4.4 FAMILY AND ENTREPRENEURSHIP**



Research done by Dunn (2004), Smith (2005), Kirkwood (2007) and Breen (1998) have asserted that an influence of demographic and family background to entrepreneurial intention does exist. Dillard and Campbell (1981), however, differed with this observation when they point out the non-parental factors, among White American students, such as peers and career development choice as influential factors. This observation contradicts the influence of demographic and family background to entrepreneurial inclinations as noted by the research done by Dunn (2004); Smith (2005); Kirkwood (2007) and Breen (2008), which pointed out the influence of demographic variables to entrepreneurial inclination. Although the contradiction is noted in that observation, it is worth noting other studies such as that done by Buzeye (2013) in an Ethiopian study found out that the male students were more entrepreneurially inclined than the females. The emphasis on gender variable is pointed out in these findings as a reinforcement of the above argument that there is an influence of demographic factors on entrepreneurial intentions. The study also did note on the contrary that the father's occupation had no statistically different significance as compared to the mother's in stimulating students towards entrepreneurship. As to the universality of this observation, a study of this kind shall affirm. Following these researched observations, it therefore becomes possible to hypothesize as below: Entrepreneurial inclination in students is stronger for: Gender, Father's occupation and Mother's occupation.

In a study done by Siyanbola, Willie and Afolabi, Oladele et al (2009), among the significant factors responsible for entrepreneurial inclination in students are parental entrepreneurial history as well as family socio demographics. This study discovered that among the five central pointers to entrepreneurial interests in students were the positions among mother's children and the number of children by the father. Father's income and entrepreneurial education were also among the factors responsible for the stimulation of entrepreneurial interest. It is important to recognise that parents can influence their children by their choices.

Engaging in entrepreneurial activities has also been claimed to be associated to genetical factors. A gene has been defined as a DNA that is biologically passed from parents to children during reproduction and ends up influencing a characteristic behaviour generally termed as the phenotype. Genes may influence brain chemical mechanisms increasing the likelihood of people engaging in entrepreneurial activity. It is further argued that the

internal locus as well as extraversion, regarded as personal attributes for entrepreneurial activity are predisposed through genes. Genes have also been noted to make some people sensitive to environmental stimuli, hence increasing the possibility of engaging in entrepreneurial activity. Genes may as well influence exposure to favourable entrepreneurial environment (Nicolaou and Shane, 2009). In spite of this argument, it may be argued that parents beyond the biological affiliation have an influence that is social and being the closest persons to their children, can influence their choices. This understanding is vital in engaging or getting inclined to entrepreneurship. Genes do not necessarily cause people to engage in a social activity like entrepreneurship, however, they affect the probability of their engagement in such activities (Plomin, DeFries, McClearn, 1990). Parents by no small measure can be inspiration to their children in terms of the choices they make.

## **2.5 CONCLUSION**

In conclusion it may be noted that this section has handled the important areas that are foundational to the study, ranging from definitive aspects of entrepreneurship, the differences that deal with small and entrepreneurial business, entrepreneurial leadership learning, factors responsible for the success of entrepreneurial effort as well as the types and challenges that entrepreneurs face. The effective study of entrepreneurship or its intentionality creation and how that can be realised has been addressed by the leadership entrepreneurial learning which has not been so much emphasised in the practice of learning entrepreneurship. This is an area that is not so much addressed as is the area of academic entrepreneurship in many circles practically. As has been noted in the foregone literature, academic entrepreneurship has been dictated by a number of factors, ranging from the changing legal to social dimensions, leaving eventually no option for its adoption by the academics. Yet it may be understood through this literature study that without comprehension of this fundamentals, the ecosystem necessary for effective inclination may be hard to come by. The various studies regarding the institutional environment, learning, role models as well as demographic and family influence in entrepreneurial inclination have been examined. The next section will deal with the entrepreneurial ecosystems, its pillars and the theories on learning and intention among others in addressing the subject matter of this study.

## **CHAPTER THREE**

### **LITERATURE REVIEW ON ENTREPRENEURIAL ECOSYSTEMS, MODELS AND THEORIES**

#### **3.1 INTRODUCTION**

The previous chapter dealt with the entrepreneurial debate, entrepreneurial university and entrepreneurial learning thus laying a foundation for the perspectives in the entrepreneurial world. In this chapter it is worth describing entrepreneurial ecosystem pillars, the entrepreneurial models and the entrepreneurial university economic impact. The entrepreneurial ecosystem of an institution is essential and has its pillars discussed here. The attendant theories on learning as well as intention have been presented in this section as well.

#### **3.2 ECOSYSTEMS**

Business operations of any kind occur within settings. Entrepreneurship is an activity that is enabled by various factors; it does not matter where it takes place, personal level, community level as in the case of social entrepreneurship or corporate venturing as in established organisations. One shared fact for the various types of entrepreneurship described in the preceding section in chapter two is that they were or are enabled by a number of factors. The word ecosystem has been primarily borrowed from the scientific analogy to comprehend the phenomenon that is based on a number of factors. A lot has been written on an entrepreneur as an individual and how the intentions were derived from a more personal and psychological point and it is almost possible to assume that entrepreneurial intentions are a consequence of one's nature and less of other factors. If entrepreneurship is learnt as has been argued, then the question is, is learning achieved only through a medium of active instruction or are there other components that influence learning? There has been an approach by researchers to not only take psychological factors for prospective entrepreneurs but also the domain specific attitudes and situational variables that may not be captured simply through character traits towards entrepreneurial intentions (Bird, 1993; Shapero and Sokol, 1982; and Shaver and Scott, 1991)

There is need to define an ecosystem in this section so as to relate to the context of this presentation. An ecosystem is a biological term that refers to the existence of living

organisms, such as plants, microbes and organisms interacting with the non-living things forming a system in the process. The ecosystem composition is held jointly by three main elements: the stakeholders or population that are a consequence of the ecosystem, secondly the context or location of the ecosystem and thirdly the interaction between the stakeholders by which they are all linked together. The linkage may thus be implied with the definitions of entrepreneurship in the previous section, where planning, organising amidst popularly accepted issues of risk taking take place in most types of entrepreneurial endeavours. An ecosystem allows or permits the coming together of the various factors necessary to achieve not only sustenance but also the competitive advantage where need be. The founder of the world economic forum Claus Schwab captures the benefit of collaboration to achieve a mutually exclusive end. He considered that during the difficult times collaborative efforts allow us to bear fruit, while fostering our imagination to help captivate the opportunities that lie ahead.

The need to enhance the entrepreneurial ecosystem in a country has been noted to lead to increased economic growth, job creation and better living for the people involved.

Jongwe (2013) points out that an ecosystem is self-sustaining and can have a huge economic impact. This is possible when all factors operate in collaboration. Among the elements, pointed by the above author of an ecosystem are education, financial capital, a network of contacts especially high level decision makers, big business, government and leadership among others. The Wits Business School is said to have developed a unique ecosystem with specific initiatives targeting the individual entrepreneur, the enterprise and as well as the sector while being cognizant of the macro environment.

### **3.2.1 THE PILLARS OF AN ECOSYSTEM**

In order to arrive at a point of departure the pillars of an ecosystem need to be identified in order to guide and measure the effectiveness of an ecosystem. In this endeavor, the WEF (2013) points out eight pillars of an ecosystem that entrepreneurs identified. These pillars happened to be the following:

- ❖ Accessible Markets,
- ❖ Human capital workforce,
- ❖ Funding and finance,

- ❖ Mentors Advisors and Support systems,
- ❖ Regulatory Framework and Infrastructure,
- ❖ Education and Training,
- ❖ Major Universities as Catalysts,
- ❖ Cultural Support.

In understanding the components of these pillars, WEF (2013) underscores that each pillar has its component make up, thus allowing it to stand out as a pillar. Universities are noted as part of the ecosystem for organisational growth, yet it is by no doubt that universities firstly impact their learners as a first point of contact. In this presentation the above pillars shall have their components presented to help create the environment required on a general basis for business development and growth before pointing out the impact of the university entrepreneurial ecosystem to the economy.

*Accessible Markets* may have the following components: The domestic markets where large companies are customers or domestic markets where small and medium companies are customers. In certain scenarios, the customers in these segments can be governments. In consideration of the market accessibility, the possibility of the foreign markets with large companies as clients, or small and medium enterprises as clients let alone governments as clients is a market component that is feasible in market accessibility.

*Human Capital workforce:* the components of the human working capital workforce entail the Management Talent, alongside the technical talent, the entrepreneurial Company experience, the outsourcing availability and its ability to access migrant labour force.

*Funding and Finance:* Funding and finance play a pivotal role for either an emerging business or existing one requiring new startup ventures. The sources of funding and financing can be an impediment or a source of progress and development. The components under this pillar can be friends and family, angel Investors, private equity, venture capital and access to debt.

*The Support System:* This basically comprise of mentors, advisors, the professional services, the incubators/accelerators, and the network of entrepreneurial peers. The

culmination of these components is likely to enhance the strength of this entrepreneurial pillar.

*The Regulatory Framework and Infrastructure:* This pillar has been known for the important role it plays especially in emerging business enterprise as well in established business in its entrepreneurial growth. Although entrepreneurial businesses are well-known for their ability against the odds, yet it remains enviable that the components of this pillar be developed. The components of this pillar include the ease of starting a business without necessarily having technical legal requirements, the tax incentives and the business friendly policies and regulations. Infrastructure on the other hand would include the accessibility to water and electricity, transport and access to telecommunications in broadband for business effectiveness in reaching the clients or suppliers at some stage or the other. The costly impact of communications can be impediment for business success, as it may increase the overheads of operation.

*Education and Training:* This is one of the important pillars of strength for the ecosystem of an entrepreneur. The components of this pillar include the available workforce with pre-university education, the workforce with university education and an entrepreneur education training specifically.

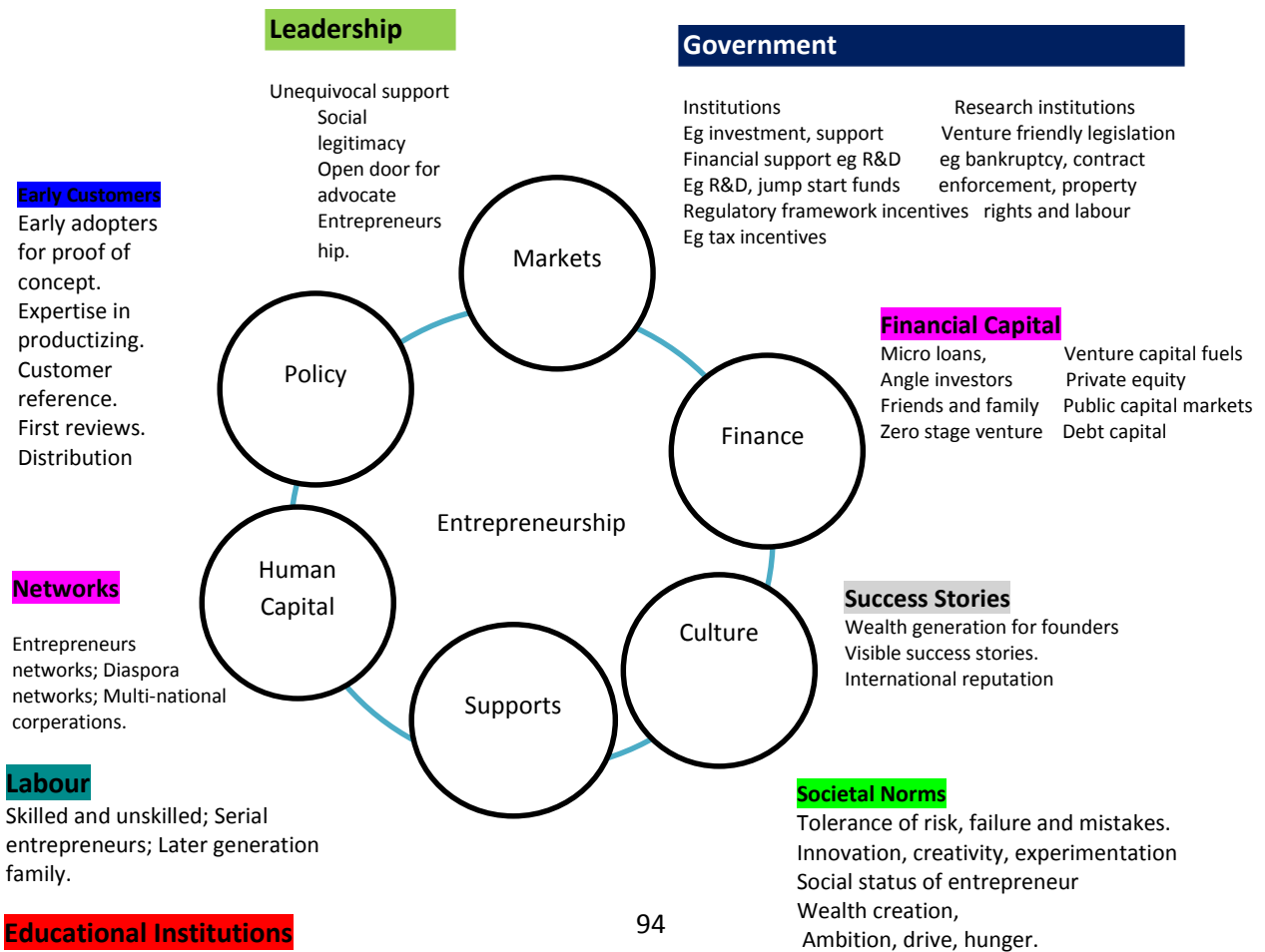
*Major Universities as Catalysts:* The role of major universities acting as catalysts in fostering and enhancing the respect of the culture of entrepreneurship is vital component of this pillar. One of the components required for this pillar is when Universities play key idea formation for new companies. Universities can also provide graduates for new companies.

*Cultural Support:* Culture seems to play the unspoken role in many choices and inclination towards entrepreneurial inclinations. These components of this pillar comprise of the tolerance of risk and failure, the idea of preference of self-employment basically developed from an element of success stories as well as the role models. This goes along with how innovation is celebrated and the positive image of entrepreneurship. Perhaps the way sport is celebrated, needs to be adapted in to the entrepreneurial domain of innovation with a broader view of what innovation constitutes.

Jongwe (2013) points the pillars that have been instrumental in the Wits University in South Africa. The five pillars upon which they actively operate are: Research, Training, information support, Programs, Advocacy and lobbying. It therefore follows that the pillars may vary from setting to setting depending on the identified factors that can allow the vibrancy of the ecosystem in question. Institutional pillars are likely to vary from industry pillars of an ecosystem.

### 3.2.2 ECOSYSTEMS MODELS

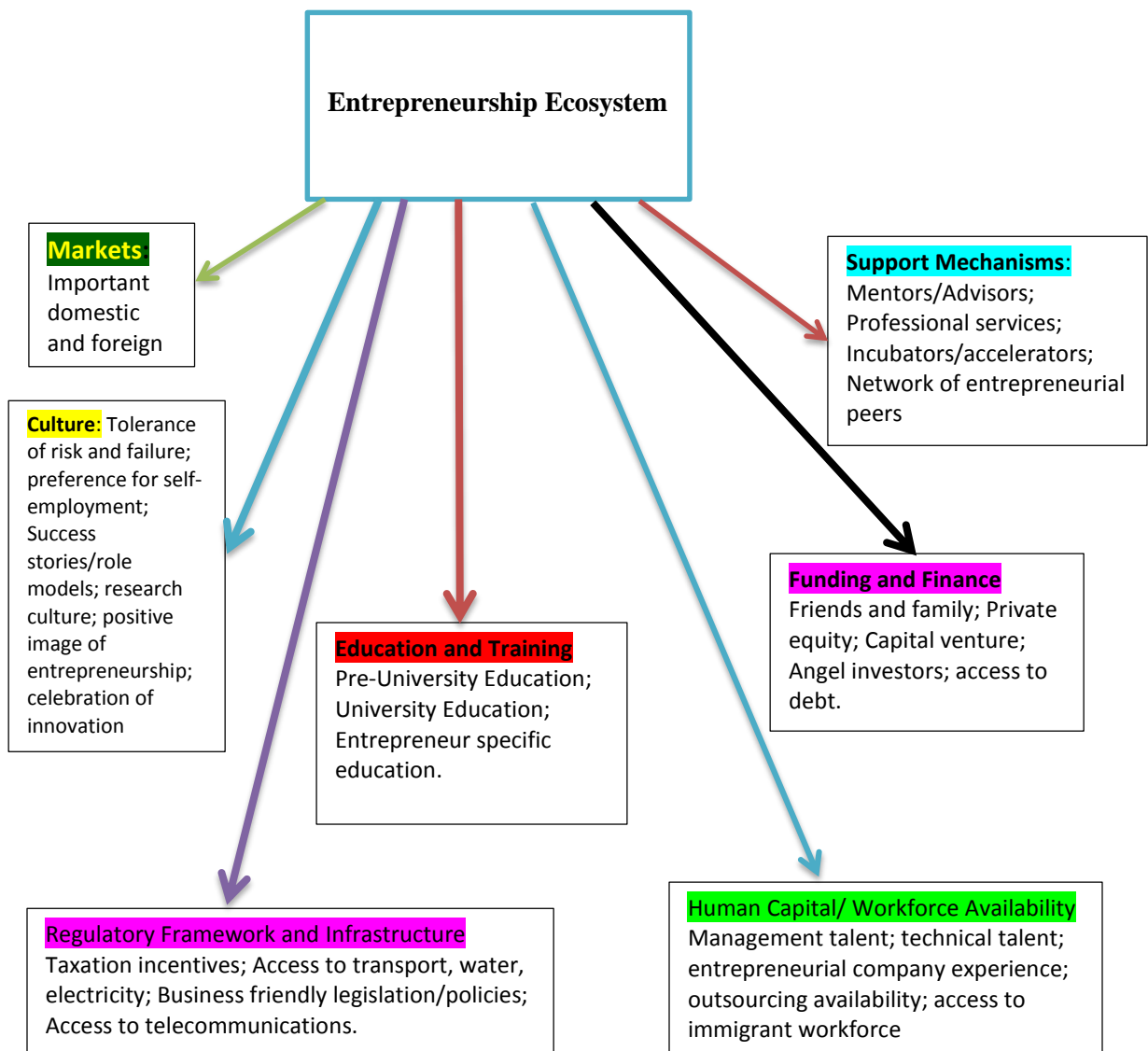
The domain of an entrepreneurial ecosystem is considered as significant in inclining a mind towards entrepreneurship which may foster a learning environment necessary for developing an entrepreneurial mindset. The business plan competitions, incubators, angel networks and various forms of catch word phrases often used for entrepreneurship end up in frustration if used in isolation. Various elements drive each other in an attainment for a beneficial entrepreneurial ecosystem. The structure presented in figure 3.1 was developed by a former professor of Harvard business school as well as a professor of Babson College, Daniel Isenberg is worth noting in terms of the components thereof:



**Figure 3.1: Entrepreneurship Ecosystems Domains**

*Adapted from: (Isenberg, 2011)*

The components of an ecosystem displayed below have as well been argued to nurture enterprise sustainability, nonetheless, it is prudent to consider how such components also play a role in inclining the populations so concerned. The components exhibited below relate to the domains of an entrepreneurial system above, which in either case point to the role of educational institutions among others.



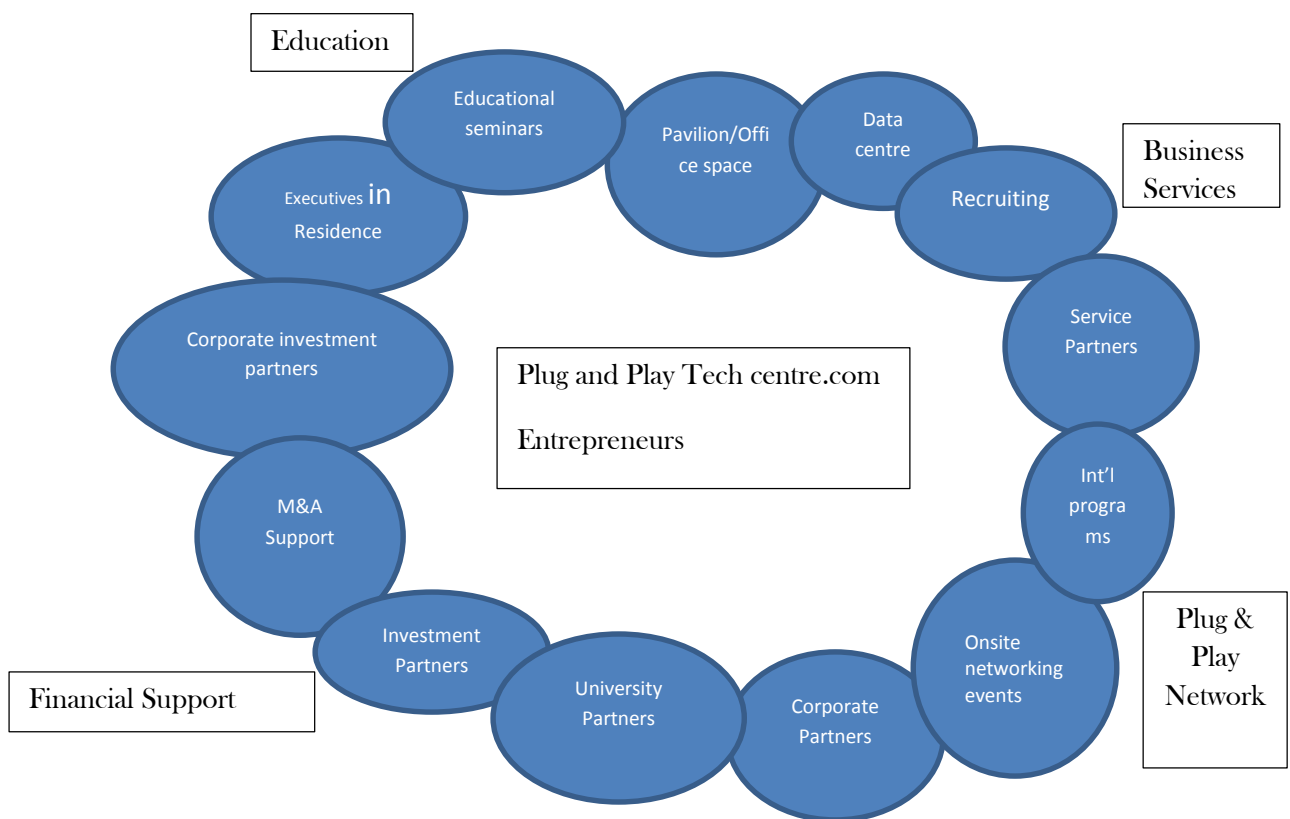
**Figure 3.2: Entrepreneurship Components**

*Source: (WEF, 2012)*



According to WEF (2012) the seven components depicted in figure 3.2 can impact on the company growth in 3-5 years of its operation. These seven components are the Markets, Culture, Regulatory framework and infrastructure, the support mechanisms, funding and finance, Education and Training as well as Human capital in terms of workforce availability. It is important therefore to recognise on an equal basis that an entrepreneurial intent can be impacted by the institution's environmental factors that are entrepreneurial.

In the figure 3.3 below entrepreneurs are centrally placed and the environment that surrounds them is diverse. There are many priorities around the life of an entrepreneur, motivating or demotivating an entrepreneurial attention. This understanding though economically developed owing to the fact that an entrepreneurship is considered one of the four factors of production, along land, labour and capital, is well encapsulated in the presentation below:

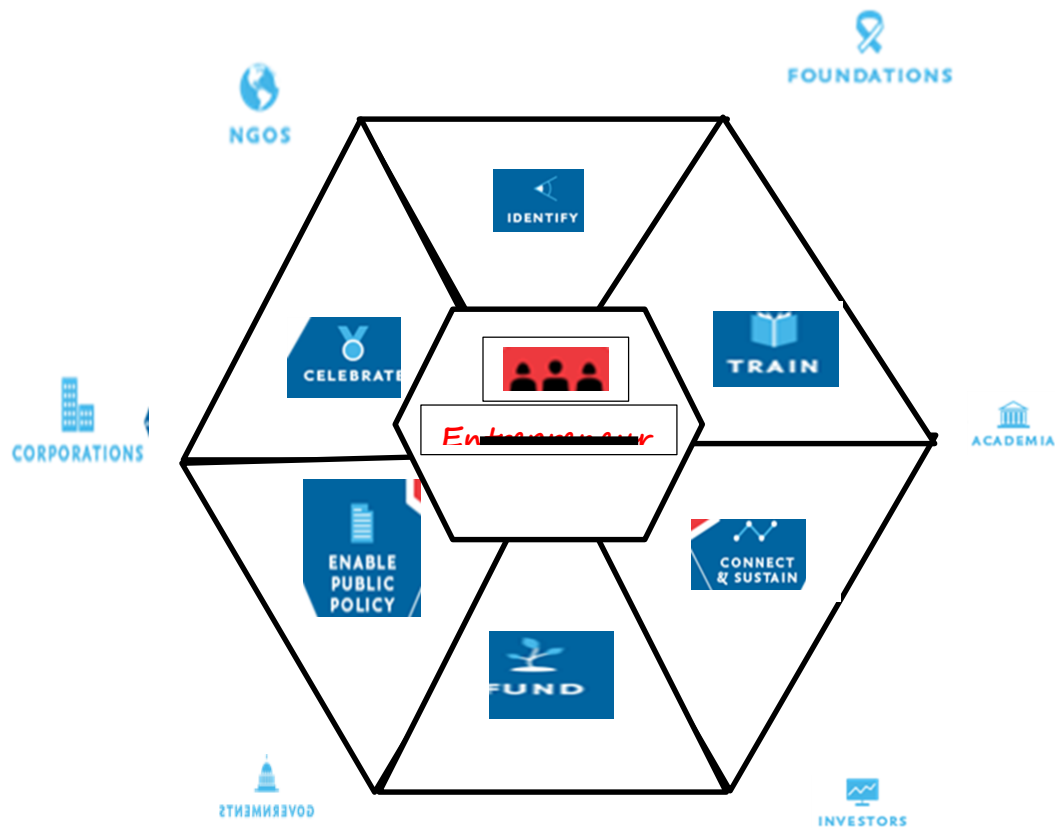


**Figure 3.3: Entrepreneurs circle**  
*Adapted from: (Plug and Play TechCentre, 2013)*

From the foregone diagram, it is evidenced that an entrepreneur succeeds by virtue of the encircling components and education is one of them, with other components being

inclusive such as the financial resources, business services sustaining the entrepreneurial environment.

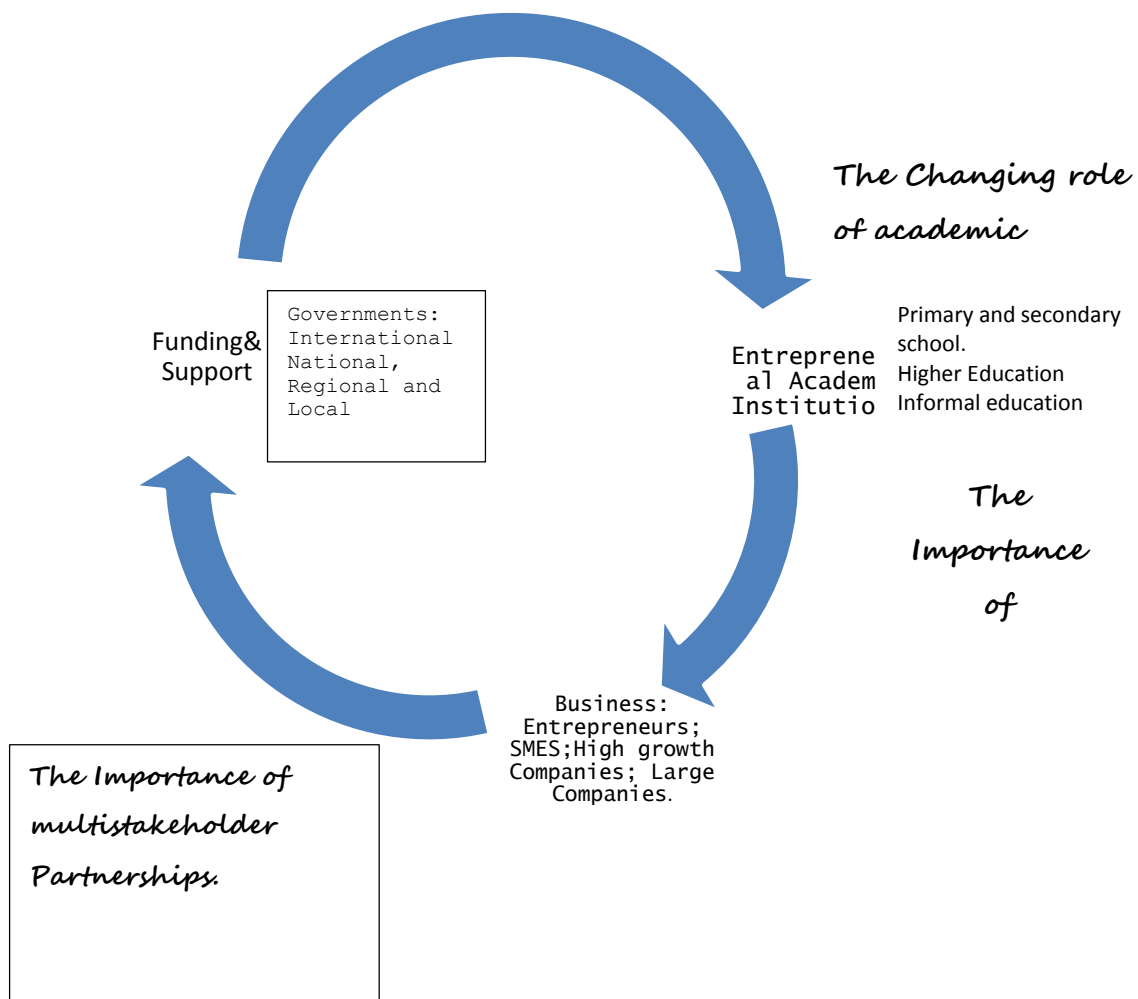
In addition to the above the ecosystem of an entrepreneur is fundamentally composed of the various stakeholders as seen in the following presentation:



**Figure 3.4: Entrepreneurs Environment**  
*Adapted from: Kotlai&Co (2013)*

In the above diagram the following become notable: parallel to the corporations and governments along with investors is the academia, who also enables potential entrepreneur to be inclined to opportunity identification through training. Investors play a significant role as they fund; government enables public policy to incorporate the other important aspects crucial for the success of the entrepreneurial endeavours.

An entrepreneurial ecosystem helps to form a cycle that gives a smooth flow of activities for entrepreneurial flair to progress. These also allows for a synergised harmony. It may be argued that there has been segmentation in bringing together the aspects that build a holistic entrepreneurial atmosphere. The diagram below supports the notion of a cycle of supportive structure in entrepreneurship, which can be argued as a basis of entrepreneurial inclination even in institutional setting:



**Figure 3.5: Cycle of Entrepreneurs**

*Adapted from: World Economic Forum (2009)*

In the diagram above the role of learning institutions is brought into clear perspective. Not only is entrepreneurship necessary at universities but lower levels of education such as the primary and secondary levels. Institutions would then reach out and indeed educate

the business community, governments on the importance of entrepreneurship and the development of niche areas through research and by so doing they would create an atmosphere necessary for organisations, individuals and intermediaries to thrive.

Universities form an important infrastructure but at the same time can influence the nature of management and the culture for which they are part of through their educational endeavours. China, noted as one of fast developing economies, thanks to an entrepreneurial artwork is considered to have some important elements of the Silicon Valley ecosystem with cultural differences in risk taking being moderate for China, and so is creativity, likewise is the issue of free flow of information and outward facing universities.

Silicon valley is reputed for its innovative technology development that occurred in the 1940s, economic development has since then been stimulated through technological entrepreneurship in other North American communities, such as Boston Route 128, North Caroline Research triangle, Austin, Tx and Boulder and Co., all of which have had some success, though not comparable to the silicon valley experience (Cohen 2006). Nonetheless, there has also been industrial ecological systems, which in pursuit of sustainability of achieved development have focused on the corporation achieved from the customers as well as communities. These industrial ecological systems have mainly focused on medium to large sized firms. The actors in this scenario were customers, manufacturers and other stakeholders. This system helped create a closed loop system. Ideas were enlisted from all the participants that were then used to create systems that could be beneficial to the system, the environment as well as those that were involved in any way. This led to generation and implementation of ideas suited for financial and environmental economic sustainability. The entrepreneurial ecosystems often comprise of interdependent actors that interact for purposes of new venture creation. The multiplicity of ecosystem entrepreneurial factors, however, gets ignored in the process, such as the private and public sector appreciation in the process, notes Van de Ven (1993).

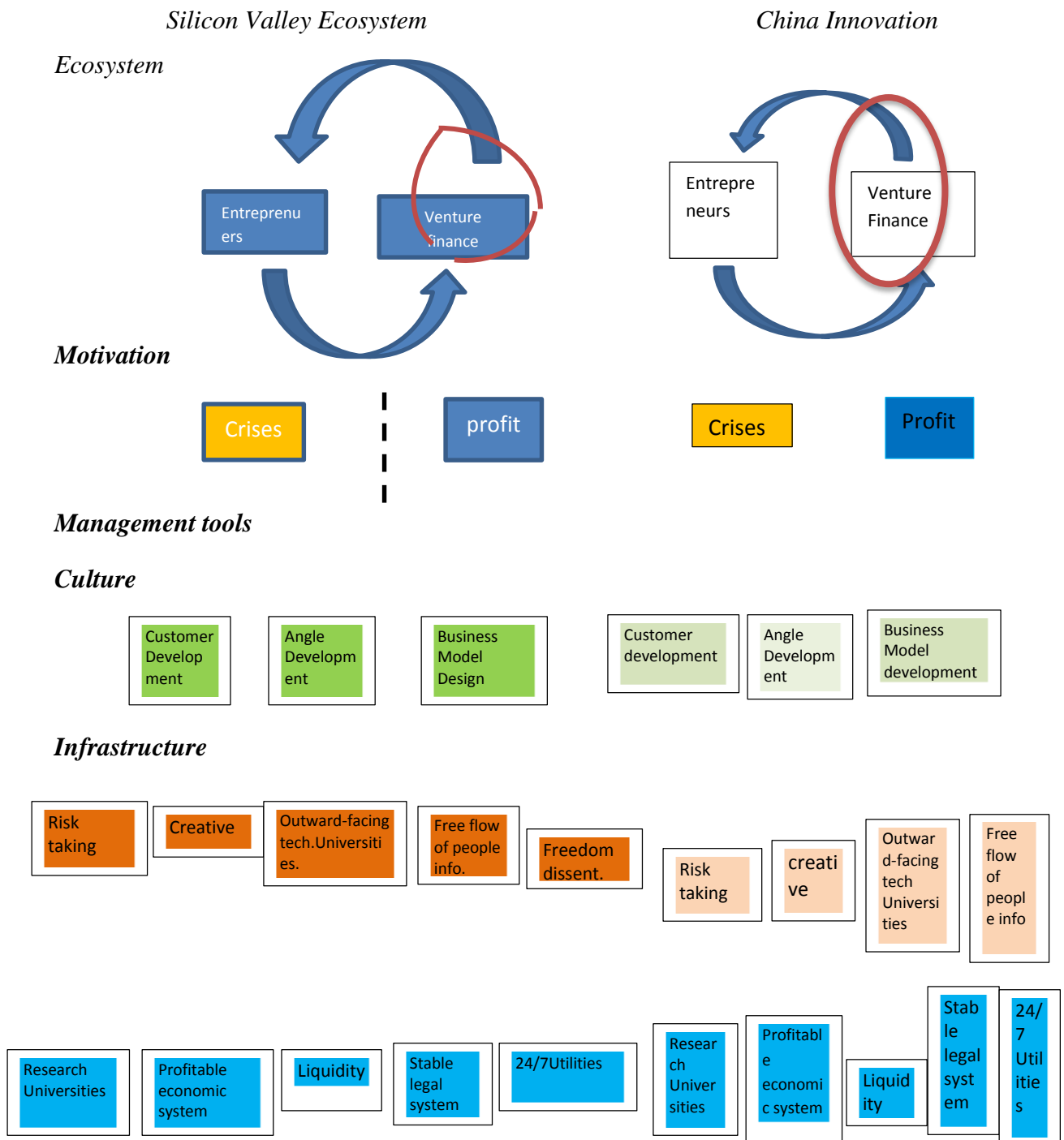
It has been recorded by extant research that the macro economic development of a region can be influenced by the individual components of an entrepreneurial system. Such components include formal as well as informal networks, institutions as well as infrastructure, let alone community culture (Neck, Meyer, Cohen and Cobert, 2004).

Traditional methods have been considered to lay emphasis on reproducing from text books for undergraduate studies (Boge 2012:14). Lerdahl (2007:13) refuted the argument that creativity is a blessing for the few but rather as a state of mind that is found in all professions. The production of some new thing, unexpected, original and appropriate has been considered by Sternberg and Lubard (1991) as only an alternative. Creativity according to Lehrer (2012: XVIII-XIX) has its multiple forms and people act as inspiration to others. This indeed agrees with Lerdahl (2007) who stipulated that creativity is not an inborn ability but something that can be learnt to a certain extent. There is an understanding that the different backgrounds provide perspectives which can as well provide room for collaboration between different people leading to creativity. In this vein of understanding, facilitating creativity learning through teams like camp models is such one approach (Burger 2011). The research at Norway University on creativity by Boge (2012) affirmed the earlier research that indicated that to a certain extent creativity can be learned (Lerdahl 2007) and that the existence of interdisciplinary teams fosters the creativity due to the presence of people with different backgrounds and perspectives (Lehrer2012).

The competitiveness of a nation and its wealth creation depends entirely on the dynamism of its firms which are dependent on the capabilities of its entrepreneurs and managers. An individual entrepreneur is at liberty to sell his idea or start up a small or medium term business upon which such ideas are exploited. The chief executive of large firms have roles that go beyond coordinating and controlling the firms resources to the position of anticipating, articulating and managing change for the betterment of the organisation. This leads to the understanding of a chief executive as a corporate entrepreneur, whose role is to reinvent the firm on daily basis for the enterprise spin offs. Those that make up the basic competencies such as managers in the running up to the actual realisation of the business can't be ignored in the entrepreneurial development of the organisation.

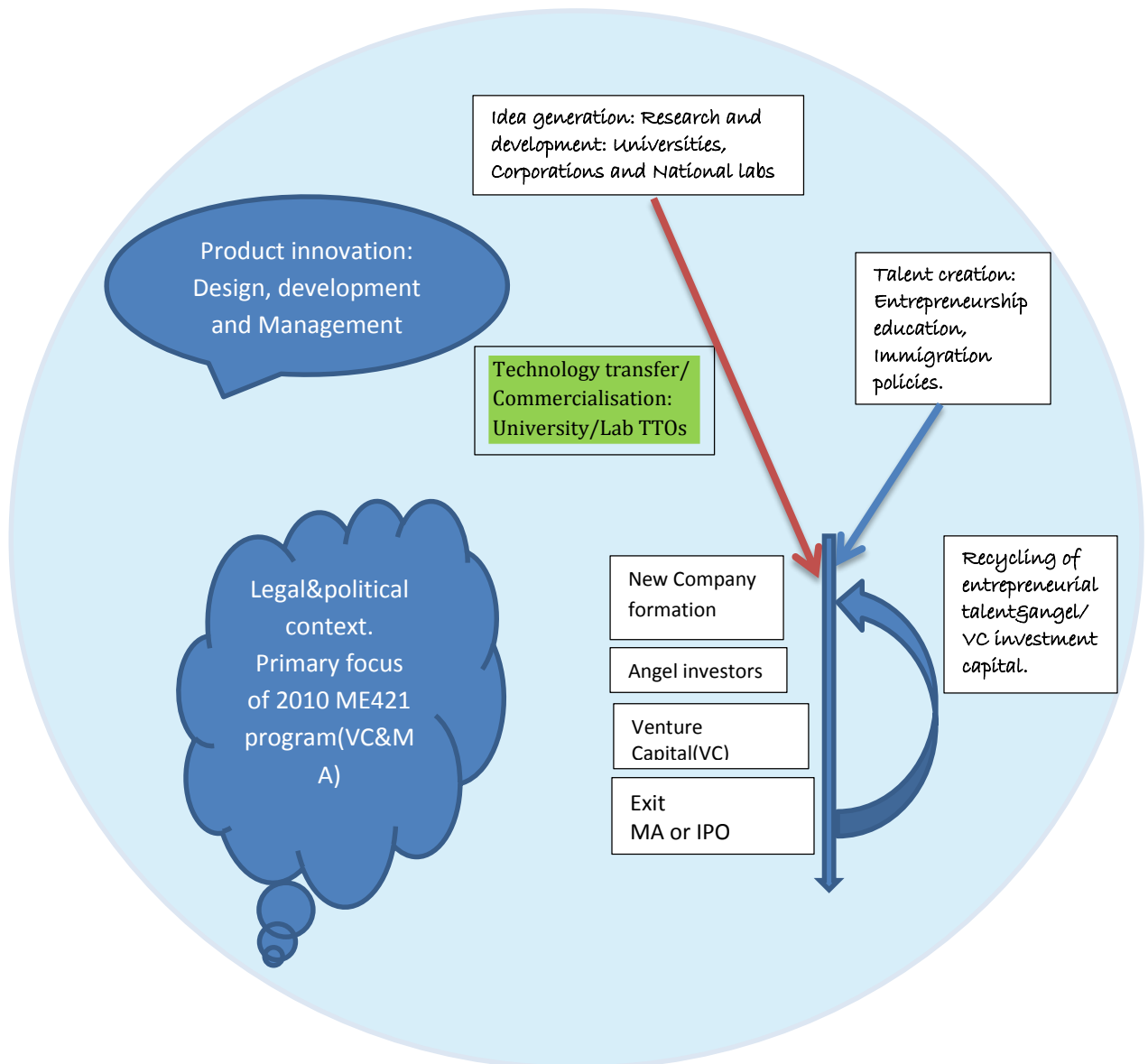
The main idea is that the conditions may significantly vary but the effect of maximising the possible variables can result in an effective strategy with significant gains. Management tools are non-existent for China as opposed to the Silicon Valley, yet there is a similarity in that both the Chinese and the Silicon Valley have entrepreneurs being motivated by profit and not crises. The crises driven situations can be compared to the

arising needs based on circumstances to start a business. It ought not to be the pressure of trying to get the job after retrenchment that causes an entrepreneurial venture, though this is useful but a need to find an opportunity, increase a performance or a profit. As the output of the organisation increases so does the Gross Domestic Product of the country which works out well to the welfare of the citizenry as well as the organisations themselves. The comparative diagram below can be observed to express this:



**Figure 3.6: Silicon, China Ecosystem**  
 Adapted from: WEF(2013)

Universities play a significant role in the innovation of ideas, as well as developing of new talent. The European model of innovation captures this in the diagram presented below:



**Figure 3.7: European Innovation Ecosystem**  
 Adapted from Stanford (2010)

In spite of the above models and expectations for learning institutions, some observations have been critical. According to Kaufman and Feldman (2004), institutions have played a role of preparing students for career choices and so students are prepared for white collar jobs only thus making them employment seekers than creators. Could it be that the orientation of the learning in universities and colleges are biased towards job seeking than creation? The institutional environment is likely to be consistent with the objective as indirectly captured by the learning content of an institution. Carter, Gartner, Shave and Gate Wood (2003) have found that there is a link between entrepreneurial intentions and venture creation. The provision of entrepreneurial knowledge and skills in enterprise education has a positive impact on entrepreneurial intentions (Peterman & Kennedy 2003; Rae 2006).

Thus, the researcher seeks to investigate whether the institutional environment and learning among other factors play a role in developing entrepreneurial inclination of students at the University of Kwazulu Natal (UKZN) in South Africa.

Valls and Condom (2003) bring to light the present and future role of universities in Bush's report of 1945: *Science. The endless Frontier*. The fundamental principle of the report was that the basic research discoveries will be converted through technology transfer to become powerful drivers for economic development and social welfare. Universities begun to be seen in different light and so were their roles, which were not just going to be limited to research and training but also contributing to economic growth of the regions they were located in. This would be termed as the third mission and would lead the new university from a second revolution to what would be termed as the entrepreneurial university (Etzkowitz, Andrew, Christiane, and Cantisano 2000). The role of educational institutions is also well hinted in the statement of Baumol (1968:71) where he categorically states that: '*...we can learn how one can stimulate the volume and intensity of entrepreneurial activity*'. In other words, entrepreneurial activity can be stimulated, and the stimulation is hereby possible in a place where the pedagogy is meant to occur. Similarly, Turker and Selcuk (2009:143) consider that the encouragement of entrepreneurship essentially stimulates growth in "a *growth-conscious world*". In the same vein Minniti and Lavesque (2010) stipulate that the main propensity of an entrepreneur is to innovate. The innovation level however can take different forms. The filling of a market niche or gap that has been created in the market can constitute an



innovation. Innovation therefore need not be related to the original technological discoveries requiring research and development expenditure. This is very much exemplified in the case of China where phenomenal growth in the economy has been evidenced without an increase in the research and development expenditure as opposed to Japan where plenty of technological expenditure in research and development has generated little to no growth. Minniti and Lavesque (2010) further contend that the imitative entrepreneur as opposed to research based entrepreneur does not incur the research and development costs, which the research based entrepreneur incurs and subsequently commercialises the technological discoveries. Technological change has been endogenised in the growth models in literature but the above illustrations shows that the patterns involved in economic growth and entrepreneurship remains unknown, though it is often taken for granted. Imitative entrepreneurs may be more significant than research based entrepreneurs. Governments worldwide are sinking large sums of money in capital forms without understanding the role of entrepreneurship in economic growth ...that the benefits on the macro economic conditions may be least impacted if any impact (Easterly 2005). This study is justifiable on the basis of the existing need even as the following section will clarify.

### **3.3 ELEMENTS OF AN INSTITUTIONAL ECO-SYSTEM**

An interview done with 40 licensing professionals and various commercial advisors on technology transfer offices (TTO's) indicated at least ten top things that universities (institutions) need to foster a thriving entrepreneurial ecosystem. The following were particularly identified:

*Research Expenditures:* The higher rates of commercialisation require that the private and public funding of universities be increased. The University's ecosystem commercialisation capability is dependent on the nature of funding and low funding may be detrimental to the objective to be achieved.

*The Angel and Venture Investment:* The significance of this factor need not be emphasised in the ecosystem of the university. This happens to be the key element for any technological start-ups at university. An active local capital pool is essentially significant. The presence of all other factors without this element is likely to lead to the stifling of creative initiatives.

*The Resources for TTO's:* In order to develop entrepreneurial activities across the campus, the nature and level of resources apportioned is of paramount importance. The better the size of the staff as well its budget allocation, the better the opportunities for a good thriving ecosystem to be achieved.

*Appropriate Location:* One of the components of a vibrant ecosystem at universities is the location as in the case of economic hotspots in Northern California, Boston or Cambridge. The identification of the appropriate location for university networking capabilities is essential.

*The development teams:* It is equally essential that the onsite venture development teams be in place at universities entrepreneurial ecosystems. Such teams may be based in TTO's or economic development organisations. Such teams are vital for the nurturing of the start-ups at university.

*Disciplinary Training:* The cross disciplinary training is necessary for the cross-functional nature of entrepreneurship as a practice. University centers for entrepreneurship allow staff and faculty of university to effectively reflect and connect in their various disciplines.

*The curricula:* It was observed that the entrepreneurial curricula ranging from certificate level to Masters and even Doctoral level are being geared towards bringing entrepreneurship into the classroom. The level at which this course have impacted on the entrepreneurial environment of the university is not ascertained as yet but it is argued that this step towards to right direction.

*Leadership:* Student leadership has been practiced in most institutions where graduate and undergraduate students are enabled to lead in activities such as business plan contests to boost entrepreneurial efforts.

*The Alumni:* In order to market emerging technologies and inventions, the need to be in touch with active alumni who have been successful in start-ups in multiple market settings is essential for the university's entrepreneurial environment.

*The Service Offerings:* The vibrancy of the ecosystem requires accelerators, co-working space, and incubation support. The location of such service need not matter, as long as

they are in the reach of those that need them. Such facilities may be located at TTO's or the local economic development organisations. They are vital for the universities ecosystem to be vibrant (Schwartz 2014).

The above points have been evidenced in the case of other Universities such as MIT or Stanford that have been outstanding in the economic transformation in a significant way. The vibrancy of the ecosystem of the university may however not be a significant factor in all major universities, nonetheless, a study such as this one looks into the impact such vibrancy may have on students.

### **3.3.1 IMPACT OF UNIVERSITY ENTREPRENEURIAL ECOSYSTEM**

Engel and Sharon (2006) point out the need for an eco-system for entrepreneurship, in as far as the facilities, people, networks and pedagogy is concerned in nurturing entrepreneurial intents in institutions. An institution cannot plan entrepreneurship but by providing a supportive pedagogy it facilitates its development as well as its inclination. Skills development as well as good relationships are therefore necessary in the areas of its ecosystem. The relevant processes, facilities and processes are said to help in the formulation of a good entrepreneurial ecosystem as pointed out by the above authors.

The role that an ecosystem plays in the university can be enormous to the economy of the nation let alone the region. It is also important to record that entrepreneurship is not necessarily to be limited to a business department of the university. This is very much evidenced by MIT alumni. A study revealed that thirty percent of the MIT alumni is in the manufacturing sector; this percentage exceeds the US overall manufacturing sector which stands at eleven percent! The 6900 active alumni of MIT have created an estimated one million jobs globally. In California alone the 4,100 firms founded by the alumni of MIT have created 526,000 jobs, in New York, jobs created are estimated at 231000, Texas -184,000 and in Virginia – 136,000 jobs were created by the alumni. This is in exclusion of 15 states with an average job count of 10,000 and a further 11 states with 1,000 jobs from the entrepreneurial alumni of MIT.

In terms of revenue collected in the 6900 alumni firms, it is of note that \$164 billion is generated from these firms. It has also been noted that 30 percent of the foreign students

form companies after studying at MIT; this figure sharply contrasts with the US born students by 20 percent. Due to the fact that most of the companies are knowledge based essentially comprising of biotech, manufacturing, software and consultancies, their access to global markets is easily realised as well as high revenue in dollars. The income generated per employee exceeds the normal amount generated by an average American company.

This explosive performance of entrepreneurial mindset has been attributed to the ecosystem of the University of MIT. The ecosystem comprising of research, education and social networks have helped achieve this significant entrepreneurial output. The ecosystem of MIT is based on its logo 'Mens et Manus', a latin word for "mind and hand." The ever increasing entrepreneurial efforts among students and staff is said to be benchmarked on the strong ties that the university developed with industry even before the 20<sup>th</sup> century. Besides more than 30 courses on entrepreneurship developed, there have been over 700 young companies being nurtured with several student clubs besides. Their ecosystem has also been strengthened by the surrounding entrepreneurship community and the venture capital involved. The cross disciplinary teams and projects since the 1990's consisting of management students, engineers and scientists have enhanced students ability to comprehend entrepreneurial processes and the initiation and engagement with the real world enterprises has further enriched their understanding on the entrepreneurial process. The formalisation of MIT institutions in fostering entrepreneurial endeavors led to the licensing of 210 companies in the last 10 years. By the year 2000, the Venture Mentoring service helped any MIT related individual/s, be they faculty, student, alumni and was considering starting a business. It is noted that after such consultations 152 companies were created (Roberts & Eesley, 2011). What may be of note as well is the fact that the ecosystem in this case includes the alumni, who are kept on the loop through the university communication system. It is also indicative of the university's continued ties with whomever once passed through their educational system; this could then be driving force for the university influence being felt out with sustained impact.

The need for the university or institution of higher learning developing and sustaining ties along its traditional activities is vital, but it certainly depends on what is the vision of the university or institution besides the training and research. The ecosystem is thus broad-

based at MIT as evidenced by the networks linking it to industry, alumni, staff, Venture Capitalists and the resources at the University.

Wilson (2013) in describing the university beyond the “ivy towers” emphasises the need for the university in facilitating entrepreneurial activity by the creation of strong networks. It is in this discourse that they ought to be the community’s intellectual hub thus attracting talent. In the same understanding the university would then be developing materials, projects and case studies that are practical and relevant. The university also progresses if it aims at providing connections between researchers, students, innovators, entrepreneurs, companies and Venture Capitalists. In its efforts, it becomes prudent that the university also attracts the funding and continues to build on innovation and entrepreneurship as a critical mass for its own progress.

The culture of an entrepreneurial university is considered as an important aspect of the ecosystem. There is need for leadership commitment from the top towards the creation of an entrepreneurial university. There is also need to understand the strategy used in the process of realising an ecosystem that can help foster an entrepreneurial climate. Is entrepreneurship multidisciplinary in its offering at the university? The university needs to identify champions among students, staff and faculty whose entrepreneurial efforts need further support.

It is also undoubtedly important that the university long term commitments to the programs they initiate, the people involved and the funding that goes along with it.

The willingness of the university to learn, unlearn, adapt and test must be continuous experimentation of ideas. This is important for the sustainability of the issues that become entrepreneurial. The culture of continuous learning is a necessity that needs to be adopted.

Further to the above, there need to appreciate and recognise the need to connect with the local and global ecosystems that are in place. In the local domain, the actors involved may include large and small firms, entrepreneurs, alumni, government and financing community and so forth. Whereas on the global side there is need to appreciate and recognise other entrepreneurial ecosystems that are in place in other universities.

The need to create or trigger an entrepreneurial potential can be considered to be vital and some of the critical success factors would include, an exposure to all learners or students

to entrepreneurship at lower and higher levels of education as well as integrating it as one of the extra curricula activity of the university.

The need to essentially develop the faculty and curriculum by learning about the best international practices. This needs to be done in connection with the engagement of entrepreneurs and practitioners in the classroom. The adaptation of the local context with relevant local content.

The teaching methods need to be action oriented, as such there is need to test ideas, take risks and so forth. (Wilson 2013)

There is somewhat a similarity in the aspects that help in the ecosystems of universities in raising the level of entrepreneurial activity and flair among the participants. Cambridge University offered entrepreneurship across several programs as part of an ecosystem incumbent on an entrepreneurial mindset. Besides this, there was also a set of initiatives that the university broadly adopted as stated below:

- **The Ignite:** This was a summer school which conducted an intensive course for the solo entrepreneurs and corporate innovators who had technology knowledge ideas. A venture capital of over \$35m and over 200 entrepreneurs trained.
- **Enterprise Tuesdays:** This initiative addressed the need to turn ideas into reality. In offering these evening courses it was noted that was an attendance of 1,500 from the 50 departments of the Cambridge University, 108 private businesses and 10 other universities by calendar period of 2005/6.
- **Enterprisers** were another initiative which drew the youth globally with different talents and diverse cultures for a one week residential retreat in 2002 by the collaborative effort of Cambridge –MIT institute. In this initiative, 65 Universities participated, 900 students were trained along over 100 faculty members.
- **The Cambridge Enterprise.** This initiative was raised to support the knowledge commercialisation from all parts of the university. The

following services were rendered to the academics: licensing of IP, advice and support for the creation of the new companies, support with the seed funds as well as leads further funding in companies. Besides the above, other services offered included costing, contract negotiation, insurance and VAT, invoicing. Further support was given towards consultancy to external organisations, networking events and industry leads through showcasing. Identification and protection of ideas was another service that was part of the package in the Cambridge enterprise initiative.

- **The Cambridge Entrepreneurship Educators Program initiative.** This initiative involved knowledge sharing from 6 countries in a two day program with 15 delegates. It addressed the practical aspects of aiding the nascent entrepreneurs as well as the cultural effects of entrepreneurship programs.

The undergraduate programs of the university had the following offerings associated with entrepreneurship:

Entrepreneurship was taken as a foundation program though running as a minor topic in 16 lectures for the Physics department.

Eight lecture periods were offered with an avenue for writing a business plan or interviewing entrepreneurs in the Chemical engineering and Material Science department. 12 Business studies lecture courses were offered to students of Biochemistry department with two lectures specifically on IP the starting of a biotechnology business.

Other similar programs were run the computer and Architecture undergraduate departments.

At the graduate level, a one day session was run for Chemistry and Earth Science Students. For the MBA students, a one day boot camp and the various electives were conducted whereas the Graduate School of Biology, Clinical, Veterinary and Medical Sciences, four hour sessions comprising of one and half hours were run (Wilson 2013).

Stanford University is one of the Universities that has been deeply entrenched in entrepreneurship and Innovation with a significant impact on the on the economic

progress of the globe. Global companies like Google, Nike, and Hewlett Packard are among the many companies started by the graduates of Stanford. These companies have created 5.4million jobs with average world revenues of \$ 2.7 trillion according to the 2011 survey report. The University's entrepreneurial ecosystem encourages the collaboration and networking among students, alumni and industry. Some of members of industry are an alumna of the university. The reputed Silicon Valley development was led by the Stanford graduates. Stanford encourages students to be more involved in research and testing of ideas as prototypes. It is also noted that both the Graduate School of Business as well as the Engineering school offer entrepreneurship in their curricula. The approach employed by Stanford has included the theory teaching as well as the real expertise in classroom setting. Thus it can be understood that there was a comprehensive approach on creating an entrepreneurial flair in Cambridge just like the MIT University and since learning and its facilities are an important aspect of an entrepreneurial ecosystem, it can be without doubt considered as a fundamental setting that was well integrated to the academic setting of the institute. The organisational set up of the activities in creating the entrepreneurial flair in this setting can as well be attributed to the cohesion exercised by the higher learning institutions with the support of the business sector in gaining an advantage towards creating a strong ecosystem that is not limited to one university setting. The two universities cited in this section that is MIT as well as Cambridge have bestowed an enormous effort in the Universities entrepreneurial ecosystem, however, it is yet to be understood how much this impacted on the intentionality of learners in being entrepreneurial.

The founding of a firm and as to whether the firm can be considered as a product of University based knowledge can be connected to the four aspects pointed out by Roberts & Eesley (2011) in that the new firm's technology was directly licensed from the University. It can also be considered University based knowledge if a faculty member was involved as a co-founder of the company in question or had been an advisor, formally or informally during the startup phase of the organisation. Alternatively if the firm originated from the research work or thesis done at university, this would include the coursework as well. Finally if the founding team met at the lab or university facility then the authors argue that it can be considered a University based founding technology. The four categorisations upon which a firm may be deemed to be University based is



necessary for quantifying the University impact of its entrepreneurial activity as such but at the same time it may not be solidly confirmed whether other factors were directly involved in motivating the foundation of the enterprise.

The approaches that have been considered useful for the realisation of an effective entrepreneurial ecosystem have been stipulated by Wilson (2011) as follows:

- ❖ The development of the Leadership and life skills in learners. This is an important component of effective entrepreneurship as pointed out in chapter two of this work on the success factors for entrepreneurs. This is also pointed out in the entrepreneurial leadership learning as an important element in entrepreneurship education.
- ❖ The need to embed entrepreneurship in education. This is necessary for the foundation for an entrepreneurial intent to be enhanced. If it is confined to Business schools as is the case in a number of universities, then the entrepreneurial flair shall not be fully achieved fully.
- ❖ The use of a cross disciplinary approach is necessary for entrepreneurship to be incorporated into all areas of learning. This would allow the understanding of enculturalising entrepreneurship to be realised across the various departments of the university.
- ❖ The use of interactive pedagogy is necessary as a useful tool in realising an entrepreneurial leadership learning principle. This allows the output from the student to be realised and allows creativity to be spurred in classroom settings.
- ❖ The need to leverage technology is an effective tool in developing an effective eco system in a university setting. It may be realised that technology has had rapid advanced and as discussed in the previous sections of chapter two, it has been responsible for an entrepreneurial globalisation efforts. It has been cut the costs which were a burden for entrepreneurs who are starting business.

Entrepreneurship is something that can be learnt and in far as learning is concerned there is guiding a concept to the view that abilities and concepts are developed in order to realise the objective of an entrepreneurial mindset at company level, individual level or even community level. For the understanding of this view the subsection that follows shall devote some emphasis on the learning concept.

### **3.4 THE LEARNING CONCEPT**

Learning has been delinked from its context and yet it is considered as something that continues throughout life. The world people live in is a component of learning argues Jean (2009). Researchers have been accused of treating learning as a process in the mind of a learner without considering the 'lived in world' points Jean. The role of learning is important in inclining a learner towards an entrepreneurial mindset and it is paramount understanding what learning is all about, its types and theories in this section.

Illeris (2007:3) has defined learning as *any process that in living organisms leads to permanent capacity change which is not solely due to biological maturation or ageing.* Jarvis (1987:32) who had defined learning as *the transformation of experience into knowledge, skills and attitudes* later defined learning as *a lifetime combination of processes, thus involving the whole person, body- genetic, physical and biological, the mind- knowledge, skills, attitudes and emotions and senses, the combination of which can be the social experiences, leading to emotional, practical and cognitive transformation, becoming an integrated individual and consequently becoming a continuously changing person or more experienced person* (Jarvis, 2009:25). Following these definitions it can be understood that learning is intended to bring about a lasting impact. This is of importance if learning is to achieve lasting impression in the economy of a nation especially in regard to the intentionality of being entrepreneurial. Learning has to have a theoretical foundation. The learning foundations may be biological, sociological or psychological. With the foundation in view, the need to realise the centrality of learning comes to view. There are processes and dimensions of learning, types and barriers that make learning to be able to achieve its impact as far as the above definitions are concerned. There are also internal and external conditions that not only influence learning but are directly involved in learning. One may conclude by understanding that the application of learning is finally involved.

Learning is considered as a comprehensive art that has processes and dimensions. The processes are two; the external and internal. The external process involves the interaction of the learner with his or her environment. The environment can be social, cultural or material in nature. The other learning process is the internal process. The internal process is a psychological process that deals with elaboration and acquisition. It is rather unfair that most learning theories deal with one of these theories as a distinct area other than having a combination of these approaches to gain a holistic nature for learning. The Behaviorists and Cognitive theorists focus on the psychologically internal learning processes, the modern learning theorists on the other hand emphasise singly in exclusion to this the external processes. The personal functionality of an individual is often developed by a learner's construct of his /her ability and meaning to deal with the practical challenges of life. The content dimensions of learning include among others knowledge, skills, attitudes, opinions, insight and values, methods, strategies and ways of behaviour. For learning to effectively take place the incentive dimension needs to be met. In this dimension, feelings, emotions, motivation and volition have to be considered. The mental balance of the learner is developed along with sensitivity necessary for the learning energy to be achieved using this dimension. The two dimensions of content and incentive are stimulated by the interactive impulses from the interaction process, and then they are integrated into the elaboration and acquisition internal process. This then follows on the understanding that the learning process is often influenced by the incentives at stake. Learning can therefore be driven by desire, necessity, compulsion or interest. Sometimes however, the content can determine the incentive, for example new information can easily change the incentive condition (Illeris 2009). The situation described is known to many psychologists in regard to the connection between the two areas of influence, the cognitive and emotional. (Vygotsky 1978 and Furth 1987). Other studies especially in advanced neurology have reported that both sides of a human are often in learning processes continuously with an exception of severe brain damaged cases (Damasio 1994). Other authors have considered that learning takes place both from mental and bodily sides, although the brain is part of the body, yet the centrality the brain finally takes over after the body is said to be separate. There is however, no separation between the two, points out Piaget (1952). An example of a class learning chemistry lesson can be used as an illustration, where the learner is listening to the teacher while at the same time asking questions(interacting) so that they understand what is needed for

them to practice this under certain conditions and so reproduce it or further their learning. However, it is possible that influences like poor explanation by the teacher, disturbances at the time of learning may make the learning not to take place as intended. It is however also possible that lack of concentration at the time the lesson was delivered was the cause of having the lesson partially understood, hence the learning objective not achieved. In certain situations, it is possible that the prior learning of the student did not provide a proper background necessary for them to understand what was being taught. This then would point to the fact that learning is not simply a cognitive matter but other factors are involved in the process. The incentive dimension is important on mental energy mobilisation as well as interest. Although the learning content is often given great focus as opposed to incentive, yet interest and motivation towards learning is developed through the incentive dimension mainly. It is within the incentive dimension that the value and period involved in learning is factored. The interplay between learning and incentive is considered important in a sense that the foregone example of learning chemistry may not be realised if the chemistry lesson is inadequate or unacceptable to students. It is also possible that something else may be learned such as the teacher's attitude, or the other students, or the subject itself let alone the school as such instead of what was intended originally points Illeris (2009).

In the case of entrepreneurial intents to be developed following the explanation above, it leaves room for consideration that though there are many schools offering education towards economics and entrepreneurship today; the content thereof is unquestionably approved by the relevant educational bodies worldwide, however, the incentive for learners is unapproved and is solely at the discretion of the schools offering the services to the learners. The challenge with the incentivisation could easily be of importance in valuing the content offered by learners. The knowledge available is likely to be appreciated more by learners as they notice the importance attached to it by the learning institution through incentivisation. So far, a number of institutions have often awarded winning ideas prizes, but have not rewarded attempts of individuals who have not won. This is likely to create a learning that you need to be the best in order to be accepted. This is likely to dampen the development of ideas. Ideas are necessary for creativity to be unleashed which later becomes an innovation upon actualization through operationalization of the ideas.

It may be of note that the habit of awarding the winning entrepreneurial ideas and leaving the rest in the cold reinforces the culture that does not tolerate failure. This is a culture that stops exploration as demanded by an entrepreneurial culture which requires that failure is tolerated and so is risk. Until the entrepreneurial culture is cultivated by institutions, the possibility is that entrepreneurial flair is unlikely to be achieved. Many a time, more time is rather spent with the winning teams and others are left abandoned for good. This is often at the expense of the fact that as far as development of ideas is concerned, there will be a stage where the winning person of today shall also fail and will realise the rejection of abandonment. This may result to what may be termed as abortive entrepreneurial gesture in this presentation.

### **3.4.1 TYPES OF LEARNING**

Piaget (1952) and Flavell (1963) developed the four types of learning. Psychologists have noted that the brain upon the realisation of a person, a topic, a problem, develops knowledge, an attitude, or an emotion that is ascribed to that particular issue within the conscious mind. The psychological metaphor for this scenario is the mental schemes, which is a learning embedded in the constructivist nature. Researchers have argued that there are billions of neurons in traces of circuits which has been termed as ‘*engrams*’. These neurons are active at particular times and can be revived with new experiences or sometimes with different courses slightly. Illeris (2009) terms this as the mental schemes, since they permit one to subjectively consider issues in view and therefore applies to the content dimension. It is also not like an archive and therefore it is not easy to find different elements in particular positions of the brain. The communicative ways, emotions and motivations tend to become organised whenever one is reminded of a situation similar to an earlier scenery. It is understood that new impulses are often generated for the four different contexts of learning and in some cases more or less energy is required.

There is also the *cumulative or mechanical* learning which is developed after a pattern is established. It is something new and is therefore isolated formation that this type of learning is basically based. This learning is also considered frequent at young ages and may later be experienced when the context of meaning is unclear, or its significance to our personal identity such as the Pin code. This type of learning is termed as conditioning

and it is also applicable to animals. The learning of this nature essentially automated in a sense that it can be mentally recalled and applied to a similar context.

There is a type of learning commonly evidenced in school setting. This is termed as the assimilative type of learning. The basis of this learning is that new elements are linked to what is already there. There is therefore an addition to the existing pattern. This can be exemplified with school subjects which have already been learned. Illeris (2008) stipulates that this type of learning has its limitation in application at times. For example what is learnt at school may be difficult to apply to other subjects or the outside context. Nonetheless, the learning facilitates the recollection of mental knowledge that can be applied some situations and yet hard in other contexts as stated above.

The other type of learning that can be linked to the assimilative one is the accommodative or transcendent learning. It is through this type of learning that a pattern is broken down to accommodate new setting. The relinquishing and reconstruction takes place using this kind of learning and it can be painful since it demands more energy. Through this learning the contextualisation of the subject can be applied in various contexts and this type of learning requires crossing the previous limits and understanding and consent to something new and perhaps different. It goes beyond setting of a pattern or scheme or even assimilating but takes one to another level of learning since it is not about adding of a new element to what is already there.

The fourth type of learning is extensively profound and has been termed as the *transformative* learning (Mezirow 1991), others have termed it as *transitional* (Alheit 1994), still others have called it *significant* (Rogers, 1951, 1969) or *expansive* (Engestrom 1987). This type of learning impacts on the change that profoundly affects the self-personality. It also restructures all the other three dimensions of learning. This type of learning occurs in the unavoidable situations and in a crises-like manner and to get any further the change is unavoidably necessary.

Besides the above four types of learning, the other types of learning have generally been considered as the day to day learning and can easily be classified as the cumulative or assimilative learning. In this category is the single and double loop learning (Argyris 1992; Argyris and Shon 1996). Then we also have the adaptation-oriented and development-oriented learning by Ellstrom (2001), then we have Vygotsky's (1978)

regarding the transition of the 'zone of proximal development', which can be considered to run in parallel to accommodative learning. Illeris (2009) argues that the learning design in schools is mainly assimilative in spite of the fact that its inadequacy is evident in the present challenges. The combination of the assimilative, accommodative, cumulative and the transformative learning processes are required. Entrepreneurial intent may not be taught, but rather 'caught', as the appeal, is not structured to every individual in the same way. The transformative aspect of learning is therefore necessary due to the charisma it may weld to the learner. This understanding of the types of learning is necessary and a study of which learning inclines the learners most deserves a study.

### **3.4.2 INFORMATIONAL AND TRANSFORMATIONAL LEARNING**

Learning has the intention of either increasing our repertoire skills, the extension of the already existing cognitive structures or the deepening of frameworks that were in existence already. The issue here is on the in-form-ative. The nourishment of any discipline or activity or field owes its continuity to this kind of learning, if it is to grow. For etymological realisation of the meaning of the term education (leading out), there is need for not only what we know but how we know what we know is made. Informative, (leading in) undertakes us to the level of filling in the form. Here is a construct of the understanding that is required or expected to be of benefit. In reflection of this kind of learning the transformative is then the opposite of the informative as it put the existing form at risk. The present need to learn to be entrepreneurially inclined whether as an individual, organisation or community follows the need for a desired learning to be thus developed. The landscape altering potential of transformative learning is characterised by the following features:

- ❖ It has its own distinction from informational learning, though each needs to be appreciated for its contribution for learning in any given discipline.
- ❖ For transformational learning to take place there is a need to understand what 'form' is to be transformed or else there is unlikely to be any transformation taking place.

- ❖ Transformational learning isn't just about increase in knowledge, or its fund but its epistemological change and not the behavioural repoitre. There must be a way of knowing or 'a frame'.
- ❖ Transformational learning is not limited to adults, but is broadened to include a whole lifespan and has a focus on the epistemological wherein the origins, nature, methods and limits of human knowledge are explored.
- ❖ It takes into account the epistemological complexities of learners as it studies the learners' transformational learning needs.
- ❖ It takes into account the students' current epistemological needs so as to develop a design that is worth promoting than a presupposed design of the learners.

Informative learning tends to focus on in what we know whereas the transformative learning deals with changes in how we know what we know.

The centrality of what transforms is a highly epistemological form in learning and therefore the frame identification for reference is important. It is noted that some frame is either clung to or loosely held to by the learner. This frame can be familial connection, tribal association or a social construct argues Illeris (2009). This then points a relation between ones culture and the frame upon which the world is viewed. Frame refers to both the habit of mind and a point of view points Illeris (2009). It may be emphasised that epistemology is precisely our way of knowing as opposed to what we know. The need to form meanings is exceeded by the way we change meanings under a transformative mindset. Kant cited in Illeris (2009) considers that precept without concept is blind. The postulation is that we change our epistemology. The need to understand education and transformational learning has been a subject of much concern among authors such as Kegan (1982, 1994); Piaget (1954) and Kohlberg (1984). This has lent itself to understanding the construction of meanings. The constructive developmental theory is thus understood by these authors to be necessary for transformational learning. Illeris (2009) directs attention of adult educators to two aspects in the usage of this theory, thus: the form which transforms, which forms an architecture that is dynamic in the form of knowing and secondly the psychological forms and processes of our knowing thus leading to the architectural dynamism in the reformation of our forms of knowing. There



is a subject and an object relationship in the knowing aspect of learning. The core of epistemology is based on the subject-object relationship. The object is thus what we look at, become responsible for, reflect upon, exercise control over and thus integrate with somewhat of knowing whereas that which is subject is what we are fused by, identified with, and affected by. It is for this reason; Illeris argues that we cannot be responsible to that we are subject to. The complexity therefore arises in that we have to move from where we are held 'captive' by it to a position where we 'have it'. It is then that our knowing becomes more expansive or even more complex, points Illeris (2009).

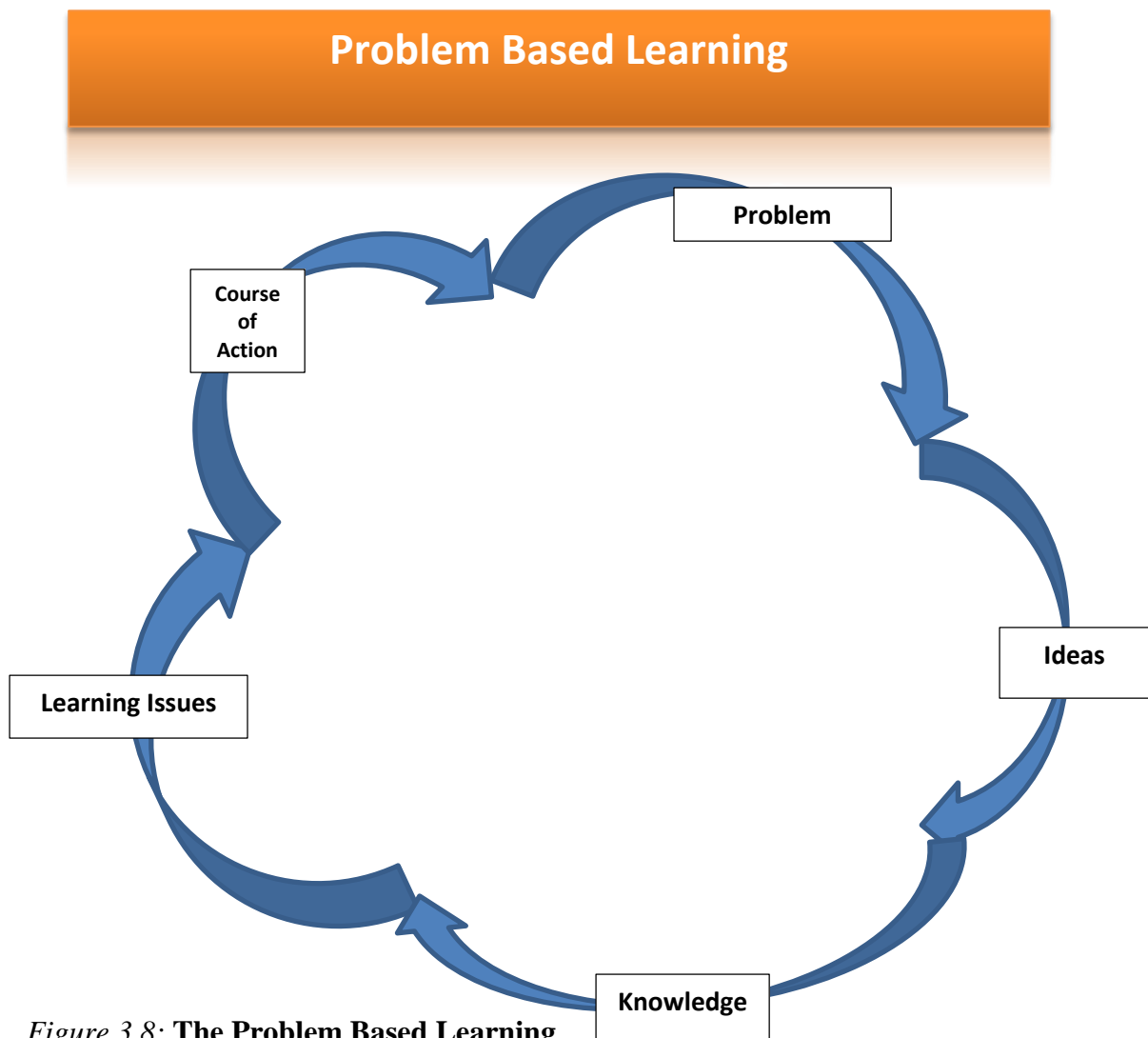
It goes without saying that there is a need to develop a learning that is transformative to have an entrepreneurially minded students and staff. As indicated in chapter one the education system so far inclines one to simply seek for employment, thereby creating job seekers than creators. Moreover, at the same time, organisational existence is at jeopardy since the idea of working is not related to creating value that sustains the company since such innovativeness is not explored by the employees. This type of learning is also necessary in an existing company to enhance the level of creativity that may lead to innovation among the staff that is already employed. The critical challenge companies' face that can be resolved by an entrepreneurial staff is their ability to survive crises at a time the economy is shaky. This often is left as a management responsibility, and singly handedly they falter to the very detriment of all stakeholders in the organisation including employees. It therefore follows that an entrepreneurial flair is not only necessary for start-ups but also for any setting, but the driving force is the nature of learning which needs to be transformative as to an individual's potential of creativity. This may be achieved thus through the use of transformational learning other than informational learning as explained in this section.

### **3.4.3 PROBLEM BASED LEARNING**

Problem based learning is understood as a scenario where learners use case scenarios in problem identification and develop objectives independently and individually before getting together as a team for further resolution. In problem based learning students use the issues that are triggered by the problem in defining the objectives. Problem based learning uses various attributes that include teamwork, communication, attitudes, work independence, information sharing as well as respect for others. The following generic

skills are said to be developed besides presentation skills: listening, critical review of literature, self-directed learning as well as use of resources, the chairing of a group, recording and cooperation, as well as teamwork. The problem is identified, ideas are developed, knowledge is sought from the relevant sources on how to deal with the problem, learning areas are also brought into focus and finally a course of action is taken to address the problem. The main objective of this approach is not necessarily to solve the problem but to learn the means by which such a problem can be seen and acted upon on using the knowledge. It is possible some problems may not be solved but rather managed.

Figure 3.8 helps depict the problem based learning process:



*Figure 3.8: The Problem Based Learning*  
*Adapted from (Wood, 2003)*

The problem based learning approach can be compared to a project based learning in which the learners or students are guided with the end product in mind as opposed to a problem which requires a general enquiry. The project based learning would also conduct a pretest or pilot study as opposed to a problem based learning approach. It should be noted that in Project based learning the concern is on the end product, in problem based learning the end result of the enquiry is a process presented in dealing with the problem. It can therefore be beneficial to consider that the problem based approach as well as the project based approach can be used depending on the context of the problem. The Venn diagram below serves to depict the unique differences between the two approaches that can be engaging to the learner as well as the teacher or the educator. In both case cases the shared attributes for the approaches of learning are: both approaches utilize the educator as a facilitator of learning than the traditional learning methods. Students are utilised in real authentic tasks that they can relate to. Open ended issues are dealt with that do may have more than just one approach or solution. The situations are meant to simulate the real professional situations in the field. Learners are to seek multiple sources of information in order to deal with the issue at hand. Self-evaluation and reflection is practiced by both approaches. Teamwork is encouraged by both approaches and learners work in teams for extended period of time.

### Comparing/Contrasting Problem and Project-Based Learning Approaches

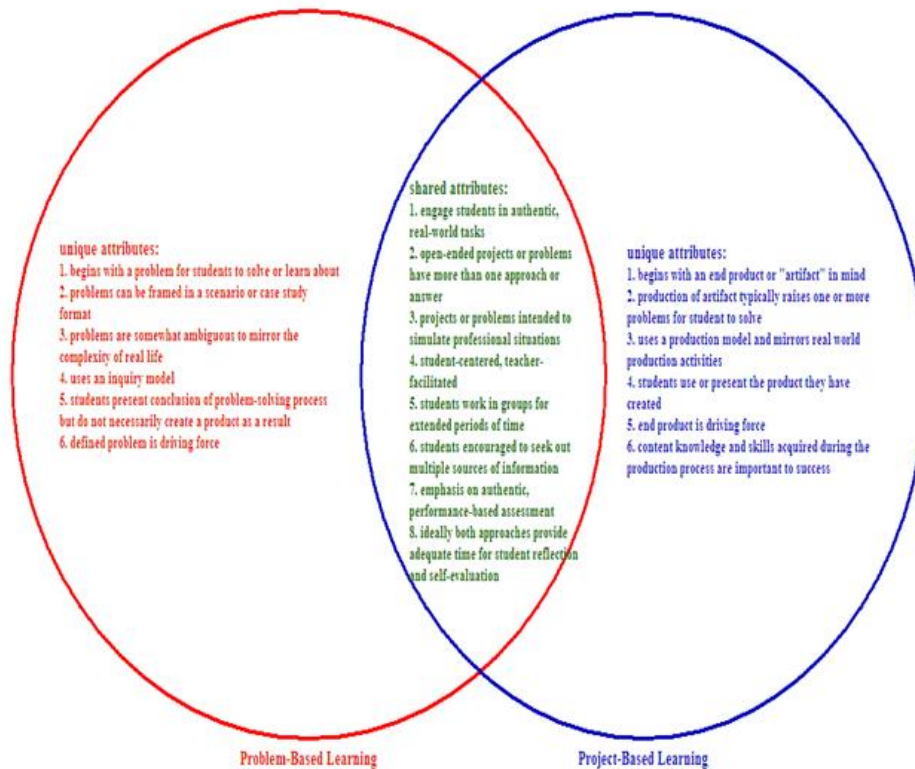


Figure 3.9: Problem and Project Based Learning

Source : ( Easch 1998; Benoit 2000)

The learning necessary to stimulate entrepreneurial inclination may need the use of both approaches given that intentions can often be affected by external stimuli. The problem based approaches would basically help learners to relate with real life issues without necessarily going to the details of conducting actual project like experimentation of ideas due to constraints such as the financing aspect of these deals. The development of intention is significant and the use of these approaches may tally with the Theory of planned behaviour as postulated by Ajzen (1991), who considers the exogenous factors as responsible for intent to be achieved. As learners get exposed to real life situations in learning, the fear that may be associated with what has not been evidenced before is likely to be dealt with and the students may likely develop intention. It is intention that can be responsible for an entrepreneurial behaviour to be achieved. Intention is

considered as a precursor for the real entrepreneurial behaviour (Susetyo and Lestari, 2014). Therefore the greater the intention the greater the possibility of the behaviour being exhibited. There is also a relationship between entrepreneurship intention and education (Zhang, Duysters and Cloudt 2014). The theories on intention will further elucidate these aspects in the coming sections of this work.

#### **3.4.4 THE LEARNING BARRIERS**

Learning has been known to have its barriers or hindrances. At times people do not learn what they were supposed to learn due to a number of factors involved. At times people learn what is wrong in the first place. Learning can be impeded by mislearning due to misunderstanding, inadequate prior learning and even lack of concentration. Mislearning, however, can be corrected easily and hence it is not considered so much in the learning theory. The mislearning and non-learning of the modern day age are not as simple as one can envisage points Illeris (2009). Part of the complexity of learning in the modern generation can be attributed to what Freud (1942) called defense mechanisms. The volume and complexities in our society can be enormous and therefore one may not accept to remain open to learning. The defense mechanisms can be specific to personal connections. Leithauser (1976) has termed this as everyday consciousness following the understanding of how people have developed self-automatic mechanisms of defense against the various influences that are numerous to count. The method by which this understanding operates is that one develops a pre understanding that is used to measure any other understanding that one encounters. There are basically two options to the pre-understanding, total rejection or being falsified to fit into the pre-understanding paradigm through distortion. This can result into new learning but basically supporting the existing one. It can then be agreed that we control our own learning everyday using everyday consciousness. This is done with the massive defense of the acquired knowledge, or identity. The overwhelming influence on TV, with various visuals of crime and other unbecoming scenarios can be a cause for protection of self-identity. In certain circumstances, the nature of workplaces, those that exert undue influence from positions of power and sometimes even social institutions can lead to the exercise of self-identity protection and motivate a form of learning that corresponds to the circumstance and scenario in place.

In the event that a life change is to occur then a transformative approach would be required to break through the defense in the case described above. The fundamental changes at work, leading unemployment or divorce or loss of a loved one can lead to a self-identity defense in the modern day era than before due to the fact that if need be to break through to the life so concerned, then a therapeutic approach is necessary.

### **3.5 LEARNING THEORIES**

There have been a number of theories advanced towards learning. One of such theories is the Cultural-historical activity theory. This theory was developed in the 1920's and 30s' by Vygotsky (1978). Following the attempts by Vygotsky, his counterpart and disciple, Leont'v (1978; 1981) developed the theory further. Through three generations of research as cited by (Engestrom 1996), the activity theory evolved. In the first generation of the theory under Vygotsky, the idea centered on mediation. A triangular model that was famous was developed in which a conditioned connection existed between the stimulus (S) and response (R); this was being transcended by 'a complex mediated act'. This idea became commonly known as the triad of subject, object and mediating artifact (Vygotsky 1978:40). Nonetheless, this theory has been noted to lack the need towards the development of conceptual tools, such as the understanding of the dialogue, the network of interacting activity systems as well as the multiple perspectives.

Bateson (1972) in his theoretical approach categorised the three levels in learning that take place in differing contexts in response to the inadequacy network tools exhibited in the above theory. In his categorisation, Learning I relates to the act of acquiring the right responses, the relevant conditioning. This can be exemplified by a situation when learning the right answers in a classroom situation. While learning I is going on learning II is also said to be taking place, this is where patterns and deep seated rules are acquired relevant to the context. This may range from how to belong to the new group, how to pass exams, how to get along with the teachers. In certain situations, argues Bateson, the situation in learning II can be contradictory and this can lead to learning III. It is in learning III that the context gets questioned, the meaning and the sense it may carry and any alternative. This can be radical. The processes dealt with in Learning III can be dangerous but it has been noted as rare. The Psychologists have ascribed the level III

learning as psychotic and it is known that at this stage the individuals may be inhibited from using the first person pronoun.

It may thus be assumed that following the postulation of the above theory, the need for foundation on entrepreneurship can be achieved in the context of traditional informative learning methodologies which include the learning of how to pass exams, getting along with others( teamwork spirit being fostered), and the level 111 learning if handled cautiously can easily lead to creativity that can yield innovative developments given that the present type of learning has been largely informative than transformative. The level 111 of learning can lead to changing of the status quo to the relevancy of the context. In the context of economic uncertainty with deplorable job absence, the kind of learning needs to change to a point of addressing challenges faced. The traditional employment seeking attitudes thus created by the present learning systems can be transformed to ‘deployment’ ventures upon graduation by learning institutions. The graduates would relate to companies with a ‘deployed’ mentality, where they get additional support and experience for either the development of the company they are based in or start their own establishment after sighting existing gaps in the market.

Other theories seem to emphasise the stimulation of learning processes as such in the learner. The traditional sensory theory has it that learning occurs when senses are stimulated. The empirical results for the use of this theory confirmed that 75% of the adults learnt through seeing, whereas those that learnt through hearing were 13%, the touch, taste and smell category accounted for just 12%. This theory therefore would support the idea of an exposure of the learners to the actual workplace in the case of entrepreneurial flair to be developed more effectively. The theory emphasised the stimulation of senses to foster learning and therefore the use of effective techniques and media is deemed necessary including the volume, the utterance of strong statements, and the presentation of facts more visually (Laird 1985).

Another learning theory is the reinforcement theory. The theory articulates the fact that behaviour is often repeated if there is reinforcement. Positive reinforcements are required for the continuance of the behaviour. Such reinforcements can be verbal as in the case of comments such as, ‘that was great’ or tangible rewards such as the issuing of a certificate, or promoting an individual (Laird 1985, Burns 1995). The theory recognises punishment

as a negative reinforcement of behaviour. In this dimension, the behaviour gets deterred. The argument advanced by Burns (1995:108) towards negative reinforcement is that the introduction of punishment weakens behaviour because of the introduction of the negative condition as it teaches an individual not to repeat the behaviour that is being discouraged. In the use of punishment, the unintended behaviour is therefore eliminated. At another development, Burns agrees with Laird (1985) who stipulates that this aspect has little educational relevance. The argument against this reinforcement is that it is mechanical and not flexible. In this context, it is also argued that the theory doesn't enable high learning to take place and often is effective when the punishing agency is present. Generally the competency based training is said to have benefited from this theory and has also been noted to be useful in repetitive tasks, though it doesn't involve higher learning order.

On the hand there is the Cognitive Gestalt approaches theory where a significant emphasis is laid on problem solving, meaning, experience and insight development. It is to be understood under this theory that the experiences of individuals are subjectively interpreted in contextualised environments. It is also true that individual's needs and concerns vary (Burns 1995:112).

The next theory calls for the stimulation of an entire individual personality- the holistic learning theory. The theory postulates that the different personality elements that comprise of imagination, intuition, the desire (the body impulse), emotions and intellect need to be specifically to be activated for learning to be achieved (Laird 1985:121).

Using another approach towards learning where the educator acts as a facilitator, a theory of facilitator learning was developed. In this theory the aim is to encourage learners to freely consider new ideas and not feel threatened by any external factors. This theory is premised on the following understandings:

- ❖ The changing of the concept of oneself leads to a significant learning. This could lead to the idea of a world view one finds themselves in before seeking for additional understanding that could eventually affect their emotional, physical, or mental position in as far as learning is concerned.



- ❖ Individuals have firm held positions as to what is true and therefore giving that up is resisted due to unwanted consequences.
- ❖ The theory assumes that the natural eagerness to learn is within humans.

The theory on the other hand holds it that the facilitative teachers are:

- Attentive to learners and more specifically their feelings.
- The attention given to the course content as well as the relationship with the learners is at the same level.
- Further to the above, they normally accept any kind of feedback for their improvement and therefore use it as a constructive insight for their behaviour.
- These teachers are inclined to be less protective towards their own personal constructs and beliefs as opposed to other teachers.

On the other hand the learners are considered as having the following characteristics:

- Do provide much of the needed input for learning.
- Have theorist behaviour of abstracting ideas from experience as well as connecting to such ideas carefully.
- The learners also spend time in reflecting. This demands both the desire to do so and the time.
- Feel encouraged responsibility for their own learning.

There is therefore an understanding of each part carefully taking responsibility of their learning if the above is to be realised.

Action Learning is another theory that needs to be factored in this presentation. Through a reflective process, the world of learning is linked to a world of action using a reflective process that exists in the cooperation of learning groups or sets (McGill and Beatty 1995). The sets constituted for this purpose meet and learn from each other as they discuss real life issues. Learning and action have been considered as imperative to each

other for success to be achieved according to Reg Evans, also considered as a father of learning. Action that is deliberate can lead to learning and likewise there can be no learning without action. The following equation was developed towards understanding the relationship between learning and insight gotten from questioning:

Learning (L) is the summation of Programmed knowledge (such as traditional teaching or instruction) and Questioning insight (Q) as symbolically stated below:

$$L = P + Q.$$

This learning approach has been noted that this approach is ideal when there is no right answer and all others are trying to seek a solution to the problem in their set. The complexity facing the economic scenarios upon which entrepreneurship is called upon as a remedy provides no direct answers as to the conundrum of questions towards social welfare issues or economic challenges of nations. The equation therefore can be applicable in any given situation with universality it is deemed for. The relevance and applicability of what is learnt can only be contextualised by a questioning insight. As to whether the learning offered allows the questioning insight into the summation of the programmed knowledge is another area of study that needs further exploration.

The andragogy or adult learning is another learning theory as developed by Theorist Knowles (1978, 1990). It is argued by Knowles that adults need to be treated that way since people feel that they are adults after reaching the adulthood status. The value of adult learning is noted in the following statements:

Adult learners have been noted to bring a lot of experience and educators can use this as a resource. This is likely to enrich the learning environment.

The way the adults are educated and what they are educated on is often based on the influence they exercise as part of their expectation.

In view of the above, it therefore becomes imperative that they are engaged in the designing as well as implementation of the educational programs.

One of the expectations of adult learners is to notice the applications of their new learning.

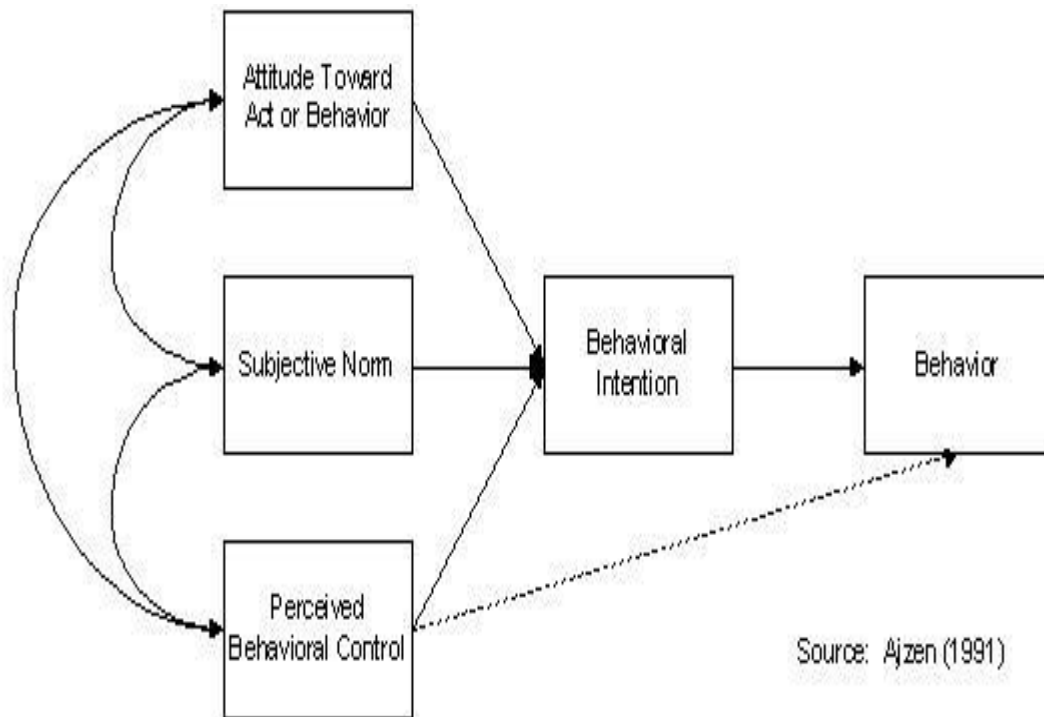
Evaluation of learning is important for adult learners and they expect a higher degree of influence in that regard.

Also the adult learners have been known to expect action to be taken on their responses especially in regard to the feedback of the program. The basic concept of andragogy is that of a collaborative, experience-based, and student-centered and problem based approach to learning. It is at this juncture that the whole activity turns on to the student (Burns 1995:233). The level of stimulation of learners towards participatory learning is of interest and can form a subject of study by itself but perhaps the question that may need addressing is the definition of learners who can be considered as adults. Over the years the level of development among children has changed causing children to take adult decisions in some contexts. In war torn zones, children have had to operate and take adult decisions that have saved them from annihilation by the vile economic environment they face after the departure of their parents or guardians. The confinement of adult learning may thus vary if the intention is the contextualisation of subject material of learning into appropriate contexts. Not only has it been in war torn zones, but child headed households have had to exercise adult decisions to expedite their economic and social survival, after they lost their parents and guardians to the Aids scourge. As to the nature of contribution brought by 'adult-children' to a learning environment can also be an area of further exploration and interest. The revisitation of andragogy or adult learning theory would be of great interest in understanding the context with particular reference to the changing adulthood status in some world regions. The development of entrepreneurial flair of economically deprived children may thus be achieved when the children perceive that they are being given the freedom and respect of opinion expression. This is likely to vary given the possible variance to be encountered in child maturity due to the unequalled contexts. Whereas the two areas of either war or children who come from child headed households have been pointed out, yet there are contexts such as the previously deprived communities due to racial segregative policies and such learners may be attaining their university education. Their experience given the unbecoming conditions some of them faced can be a source of learning for educators in enhancing their capacity to capacitate such learners towards creativity. The learning that inclines the learners towards entrepreneurial inclination may thus require the understanding of the learners' contexts, to some extent in a broader perspective by educators.

### 3.6 THEORIES ON INTENTION

The discovery of venture opportunity has been linked to intentions. One of the well-known theories of intention is by Ajzen (1991) postulating on the Theory of Planned Behaviour (TPB). For action to take place there must be a cognitive process where beliefs, exogenous factors and perceptions are channelled into an action. Bird (1988) Katz and Gartner (1988) affirm that since new venture emerges after a long time, with planning involved, intention models are suitable for it and it is therefore a planned behaviour. TPB is a theory that follows the Reasoned Action theory that had 3 major elements: Firstly the behaviour must be under volition control in order for intention to predict actual behaviour. Secondly for intention to predict actual behaviour, the intention must not change before the behaviour is observed. Thirdly, for actual behaviour to be predicted, it is important for the targeted contextual behaviour to correspond with intentions (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). The challenge at hand is that volition of behaviour is difficult to control and exogenous factors like the socio cultural factors influence behaviour as well as intention. Ajzen (1985) argued that personal and environmental factors could hinder the performance of an intention, it is at this point when environmental factors hinder the execution of behaviour that intention will predict attempt to behaviour performance that the actual behaviour. In realisation of the fact that behaviour volition control is not possible at times, the performance of behaviour therefore becomes subject to the joint function of perceived behaviour control and intentions.

Eagly & Chaiken (1993) further comment on the behaviour linkage with the behaviour control pointed out by Ajzen and supposedly based on the perceived behaviour as something that should be considered in the aspect of actual behaviour rather than perceived behaviour to achieve an act. The following thematic diagram helps illustrate this concept:



**Figure 3.10: Intention and Behaviour**

The understanding of the theory can as well be furthered by the knowing the reality that the volition control is dictated by a number of factors and it is most certainly that where one fully spends their time most the time, can shape intentionality. The cognitive development of an individual can thus be related to what one is learning and how the learning is impacting them. Universities may certainly play a role in this. Predicting intention is one of the difficult things to undertake let alone action, however, once intention is predicted, it is possible to note the action especially in entrepreneurial endeavour. It is perhaps in the guidance and sustenance of this intention till action is assured that becomes a problem in itself.

The Other theory used is Shapero’s Model of Entrepreneurial Event (SEE) which was developed by Shapero and Sokol in 1982. For entrepreneurial career to be pursued by individuals, its credibility must be perceived. The perception and attraction of the task is found in its feasibility and desirability or attractiveness postulates the SEE theory. The socio –cultural environment is brought into focus when starting a new business. Feasibility or how easy it is for one to accomplish or even conduct the task is brought to view with previous exposure to entrepreneurial activities playing (Shapero and Sokol 1982). This generally leads to the understanding that there are intentions developed and

intention is known to be the best and single predictor of future behaviour ( Pfeifer, Sarlijah and Suzac, 2016).

In a study done by Meeks (2009) on 669 nascent American entrepreneurs, the findings noted among others that although Ajzen's model became powerful in explaining intentions, whereas when it came to predicting activity, Shapero's model of entrepreneurial event was of great significance.

Another theory of intention is by Krueger and Brazael (1994) termed as Krueger and Brazael's Model of Entrepreneurial Potential. The model considers that the predisposition to a conduct is produced by an individual's perception. This theory is in line with the TPB and SEE of intent. Usually unexpected events, catalytic events, influence the predisposition towards entrepreneurial intentions. This as well brings to view the need to understand how universities operate as knowledge communities and the role of students as such. Entrepreneurship education activities should fit with the core knowledge activities of the Universities in order to command the competence that is required (Benneworth and Osborne, 2015).

In order to enhance perceptions on desirability and feasibility towards entrepreneurship, Audet (2000) holds it that entrepreneurial knowledge and skills are necessary. Shane (2000:448) states that: "*entrepreneurs discover opportunities depending on the information they have*". Bandura (1997) on the Social learning theory proposes that as the learner plays an interactive role with the environment, their human behaviour becomes a reciprocal interaction of cognitive, behavioural and environmental factors. Another important aspect necessary to undertake entrepreneurial activity is entrepreneurial self-efficacy. Chen, Greene and Crick (1998:295) define entrepreneurial self-efficacy (ESE) strength in personal belief in one's ability to perform roles and tasks of an entrepreneur. The three sources of self-efficacy that Bandura (1997) identified were active mastery (learning from doing), vicarious experience (Learning from observing others), and verbal persuasion (Learning from hearing). Boyd and Vozikis (1994) considered that there is also need to manage the physiological state such as stress. Self-efficacy is achieved through cognitive, social and physical experiences by individuals as they gradually progress in their intents. Self-efficacy is therefore task and context specific.

Conclusively this section has highlighted the context surrounding the learner, in terms of the ecosystem, the elements that are associated to a vibrant ecosystem, as well as the impact of a university ecosystem. The ecosystem models have used the university as one of the components but have not given emphasis on the university in its own right. In this respect this study considers that a model be developed in relation to University setting. Theories have addressed issues as the requirement for the title under study: learning and intention. Nonetheless, it is important to recognise that approaches in fostering intentions towards entrepreneurship are based on multiple approaches of learning and understanding of both the ecosystem. This is likely to help develop an entrepreneurial flair upon which intentions are strengthened.

The next chapter shall deal with the research methodology employed in this work. The section addresses among other the research problem, the sample and statistical analysis employed in this study.

## **CHAPTER FOUR**

### **RESEARCH METHODOLOGY**

#### **4.1 INTRODUCTION**

The processes and the structure necessary to achieve the objectives of this study are presented under this chapter. The study aimed at underscoring the role of institutional environment and learning in inclining students towards entrepreneurship intent. In pursuit of this mission the study sought to investigate how institutional environment influences students towards entrepreneurship. Knowing that intentions can be developed by a multiplicity of factors, it was the objective of the study also to find out whether university learning and environment inclines students towards entrepreneurship. This was to be investigated along other inclining factors such the influence of role models as well as other demographic factors such as gender and parental influence. A methodology that tests existing principles allows previous knowledge to be tested in an effort to prove whether the said principles are applicable in all settings such as in KwaZulu-Natal University that aspires to be a University of African Scholarship. This chapter therefore presents the methodology and research design used to address the research problem and the specific objectives of the study. The rationale for the research design, information on population and sample, data collection and techniques of analysis are presented. It also addresses the validity and reliability of the instruments and data collected. Further it covers ethical issues. The chapter in essence covers the objectives, hypotheses, research paradigms, strategies, approaches, choices, population, sample selection, data collection, data analysis, ethical issues and limitations.

#### **4.2 RESEARCH OBJECTIVES**

The research objectives developed to guide this study were in conjunction with the aim of the study namely the investigation of the role of institutional environment and learning on student entrepreneurial intent along other factors. The objectives featured in the study were:

- ❖ To investigate the role of institutional environment in developing entrepreneurial intent of students.
- ❖ To investigate whether learning stimulates students towards entrepreneurship.



- ❖ Analyse whether there is a relationship between role models and entrepreneurial intent.
- ❖ To investigate whether variables that influence entrepreneurial intention have impact upon one another.
- ❖ To assess whether entrepreneurial intent varies according to demographic variables such as gender, race and parental motivation.
- ❖ To develop a model that investigates the most influential variable on an entrepreneurial intent.

### **4.3 HYPOTHESES**

*Hypothesis 1:* The University Of KwaZulu - Natal (UKZN) plays a role in stimulating the entrepreneurial intents of the learners.

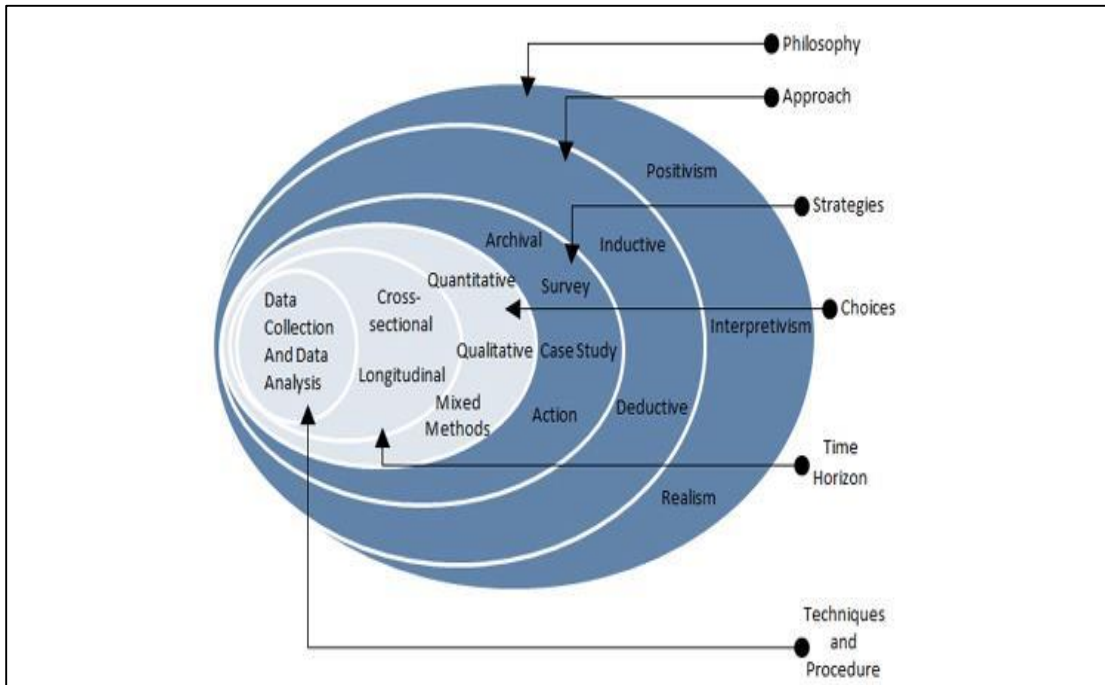
*Hypothesis 2:* The entrepreneurial inclination of students is likely to be increased by the nature of learning at the University.

*Hypothesis 3:* The availability of entrepreneurial role models increases the entrepreneurial inclination of students.

*Hypothesis 4:* Entrepreneurial inclination in students is stronger for: Gender, Father's occupation and Mother's occupation.

### **4.4 RESEARCH PARADIGMS**

Research paradigms have also been termed as research philosophies. Every enquiry under investigation holds out to some world views or beliefs. It is these beliefs or world views that tend to determine the techniques, processes, design and strategies for the reinvestigation or investigation on the knowledge relating to the object of enquiry (Saunders, Lewis and Thornhill 2009). Before selecting the research philosophy for this study, it is important to discuss the research philosophies presented by Saunders et al (2009:108). The authors presented their philosophies using a figure of an onion as shown below:



*Figure 4.1: The 'Onion' of Research*

*Source: Saunders et al (2009:108)*

#### **4.4.1 The various research paradigms**

Among the various research paradigms often in use is realism. Realism is known for its two positivism attributes. One of the assumptions adopted in realism relates to the researcher's orientation in that the researcher is different from the object being investigated. The advancement of a given phenomenon under realism leads to the understanding of two existing realisms: The empirical realism and the direct realism (Bryman and Bell 2011). The second realism termed as critical realism and as implied by the nature of its name raises questions that are critical as to the extent the social actor's enable a true world view to be realised. In pursuit of understanding the real world view, instances are pointed where social actors were deceived by human senses leading to wrong world views. It is understood that social actors tend to view things differently consequent on the apparent circumstances. Critical realism is based on a learning process since human knowledge is based on a training that is shared and therefore it can not be realised if the actors do not get involved in the learning process (Dabson [2002] in Saunders et al 2009).

Interpretivism is another paradigm. The use of symbolic and phenomenological interactionism gave rise to interpretivism (Saunders et al 2009). The conception of the lived world by social actors is explained by phenomenology (Saunders et al 2009; Goulding 2005; and Lester 1999). The role of Symbolic interaction in the continued interpretations of the lived world remains significant. Activities as well as values are shaped by the interactions actors have which are derived from the interpretations as reflected by the actions and discussions with each other (Bokberger and Melen 2011; Saunders et al 2009).

The distance between the social actor and the objects under investigation does not get removed under interpretivism. This then becomes an alternative to positivism since it is related to natural sciences research (Kelliher 2011; Saunders et al 2009). Interpretivism considers that the researcher and the behaviour being investigated cannot be separated. Besides the caution of bias associated with interpretivism, in particular reference of the views of the researcher influencing the study outcomes (Saunders et al 2009). The generalisation challenges associated with interpretivism have been identified by Kelliher (2011). In this context, the author points out that reliability and validity of interpretivism are subject to challenges and therefore the generalisability is made difficult on the outcomes of such a study.

Finally there is pragmatism. In contrast with other research philosophies, pragmatism deals with consequences, situations and actions under investigation. Pragmatism relies on multiplicity of methods, as such the use of multiple approaches to help achieve better outcomes (Creswell 2009a). Under this method the researcher is free to use any methods to produce better results (Freshwater and Cahill 2013). It is further argued that pragmatists see the universe diversity and consider the use of various techniques in underscoring the challenges thus involved (Creswell 2009a; Johnson and Onweugbuzie 2004; Hanson et al 2005). It has been argued that the research problem of any of the following philosophical assumptions: epistemology, ontology and axiology. The table below gives a snapshot of the management research philosophies.

#### **4.4.2 Positivism**

It is within the understanding of positivism that visible and assessable objects in pursuit of true knowledge should be generalised. Positivists consider that the object under study

and the attached meaning ought to have a separate existence from the researcher (Bryman and Bell 2011). Positivism has also been referred to as a research strategy that is objectivist (Saunders et al 2009). The affirmation of the separation between the researcher and the objects under study is an epistemological stance in positivism. This is further affirmed in natural sciences as the object reality is different from that of the actor in the process of investigation. The ontological perspective of positivism on social phenomena is the distinctness of reality between the object under study and the actor (Bryman 2012). This is applicable with the present study in that the institutional environments as well as its learning are different from the actors in the investigation. The institutional entrepreneurial ecosystem of the University has its components and their impact on those learners is a construct that requires its own understanding.

This in complete contrast to the ontological perspective of the constructivist which considers that the view points of the social actors result in social constructs (Bryman 2012). It is within this paradigm that social constructivists are known to build the construct through a joint effort (Maylor and Blackmon 2005). This is an otherwise contrary concept within positivism paradigm. The axiological beliefs governing the positivists is that the research process that is scientific in nature is also value free. The concept itself is an object (Samuel 2012). The quantitative approach is often used by the positivists as it goes hand in hand with the objectivist philosophical approach of study and this is opposed to the phenomenologists who consider that the researcher's perceptions and values impact on results interpretation.

*Table 4.1: Tabulation and comparison of research philosophies.*

<b>Research philosophies</b>	<b>Positivism</b>	<b>Realism</b>	<b>Interpretivism</b>	<b>Pragmatism</b>
<b>Epistemology:</b> the investigator's perceptions of what constitutes satisfactory knowledge.	Only observable objects are capable of providing reliable data and facts. Emphasis is on cause, effect, impact and law to make generalisations. It reduces constructs to the simplest	Observable objects offer reliable data and facts. Inadequate data implies imprecisions in feelings (direct realism) while objects provide feelings which are vulnerable to	Centres on perceptual meanings and social constructs. Emphasis is on the information surrounding the situation, the background of the information, perceptual values	Any or combinations of observable constructs and perceptual values can lead to acceptable knowledge. This is dependent on the nature of the research questions

	elements.	misconceptions (critical realism). Emphasis is on discussions within the framework.	and rationale behind the actions.	at hand. Emphasis is on applied research, adopting multiple techniques for data collection and interpretation of results.
<b>Ontology:</b> the investigator's perceptions of what constitutes the nature of reality.	Objects are seen as external and possess a reality that is different from that of the investigator.	Objective in nature, its existence is completely different from the thoughts, and beliefs of social actors (realist); its interpretation comes from social circumstances (critical realist)	Social constructs built into social interactions and actions of others. Subjective and variation is inevitable	Emphasis is on better ways to provide answers (solutions) to the research questions (problem). The decision on the suitable techniques is dependent on the research questions.
<b>Axiology:</b> the investigator's perceptions of the role of values in investigation.	The investigation is carried out in a value-free way; the investigator is alienated and upholds an objective mind set.	Investigation is value loaded; the investigator's point of view is subjective based on their social experiences and background which often impact the outcomes of the study.	Investigation is value assured; the investigator is part of the investigation, not possible to be indifferent; this makes the whole exercise sometimes subjective.	Values play a significant role in interpretation of results; the investigator adopts both objective and subjective perspectives.
Main methods of data collection.	Very organised, big samples, measurement, quantitative and permitted to use qualitative when necessary.	Techniques adopted must be align with the research questions, qualitative or quantitative.	Takes small samples with deeper examination, more qualitative.	Takes mixed or multiple approaches, that is, qualitative and quantitative.

Source: Saunders et al. (2009: 119).

#### 4.4.3: Study Research Philosophy

The positivism research paradigm was deemed appropriate to the statement of the problem and to the research questions and hypotheses. This choice of research paradigm had implications on the research problem, purpose statement, and research questions and

on the choice of the research design. In turn, the choice of the research design had implications on methods for collecting data, data analysis, data interpretation and validation of procedures. Besides, the choice of positivism as a research philosophy for this study was undertaken due to the fact that the measurability of data through hypotheses testing was permitted.

## **4.5 Research Approaches**

The research approaches are premised on two perspectives that are distinct and they are the deductive and inductive approaches. An elaboration of these approaches is presented below:

### **4.5.1 The Deductive Approach**

The fundamental basis of the deductive approach is on positivism which is associated to natural sciences (Saunders et al 2009). The development of hypotheses alongside data collection and analysis is a measure used after critical examination of prior knowledge and literature and any theoretical assumptions available on the subject of study (Bryman and Bell 2011).

Critical literature review and the examination of embedded relationships among the variables is normally termed as the first step in the enquiry utilising the deductive approach for an enquiry (Minner, Levy and Century 2010; Saunders et al 2009).

The above step is necessary to lay a foundation for the second step in the deductive approach of scientific enquiry. The consciousness and knowledge of the subject matter require an examination of relevant literature so as to help formulate hypotheses in the second stage of the deductive enquiry ( Bryman and Bell 2011; Minner et al 2010; Saunders et al 2009).

Data collection and analysis method is the third step in the deductive approach and is said to require alertness when exercising the choice of data collection and analysis. This procedure helps the researcher avoid invalid results (Saunders et al 2009). The need to justify the approach of a particular scientific enquiry becomes a significant step to researchers.

The interpretation of the findings forms the fourth part of the deductive approach. It is an important moment when a connection is made between the data and the hypotheses as well as theory. This process is termed as verification (Maylor and Blackmon 2005).

It is the statistical significance interpretation that forms the fifth stage. It is also at this stage that hypotheses become accepted or rejected (Bryman and Bell 2011).

It is in the sixth stage that the re-examination of theory to develop new knowledge is attended to. At times this could clarify the extent of variation in the available knowledge (Bryman and Bell 2011; Saunders et al 2009). It is at this stage that generalisations are made given that the findings or outcomes could highlight strengths or weaknesses in the theory being reviewed. This then forms the last part in the deductive approach. This approach, the deductive, has been used in this study.

#### **4.5.2 Inductive Approach**

This approach is based on the interpretivist philosophy and is an alternative to the positivist philosophical assumptions (Kelliher 2011; Thomas 2006). The inductive approach has been considered as a mechanism that aids research to dig deep in the development of theory in order to contribute to a body of knowledge under investigation. This approach became more pronounced in the 20th century in the social and management sciences (Kelliher 2011; Groudling 2005). The preparation of wide range of raw data by compressing it becomes the first stage in the deductive approach. A linkage is built between the outcomes and the objectives of the study through the collected data (Thomas 2006). Finally a theory or a model is developed from the data collected showing a relationship between the variables under study (Kelliher 2011; Saunders et al 2009). This is the stage where generalisations are made from the collected raw data outcomes analysed through qualitative techniques. The table below shows a comparison of qualitative approaches by Thomas (2006:241)

Table 4.3: *Qualitative Analysis Approaches*

	<b>General Inductive Approach</b>	<b>Grounded Theory</b>	<b>Discourse Analysis</b>	<b>Phenomenology</b>
Analytic strategies and questions	What are the core meanings evident in the text, that are relevant to evaluation or meet the research Objectives?	To generate or discover theory using open and axial coding and theoretical sampling	Concerned with talk and texts as social practices and their rhetorical or argumentative organisation	Seeks to uncover the meaning that lives within experience and to convey felt understanding in words
Outcome of analysis	Themes or categories most relevant to research objectives identified	A theory that includes themes or categories	Multiple meanings of language and text identified and described	A description of lived experiences
Presentation of Findings	Description of most Important themes	Description of theory that includes core themes	Descriptive account of multiple meanings in text	A coherent story or narrative about the experience

Source: Thomas (2006: 241).

The difference between the inductive and deductive approach is that the inductive approach uses a small sample for in depth analysis whereas the deductive approach uses a large sample with complex statistical analysis. The deductive approach has been a shortfall of validity due to the highly subjective nature where the researcher's perceptions are integrated in the interpretation of data as well discussions (Saunders et al 2009). The next approach is a combination of the deductive and inductive approaches as argued by some scholars.



### 4.5.3 Deductive and Inductive Combined Approach

The combination of the deductive and inductive approaches is argued by some authors to bring significant benefits (Saunders et al 2009). This approach is also termed as the mixed methods approach (Creswell 2009a). This approach is said to address the objective and subjective shortcomings but this has been subjected to some controversies as presented in table 4.2 of this presentation. Ali and Birley (1999:106) made a comparison of the deductive and inductive with the option of integrated approach. Table 4.4 shows the comparison.

*Table 4.4: Deductive, Inductive and Integrated Approaches Compared*

Stage	Deductive	Inductive	Integrated approach
1	Development of theoretical framework	Area of enquiry are identified, but no theoretical framework	Development of theoretical framework based on constructs
2	Variables are identified for relevant constructs	Respondents identify constructs and explain the relationship between them	Some variables are identified for relevant constructs - others can be identified by respondents
3	Development of research instruments	Identification of broad themes for discussion	Researcher converts the a priori theoretical framework into theoretical questions
4	Data are collected from respondents	Respondents discuss general terms of interest	Respondents discuss the seemingly general questions and identify constructs which are meaningful to them and explain the relationships between the constructs.
5	Data are analysed in terms of prior theoretical framework	Researcher develops theory on a purely inductive basis	Data collected from respondents are analysed according to existing theory. Or theory is developed on an inductive basis - without regard to the existing theory.
6	Outcome; theory tested based on decision whether to accept or reject the formulated hypotheses.	Outcome; theory developed.	Outcome; either theory is adapted or alternative theoretical framework is presented.

Source: [Ali and Birley \(1999: 106\)](#).

### 4.5.4 The Study Approach

Owing to the weaknesses noted in literature for the various weaknesses found in the inductive and integrated approaches, this study adopted the deductive approach following the need to investigate the institutional and learning environment's impact on the institutional intent of the learners at the University of KwaZulu Natal. This approach made it possible to provide advanced analysis for variable relationships in the study. The predictor latent variables impact on the criterion variable were established through a numerical statistical analysis due to the numerical nature of the deductive approach. The hypotheses developed for this study were derived from literature examination on issues related to institutional and learning environment and entrepreneurial inclination of learners and only the numerical analysis permitted the cause and effect relationships to be analysed.

#### **4.6 RESEARCH DESIGN**

Research design is a plan that knits together the various elements of the research project.: Purpose, together with questions, together with literature review, together with approach, which leads to decisions about design frame, methods of data collection and data analysis. In order to achieve realistic conclusions (Azika 2008), research designs or strategies need to be employed. Research methodologies or designs are methods the researcher uses in collecting data so as to gain realistic conclusions (Creswell 2009a). The strategy in exploring and finally translating the research methodology into tools, instruments and techniques is termed as a research design (Maylor and Blackmon 2005). Below is the discussion of the research designs often used in research.

##### **4.6.1 Descriptive Studies**

The provision of features of the numerous variables or a phenomena is often done by a descriptive study. This is a study that is done to adequately describe the features of the variables under study (Sekaran and Bougie 2009). Descriptive studies lay a background for exploratory study as it enables arguments to be built on the data under review (Saunders et al 2009).

The role of institutional and learning environment in entrepreneurial inclination of learners is well articulated by a descriptive study as it helps investigate the gap of learning and entrepreneurial. Also the role of other variables in relation to entrepreneurial intent is described in terms of features of the demographic profile of the sample and associated impact.

#### **4.6.2 Exploratory Studies**

In the need to expand knowledge of a specific phenomenon, exploratory research is undertaken. This type of research is undertaken when there is little or no information in regard to the apparent problem. Therefore it is in this regard that the familiarisation with the subject matter in question becomes a preliminary requisite in knowledge advancement while using the research questions or hypotheses (Sekaran and Bougie 2009). Exploratory research design has often been adopted in qualitative studies through observations and interviews when seeking knowledge on the phenomenon. This is normally done when there is scarcity of knowledge on the phenomenon (Sekaran and Bougie 2009).

The following three steps are important in exploratory studies: firstly the examination of literature; secondly getting of important and first-hand information from key persons such as specialists in the field and thirdly interviews with focus groups. In the quest for making a valid contribution to knowledge, the researchers must initially conceive the phenomenon from a broader point of view and progressively narrow the phenomenon to the crucial point (Sekaran and Bougie 2009).

#### **4.6.3 Explanatory Studies**

In order to assess the relationship between two variables or more the use of hypotheses is often done and this process is characteristic of an explanatory approach (Sekarana and Bougie 2009). The need for hypotheses in explanatory studies is necessary for the assessment of independent and depend variables so that an explanation that is constructive is arrived at. The data collection method can be quantitative, qualitative or mixed methods approach (Bryman and Bell 2011; Creswell 2009a; Sekarana and Bougie 2009).

This study used the positivist approach and hence undertook hypotheses testing approach in order to understand the relationship between the variables in student entrepreneurial intention. Following the gap that was identified through literature study as well as theoretical framework on the student entrepreneurial intention and institutional and learning environment, the hypotheses testing guided by a high level explanatory design sought an explanation of the latent variables in the study. Hypotheses testing were done using the Warp partial Least Squares (PLS) Structural Equation Modelling and a model was developed as presented in chapter 6 of this study.

#### **4.6.4 Experimental Design**

The following two perspectives have been characteristic of experimental design: laboratory experiments and field experiments. Whereas laboratory experiments often occur in an artificial setting field experiments do take place in a natural environment (Sekaran 2003). The use of laboratory experiments in social constructs seems to be rare but these kinds of research designs have been common with the pure research sciences (Quiallan 2011). The real life settings have been able to utilise field experiments as noticed in social sciences and business (Bryman and Bell 2011).

The use of experimental design has also been associated with the need to cause and effect scenario of the independent variable on the dependent variable (Vanderstoep and Johnston 2009). It is for this reason that subjects get divided into control and treatment group (Sekaran 2003). The use of independent and dependent variables in experimental designs is furthermore taken to another step when an extraneous variable responsible for the independent and dependent variable description. Extraneous variable therefore is of great significance in its explanatory power (Vanderstoep and Johnston 2009).

The difficulty of including an experimental design in this study given the management aspect of it (Quilan 2011) led to the examination of the dependent and independent variable using other designs.

#### **4.6.5 The Quasi Experimental Design**

The quasi experimental design does not permit the researcher to subject the respondents to any manipulation (Sekaran and Bougie 2009). The social situations upon which the independent and dependent variables are subject to makes it difficult for the

researcher to subdivide the subjects into control and treatment groups for the manipulation of the predictor variables ( Bryman and Bell 2011). The experimental design permits the investigator to subdivide groups unlike the quasi experimental design (Sekaran 2003). Since the quasi experimental design conditions are manipulated by the natural environmental conditions, it goes beyond the researcher's control (Edmonds and Kennedy 2012). It is therefore understood that the quasi experimental design is termed as the weakest as a result of its inadequate evaluator mechanism for the cause and effect relationship in the variables under study (Maylor and Blackmon 2005; Sekaran 2003).

It was not therefore necessary to make use of this design in this study given that it could not permit a reliable statistical manipulation of the variables under study.

#### **4.7 THE SURVEY RESEARCH DESIGN**

This is one of the common research design methods associated with the quantitative approach. This enables the use of probability techniques of sampling (Creswell 2009a; Maylor and Blackmon 2005). These kinds of studies subject the data to statistical analysis so as to understand the outcomes. This study employed this method as the respondents were given an equal chance of participating through an online questionnaire that investigated the institutional and learning impact on student entrepreneurial intention at the University of KwaZulu Natal. There are two types of survey research designs as explained below:

##### **4.7.1 The Cross Sectional Study**

This type of study refers to the snapshot of a particular period in collecting data in regard to the questions of research (Wilson 2010). The advantage of this study is that it is less expensive and it is time saving in a sense that the period used is not too long. It is perhaps for this reason that students use it for the award of degrees (Wilson 2010).

In the course of this study it became appropriate to use cross sectional data given the associated costs which made it easier for the researcher to fit this within the time frame of

the study period. This study was done on full time basis providing the researcher with little time to get extra income to supplement the research grant.

#### **4.7.2 The Longitudinal Study**

The use of longitudinal studies is characterised by a data search that spans a period of time. This is done to express levels of variations between variables under investigation. This therefore means that this type of study is costly and time consuming (Sekaran and Bougie 2009; Saunders et al 2009). The longitudinal studies are known to establish the cause and effect in the variables under study. This type of study could not be used during this research due to the fact that it was costly and time consuming.

#### **4.7.3 Other research designs**

Among the other research designs is the action research. In action oriented research a series of activities resulting to an outcome are considered than in the construct other than theory (Coghlan and Coghlan 2010). It is the proposition of Coghlan and Coghlan (2010) that theory is still needed in problem identification in the action research as it extends knowledge frontiers with emphasis on practical knowledge. In order to recommend improved organisational productivity after problem diagnosis, experts may undertake this type of research (Sekarana and Bougie 2009).

Action research unlike basic research is used to address immediate problems of the organisation using the shortest possible timeframe, whereas basic research fills the literature gap that was identified. The similitude in between action research and basic research is that both approaches adopt a scientific enquiry. Action research therefore revolves around the problem diagnosis, planning taking of action and an evaluation.

This study approach was not applicable in this study as literature had identified the gap with a view to extending the knowledge on the variables that impact on the entrepreneurial intention of students.

There is a case study approach. The case study approach is often associated with companies, organisations, individuals. This approach may utilise the qualitative or quantitative data collection method (Saunders et al 2009). Sources like the public and private annals, observation and interviews are means by which the case study data is collected. It is for this reason that this approach often adopts a qualitative method in its

research (Wilson 2010). In case studies, life experiences are often used to help make past or present inferences. Case studies are common in management, law and social sciences (Sekaran and Bougie 2009).

This approach is beneficial in that once a thorough investigation is done, the future predictions can be realised.

There is need for actors to be cautious on the weaknesses stipulated above to enable perfect phenomenon prediction (Flyvbjerg 2006).

In this study no comparative approaches were conducted and therefore the pure case study approach does not apply.

The grounded theory is another design. The observation of Hallberg is that the grounded theory makes provision for a few procedures in developing theory in identifying variable associations. This was a 1967 theory by Glaser and Strauss (Hallberg 2006). This theory has also been considered a 'theory building' approach and is well-known for using the inductive approaches in the social constructs. The new theory development is often associated with the grounded theory approaches as well as existing theory consolidation and this may be helpful in the management issues (Saunders et al 2009). Multiple sources of data collection are needed for grounded theory approach, points Creswell (2009). This is further augmented by Sekarana and Bougie (200) when they affirm the repetitive data collection, sampling as well as analysis to achieve a 'theoretical saturation'. The point of theoretical saturation according to the authors is used to mean a stage in the research where no new or novel evidence is gained in the investigation of the study following the use of cases that are consistent.

This approach was not used in this study since the study adopted a quantitative approach in investigating the institutional and learning environment of the University of KwaZulu Natal.

Ethnographic Study is another approach. Anthropology is said to have laid the foundation for ethnographic inductive approach. This type of study focuses on analyses that are descriptive with regard to the group culture (Saunders et al 2009). Sociology and

anthropology major on ethnographic studies (Maylor and Blackmon 2005). This is a qualitative study in which the actor conducts a cultural group examination for a prolonged period of time by observing participants and interviewing individuals. This also depicts ethnography as a study which does not deal with the measurement of the phenomenon but as an open ended probing strategy (Creswell 2009a). Table 4.5 gives a comparative tabulation of scientific and ethnographic approaches:

*Table 4.5: Scientific and Ethnographic Approaches Compared*

<b>Characteristics</b>	<b>Scientific approach</b>	<b>Ethnographic approach</b>
Research philosophy	Philosophy of science	Philosophy of social science
Research perspectives	Positivism Relativism Empiricism	Interpretivism Constructivism Subjectivism
Archetype	Laboratory experiment	Participating in the field of interest
Questions that can be answered	What, how much	Why, how
Starting point	Structure for data - you know what you need to collect as led by theory	Unstructured - what you need to do emerges as led by data
World-view	Objective- the research is independent	Subjective – the researcher is part of what is being researched
Objective of the study	To find general patterns or laws – generality as well as statistically significant results	To understand meaning in one specific situation – depth and valuable, transferable results
Underlying logic	Deduction	Induction
Who uses	Commonly used in economics, finance, operations research, management science and marketing	Commonly utilised in human resource management, organisational behaviour, organisational science
Role of theory	Testing theory through development of hypotheses, collection of data, verification	Generation of theory through pattern analysis
Process	Predominantly linear, sequential, ordered	Predominantly iterative, overlapping, messy
Associated methods	Scientific method of which	Video diaries. Recognises social



	surveys are as an example. Modeled on closed-system experiments, minimising bias but limiting the possibility of discovery	systems, and tries to acknowledge personal biases and tries to keep an open mind
Data type	Predominantly quantitative, predetermined	Predominantly qualitative, for example a series of statements or impressions
Finding	Measure	Meaning
Data analysis	Statistical through rules and procedures	Thematic through intuition
Quality	Validity, reliability, generalisability	Makes good use of a recognised method, neutrality and transparency

Source: [Maylor and Blackmon \(2005: 161\)](#)

The basic features for scientific and ethnographic research have been tabulated in table 4.4 above, nonetheless, for this study an ethnographic approach was not employed owing to the advanced level of statistical analysis needed to analyse the predictor and latent criterion variables.

Archival research is also another research design. This type of research strategy collects its data mainly from administrative documents of private and public bodies (Saunders et al 2009). The archival research strategy does require that consent be gained from the private or public bodies in order to access this kind of secondary data.

The following four key issues are necessary to be considered at the earliest periods of an archival research.

Will the data be accessed upon the fee payment or will it be free?

Is the data to be acquired in its raw form or will it have to be processed?

Is the data based on a particular organisation or is it addressing a phenomenon?

What is the accuracy of the data?

These four aspects will enable the archival research to become significant (Maylor and Blackmon 2005). Archival research like other secondary research have their points of weaknesses and strengths. The tabulation of these aspects in regard to major areas in research is focused in the table. The three areas by which most research is considered are: Contribution, analysis and effort.

*Table 4.6: Secondary Data Analysis: Weaknesses and Strengths*

<b>Key areas in research</b>	<b>Strengths</b>	<b>Weaknesses</b>
Effort	Less costly and time consuming data collection, allowing more time for data analysis	<p>Researchers need to familiarise themselves with the data.</p> <p>Ability to manage large and complex data set.</p> <p>It may be expensive if payment is required.</p>
Analysis	<p>Access to high quality data, comparing subgroups or subsets within the data sample,</p> <p>Comparing subgroups or subsets in other countries</p>	<p>Researchers lack control of the quality of the data as the data has been already collected.</p> <p>The data may be biased in unobservable ways.</p> <p>The data may lack the ability to answer key research questions.</p>
Contribution	Re-interpretation of original findings by providing adequate analysis of the data set	Lack of rigorous and purposeful data collection from primarily sources; does not build as many research skills as direct methods.

Source: [Maylor and Blackmon \(2005: 173\)](#).

It was not appropriate for this study to use archival research since the topic under study dealt with current issues in relation to importance of entrepreneurial mind-set development for creativity in work place or an enterprising culture in private business.

Phenomenological research is also noted as one of the designs. The use of phenomenology as a research paradigm has been associated with management research to enable deep investigations to be conducted (Goulding 2005). The method of data collection in phenomenology is qualitative thus permitting the researcher to gain information that would have been otherwise not available on other research methods. The

joint effort between the actor and the participant in arriving at a joint understanding on the phenomenon is a fundamental concept in phenomenology. The aim of phenomenology is the description of the participants lived experience. It is after the interpretation that practical theory development occurs (Lester 1999).

The above various stages can equip a phenomenological researcher to attain a meaningful research that presents the views of the participants (Colaizzi, 1978 in Goulding 2005). This study could not make use of this research design as literature and theoretical frameworks were explored in investigating the subject under study.

#### **4.7.9 The Research Study Design**

The consideration of the various research designs led to the need to adopt a suitable research design for this study. This was a cross sectional study design which aided in investigating the predictor latent variables influence on the criterion variable. A non-experimental approach was adopted for the study. The validation of the research variables influence in a cross sectional study between variables required a snap shot data or a one time data (Edmonds and Kennedy 2012). A non experimental design approach was considered suitable for this study following the fact that other studies had used the same approach previously (Liao et al 2012; Katou and Budhwar 2010; Walker and Greene 2009; Hung et al 2010; Kuvaas 2008).The next section shall discuss the various research choices.

### **4.8 RESEARCH CHOICES**

The various sources of data collection are termed as research choices. Basically these methods are the mono methods, the multiple method and the mixed methods (Saunders et al 2009). The sections below will elaborate on the research choices.

#### **4.8.1 The Mono Method**

This method does not only require an adoption of a technique of data collection but also the conformation of the data analysis procedure. The type of data may be numerical or

non-numerical and thereafter it gets subjected to a statistical analysis that is complex so as to report the findings numerically (Saunders et al 2009).

The non-numerical method also termed as the qualitative is said to possess the social science qualities to a greater extent as depicted in table 4.4. Whereas the numerical method referred to as the quantitative often is characterised by the pure sciences philosophies as shown in table 4.5. The criticism labelled against this method is that it lacks data triangulation (Saunders et al 2009) and that it may not be able to answer dynamic questions which require mixed methods for data triangulation (Wilson 2010). Nonetheless, the use of mixed method has been an issue of controversy as depicted in table 4.2. The controversy on mixed methods was questioned by Sandelowski (2000) in regard to the high analytical power attributed to it when it is neither a paradigm nor a technique. A former teacher of mixed methods, Creswell after further analysis comes to the same conclusion following the several seminars on the subject.

#### **4.8.2 Multiple Methods**

The use of two or more data collection techniques alongside a corresponding analysis is termed as multiple methods. These methods have been categorised into four areas as follows:

##### **4.8.2.1 Multiple Methods Qualitative Studies**

This approach is said to be common in areas such as marketing, organisational behaviour, sociology, anthropology, HR Management as well as social and management disciplines. The combination of two or more data collection qualitative approaches and procedures of analysis is conducted in the multi-methods qualitative studies. Thereafter the data is analysed using the qualitative approaches in regard to the objectives and questions of the research (Saunders et al 2009). This method's sample size is small as the concentration is based on the depth and richness of data. During the collection of data, the need to reach a saturation point of data is aimed at (Sekaran and Bougie 2009). The shortcoming of this approach is said to be the nature of enquiry which is the over reliance on subjectivity.

This may land the researcher into issues on bias if not properly managed. This is the reason some researchers prefer the objective enquiries in the quantitative.

#### **4.8.2.2 Multi-Method Quantitative Studies**

The use of two or more data collection quantitative methods and data analysis in a study is termed as the multi-method quantitative study (Saunders et al 2009). It is the objective approach that guides this kind of study. A number of disciplines adopt this approach. Among such disciplines are finance, economics, management and accounting for the collection of primary and secondary data in relation to the given study objectives. The advantages of this method is found in the cost of data and the time saved in the process of data acquisition (Maylor and Blackmon 2005). On the other hand the shortcoming of this approach is that the complex and large amounts of data can be a challenge in the data familiarisation, in certain exception, where data is old, the expense may be high (Wilson 2010).

#### **4.8.2.3 Mixed Methods Research**

The mixed methods approach integrates two methods: the quantitative and qualitative data collection methods as well the analysis being conducted concurrently or consecutively (Saunders et al 2009). The strategies adopted by mixed methods research have been discussed by Creswell (2009) as presented below:

##### **4.8.2.3.1 Concurrent Mixed Methods**

This method integrates the numerical and non-numerical approaches of data collection and analysis procedures (Cameron 2009). This may be exemplified with a cross sectional survey containing open-ended and closed ended structured instrument (Creswell 2009a; Wilson 2010).

#### **4.8.2.3.2 The Sequential Mixed Methods**

The use of one approach after another is the main feature of the sequential mixed methods approach (Cameron 2009). This may be exemplified by a scenario where the researcher starts with the qualitative and later with the quantitative approach. This can be applicable when exploratory and explanatory approaches are in use. The collection of data from a large sample and statistical analysis is meant to fulfil the explanatory objectives of the study. It is however, not the case that the researcher must always begin with the qualitative approach (Creswell 2009a). Basically, the procedures must be on a consecutive order (Hanson et al 2005).

#### **4.8.2.3.3 The transformative Mixed Methods**

The use of the transformative mixed methods permits the collection of both the numerical and non-numerical data with the option of analysing the data sequentially or concurrently depending on the research problem and the terms of reference (Hanson et al 2005). According to Creswell (2009) the prioritisation of data collection methods is possible. In which case one method of data collection may be given priority over another or the same preference may be accorded to both methods of data collection. In this process, data may be triangulated at any given point during the investigation.

#### **4.8.2.3.4 Mixed Model Research**

This approach does combine the numerical and non-numerical methods of data collection and analysis in response to the research questions (Saunders et al 2009). The conversion of data into narrative form or vice versa is possible using this method (Sekaran and Bougie 2009). This is notwithstanding the controversies stated in table 4.2.

#### **4.8.2.3.5 Adopted Research Choice**

Owing to the shortcomings associated with the qualitative and the mixed methods research, this study adopted the Multi-method quantitative analysis technique as its research choice. It is for this reason that SPSS was used as well as Structural Equation

Modelling (SEM). This allowed the data analysis to dig deep into the variable relationship. This was necessary since the study investigated quantifiable findings as expressed by the hypotheses and study objectives. The complex analysis required for the latent predictor variables and the latent criterion variable was thus enabled by the use of this method. The quantitative research methods are noted for their ability in researching the effects of specific variables (Edmonds and Kennedy 2012). This study investigated the impact of Institutional and learning environment on student entrepreneurial inclination or intention. The need to understand the role and strength played by learning and institutional environment in encapsulating an entrepreneurial atmosphere without any subjective possible bias could be achieved with an objectivist approach.

#### **4.9. RESEARCH SITE**

South Africa is credited with three of her Universities in the world top 500 Universities (Macgregor (2007)). These Universities are University of Cape Town (UCT); The University of Witwatersrand (WITS) and the University of KwaZulu – Natal (UKZN). The role a University of an international ranking like UKZN plays in impacting her learners is significant and this motivated the choice for this site for this study. The University of KwaZulu Natal has sustained stakeholder relationships, which help the available ecosystem at the disposal of the University. The University has often run entrepreneurship seminars among its activities. A study of this kind helps investigate the available environment towards entrepreneurial inclination/intention of the learners.

#### **4.10 POPULATION AND SAMPLING**

Welman, Kruger and Mitchell (2005:55) have defined a sample as ‘a miniature image or likeness of the population.’ Different situations, however, call for different sampling methods. Leedy and Ormrod (2010) have exhaustively covered the sampling designs found in probability and non-probability designs. The probability sampling technique ensures that every member in a given population has a chance of being represented. The individual’s ability of being represented is often possible through a random opportunity of selection. Leedy and Ormrod (2010) have given the following examples of probability sampling:

<b>The Simple Random Sampling</b>	<b>Each individual in this category has a chance of being selected from a large pool.</b>
<b>Systematic Sampling</b>	This sampling begins with a random start after identification of an element of the population; every element therefore gets selected after a sampling fraction has been identified.
<b>Strata Sampling</b>	This type of sampling requires that the population be divided into strata and then a simple random sampling is used on each stratum.
<b>Cluster Sampling</b>	This is where the population gets divided into heterogeneous subgroups.

The non-probability sampling has basically the following sampling methods: *Convenience sampling*; this is also known as the haphazard sampling where readily available units are taken into consideration. This is also known as accidental sampling.

*Quota Sampling* is another sampling method under the non-probability sampling where the respondents are taken in the same proportion of the population.

*Purposive sampling* is the other method where units are taken for that particular purpose. In this case whoever is at hand is taken for the sampling purpose. The purposive or judgmental sampling, normally occurs where the researcher finds it hard to get the population.

*The snowball sampling* method used under non probability sampling deals with a sample where referrals normally by word of mouth lead to getting the sample target from the population.

*The maximum variation sampling*: In this category, the identification of topic related interest is done and the subjects or contexts that provide the most varied context are used. The researcher is interested in the phenomenon that represents the greatest range of differences (Leedy and Ormrod 2010:212).

Due to the use of web-based survey an open ended number was allowed to respond to the questionnaire. However only the final year undergraduate level of the College of Law and



Management Studies were directed to respond to the survey. Final year undergraduate students were chosen for this study given the understanding or experience they have had with the university environment and learning. Most of the students who are in the undergraduate programs may not for some reason or the other continue with further studies and thereby joining the community or society for inconceivably longer time and hence their experiences get to be felt in the society in terms of their entrepreneurial intent, if any.

The business nature of the courses in the College of Law and Management corresponds to business environment in terms of business education and research thereby making it ideal for the study.

This study was directed to the final year undergraduate students. There were 5,529 undergraduate final year students in the College of Law and Management. Leedy and Ormrod (2010:213-214) have suggested guides in sample selection as follows:

- ❖ Where N is 100 or less the entire population should be subjected to a survey.
- ❖ Where N is 500, the sample should form 50%.
- ❖ However, where N is 1,500, then 20 % should form the sample.

In addition to this the authors indicated that there are instances where the population size in relation to the sample becomes irrelevant such as when the population is 5,000 and above. In such a case, a sample of up to 400 may be used. The use of a sample has been considered as the selection of units from the population so that the results can be generalised fairly to the whole population that is under consideration (Trochim 2006:41). Studying the whole population can be cumbersome in a short span of time and authors like Goddard and Melville (2006:29) do concur when they categorically state that a sample is used when it is not possible to study the entire population. In this study, it may be noted that 501 viewed the questionnaire, indicating the realisation of more than an appropriate sample as given by Trochim (2006) of 400. The final year students will have likely positioned themselves to understand the environment they have been in and where they are headed in their goals. There is an understanding that first impressions last, the creation of such impressions, is likely to be underscored at this earliest stage of their career. It is for this reason that postgraduate students have been left out. This study

chooses to undertake this segment knowing that the results can be generalised for the entire population and can also be manageable for statistical coding and electronic assessment within the required time.

#### **4.10.1 The Study Sampling Technique**

The sampling technique chosen for this study was the simple random sampling (Leedy and Omrod 2010). This sampling technique allows for every individual to have a chance of being selected from a large pool. The use of a web based questionnaire opened an opportunity for every member within the population to participate in the survey. The advantages of simple random sampling are the great efficiency associated to it (Hedt and Pagano 2011). This sampling is categorised under the probability sampling method which permits the generalisation of the findings (Ozdemir et al 2011). Using this method permitted the generalisation of findings following the theory underpinnings which guided the verification of the findings. The web-based questionnaire was directed to the final year undergraduate students of the college of Law and Management Studies at the University Of KwaZulu Natal. This University is one of the World accredited Universities presently falling within the first top 3 % of the University rankings (CWUR 2014).

#### **4.11 DATA COLLECTION**

Data collection is essential for analysis of the study to be realised. The choice of the instruments is important for effective use by the researcher. It is for this reason that simple tools have been chosen to enable the data collection exercise to be realised with ease. Electronic questionnaires were employed to gather data following the present accessibility of the internet technology to students. Gosling, Vazire, Srivastava & John (2004) have found evidence that indicates that the online surveys yield data comparable to the face to face contact. The use of electronic questionnaires for research has been known to provide benefits by various authors (Lazar and Preece, 1999; Opperman, 1995; Saris, 1991). These authors have considered the following benefits to be realised by the use of electronic surveys: Increased and faster rates in responding by the respondents as well as decreased costs. Although it is argued that there has been a mixed realisation of these benefits, yet a general agreement among researchers indicates that faster response rates and decreased costs are inarguably achieved through the use of electronic surveys.

Issues regarding the response rates are, however, said to differ according to variables which tend to transcend the administration capabilities so employed. (Kiesller and Sproull, 1986; Mehta and Sivadas, 1995; Sproull, 1986; Tse Tse, Yin, Ting, Yi, Yee and Hong, 1995). The collection of data using electronic surveys has been categorised into three levels as noted here under:

*The point of contact electronic survey.* In this category, the respondent is made to fill out the questionnaire in laboratory conditions or on-site using a computer provided by the researcher. This method is noted by the following authors, Synodinos, Papacostas, Okimoto, (1994). The use of point of contact electronic surveys is said to have been necessitated by majorly two scenarios, viz: for respondents who do not use computers in their workplace, and researchers that want to maintain a strict control of the study context such as a laboratory (Rosenfeld, Booth-Kewley, Edwards and Thomas, 1996).

The second category is the *e-mail based survey* where survey instruments get delivered through the mail applications. This may be done in one of the two ways, on internet or over intranet. It has been noted that the cost of running this surveys is lower and that it is faster to administer (Kiesller and Sproull 1986; Sproull, 1986). However after receiving the data the researcher is expected to code the data manually. The main users of e-mail surveys have been the corporations and the online groups (Corman, 1990; Kiesller and Sproull, 1986; Mehta and Sivadas, 1986; Thach, 1995).

The third and last electronic method that has received most attention from researchers is *web-based electronic survey* (Stanton, 1998; Zhang, 2000). The survey instruments in this case basically reside within the server that is connected to the organisation's website through their internet or intranet (Green, 1995). This instrument can be easily accessed through the organisation's browser. The researcher chose to use this method for this study. This basically meant that the questionnaire was made available to the respondent or students through the University browser. Witte, Amoroso and Howard (2000) have pointed that the users' experience can be enhanced by the use of animation, voice or video in a web based survey. This study sought to use introductory voice sound as a welcome motivation for the respondents. In one study, events that occurred on ones birthdate were provided on the side bar and so this motivated the respondent and at times entertains during the task of responding. The web-based surveys are normally kept in the

data base where they are stored and analysed for use by the researcher points Lazar and Preece, (1999); Schmidt, (1997). The web based surveys have broadly been known to use two approaches towards their respondents. The approaches are self-directed or sampled. In the self-directed approach, the respondent comes across the site and then they start the survey and are not in any way solicited by the researcher to participate in the survey. The sampled one, however, is where the participant is informed to participate after having been selected from a population and then directed to the survey site. In this study, self-directed respondents participated in the survey.

The use of questionnaires as survey instruments was used in this study. Notwithstanding the fact that questionnaires according to Welman, Kruger and Mitchell (2005) can be open ended or close ended type. In the open ended questionnaire the researcher asks questions without any prompting of the range of answers expected. In this type of data collection the respondent's reply is noted verbatim. The closed ended questionnaire on the other hand offers a respondent a variety of answers to choose from. The questionnaire used for this study was closed ended since it allowed for the capturing of the principles that were being tested. A 5 point Likert Scale was used that gave the respondent freedom to maintain the position of neutrality. Questions were meant to guide the respondents in affirming their position towards the statement. The use of electronic questionnaires was justified in that they were easily administered and hence, the costs were reduced. Access to internet is not limited at the University to students. There was also absence of interviewer bias since the researcher did not have face to face contact with the respondents. Convenience for respondents was possible as every respondent would respond at their suitable time.

Bryman et al (2014) enumerates the following benefits if online surveys:

- ❖ The low cost associated to online surveys is a benefit. Although the postal questionnaires are cheaper yet the online questionnaires are much cheaper. The cost of online administration is said to be much lower.
- ❖ Attractive formats can be applied on web-surveys. There is an immediate collection of data as it can be downloaded immediately.

- ❖ It is also noted that it can be responded to faster than the postal or printed questionnaires.
- ❖ Option for the respondents' format of returning the reply can be given. The respondents can reply via post or online. This therefore means that there is an advantage of using mixed administration approach.
- ❖ There is no geographical limitation for the survey coverage. This kind of problem may be applicable in when postal administration of questionnaires is employed.
- ❖ Open questions tend to receive faster response rates.
- ❖ Accuracy of data can be realised. This is due to the fact that the process is automated.

However the following disadvantages have been associated to the online surveys:

The response rates for online surveys are low as compared to physical distribution of questionnaires.

The online surveys are only limited to those that are online. Therefore those that are not online are not able to participate on the online surveys. In this study; however, all the participants had access to the use of internet.

Online surveys require a lot more motivation than postal surveys. A number of reminders and motivations were employed for the respondents to respond.

The respondents' confidence in their privacy being kept becomes an issue that could cause hesitations in their participation in the survey.

There is also a situation where some respondents may make many replies out of mischief. Every respondent in this study had to enter his/her email and therefore it was easy to follow up on any repeats if any.

#### **4.12 THE RESEARCH INSTRUMENT**

The research instrument used in conducting this study was a questionnaire. Following the positivist approach quantitative data was collected using the questionnaire. Questionnaires have been found to be useful in numerical data collection (Creswell

2009a). The three major types of variables collected by questionnaires are: behaviour, opinions and attributes (Dillman, 2007 in Saunders et al 2009). What is done in organisations in the present and what was done in the past is the information collected when behaviour variables are being measured. This may be exemplified with policy reaction by the participants in a given organisation. The measurement of opinion variables is achieved when the respondents are subjected to express their feelings over the existing phenomenon. It is at this point that the selected sample expresses what is true or false about a given phenomenon. The attribute variables on the other hand, feature characteristics that are distinctive in relation to the sample profile in the questionnaire.

It became an issue of importance during this study to critically consider the above issues and thereafter proceed with the data collection. For this reason, the need to align the questionnaire to the research objectives and hypotheses was effected. The study used a web based questionnaire.

The web-based questionnaire was divided into three subdivisions. The first section was a short letter to the respondents containing a consent clause which was to be ticked by the respondent agreeing to participate in the survey. This introductory section clarified who was to participate in the study- the final year students of the College of Law and Management Studies at the University of KwaZulu-Natal.

The second section contained part A of the questionnaire. The part A of the questionnaire required the demographic details of the respondent. In this section therefore statements requiring the gender, course, school, age, the father s' and mothers' occupation were presented to the respondents. This section enabled the statistical tests on the relationship between the respondents profile and other aspects of study. The year of study was added to this section so as to know whether the respondent was a final year student or not. The next section had part B of the questionnaire which tested six aspects as per the hypotheses developed for this study. The detail of the aspects in this section included among others, the intent of the respondent towards entrepreneurship, their image on entrepreneurship, the influence of role models, the learning, institutional environment and parental impact to the respondent in as far as entrepreneurial stimulation is concerned.

#### **4.12.1 Research Instrument Administration**

Permission was sought from the Humanities and Social Sciences Research committee at the University of KwaZulu-Natal before the pilot study and field research could commence for this study. An approval letter dated 9 May 2014 with a protocol reference number HSS/1430/013D was issued to the researcher. See appendix C for its details. After receiving this letter, the pilot study was done and thereafter the questionnaire was placed on the web. Several reminders were sent to the respondents from July 2014 to May 2015 when an increase of the respondents was realised. Within the introductory paragraph of the questionnaire, the respondents were informed of their rights to voluntarily participate in the study. The language of the questionnaire was simple and was confirmed by the respondents during the pilot study.

#### **4.12.2 Benefits of the research instrument used**

The following can be considered as the benefits of the research instrument used in this study:

The professional jargon or use of language was avoided and therefore it was easy for the entire sample under study.

The use of a web based questionnaire permitted cost effectiveness and less time for access by the respondents.

The questionnaire used in this study was aligned to the objectives and hypotheses of the study.

Consent for the institution to be used was sought as indicated in the gate keepers' letter (see appendix C) attached.

The questionnaire was designed with anonymity and confidentiality of the respondent in mind.

#### **4.12.3 Challenges to the used research Instrument**

Although the instrument was easily accessible yet it took a number of reminders to realise meaningful data collection. There were times when the research instrument had to be reloaded after it was discovered that some of the respondents could not access the given

link. There were also times when the campus network was offline. This made a lot of time to pass.

#### **4.13 VALIDITY**

Welman, Kruger and Mitchell (2005) refer to population validity as the degree by which findings can be generalized to the total population to which research hypotheses applies. On the other hand, Leedy et al (2010) refer to validity as a measurement to which instrument measures what it is intended to measure. Bergman (2008), however, denotes that internal validity is divided into four categories. The four major identified categories are thus: Internal Validity (referring to explanations for the findings); Statistical conclusion validity (Inferring to the appropriateness of statistical tests, their adequacy for relationship and difference detection); Construct validity (referring to adequacy of procedures in measuring constructs under investigation) and external validity where the findings can be generalized to the population. It follows that the above two authors have stipulated statistical conclusion validity and the external validity leaving out the internal validity and the construct validity unexplained. There is a threat on the validity if the experimental groups differ and the time frame of collecting the data is not the same, argues Cook and Campbell (1979). This fortunately does not apply to this study as the collection of the data was done the same time the respondents got done with their responses. A challenge towards temptation in e-surveys is when changes can be made in time periods and administrations of the survey, thus threatening the validity points, Zhang (2000) and Jansen (1999). This is also based on the fact due to the simplicity in developing and maintaining electronic questionnaires the temptation of varying the instrument through making uncalled for changes in the original design easily be effected. The validity in this instance is very much affected when collecting data if especially done in multiple waves over time. It may be noted that this was avoided in the present study as data collection was done at once without segmenting the period of collecting data.

#### **4.14 RELIABILITY**

Kruger and Mitchell (2005) consider that reliability to be connected to the findings and credibility of the research, this also follows the ability of the same results being realised if the research was done with other subjects elsewhere. Among the reliability tests available are the test retest reliability where the administration of questionnaires is administered to



the same group twice in order to gain the measure of reliability (American Educational Research Association, American Psychological Association & National Council on Measurement in Education 1985). This normally is done over a period of time. This test however may not fit within the time frames accorded for this research. Another reliability testing is done by administering two versions of same instrument to the same group of people; thereafter the two scores are correlated to confirm the consistency of the measure of reliability (Cozby 2001). This method may have the disadvantage of respondent fatigue which is to be avoided at any possible cost.

The reliability in terms of collecting data on e-surveys has been noted to be of equivalence to that done by paper and pencil formats points Davis, (1999); Richman, Kielser and Weisband and Drasgow, (1999). Crawford, Cooper and Lamias (2001), however, lower the response rate in their submission. Data quality has also been noted as a threat to e-surveys, but the development of automation tools that allow for the checking of the data, enables such threats to be dealt with accordingly. (Jansen, 1999; 2004; Witte et al, 2000)

The models that were developed in the study were subjected to the ten global fit indices that performed the various tests on the model including the explanatory power of each of the models.

#### **4.15 ETHICAL CONSIDERATIONS**

It is within the bounds of this study that the ethical issues are observed both for the respondents as well as the institution/s to which they belong. In the process the integrity of both was respected by the researcher by every means possible. It is for this reason that the element of privacy was attended in the instrument used in the study. The instrument (Questionnaire) used ensured anonymity and confidentiality of the consenting individuals for the study, unless requested otherwise. In the process of conducting this study, it became vital that issues on ethical consideration were taken into account using the research instrument- the questionnaire, as it was the means by which the respondents would be reached. The embodiment of the questionnaire, no doubt, permitted the voluntary participation of the respondents and the ability to terminate their participation at their wish. Ethical clearance was also given by the University for this Study. Since the questionnaires were electronically processed, the possibility of respondents' responses

being manipulated was ruled out. It is for this reason that the results of the study were based on the actual data collected using the research instrument. A number of factors were embodied in the area of ethical consideration as depicted below:

#### **4.15.1 The Informed Consent**

It is paramount that any study that fits ethical consideration into their ambit takes seriously the issues regarding ethical consideration of informed consent of the participants. To this end, Jackson (2012:41) stipulates the importance of informed consent for those under the study including their ability to decline participation, should they so wish. The elements that constitute informed consent have further been identified by O'Leary (2004:53) as:

*The right to discontinue their participation.* As pointed out above, the participants for this study were informed of their right to stop their participation in the web based questionnaire.

*To be not deceived:* The respondents in this study were informed through an introductory note of the purpose of the study and were therefore not misled or deceived over their participation in any way.

*Competency:* The respondents were competent in the ability to use the research instrument, in this case, the web based questionnaire, given that they were third year University students. Students are computer literate right from year one of joining the university. The participants in this study were year three candidates.

*Voluntary Participation:* the participants were to tick acceptance box in the questionnaire before they could ever commence responses to the questionnaire. Any participant in this study would access the web voluntarily and participation would depend on personal choice.

*Autonomous:* At the time of responding to the questionnaire there was not any undue pressure of the respondents as they responded with the freedom they had at the time they accessed the web based survey.

*No use of Coercion:* This element was fully made available with ease as the respondents fully interacted with the research instrument at their own will. No external authority was

employed in any way to enable their participation. Neither were any coercive statements used in the web that would amount to any coercion.

#### **4.15.2 Confidentiality of the Respondents**

The issue of confidentiality is of great significance as pointed out by O'Leary (2004:54). The subjects of study need their identities secured and this has been observed in this study by ensuring that the data collected is secured in the university and will only be available to the researcher till it is disposed off in 5 years' time. It may be understood that the need for the researcher to have knowledge of the information of the respondents is for purposes of enabling the study to be realised, therefore the researcher's need to access such information for further decision making in terms of further studies.

#### **4.15.3 Protection from Harm**

The need to be protected from harm is also applicable to social sciences. The harm can be psychological or emotional (O'Leary, 2004). It is for this reason that this study had a clause for the respondents to decline from the study should they so feel.

#### **4.15.4 Permission**

This research begun after permission was granted by the ethical clearance committee of the University as well as permission by notice of the gate-keepers letter granted.

### **4.16 DATA ANALYSIS**

The collected data was analysed by use of the statistical package for social sciences (SPSS), using statistical tools like the 2 way Anova analysis to check whether there will be variation among the biographical data like gender, or race as well as the use of correlation to enable the researcher ascertain any relationships that may exist in variables being tested. Anova and Linear Pearson Correlation used as statistical testing tools for the variables on institutional environment and biographical information in understanding the entrepreneurial stimulus of the respondents. Welman, Kruger and Mitchell (2005) have considered the role of Anova as necessary for measuring statistical difference between the means and distribution of the sample. Correlation on the other hand

according to Leedy and Ormrod (2010:273) refers to a process where association between two or more variables are discovered. In this study the relationship between the institutional environment and the students' intent towards entrepreneurship will be tested as well as the relationship between University Learning, parental origin and role models with entrepreneurial intent. Means were used to help understand the differences in certain factors among the respondents.

The data was also analysed using the Warp Partial least Squares (PLS) structural Equation modelling (SEM). This will allow the latent variables to be tested towards understanding their impact on student entrepreneurial Intent. The rest of the variables shall be used as predictor latent variables and the criterion latent variable will be the student entrepreneurial intent. Two models shall be formed. These models shall be subjected to the ten global indices that include the explanatory power of the models (Goodness of Fit [GoF]). The use of Warp PLS shall test the hypotheses under study and well as define the impact level towards the Intent or inclination they create towards entrepreneurial intent.

#### **4.17 LIMITATIONS OF THE STUDY**

In so far as the definitions of entrepreneurship are concerned, the debate is far from over and hence the teaching objectives of institutions are likely to differ and so shall the curricula and the environment thus created. This therefore puts a limitation to this study in a sense that other institutions may not take a leaf from the findings of this study should they decide to do so. Contextualised learning environment makes it foreseeable that the learning environment is likely to be driven by the objective of the institution. So the issue of context may likely limit the expectation of learning from this study.

Most of the studies on entrepreneurship have so far been benchmarked on existing firms other than those venturing into business and so this study is being conducted when less literature is available on the entrepreneurial process in institutions of higher learning. The entrepreneurial process, would among others point the tendencies that habitually exist in potential entrepreneurial mind-sets and more so how these can be evoked for purposes of realising the possible intent in action.

Besides this factor, most of the studies have focused on developed economies other than developing economies, relatively creating a gap of a comparative study which could be used to bench mark the findings of this study in a developing context.

One of the limitations was the delayed response of the respondents. However through a number of reminders the study finally was concluded.

#### **4.18 CONCLUSION**

In this section of the study, the various methodological approaches were noted and the quantitative approach was adopted for the study. The positivist approach was used following the numerical nature of the data in use. Though there are various approaches recorded for information and clarity yet reason along the philosophy led to the use of the said approach. This was found suitable following the various studies done in researching on entrepreneurial intent and other considerations in regard to the mixed methods approach. The research paradigm of the study was brought to view as well as the ethical considerations employed throughout the study. The next section and chapter of this work presents the results obtained.

## **CHAPTER FIVE**

### **PRESENTATION AND ANALYSIS OF RESULTS**

#### **5.1 INTRODUCTION**

This chapter presents the results in both descriptive and inferential statistics in accordance to the aims and objectives of the study. The hypotheses are tested using the Warp Partial Least Squares (PLS) in a structural equation modelling (SEM) model development. Descriptive statistics including means and standard deviations, where applicable were used. Single sample t-tests were used to test whether the average value was significantly different from a value of 3 (the central score). This is applied to Likert scale questions to show agreement or disagreement within a given proposition to the respondents in the study.

Anova (Analysis of variance) test was also conducted. Anova is used to test for several independent samples that compares two or more groups of cases in one variable as well as Pearson's correlation.

In order to develop a model for the study in relation to understanding how latent variables influence each other; the warp partial least squares (Warp PLS) was used in structural equation modelling (SEM). Two models were developed in the process. The presentation in this chapter shall begin by capturing the biographical details of the sample under study as well as analysing the data using the SPSS software. This will be followed by the Warp PLS model development. The model tests the study hypotheses in the realisation of student entrepreneurial intention in the University of KwaZulu-Natal.

#### **5.2 RESPONSE RATE**

The survey was web based targeting final year undergraduate students from the college of Law and Management Studies. A total of 501 respondents viewed the survey; 159 started the survey and 98 completed the survey instrument. The statistical recording on the analysis of the response rate is that there was a completion rate of 61.64% of those who started and completed and 19.56% of those who viewed and completed and for those who started and viewed the rate stood at 31.74%. The usable data was screened and 83 respondents were used for data analysis. The actual response rate therefore was 19.56%. Online surveys tend to have a low response rate. In one research where online

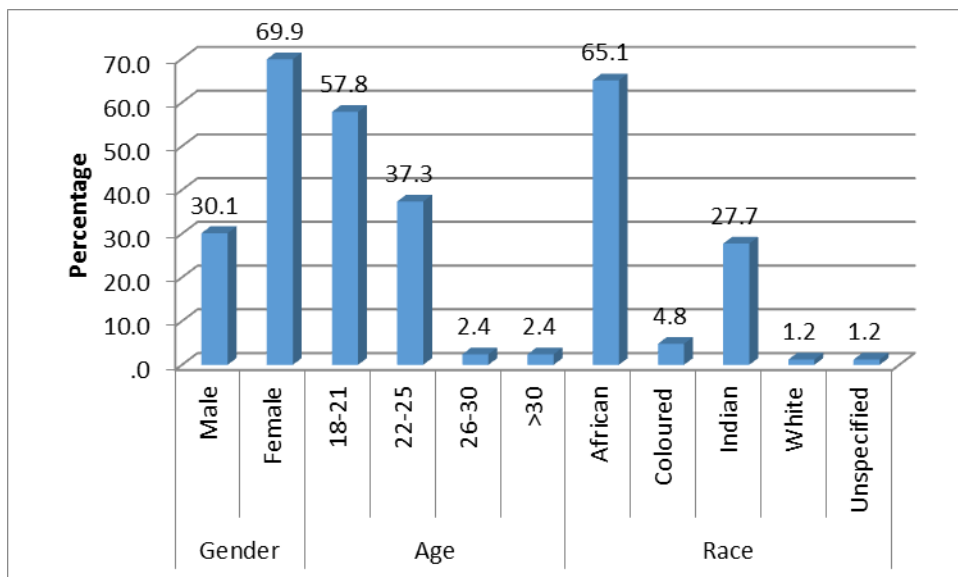
questionnaires was sent to an expected sample of 386 respondents; only 64 responded even after numerous reminders (Naidoo 2011). Other authors have equally found that online surveys tend to have low response rates. In an online survey of the Greek medical students after three reminders by the researchers did the response rate rise upto 23.5% (Tsimtsiou et al 2015). In other instances the response rates have been lower than the above percentage. In a random sample of the American Thoracic Society members a response rate of 17% was only realised after four reminders were sent (Sarfaty et al 2015).

### 5.3 Section A

#### *Demographics*

69.9% of the participants were female out of which 65.1% were African by race with the largest age range of between 18-21(57.8%) years as depicted by the graph below. The lowest number of participants was whites with a percentage of 1.2 followed by coloureds, 4.8% and Indians, 27.7%. Participants aged between 26-30 had the least amount of participation at 2.4%.

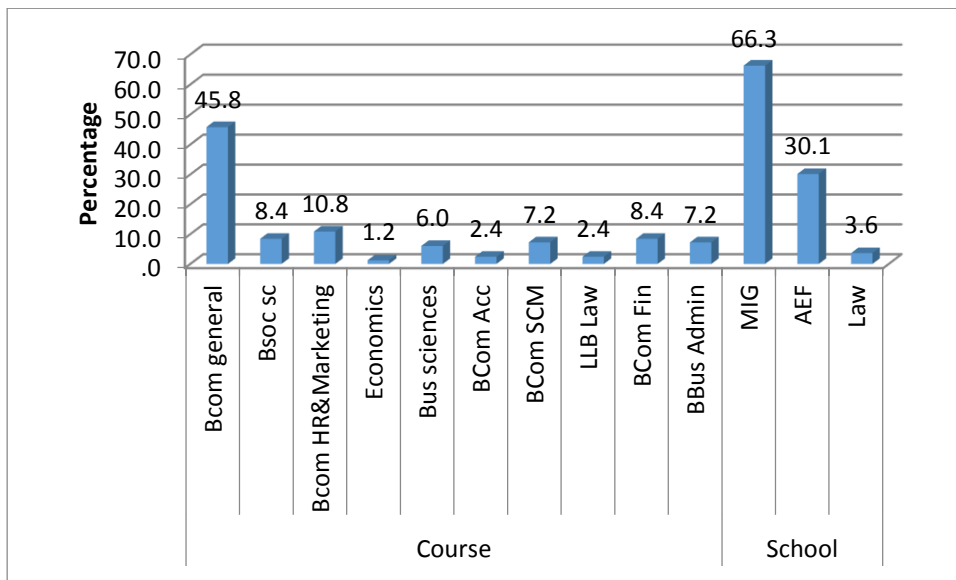
*Graph 5.1: Gender, Age and Race*



The largest number of participants came from the School of Management, Information and Governance (MIG) 66.3%, followed by the School of Accounting, Economics and

Finance (AEF) [30.1%] and the lowest proportion of the participants was from the school of Law 3.6%. Bcom general course participants were the highest (45%) followed by Bcom HR &Marketing at 10.8% and the least were those doing LLB Law, Bcom Accounting (2.4%) and Economics 1.2%. The graph below gives details of the rest of the respondents in the study.

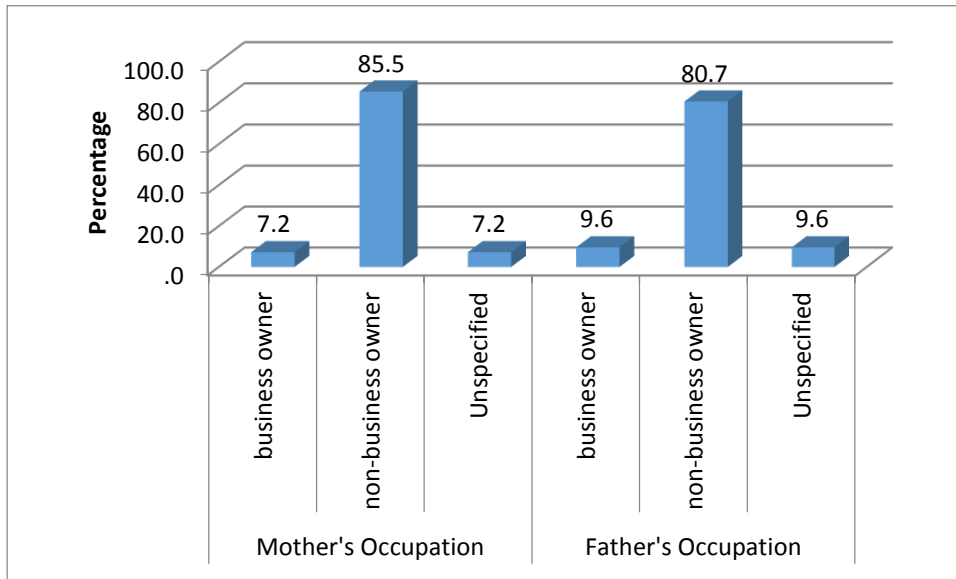
**Graph 5.2: Course and School**



The analysis of data indicated that most of the parents are non-business owners with mothers being the highest (85.5%) and fathers at 80.7%. A small number of parents were business owners, mothers at 7.2% and fathers at 9.6% as depicted in the graph below.



**Graph 5.3: Parental Occupation**



#### **5.4 Section B**

For each of the sections below, frequency tables are used and reported in appendix A. Then inferential analysis has been applied in the form of a single sample t-test to ascertain whether there is on average a significant agreement or disagreement to the statements. Mean values were calculated and plotted. Since the data does not always follow a normal distribution, Wilcoxon signed ranks test was used.

##### **5.4.1 B1 – Entrepreneurial Intent**

The findings of this section are tabulated in appendix A (tables). Under this section, however, one- sample statistics with means and standard deviations and standard error means are presented. One –sample test was conducted on spss and an analysis was carried out with a two-tailed significance on each of the variables observed. Interpretation is offered thereafter as noted below.

**Table 5.1: Intent Means**

<b>One-Sample Statistics</b>				
	N	Mean	Std. Deviation	Std. Error Mean
B1a. Entrepreneurs are respectable and honourable people	83	4.20	.838	.092
B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	83	4.14	1.014	.111
B1c. Entrepreneurship is a highly desirable career option	83	3.94	.874	.096
B1d. It has never come to my mind that entrepreneurship is even a career option.	83	2.00	1.082	.119
B1e. Starting a business is a risky affair and am afraid of failing	83	3.04	1.283	.141
B1f. I am actually planning on starting a business venture	82	3.43	1.111	.123

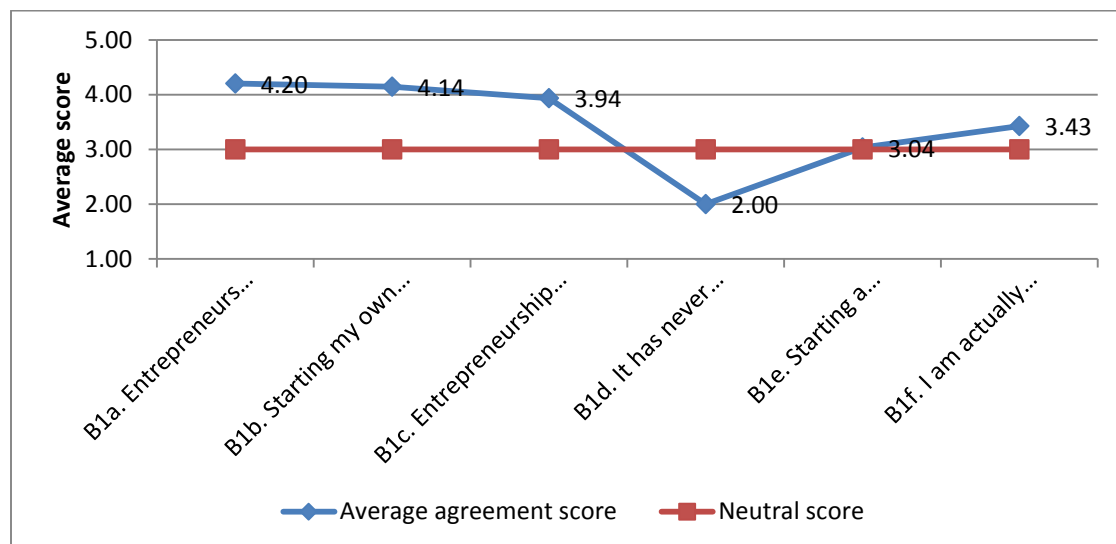
**Table 5.2: Intent p-values**

<b>One-Sample Test</b>						
	Test Value = 3				95% Confidence Interval of the Difference	
	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Difference	Lower	Upper
B1a. Entrepreneurs are respectable and honourable people	13.106	82	.000	1.205	1.02	1.39
B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	10.287	82	.000	1.145	.92	1.37
B1c. Entrepreneurship is a highly desirable career option	9.791	82	.000	.940	.75	1.13

B1d. It has never come to my mind that entrepreneurship is even a career option.	-8.420	82	.000	-1.000	-1.24	-.76
B1e. Starting a business is a risky affair and am afraid of failing	.257	82	.798	.036	-.24	.32
B1f. I am actually planning on starting a business venture	3.478	81	.001	.427	.18	.67

There is significant agreement that Entrepreneurs are respectable and honourable people ( $t(82) = 13.105, p < .0005$ ); Starting my own business is a desirable idea that I would want to pursue after my studies ( $t(82) = 10.287, p < .0005$ ); Entrepreneurship is a highly desirable career option ( $t(82) = 9.791, p < .0005$ ); and I am actually planning on starting a business venture ( $t(81) = 3.478, p = .001$ ). There is significant disagreement that It has never come to my mind that entrepreneurship is even a career option ( $t(82) = -8.420, p < .0005$ ).

Graph 5.4: Intent Average Scores



#### 5.4.2 B2 – Entrepreneurial Image

Entrepreneurial Image findings have significant means from 4 onwards as depicted by the One-sample statistics below. This indicates that image of the respondents towards entrepreneurship is undoubtedly significant. These results have been tabulated in the

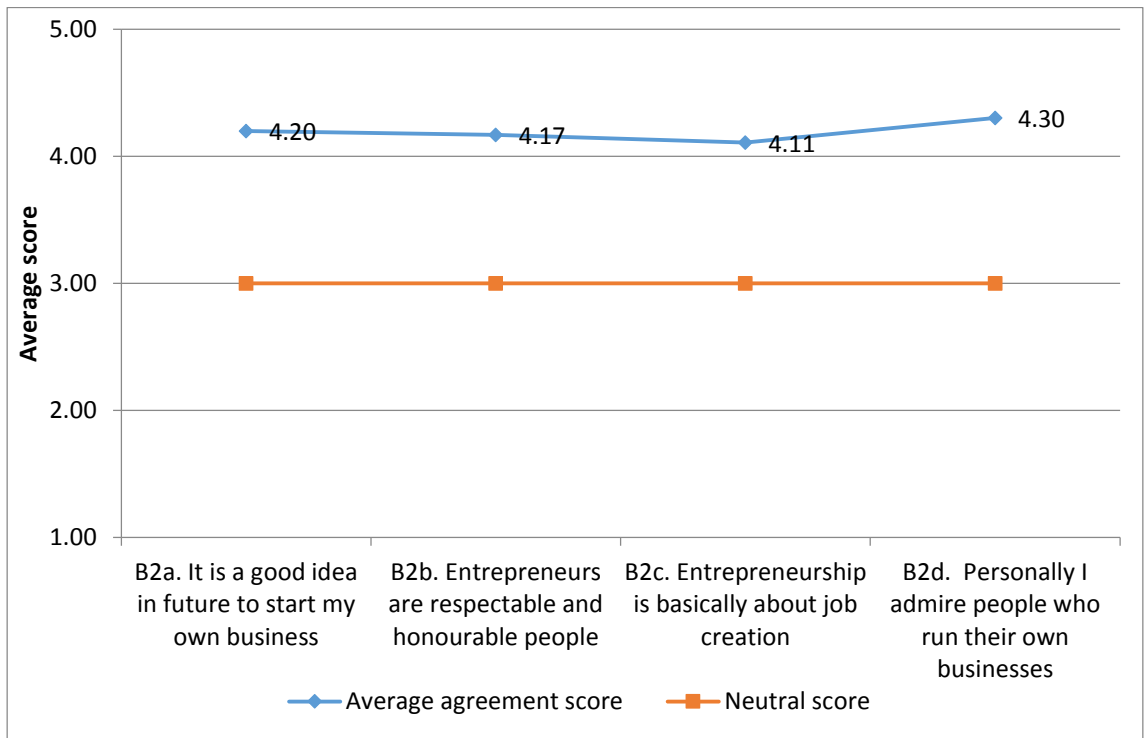
appendix [A] with percentages and frequencies. Below are the One-sample Statistics as well as the one sample statistics test conducted on the variables relating to the Entrepreneurial image of the respondents.

*Table 5.3: Image Means*

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
B2a. It is a good idea in future to start my own business	81	4.20	1.005	.112
B2b. Entrepreneurs are respectable and honourable people	83	4.17	.778	.085
B2c. Entrepreneurship is basically about job creation	83	4.11	.884	.097
B2d. Personally I admire people who run their own businesses	83	4.30	.934	.102

**Graph 5.5: Image Average Scores**



**Table 5.4: Image p-values**

**One-Sample Test**

	Test Value = 3				95% Confidence Interval of the Difference	
	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Difference	Lower	Upper
B2a. It is a good idea in future to start my own business	10.722	80	.000	1.198	.98	1.42
B2b. Entrepreneurs are respectable and honourable people	13.685	82	.000	1.169	1.00	1.34
B2c. Entrepreneurship is basically about job creation	11.428	82	.000	1.108	.92	1.30
B2d. Personally I admire people who run their own businesses	12.698	82	.000	1.301	1.10	1.51

There is total agreement observed regarding the Entrepreneurial image by the respondents. Statistically there is a significant agreement to the statements that It is a good idea in future to start my own business [t (80) = 10.722 p<0005]; Entrepreneurs are respectable and honourable people [ t(82)= 13.685 p<0005]; Entrepreneurship is basically about job creation [ t(82)=11.428 p<0.0005]; Personally I admire people who run their own businesses [t(82)= 12.698, p <0005]

#### 5.4.3 B3 – Role Models’ significance

The significance of role models towards developing an entrepreneurial intent was tested and the percentage and frequency results have been tabulated in appendix A. The One-sample statistics with means and standard deviations portray the divided attention of the respondents over the variables under study. The one –sample test has revealed this disagreement as stated below.

*Table 5.5: Role Model means*

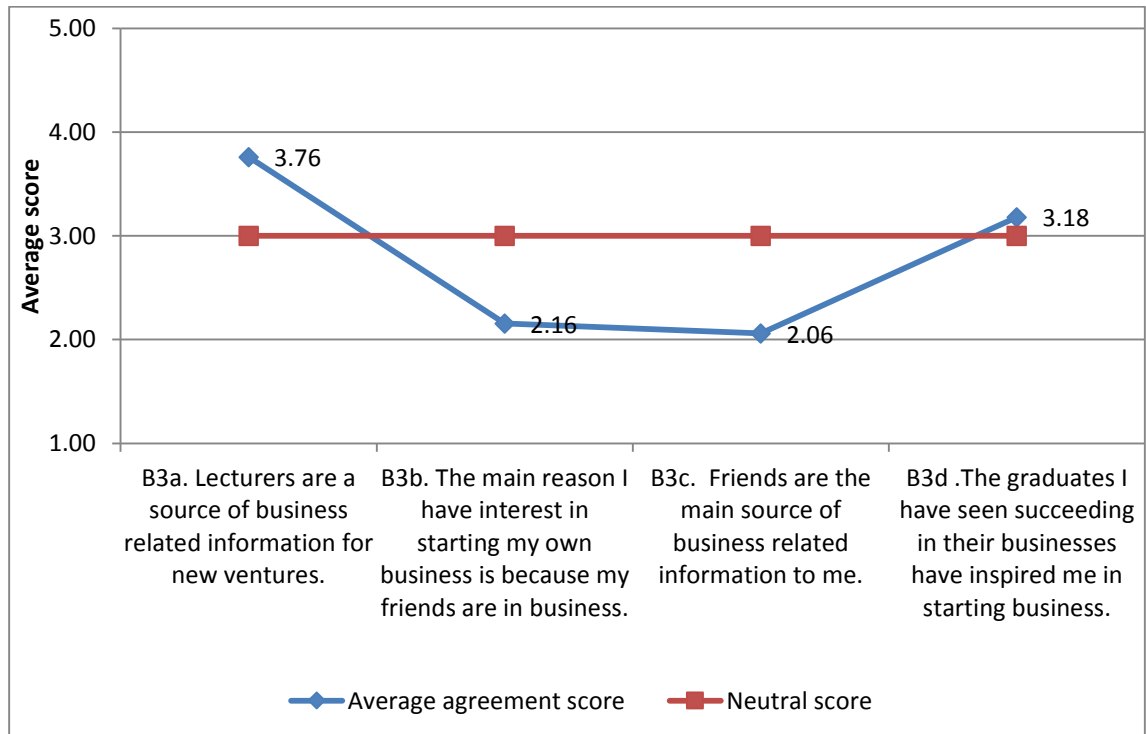
#### **One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
B3a. Lecturers are a source of business related information for new ventures.	83	3.76	1.043	.114
B3b. The main reason I have interest in starting my own business is because my friends are in business.	83	2.16	1.030	.113
B3c. Friends are the main source of business related information to me.	82	2.06	.960	.106
B3d .The graduates I have seen succeeding in their businesses have inspired me in starting business.	83	3.18	1.139	.125

**Table 5.6: Role Model p-values (One-Sample Test)**

	Test Value = 3			95% Confidence Interval of the Difference		
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
B3a. Lecturers are a source of business related information for new ventures.	6.631	82	.000	.759	.53	.99
B3b. The main reason I have interest in starting my own business is because my friends are in business.	-7.461	82	.000	-.843	-1.07	-.62
B3c. Friends are the main source of business related information to me.	-8.855	81	.000	-.939	-1.15	-.73
B3d. The graduates I have seen succeeding in their businesses have inspired me in starting business.	1.446	82	.152	.181	-.07	.43

**Graph 5.6: Role Model Average Scores**



The notable findings are that lecturers are a source of business related information for new ventures. This is significantly agreed on by the respondents [t (82) = 6.631 p<0005]; the graduates I have seen succeeding in their businesses have inspired me in starting business [t (82) = 1.446 p<0005]. There is however a disagreement that the main reason I have interest in starting my own business is because my friends are in business [t (82) = -7.461 p< 0005]; or that Friends are the main source of business related information to me [t (81) = 8.855 p<0005]. The mean scores for a and d show levels of agreement as per the graph which are all above 3 as opposed to b and c which are below 3.

#### 5.4.4 B4: **Institutional environment and Entrepreneurship**

The one –sample statistics below indicates that the means of the respondents towards the variables that; It is my experience that at University you get to meet people with new ideas of venturing into business (Mean 3.80); Being at varsity has provided me opportunity to reflect on developing business ideas (Mean 4.06); and The University needs to establish more entrepreneurial and business programs to help students start their own businesses (4.31) were generally higher. This can be construed to mean that the agreement level in these variables was high. The One sample test below examines the significance test (two tailed) and therefore complements this finding.

*Table 5.7: Institutional Means (One-Sample Statistics)*

	N	Mean	Std. Deviation	Std. Error Mean
B4a. It is my experience that at University you get to meet people with new ideas of venturing into business.	82	3.80	1.071	.118
B4b. Being at varsity has provided me opportunity to reflect on developing business ideas.	81	4.06	.953	.106
B4c. There is no better place to learn about starting your own business than at university.	81	3.15	1.216	.135
B4d There are more business or entrepreneurial examples at classroom teaching at the university.	82	3.02	1.018	.112

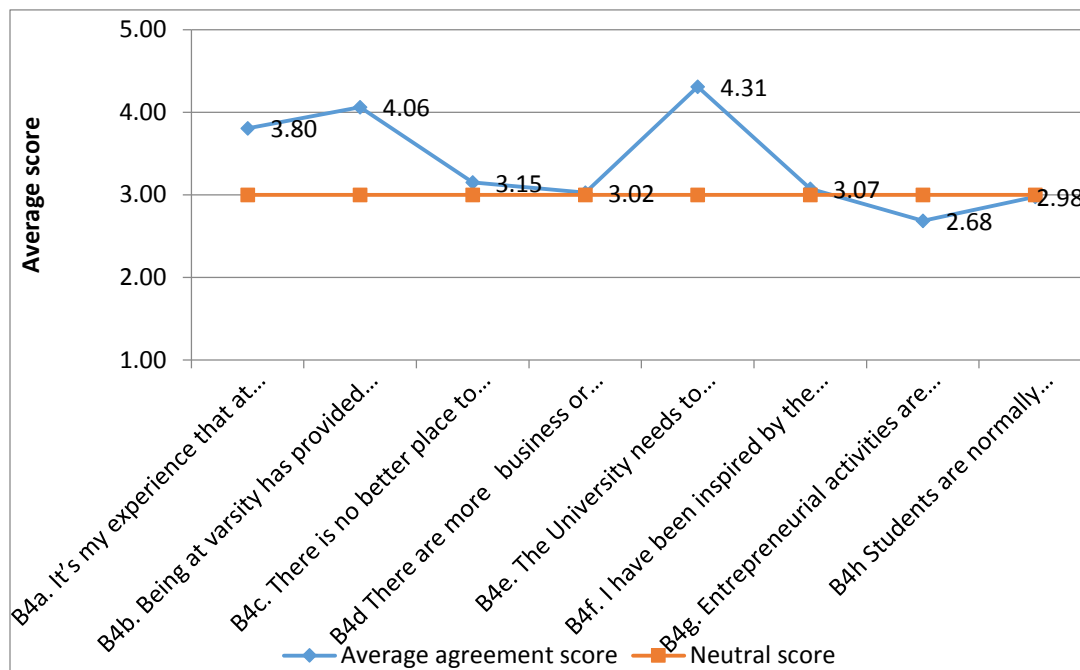


B4e. The University needs to establish more entrepreneurial and business programs to help students start their own businesses.	81	4.31	.831	.092
B4f. I have been inspired by the university environment to start my own business.	82	3.07	1.097	.121
B4g. Entrepreneurial activities are mainly limited to business students.	82	2.68	1.175	.130
B4h Students are normally encouraged to pursue their entrepreneurial ideas at university.	82	2.98	1.133	.125

**Table 5.8: Institutional *p*-values (One-Sample Test)**

	Test Value = 3				95% Confidence Interval of the Difference	
	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Difference	Lower	Upper
B4a. It is my experience that at University you get to meet people with new ideas of venturing into business.	6.806	81	.000	.805	.57	1.04
B4b. Being at varsity has provided me opportunity to reflect on developing business ideas.	10.024	80	.000	1.062	.85	1.27
B4c. There is no better place to learn about starting your own business than at university.	1.097	80	.276	.148	-.12	.42
B4d There are more business or entrepreneurial examples at classroom teaching at the university.	.217	81	.829	.024	-.20	.25
B4e. The University needs to establish more entrepreneurial and business programs to help students start their own businesses.	14.168	80	.000	1.309	1.12	1.49
B4f. I have been inspired by the university environment to start my own business.	.604	81	.548	.073	-.17	.31
B4g. Entrepreneurial activities are mainly limited to business students.	-2.444	81	.017	-.317	-.58	-.06
B4h Students are normally encouraged to pursue their entrepreneurial ideas at university.	-.195	81	.846	-.024	-.27	.22

There is significant agreement to the following statements in this finding: It is my experience that at University you get to meet people with new ideas of venturing into business [  $t(81)=6.806$   $p<0005$ ]; Being at varsity has provided me opportunity to reflect on developing business ideas [  $t(80) = 10.804$   $p<0005$ ]; The University needs to establish more entrepreneurial and business programs to help students start their own businesses[  $t(80) = 14.680$   $p<0005$ ]. There is however a significant disagreement that Entrepreneurial activities are mainly limited to business students [  $t(81) = - 2.444$   $p>0005$ ]. The means of the 3 variables are above average (3.80, 4.06 and 4.31) respectively as depicted in the graph below.



*Graph 5.7: Institutional Average Score*

#### 5.4.5 B6: Parental Motivation

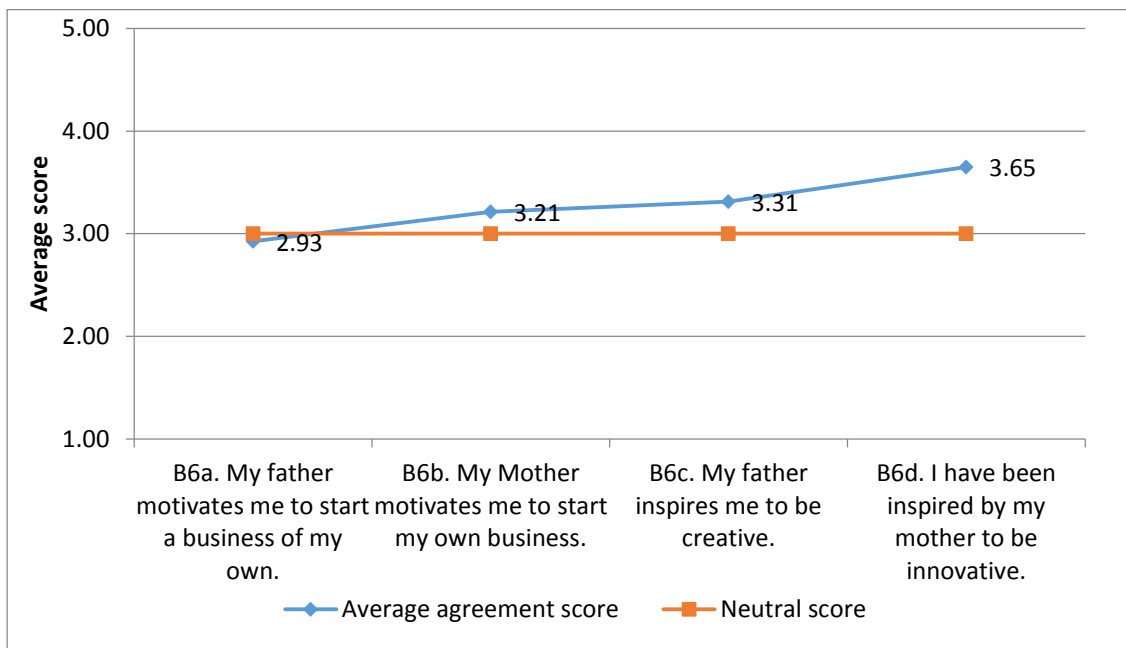
The mean scores in parental motivation towards entrepreneurship strongly indicate that the mother motivates the respondents than the father (mean score of 3.65 for mothers compared to fathers 3.31). The one –sample test results below support this significance.

**Table 5.9: Parental Means (One-Sample Statistics)**

	N	Mean	Std. Deviation	Std. Error Mean
B6a. My father motivates me to start a business of my own.	80	2.93	1.230	.138
B6b. My Mother motivates me to start my own business.	80	3.21	1.299	.145
B6c. My father inspires me to be creative.	80	3.31	1.318	.147
B6d. I have been inspired by my mother to be innovative.	80	3.65	1.233	.138

**Table 5.10: Parental p-values (One-Sample Test)**

	Test Value = 3				95% Confidence Interval of the Difference	
	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Difference	Lower	Upper
B6a. My father motivates me to start a business of my own.	-.545	79	.587	-.075	-.35	.20
B6b. My Mother motivates me to start my own business.	1.463	79	.148	.212	-.08	.50
B6c. My father inspires me to be creative.	2.121	79	.037	.313	.02	.61
B6d. I have been inspired by my mother to be innovative.	4.713	79	.000	.650	.38	.92



**Figure 5.8: Parental Average Score**

Following the one-sample test findings it can be deduced that there is a significant agreement to the statement that I have been inspired by my mother to be innovative [ $t(79) = 4.713$   $p < 0005$  and that my

My father inspires me to be creative [ $t(79) = 2.121$   $p < 0005$ ].

## 5.5 OBJECTIVES

Exploration of objectives was done with following analysis employed in each case.

Objective 1 To investigate the role of institutional environment in developing entrepreneurial inclination/intention in students

Apart from analysis done above, Pearson’s correlation was applied to the questions and B1b. this statement regarding the need of starting my business after studies (B1b) is also highly correlated with B1f – hence measuring their inclination or intention]

**Table 5.5.1: Institutional Environment and Intention**

	B1b. Starting my own business is a desirable idea that I would want to pursue after my studies
--	--

B4a. It is my experience that at University you get to meet people with new ideas of venturing into business.	Pearson Correlation	.192
	Sig. (2-tailed)	.084
	N	82
B4b. Being at varsity has provided me opportunity to reflect on developing business ideas.	Pearson Correlation	.273*
	Sig. (2-tailed)	.014
	N	81
B4c. There is no better place to learn about starting your own business than at university.	Pearson Correlation	-.033
	Sig. (2-tailed)	.770
	N	81
B4d There are more business or entrepreneurial examples at classroom teaching at the university.	Pearson Correlation	-.068
	Sig. (2-tailed)	.544
	N	82
B4e. The University needs to establish more entrepreneurial and business programs to help students start their own businesses.	Pearson Correlation	.340**
	Sig. (2-tailed)	.002
	N	81
B4f. I have been inspired by the university environment to start my own business.	Pearson Correlation	.163
	Sig. (2-tailed)	.143
	N	82
B4g. Entrepreneurial activities are mainly limited to business students.	Pearson Correlation	.043
	Sig. (2-tailed)	.703
	N	82
B4h Students are normally encouraged to pursue their entrepreneurial ideas at university.	Pearson Correlation	.046
	Sig. (2-tailed)	.682
	N	82

There is significant positive correlation between intention to start a business and that being at varsity has provided the opportunity to reflect on developing business ideas ( $r=.273$ ,  $p=.014$ ).

*Objective 2* To investigate whether university learning stimulates students towards entrepreneurship.

**Table 5.5.2: University Learning and Intention**

	B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	
B5a. A university course prepares one for an entrepreneurial career.	Pearson Correlation	.087
	Sig. (2-tailed)	.436
	N	83
B5b. The course I have undertaken at university provided me with a new and different experience.	Pearson Correlation	.192
	Sig. (2-tailed)	.084
	N	82
B5c. The university course has helped me to develop my entrepreneurial skills and knowledge.	Pearson Correlation	.248*
	Sig. (2-tailed)	.024
	N	83
B5d. I have been empowered to deal with ambiguity in a real world by attending a university course.	Pearson Correlation	.142
	Sig. (2-tailed)	.201
	N	83
B5e. Since I took this course, I now have better understanding of business.	Pearson Correlation	.256*
	Sig. (2-tailed)	.020
	N	82
B5f. One notable thing that my instructor did was to make the	Pearson Correlation	.078

course more relevant to the real world.	Sig. (2-tailed)	.488
	N	82
B5g. My interest towards new venture creation has been raised during the course of my studies.	Pearson Correlation	.190
	Sig. (2-tailed)	.087
	N	82

There is a significant positive correlation between intention to start a business and that the university course has helped me to develop my entrepreneurial skills and knowledge ( $r = .248, p = .024$ ). Another significant positive correlation is depicted between intention to start a business and a better understanding of business after taking a university course ( $r = .256, p = .020$ )

Objective 3 To investigate whether there is a relationship between role models and E inclination.

**Table 5.5.3: Role Models and Intention**

	B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	
B3a. Lecturers are a source of business related information for new ventures.	Pearson Correlation	-.013
	Sig. (2-tailed)	.909
	N	83
B3b. The main reason I have interest in starting my own business is because my friends are in business.	Pearson Correlation	-.080
	Sig. (2-tailed)	.470
	N	83
B3c. Friends are the main source of business related information to me.	Pearson Correlation	.192

	Sig. (2-tailed)	.083
	N	82
B3d .The graduates I have seen succeeding in their businesses have inspired me in starting business.	Pearson Correlation	.410**
	Sig. (2-tailed)	.000
	N	83

The results in the above table indicate that there is a positive correlation between an intention to start business and successful graduates in business as an inspiration in starting a business ( $r = .410, p = .000$ ).

#### Objective 4

#### **Gender**

Test – ANOVA to test for significant differences between male and female responses.

**Table 5.5.4: Gender Anova**

#### **Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
B1a. Entrepreneurs are respectable and honourable people	Male	25	4.16	.943	.189	3.77	4.55	1	5
	Female	58	4.22	.796	.104	4.01	4.43	2	5
	Total	83	4.20	.838	.092	4.02	4.39	1	5
B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	Male	25	4.00	1.443	.289	3.40	4.60	1	5
	Female	58	4.21	.767	.101	4.01	4.41	2	5
	Total	83	4.14	1.014	.111	3.92	4.37	1	5



B1c. Entrepreneurship is a highly desirable career option	Male	25	3.92	1.038	.208	3.49	4.35	1	5
	Female	58	3.95	.804	.106	3.74	4.16	2	5
	Total	83	3.94	.874	.096	3.75	4.13	1	5
B1d. It has never come to my mind that entrepreneurship is even a career option.	Male	25	2.28	1.400	.280	1.70	2.86	1	5
	Female	58	1.88	.900	.118	1.64	2.12	1	5
	Total	83	2.00	1.082	.119	1.76	2.24	1	5
B1e. Starting a business is a risky affair and am afraid of failing	Male	25	2.88	1.364	.273	2.32	3.44	1	5
	Female	58	3.10	1.252	.164	2.77	3.43	1	5
	Total	83	3.04	1.283	.141	2.76	3.32	1	5
B1f. I am actually planning on starting a business venture	Male	25	3.60	1.258	.252	3.08	4.12	1	5
	Female	57	3.35	1.044	.138	3.07	3.63	1	5
	Total	82	3.43	1.111	.123	3.18	3.67	1	5

The anova test carried out across gender recorded no significant differences between male and females in entrepreneurial intention in starting business after studies.

### ***Race***

*Table 5.5.5: Race Anova*

### **Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
B1a. Entrepreneurs are respectable and honourable people	African	54	4.20	.833	.113	3.98	4.43	1	5
	Coloured	4	4.50	.577	.289	3.58	5.42	4	5
	Indian	23	4.09	.900	.188	3.70	4.48	2	5

	White	1	5.00	.	.	.	.	5	5
	Total	82	4.20	.838	.093	4.01	4.38	1	5
B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	African	54	4.28	.899	.122	4.03	4.52	1	5
	Coloured	4	4.00	.816	.408	2.70	5.30	3	5
	Indian	23	3.78	1.242	.259	3.25	4.32	1	5
	White	1	5.00	.	.	.	.	5	5
	Total	82	4.13	1.015	.112	3.91	4.36	1	5
B1c. Entrepreneurship is a highly desirable career option	African	54	4.04	.800	.109	3.82	4.26	1	5
	Coloured	4	4.00	.816	.408	2.70	5.30	3	5
	Indian	23	3.74	1.054	.220	3.28	4.19	2	5
	White	1	4.00	.	.	.	.	4	4
	Total	82	3.95	.874	.096	3.76	4.14	1	5
B1d. It has never come to my mind that entrepreneurship is even a career option.	African	54	1.93	1.079	.147	1.63	2.22	1	5
	Coloured	4	2.00	.816	.408	.70	3.30	1	3
	Indian	23	2.13	1.100	.229	1.65	2.61	1	5
	White	1	1.00	.	.	.	.	1	1
	Total	82	1.98	1.065	.118	1.74	2.21	1	5
B1e. Starting a business is a risky affair and am afraid of failing	African	54	2.94	1.188	.162	2.62	3.27	1	5
	Coloured	4	3.75	1.258	.629	1.75	5.75	2	5
	Indian	23	3.22	1.476	.308	2.58	3.86	1	5
	White	1	3.00	.	.	.	.	3	3
	Total	82	3.06	1.270	.140	2.78	3.34	1	5
B1f. I am actually planning on starting a business venture	African	53	3.60	1.025	.141	3.32	3.89	1	5
	Coloured	4	2.50	1.000	.500	.91	4.09	2	4
	Indian	23	3.30	1.222	.255	2.78	3.83	1	5

	White	1	2.00	.	.	.	.	2	2
	Total	81	3.44	1.107	.123	3.20	3.69	1	5

The anova test carried out across race groups recorded no significant differences between the various race groups in entrepreneurial intention in starting business after studies.

### *Parental occupations*

#### Mother

*Table 5.5.6: Mother Anova*

<b>Descriptives</b>									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Mini	Max
						Lower Bound	Upper Bound		
B1a. Entrepreneurs are respectable and honourable people	business owner	6	4.17	.983	.401	3.13	5.20	3	5
	non-business owner	71	4.20	.839	.100	4.00	4.40	1	5
	Total	77	4.19	.844	.096	4.00	4.39	1	5
B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	business owner	6	3.67	.516	.211	3.12	4.21	3	4
	non-business owner	71	4.15	1.064	.126	3.90	4.41	1	5
	Total	77	4.12	1.038	.118	3.88	4.35	1	5
B1c. Entrepreneurship is a highly desirable career option	business owner	6	3.83	.408	.167	3.40	4.26	3	4
	non-business owner	71	3.96	.917	.109	3.74	4.17	1	5
	Total	77	3.95	.887	.101	3.75	4.15	1	5
B1d. It has never come to my mind that entrepreneurship is even a career option.	business owner	6	2.50	1.378	.563	1.05	3.95	1	5
	non-business owner	71	1.90	1.002	.119	1.66	2.14	1	5
	Total	77	1.95	1.037	.118	1.71	2.18	1	5

B1e. Starting a business is a risky affair and am afraid of failing	business owner	6	3.00	1.549	.632	1.37	4.63	1	5
	non-business owner	71	3.08	1.273	.151	2.78	3.39	1	5
	Total	77	3.08	1.285	.146	2.79	3.37	1	5
B1f. I am actually planning on starting a business venture	business owner	6	2.83	1.329	.543	1.44	4.23	2	5
	non-business owner	71	3.46	1.093	.130	3.21	3.72	1	5
	Total	77	3.42	1.116	.127	3.16	3.67	1	5

The anova test carried out across mothers' occupation recorded no significant differences in entrepreneurial intention in starting business after studies and mother's occupation.

### Father

*Table 5.5.7: Father Anova*

#### **Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
B1a. Entrepreneurs are respectable and honourable people	business owner	8	4.13	.835	.295	3.43	4.82	3	5
	non-business owner	67	4.21	.862	.105	4.00	4.42	1	5
	Total	75	4.20	.854	.099	4.00	4.40	1	5
B1b. Starting my own business is a desirable idea that I would want to pursue after my studies	business owner	8	3.88	.991	.350	3.05	4.70	2	5
	non-business owner	67	4.13	1.057	.129	3.88	4.39	1	5
	Total	75	4.11	1.047	.121	3.87	4.35	1	5
B1c. Entrepreneurship is a highly desirable career option	business owner	8	4.25	.707	.250	3.66	4.84	3	5
	non-business owner	67	3.94	.903	.110	3.72	4.16	1	5
	Total	75	3.97	.885	.102	3.77	4.18	1	5

B1d. It has never come to my mind that entrepreneurship is even a career option.	business owner	8	3.00	1.690	.598	1.59	4.41	1	5
	non-business owner	67	1.85	.973	.119	1.61	2.09	1	5
	Total	75	1.97	1.115	.129	1.72	2.23	1	5
B1e. Starting a business is a risky affair and am afraid of failing	business owner	8	3.13	1.246	.441	2.08	4.17	2	5
	non-business owner	67	3.04	1.296	.158	2.73	3.36	1	5
	Total	75	3.05	1.283	.148	2.76	3.35	1	5
B1f. I am actually planning on starting a business venture	business owner	8	3.63	.744	.263	3.00	4.25	2	4
	non-business owner	66	3.39	1.162	.143	3.11	3.68	1	5
	Total	74	3.42	1.123	.131	3.16	3.68	1	5

There was also no significant difference between a father's occupation and an intention to start a business.

## 5.6 MODEL DESCRIPTION AND DEVELOPMENT

The models developed in this study as pointed out in the introduction were developed by the use of Warp PLS. The advantage of using Structural Equation Modelling (SEM) especially in regard to the Warp Partial Least Squares (PLS) is the fact that nonparametric estimations are employed. The nonparametric estimations of data do not necessarily require the normal distribution of data. This, however, is not possible when using the traditional analytical tools like ANOVA in SPSS software.

Kock (2015) points out a number of advantages of using the Warp PLS; in that it is a more elaborate analysis that can be done with the use of control variables; this is not easily achieved through the traditional means of analyses such as ANOVA.

Another advantage obtained from structural equation modelling analyses is the means analysis comparison between the latent variables where they can be used as a predictor or a criterion. It is noted that even the commonly used nonparametric tests such as Mann-Whitney U test do not enable the comparison of the means test.

Kock (2013b) discusses one of the special advantages of the SEM in cases where one group and condition becomes available to the researcher. Such a case in point can be exemplified by a researcher gauging an effect of technology to performance; however, the extent of which technology is used is unavailable. In such a case the researcher ends up with simply one column of data; the manipulation of this data is possible by the use of SEM. The versatility of the SEM software as discussed by Kock (2013 b) includes the longitudinal data analyses for a comparison of means test and this can be seen as a special case in SEM with regard to behavioural research application.

The use of warp 2 algorithm in the model is essential as it helps identify the U –curved relationships among the latent variables used in the study. In the event that such relationships exist, the algorithm then warps or transforms such scores of the predictor latent variables thus enabling better reflection of the U-curved relationships of the model through the path coefficients.

It must also be agreed that the default inner model analysis algorithms deal with the latent variable by performing nonlinear transformations on the latent variable before the path coefficients calculations. In the interest of finding the best –fitting linear functions, the algorithms warp the latent variable scores thus helping to minimise on a bivariate analysis the squared residuals (Kock, 2014d). The assumption that the coefficient is negative or positive recommendably requires that the calculation of the P value be a one tailed test; this is necessary to help reflect on the hypothesis that is on a corresponding association (Kock, 2014d). This is applied in this model formulation against the understanding that the hypotheses modelled may impact on the entrepreneurial intention of the respondents at the university.

In the model it is understood that the use of warp2, allows customisation of analysis depending on either theory or past empirical findings. Once a link is indicated between the latent variables in the previous empirical studies; a linear algorithm can be set as a corresponding path. On the other hand, if the link between the latent variables is based on theory then the U curved shape is expected. In this case the corresponding path can be analysed using Warp 2 Basic algorithm or Warp 2. Warp 2 is used in this case following the fact that the latent variables are theory based.

### **5.6.1 DEFINING THE MODEL**

The Warp PLS software employs graphical interface in defining the model thus allowing the editing and direct viewing of the model elements. Therefore the need for the use of scripting language in the process becomes avoidable. The latent variables were defined by grouping the associated indicators and the measurement method used was the reflective method as opposed to the formative method in this study. Reflective variables tend to have fewer indicators as opposed to formative variables (Kock, 2015).

Model links were used in developing the model. Basically there are two types of model links: direct and moderating links. The use of direct links is for the latent variables whereas the use of moderating links is for the impact of the latent variable in moderating the relationship between two latent variables (Kock, 2015). Although the moderating links were adopted in the study, the perceived strength towards the criterion latent variable; StuEnInt. (Student Entrepreneurial Intention) was highly reduced and therefore it was abandoned. Two empirical models were developed, one where each of the latent variables was directly linked to another and one where all predictor latent variables were directly linked to the criterion latent variable (Student Entrepreneurial Intention). The first model is thus presented below. The models are formatted with the following symbols: R for Reflective method of measurement; abbreviated name of the latent variable and the number of indicators in each variable denoted with an i. The latent variables are: Entrepreneurial Image (Entimg); Role Models (RoMo); Learning Environment (LeanEnv); Institutional Environment (IniEnv); Parental Motivation (PaMo) and Student Entrepreneurial Intention (StuEntin). The model developed below is based on the hypotheses which indicate the following relationships:

#### *Hypothesis 1*

The University Of KwaZulu - Natal (UKZN) plays a role in stimulating the entrepreneurial intents of the learners.

#### *Hypothesis 2*

The entrepreneurial intention of students is likely to be increased by the nature of learning at the University.

#### *Hypothesis 3*

The availability of entrepreneurial role models increases the entrepreneurial intention of students.

*Hypothesis 4*

Parental Motivation impacts on entrepreneurial inclination of students.

*Hypothesis 5*

Entrepreneurial image impacts on entrepreneurial intention of students.

### **5.6.2 EXPLAINING MODEL 1**

In the model below it is assumed that besides the above hypotheses being tested the possibility that:

RoMo can influence Entimg.

Other assumptions are:

PaMo. can influence IniEnv., StuEnit; as well as the LeanEnv.

It is further assumed that IniEnv. Influences Entimg.

Just as it is expected that the LeanEnv. of an institution can have an influence on RoMo.

And finally that the RoMo can influence the Entimg of the students.

The interpretation of the PLS based SEM analyses is based on the path coefficients termed as the “Beta Coefficient”. P values are displayed in parentheses just below the path coefficients. The R squared coefficients of the endogenous variable reflect the percentage in variance of the latent variable that is being affected by the latent variables that hypothetically affect it (Kock, 2015).



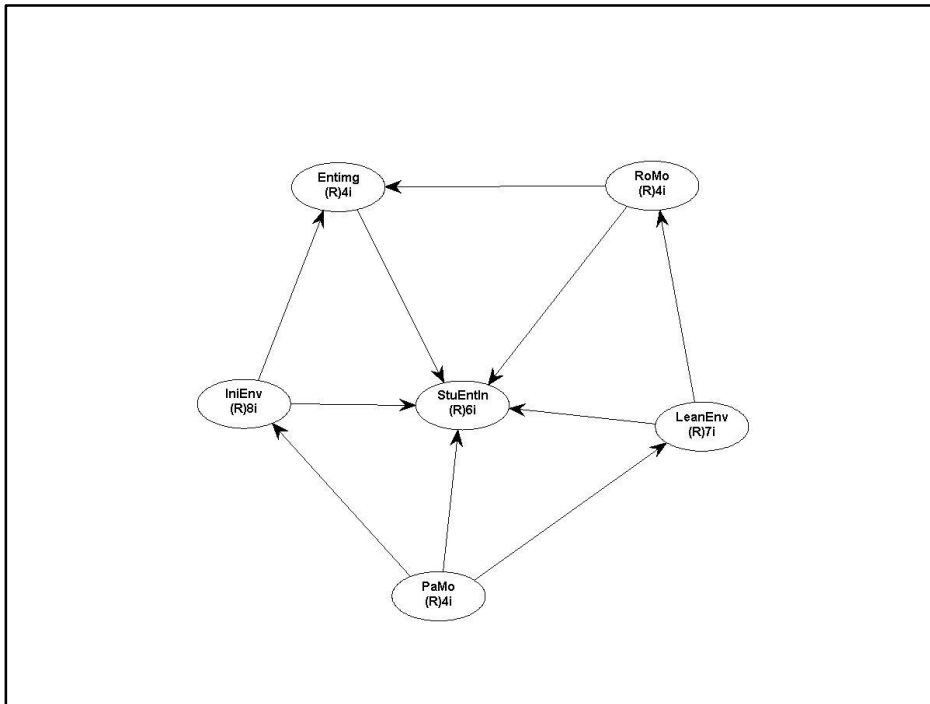
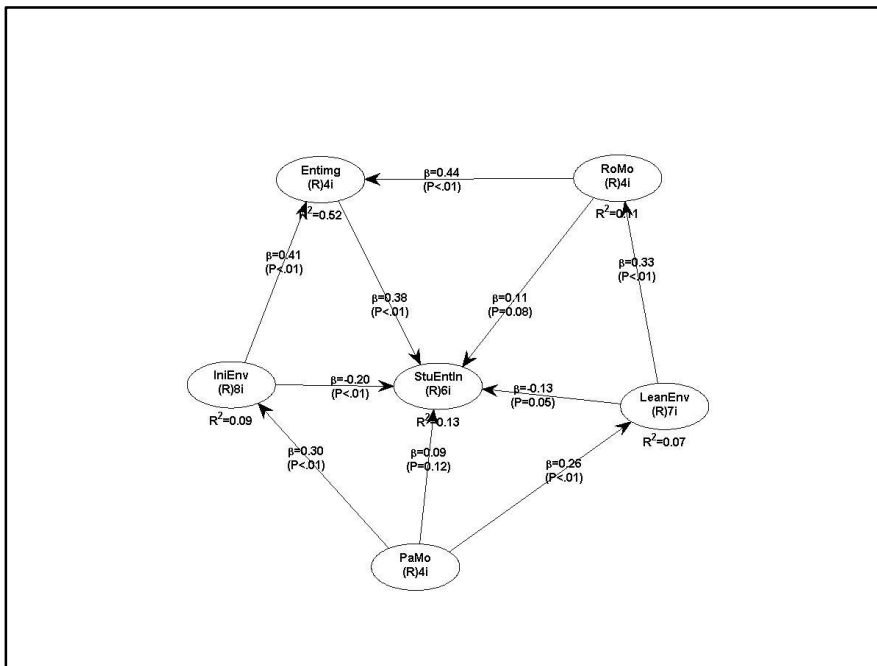


Figure 5.1: Empirical Model 1. Source: Author

### 5.6.3 THE PERFORMED EMPIRICAL MODEL (MODEL 1)

Below is the SEM performed model.



It should be noted that the arrows link the predictor latent variable to a criterion latent variable. The direct links have been associated with the direct cause-effect hypothesis; hence affirming a test on the direct links strength through a statistical significance (as represented by the calculation of the P value). In model 1, it may be realised that the RoMO (Role Models) have a significant relationship to an entrepreneurial image [ $\beta$  0.44,  $p < 0.05$ ] but not to student entrepreneurial Intention ( $\beta$  0.11,  $p > 0.05$ ). This indicates that the entrepreneurial image of the students is enhanced by the presence of role models. Nonetheless, it is the entrepreneurial image that enhances the entrepreneurial intent of the learners more significantly than all other predictor variables as statistically attested to by 38% strength relationship evidenced in the path coefficient [ $\beta$  0.38,  $p < 0.1$ ]. The institutional entrepreneurial environment has a negative impact on the student entrepreneurial intent of learners significantly [ $\beta$  -0.20,  $p < 0.1$ ]; Likewise the Learning environment [ $\beta$  -0.13,  $p < 0.05$ ]. Parental Motivation, however, has a higher significance on Institutional environment ( $\beta$  0.30,  $p < 0.01$ ), Learning Environment ( $\beta$  0.26,  $p < 0.01$ ) and no significance in entrepreneurial intent of learners ( $\beta$  0.09,  $p > 0.05$ ). The role models and entrepreneurial image have greater significance in the model on entrepreneurial intention, whereas the learning environment and institutional environment have a negative impact to student entrepreneurial intention, whereas Parental Motivation has no significance in entrepreneurial intention of the learners. The ten global indices measured the model. The model fit indices can be seen below:

Model fit and quality indices
Average path coefficient (APC)=0.333, P<0.001
Average R-squared (ARS)=0.371, P<0.001
Average adjusted R-squared (AARS)=0.362, P<0.001
Average block VIF (AVIF)=1.826, acceptable if $\leq 5$ , ideally $\leq 3.3$
Average full collinearity VIF (AFVIF)=2.034, acceptable if $\leq 5$ , ideally $\leq 3.3$
Tenenhous GoF (GoF)=0.339, small $\geq 0.1$ , medium $\geq 0.25$ , large $\geq 0.36$
Sympson's paradox ratio (SPR)=1.000, acceptable if $\geq 0.7$ , ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if $\geq 0.9$ , ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if $\geq 0.7$
Nonlinear bivariate causality direction ratio (NLBCDR)=1.000, acceptable if $\geq 0.7$
General model elements
Outer model analysis algorithm: PLS mode B

The model above has been tested against the ten global indices thus: the average path coefficient (APC); Average R-squared (ARS); Average adjusted R-squared

(AARS); Average block variance inflation factor (AVIF); Average Full collinearity VIF (AFVIF); Tenenhaus GoF (GoF); Simpsons Paradox ratio (SPR), R-squared contribution ratio (RSCR); Statistical suppression ratio (SSR); and the nonlinear bivariate causality direction ratio (NLBCDR). P values have been recorded even for APC, ARS as well as AARS. Through resampling processes meant to counter the sampling error compression effect which is associated with Bonferroni corrections are the P values included in the model (Rosenthal and Reshow, 1991). The quality indices and model fit are calculated as averages of other parameters (Kock, 2015).

The recommendation for models is that the APC, ARS and AARS shall have a P value that is equal to or lower than 0.05. The above model has the APC, ARS and AARS with P value < 0.001.

AVIF and AFVIF help in the measurement of the full collinearity and therefore need to be reported. Both the AVIF and AFVIF are should ideally be less than or equal to 3.3 where variables have two or more indicators (Kock, 2015). The AVIF of the above model is 1.826 and the AFVIF is 2.034 which are all below 3.3. All the indicators of the above model variables are more than 2.

The explanatory power of the model is measured through GoF. It is considered small if it is greater than 0.1, medium if it is smaller or greater than 0.25 and larger if it is equal to or greater than 0.36; the GoF of the above model is 0.339 which is considered large. If the GoF value is lower than 0.1, then the explanatory power of the model is considered too low or unacceptable (Cohen, 1988). The above model explanatory power is therefore acceptable since it is large and significant as such.

The SPR index refers to the level or measure by which the model is free from Simpsons Paradox instances (Pearl, 2009; Wagner, 1982). This normally occurs if a pair of variables that are linked have different signs and especially when the path coefficient and correlation associated with such a variable are affected thus. This index is still experimental but it is recommended that there should be no instances of Simpson's paradox and therefore the index should ideally be 1; it is however, acceptable if it has a value of 0.7. This means that the model is free by 70 % on the SPR instance. The above model has a value of 1. This indicates that the model is free from Simpson's paradox instances.

The measure by which a variable is free from negative R squared contributions is termed as the RSCR index. This is similar to the Simpson's paradox (Pearl, 2009; Wagner, 1982). The reduction of the percentage of variance in the criterion latent variable is deduced by the fact that the predictor latent variable makes a negative R squared contribution to the criterion latent variable. Although this index is also experimental, it is recommended that it should be 1. The RSCR contribution is obtained by dividing the R squared contributions of the model by the sum of the absolute R squared contributions. It is however, acceptable if the value of this index is equal to 0.9 or greater. The RSCR index in the above model is 1.

Another index by which the model is evaluated is the SSR index. This refers to the extent of freedom from statistical suppression instances (Mackinnon, Krull, Lockwood, 2000). This normally occurs when the path coefficient is greater than the corresponding paired linked variables' correlation. A causality problem may be indicated where there is a statistical suppression instance as in the case of Simpson's paradox (Spirtes, Glymour, Scheins, 1993), this would give a suggestion of a reversed hypothesized path. The calculation of the SSR index is achieved through dividing the model paths that are not associated with the medium or statistical instances that are suppressive by the number of the total model paths. The acceptable value of the SSR index is equal to or greater than 0.7, this means that model is at least 70% free from statistical suppression. An absolute path correlation that is greater than 1.3 characterises a medium or greater statistical suppression (Kock, 2015). The Statistical Suppression Ratio of the above model is 1. This means model is free from statistical suppression instances.

The NLBCDR index is an index that helps in measuring the extent of support of the bivariate nonlinear coefficients for the hypothesized direction of the model using its casual links. The nonlinear algorithms have a characteristic of the bivariate nonlinear coefficients varying according to the direction in the hypothesis. Essentially this means that they tend to be stronger in one direction than the other, implying that the error (residual) is greater whenever the hypothesized causality direction is in another direction. This is one of the experimental indices. Moreover, it is recommendable that the value of NLBCDR be 0.7 or greater. This means that the reversed hypothesized casualty direction is weak. This therefore means that the hypothesized direction is supported (Kock, 2015). The nonlinear bivariate causality ratio (NLBCDR) of model 1 is 1.

### 5.6.4 EMPIRICAL MODEL 2

Another analysis between the predictor latent variables and the criterion variable shall be examined in the next model in this presentation. The relationships hypothesised in the model are:

1. Role Models influence student entrepreneurial intention of students
2. Learning environment of an institution influences the student entrepreneurial intention.
3. Parental Motivation influences entrepreneurial intention of learners.
4. Institutional environment influences the entrepreneurial intention of learners.
5. Entrepreneurial image influences the entrepreneurial intent of the learners.

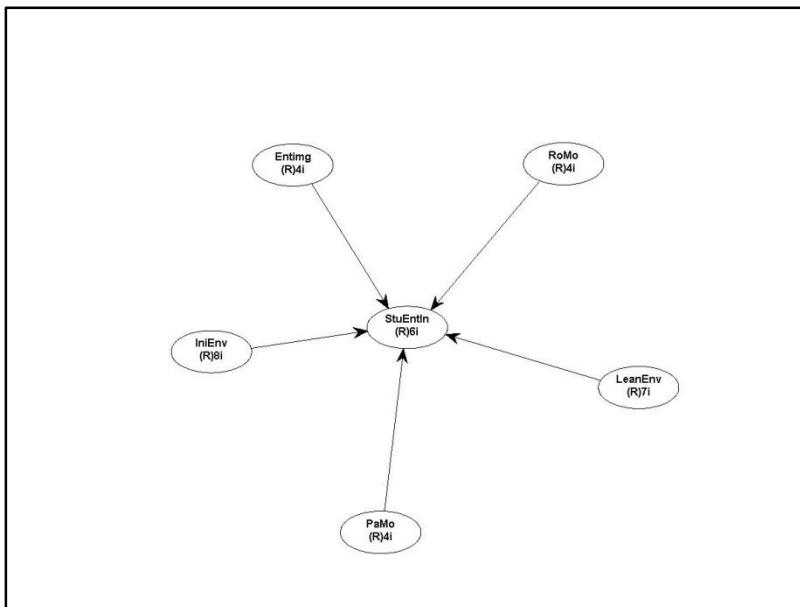
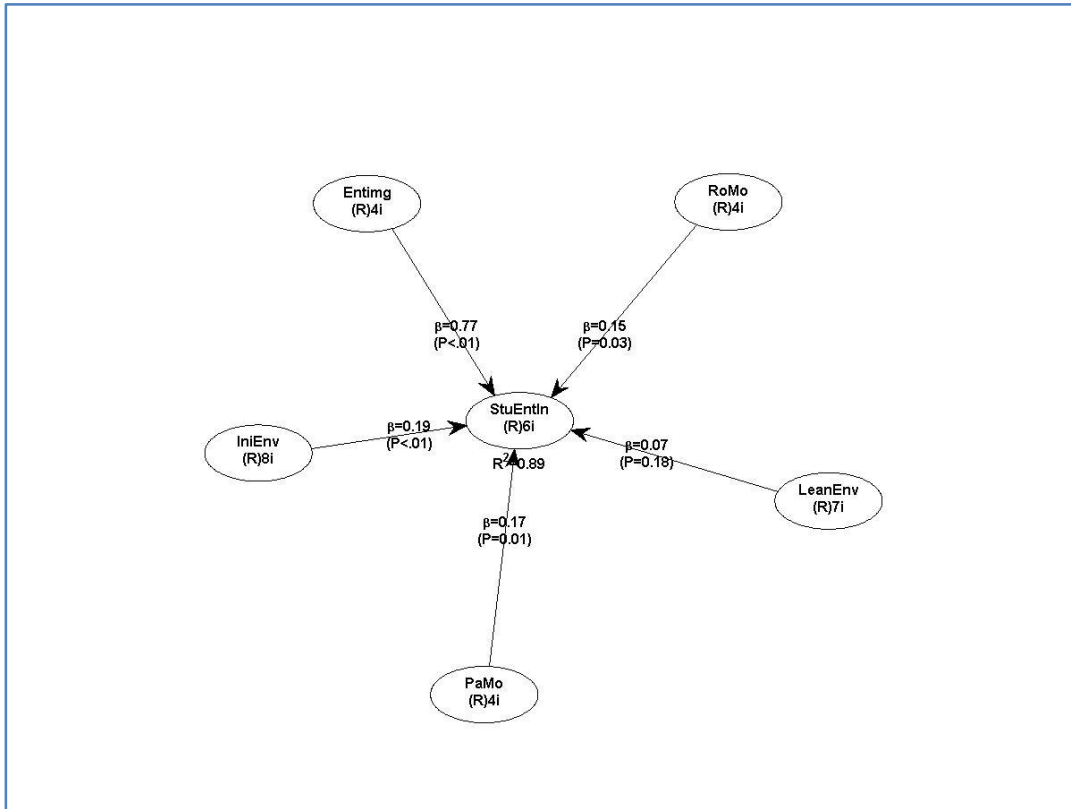


Figure 5.2: Empirical Model 2.

Source: **Author**

### 5.6.5 THE PERFORMED EMPIRICAL MODEL (MODEL 2)

Explanations of the model shall follow the presentation of the model.



As in model 1 the arrows link the predictor latent variable to a criterion latent variable. The direct links have been associated with the direct cause-effect hypothesis; hence affirming a test on the direct links strength through a statistical significance (as represented by the calculation of the P value). In the above model, model 2 it may be realised that the RoMo (Role Models) have a relationship though not very significant to student entrepreneurial Intention ( $\beta$  0.15,  $p < 0.05$ ). This supports the hypothesis that the entrepreneurial intention of the students is enhanced by the presence of role models. Nonetheless, it is the entrepreneurial image that enhances the entrepreneurial intent of the learners more significantly than all other predictor variables as statistically attested to by 77% strength relationship evidenced in the path coefficient [ $\beta$  0.77,  $p < 0.1$ ]. This proves the hypothesis that entrepreneurial image influences students' intention towards entrepreneurship. The institutional entrepreneurial environment has an impact on the student entrepreneurial intent of learners [ $\beta$  0.19,  $p < 0.1$ ]; The Learning environment however, doesn't influence student entrepreneurial intention [ $\beta$  0.07,  $p > 0.05$ ]. Parental Motivation, on the other hand influences student entrepreneurial intention than role

models ( $\beta$  0.17,  $p < 0.01$ ). The following hypotheses have therefore been supported in this model:

Role models can influence students' entrepreneurial intention ( $\beta$  0.15,  $p < 0.05$ ).

Parental Motivation can influence students' entrepreneurial intention ( $\beta$  0.17,  $p < 0.01$ ).

The Institutional Environment influences students' entrepreneurial intention ( $\beta$  0.19,  $p < 0.05$ ).

Entrepreneurial image influences students' entrepreneurial intention ( $\beta$  0.77,  $p < 0.01$ )

The rejected hypothesis is that the Learning environment influences students' entrepreneurial intention ( $\beta$  0.07,  $p > 0.05$ ).

The ten global model fit indices can be seen below:

#### Model fit and quality indices

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**Average path coefficient (APC)=0.269,  $P < 0.001$**

**Average R-squared (ARS)=0.886,  $P < 0.001$**

**Average adjusted R-squared (AARS)=0.880,  $P < 0.001$**

**Average block VIF (AVIF)=1.977, acceptable if  $\leq 5$ , ideally  $\leq 3.3$**

**Average full collinearity VIF (AFVIF)=1.961, acceptable if  $\leq 5$ , ideally  $\leq 3.3$**

**Tenenhaus GoF (GoF)=0.550, small  $\geq 0.1$ , medium  $\geq 0.25$ , large  $\geq 0.36$**

**Sympson's paradox ratio (SPR)=1.000, acceptable if  $\geq 0.7$ , ideally = 1**

**R-squared contribution ratio (RSCR)=1.000, acceptable if  $\geq 0.9$ , ideally = 1**

**Statistical suppression ratio (SSR)=1.000, acceptable if  $\geq 0.7$**

**Nonlinear bivariate causality direction ratio (NLBCDR)=1.000, acceptable if  $\geq 0.7$**

Model 2 does satisfy all the ten global indices requirements as shown below:

The APC, ARS, AARS in model 2 all have a significant value p value ( $p < 0.005$ ). This falls within the recommended model specifications (Kock, 2015).

AVIF and AFVIF which help measure collinearity of the model are acceptable if they are 3.3 but acceptable when they are  $<$  than or equal to 5. The AVIF and AFVIF of model 2 are 1.977 and 1.961 which fall within the acceptable full collinearity measure.

As explained for model 1, it is equally important to denote the explanatory power of model 2. This is achieved through the GoF index. GoF is considered large if it is equal to or greater than 0.36, medium if it is equal to or greater than 0.25 and medium if its value is equal to or greater than 0.1. It is also true that if this value is lower than 0.1, then the

model has no explanatory power. The above details of the model express that the GoF for model 2 is 0.550. This shows that the explanatory power of the model is large indeed.

Model 2 has also satisfied the requirement of being free from Simpsons Paradox instances since it has an SPR index of 1.

The R-squared contribution ratio of the model fulfils the requirement of the RSCR index as explained in model 1.

The model is also free from casualty problems in regard to statistical suppression instances where any indications of a reversed hypothesis are observed. This is indicated in the Statistical Suppression Ratio (SSR) of 1. The issue of non- existence of a reversed hypothesis is further supported by an NLBCDR index which records that the model has an index of 1. This is in accordance to the accepted standards of the index being greater than 0.7 (Kock, 2015).

## **5.7 CONCLUSION**

The chapter dealt with presentation and analysis of data using the statistical package of social sciences (SPSS) as well as the warp partial least squares in structural equation modelling design. It is observed that the largest numbers of respondents are students from the Management Information and Governance School. Institutional environment as well as role models have a higher impact on developing the entrepreneurial image of learners than parental motivation and the learning environment. The analysis has also pointed out that entrepreneurial image is the most significant predictor latent variable in influencing entrepreneurial intention of the learners. The two models (1&2) developed in this chapter have satisfied all the ten global indices. The next chapter will discuss the findings of the study.



## **CHAPTER SIX**

### **DISCUSSION OF FINDINGS**

#### **6.1 INTRODUCTION**

This section discusses the analysis laid down in the previous chapter. The objectives and hypotheses are discussed in accordance to literature as well as the empirical findings of the study. This study investigates among others the impact of institutional environment as well as learning for the entrepreneurial intent/inclination of learners at the University of KwaZulu-Natal. Literature findings as well as empirical findings are the key components of this presentation in this section. In the understanding of the title under study, the institutional and learning impact on student entrepreneurial intentions at the University of KwaZulu-Natal holds out its focus on the intentionality and how it is impacted by the institutional environment and its learning among others variables in the hypotheses. It is intention that processes our conduct towards opportunity identification and hence how it is impacted by various antecedents does merit attention. To construct viable business propositions, requires an intent and therefore intent as well becomes a predictor of behaviour as has been noted in literature. When a planned behaviour involved involves time lags, or is rare or hard to observe, psychologists have deemed that the best predictor is intentions (Krueger, Reilly and Cursard, 2000). New businesses emerge over time with considerable thought and planning and though the time is not stipulated, yet time and intention become an element in the process. The impact of the institutional environment, its learning and the role models in the process as well the image of entrepreneurship has a role to play in an entrepreneurial intent. In discussing the findings of the study, it is to be considered that the use of the word institution in this context is used to refer to a learning institution and with specific reference to the University. However, the mode of delivery of the survey is firstly addressed as below:

#### **6.2 WEB BASED SURVEYS**

This study employed the use of a web based survey. The use of web based surveys has been addressed by researchers with benefits such as decreased costs and faster response rates attributed to it (Lazar and Preeze, 1999; Opperman, 1995; Saris, 1991). Besides these benefits being recorded it should be acknowledged that the present generation has generally become technology based and that most of the actively involved people are

now using some sort of technology devices to either express themselves or receive an expression from individuals, organisations as well as friends. The use of technology is wide spread to an extent that most institutions of learning give free access to their learners to use internet. The University of KwaZulu-Natal is one such institution where the students and staff are free to use internet at campus as well as on their hand held devices such as cell phones, tablets etc. The potential benefits and drawbacks of web based surveys have been documented as follows:

The delivery period is quick in terms of the turnaround time. There is relatively a short time in reaching out to a large number of respondents. Multiple formats can be employed in the process. The data quality enquiries are easily conducted. Ethically confidentiality is ensured. A customised delivery of the items is ensured. Data can be captured directly into the data base.

The drawback issues need to be considered as well and this include:

Lack of control of the sample

It may involve time consuming developments.

Technological problems may crop up and may affect the turnaround time (Jansen, K.J, Corley, Jansen, B.J., 2007).

The author faced challenges in the turnaround time due to the network related problems but at the same time benefited from instant delivery of the survey instrument as dispersed respondents viewed the research instrument all at once when the technological internet problems were resolved by the institution. The technological problems and time lags involved caused the data collection to be delayed for several months with reminders being updated for the respondents to effectively keep abreast with the pending online survey till it was finally concluded. Nonetheless, the direct capturing of the data into the data base was easily achieved by use of a web based research and confidentiality of the respondents was ensured in the process. Additionally the respondents were given gentle reminders by notice updates for their input for the data collection.

### **6.3 DEMOGRAPHIC VARIABLES AND AN INCLINATION TO ENTREPRENEURSHIP**

In discussing this topic, the study objective of assessing whether demographic variables such as gender, race and parental factors have any relationship with entrepreneurial inclination or intention is addressed. An individual's identity has been linked to becoming entrepreneurial. This identity can be drawn from a number of areas including the individuality of a person, the parental lineage and other social settings (Falck, Heblich and Luedemann, 2010). In a study conducted by Siyanbola, Afolabi and Oladele et. al. (2012) in Nigerian tertiary institutions, gender was found as one of the determinants of entrepreneurial intention as well as parental entrepreneurial education. Karimi, Biemans, Lans et.al (2013) in their study on Iranian College students found that there were no gender differences in perceived behaviour control as well as entrepreneurial intention. In this study, however, it is of note that there was no significant difference in gender recorded towards entrepreneurial intention or inclination. Neither was there any difference in entrepreneurial intention in regard to parental occupation as well as race. This may signal the fact that the patterns in entrepreneurial intention are not the same and will need therefore contextualisation as such. The study categorized parents as having had a business ownership or not. Participants that came from parents that had business ownership and those who did not had no difference in their entrepreneurial intention. The number of respondents that did have parents with business as an occupation was small compared to those that did not have. Fathers that were non business owners were 80.7% and mothers in the same class were 85.5%. Fathers had a higher proportion of those who were business owners (9.6%) as compared to mothers who were only 7.2%. This indicates that there are more mothers who do not own business as compared to fathers.

Previous studies have also indicated that genderisation of entrepreneurial activities have tended to increase entrepreneurial intention among business students (Gupta, Turban, Bhawe, 2008). The study revealed that when the entrepreneurial activity was shown to be associated with the feminine nature, the response wasn't the same as when it was masculine in a sample of 469 students' study. Activities that were with a masculine characteristic received a higher response than those with a feminine characteristic. However, one development in the above experimental study worth noting is when the

same activities were with a neutral characteristic; the finding was that the male respondents had the same high response, nullifying societal underlying assumptions of gender stereotyped activities. In this present study the Anova test carried out across the gender divide recorded no significant differences between male and females in entrepreneurial intention in starting business after studies. This therefore confirms the understanding that gender stereotyping is not an issue that dominates in entrepreneurial intention. This further nullifies societal assumption that is gender based in terms of starting a business. This could moreover be related to a study in which gender proved stronger for females on a study of entrepreneurial education and efficacy (Wilson, Kickul, Marlino, 2007). Whereas society may be biased on male dominance, studies such as these tend to nullify these premises and point to the fact that gender is not necessarily a factor in either intention as in this study or a self-efficacy tool in developing an entrepreneurial mind set. In another study conducted by Maes, Leroy, and Sels (2014) entrepreneurial intentions on the gender effect was mediated by perceived behavioural control and attitudes than social norms. Women were found to be driven with motives of getting organised than their male counterparts in the study.

Another biographical factor in this study is age. Most of the respondents in the study were aged 18-21 (57.8%). Age has been considered as one of the factors related to entrepreneurial intention by some researchers. Isabella, Rainer, Matthias (2015) record a study where employees' entrepreneurial intention lowered as they aged. The employees in this case were also less likely to act entrepreneurially as they aged. The search for personality features in entrepreneurial intention or behaviour has been a work that has gone on for a while. Authors have pointed out the significance of demographic variables such as age, gender, religion, gender, level of study as well as labour experience among others to predict entrepreneurial behaviour (Reynold, Storey and Westhead, 1994; Storey, 1994). Series of studies have concluded a correlation between demographic factors and entrepreneurial inclination or intention (Dunn, 2004; Smith, 2005; Kirkwood 2007 and Breen 1998). A criticism has however been noted against the usage of biographical data in predicting the entrepreneurial behaviour both from the methodological as well as theoretical viewpoint (Gartner, 1988; Robinson, Stimpson, Huefner and Hunt, 1991).

The understanding of whether biographical data supports entrepreneurial intention or not may be inconclusive given that there are other factors likely to affect intention.

According to Shapero in his Entrepreneurial Event [SEE] model and theory (Shapero and Sokol, 1982), the feasibility and desirability of the task help in creating its perception and attraction. The feasibility and desirability are determinants in their own right and therefore as to whether age, gender, education level, etc. as single determining factors remains an argument of note. It is to be understood that Ajzen (1991) developed the understanding on the power of intention in behaviour development and finally an action of an individual. For action to be realised there must be a cognitive process where beliefs, exogenous factors as well as perceptions are channelled to realise action. When then Ajzen's theory stipulates that beliefs and exogenous factors are linked to action, it can be understood in part that the exogenous factors may include certain biographical factors such as educational environment and so on. Personal characteristics of the respondent such as gender may be impacted by an exogenous factor such as societal culture which may for example advocate a bias as in the case of seeing a man's job as doing business or considering business intent; whereas women are to be home keepers. It may therefore be difficult to dismiss the fact that biographical factors are inadmissible to entrepreneurial intention as some of the authors may have argued above. The complexity of understanding the proportional role each of the factors plays in influencing an entrepreneurial intent may need further study.

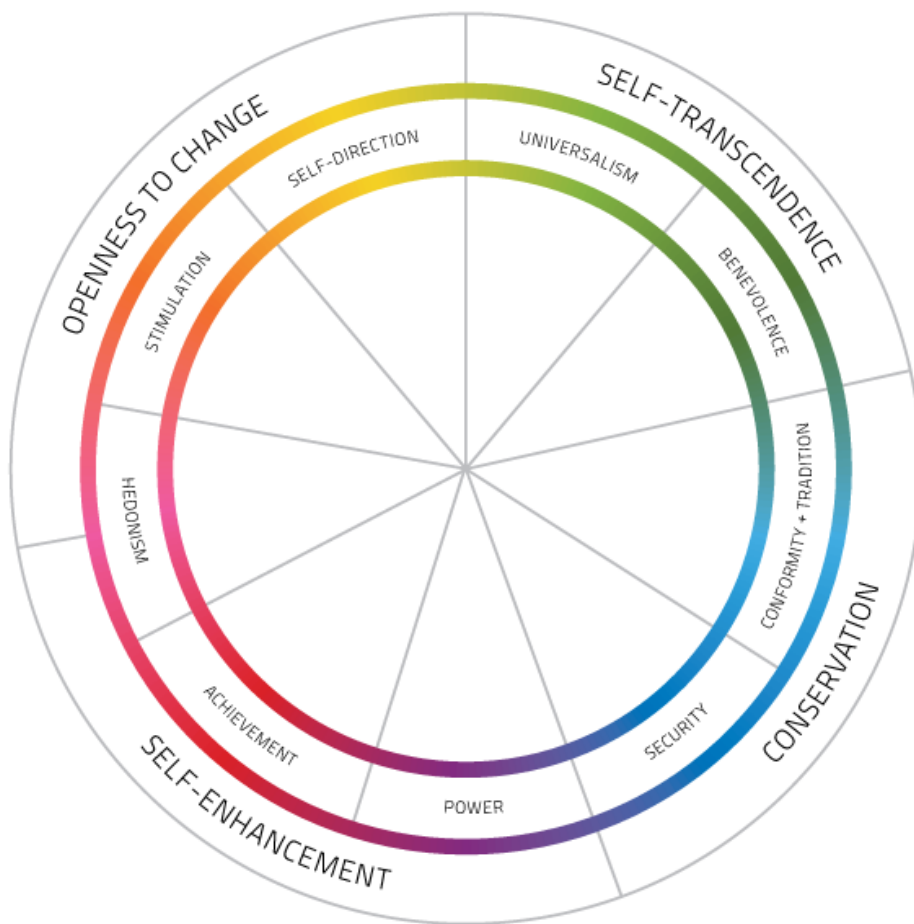
The intention to create a venture is not necessarily tied to the understanding of personal traits and characteristics per se and can be traced to the values held by the individual. The above discussion therefore needs to be underlined with the understanding of personal values which underlie motivational aspects in an individual. Values shape an individual's personal goals (Schwartz, 1990). The above author suggests that an individualistic person for example tends to have circular structure of values. It is in this context that the individual gives greater attention or significance to hedonism, power, achievement, self-direction as well as stimulation. Collectivist people on the other hand, give attention to values that alternate with the individualistic values. Such values include compliance, tradition and benevolence. Social psychology research has shown that values to cause behaviour (Verplanken and Holland, 2002). It is in instances such as these findings that hold out that the values that people hold influence their actions including intention.

The promotion of goal attainment is thus based on the premise that the goals have a subjective value and have been considered attractive in the first place (Feather, 1995). It

can therefore be argued that what attracts some people to a particular job through stimulation especially challenging jobs, would on the basis of security cause others to feel challenged and hence feel the unattractiveness based on security understanding, hence withdrawing on the basis of threats and unattractiveness (Schwartz, 2006). The need for cognitive processes in planning to start a business is an intentional act and it is for this reason that the intention models are applicable (Krueger and Carsrud, 1993; Krueger, Reilley and Carsrud, 2000). The understanding that an entrepreneurial intention is a preliminary conduct for an entrepreneurial behaviour is significant (Bird, 1988; Kolvereid, 1996) and therefore its sources need exploration in all angles. There have been a number of models used to explain intention. The following models have notably been used in entrepreneurial intention research: Shapero's Entrepreneurial Event Model [SEE] (Shapero and Sokol, 1980); Implementing Entrepreneurial ideas Model, (Bird, 1988); The planned behaviour theory (Krueger and Carsrud, 1993; Linan and Chen, 2009; van Gelderen, Brand, Van Praag et.al., 2006; Maximisation of the Expected Utility (Douglas and Shepherd, 2000). Nonetheless, the use of values is a useful addition to these models and as well helps justify the approaches in understanding entrepreneurial intention as an entrepreneurial behaviour.

Values are said to influence planning. The more goals have a higher value attached to them the more thorough the planning is. If a particular value is highly prioritised, the action plans can be formulated that lead to expression of the required behaviour (Gollwitzer, 1996). In the face of obstacles, value enhances the ability to persist towards the attainment for a certain goal. It is through the value significance that planning gets promoted to gain a value consistent behaviour (Schwartz, 2006). Under the premises of value is the understanding that value shapes motivational goals of an individual. Schwartz (1990) proposed a circular structure of values with a relationship dynamism occurring between the principles of logical contradiction and compatibility. According to the circular structure, power and achievement equated to self-direction and stimulation are adjacent values and the opposing values such as power and universalism generate conflict if pursued along the compatible ones (Schwartz, 1999; Schwartz, Melech, Lehmann, Burgess and Harris, 2001). The circular structure has ten basic values and the conflicts and the congruities among these values produce two orthogonal dimensional structures that is integrated. This is when a situation arises between openness to change

and conservation against the novelty and personal autonomy, referring to autonomy and self-direction; arise against stability, certainty and social order incidentally in the range of tradition, conformity and security. This helps form one orthogonal dimension. The other deals with ideals such as the self enhancement and self-transcendence; this directly comes in opposition to values such as selfish interest pursuit which are generally related to power and achievement leading to another opposition in terms of values that promote the welfare concern of those afar and near, the ideals based on benevolence and universalism. The one ideal that tend to share both of the spheres is hedonism, since it deals with self enhancement as well as openness. Diagrammatically the ten basic values are available in Figure 6.1 below:



*Figure 6.1: Circular Structure of Value*

*Source: Schwartz (2006)*

These values were categorised by researchers after decades of research. Below is the classification in which associations are mapped. The more closer the points are the more likely that the individual will value both items or prioritise them at the same level; the far apart the items are the more likely the person will generally consider the other and treat the other that is closer more highly.

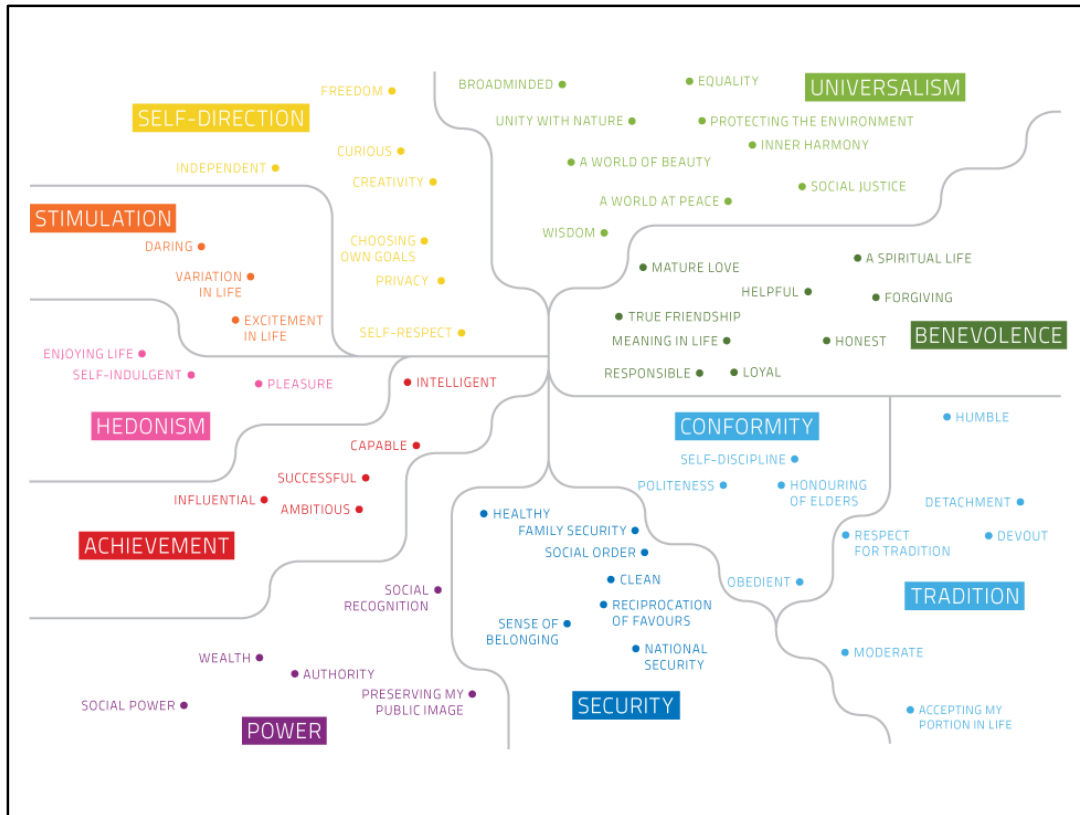


Figure 6.2: Value Classification Structure

Source: Brewer (2010)

The understanding that particular values are associated to creativity and risk taking capacity is an interesting conception. In social entrepreneurship for example, the motivation of business is not necessarily the profit making motive as opposed to the society's benefit. This may be associated to the benevolence component in the above map; on the other hand, an individual's intent in simply being an achiever leads to an ambition to beat odds and try till success reigns. Each of these categories can lead to a move that can endure hardship, resist the tendency to give up, till a project is finally established. The profit motive seems to be applicable in differing angles even in social entrepreneurial efforts. The business for example has to be run by what it is running. The



business not necessarily intended for profit has to have some gain in order to be sustainable; therefore, in that understanding its existence is based on the gain it derives from its operations in kind or cash. The owners may not necessarily gain directly but the business has to gain in order to sustain its operations. This then makes it to seek for opportunities that lead to its creativity in those particular areas which propel its existence as such. The level of gain or profitability for its sustenance is certainly differs and may be the evidence in personal pleasure or the ideal pleasure of achievement for a desired goal. Indeed upon this understanding an intention to reach out to existing opportunity may be developed. As to procedures of achieving such a goal is dependent on values. Values seem to transcend gender, age and other biographical factors in entrepreneurial behaviour development as argued by authors above.

#### **6.4 Institutional Environment and Entrepreneurship**

In addressing the theme of institutional environment and entrepreneurship attention is specifically drawn to the objective that encapsulates the role of institutional environment in developing entrepreneurial inclination of students. This theme is therefore discussed with the tested Hypothesis 1 of the study which considers that the University Of KwaZulu-Natal (UKZN) plays a role in stimulating the entrepreneurial intents of learners.

Studies have indicated the impact of institutional environment towards entrepreneurial intention. In a cross country study of two countries (Portugal and Spain) the findings were that the institutional environment was vital in the entrepreneurial intention of students (Diaz- Casero, Ferreira, Mogollon and Barata, 2012). The study compared Portugal and Spain and found that the entrepreneurial intention was higher in Spain than in Portugal. It is also understood that universities play a vital role in developing entrepreneurial convictions of students (Co and Mitchell, 2006). Authors such as Roffe (1999) have noted Universities as seedbeds for entrepreneurship. Following this understanding and the objective of this study in investigating whether the institution increases students' intent towards entrepreneurship does the study hypothesis get tested on the role of the university environment in enhancing the entrepreneurial intent of the learners at the University of KwaZulu-Natal. According to the Structural equation model 2 developed in the analysis for this study, it is to be noted that the institutional

environment of the University for KwaZulu-Natal enhances student entrepreneurial intention to a certain degree. This is signified by a strength of 19% in the inclination of entrepreneurial intent enhancement. University Institutional environment was used as a predictor latent variable against the student entrepreneurial intent yielding the following values ( $\beta$  0.19,  $p < 0.01$ ). It must be noted that other studies have indicated that the sociological or institutional environment do determine one's ability to become an entrepreneur (Shapero and Sokol, 1982; Aldrich and Zimmer, 1996; Berger, 1991; Busentiz, Gomez and Spencer, 2000; Steyaert and Katz, 2004; Monolova, Eunni, Gyoshev, 2008). This therefore is in agreement with the previous studies; nonetheless, the strength indicated is not great, perhaps pointing to the need for the university to improve the environment in order to enhance entrepreneurial image of learners which can eventually enhance the entrepreneurial intent of the learners.

Model 1 of the study has indicated that Institutional environment enhances the entrepreneurial image of the learners as depicted by the following values ( $\beta$  0.41,  $p < 0.01$ ). Observing value strength by which institutional environment influences entrepreneurial image as opposed to the direct influence of institutional environment to entrepreneurial intention of the learners ( $\beta$  0.19,  $p < 0.01$ ); it can be deduced that the institutional environment of the University of KwaZulu-Natal has a stronger impact on entrepreneurial image of students than their entrepreneurial Intention. Entrepreneurial image, however, has a higher impact on entrepreneurial intention more than all other variables in the model ( $\beta$  0.38,  $p < 0.01$ ). The challenge of sustaining and improving the institutional environment in order to enhance the entrepreneurial image becomes vital for policy makers of the institution of the University of KwaZulu-Natal. These findings also indicate the fact that the institution has been less effective in directly influencing the intents of learners towards entrepreneurial intention as opposed to influencing their image towards entrepreneurship. The role of improving intent may demand additional effort in terms of providing a stronger environment which needs capitalisation, and other incentives towards intent leading to its feasibility. This brings to view the theory postulated by Shapero on the Entrepreneurial Event. The feasibility and desirability according to Shapero's theory [SEE], (Shapero and Sokol, 1982) are necessary ingredients in developing the perception and attraction for an entrepreneurial career to be realised.

An institution may need therefore to help create the feasibility and desirability for an entrepreneurial career. The limitation to this understanding of an entrepreneurial career can be pointed to in a sense that the creative nature of entrepreneurship leads to innovation not only in venture start-ups alone but in any environment be it in corporate sector or private enterprise. In a study involving 42 countries it was discovered that South Africa ranked lowest in 142 countries under the study of Employee entrepreneurial Activity [EEA]. This study was meant to measure how entrepreneurial employees are in a company. South Africa was 0.32% (Bosma, Wennekers and Amoros, 2012). A study such as this one points to the need to improve the entrepreneurial intent of potential employees; which has a possibility of actual contribution towards an entrepreneurial behaviour in organisations and so improve companies' productivity in difficult economic times. An entrepreneurial company is definitely made of entrepreneurial employees. The value of entrepreneurial ventures is well noted in that such businesses end up growing with inflation (Wickham, 2001). This basically achieved as entrepreneurial ventures tend to have strategic objectives that target the market share, position and development. For this reason, it has also been noted that entrepreneurial ventures help create employment (Wickham, 2001). So not only is the company sustained in productivity but it is able to create employment if the potential employees' entrepreneurial flair or intent is enhanced in their previous study environment.

## **6.5 Learning and Entrepreneurship**

This section addresses the study objective which investigates whether learning stimulates students towards entrepreneurship. Therefore in addressing this topic the tested hypothesis on entrepreneurial inclination/intention of students being increased by University learning is thus discussed. Learning is termed as any process that leads to a permanent change in living organisms without maturation or ageing (Illeris, 2007:3). Others have considered learning as a process that involves a life time combination of processes involving the whole person, physically, genetically, attitudes, senses, mind, skills and attitudes leading to a continuously changing person (Jarvis, 2009:25). Learning is a comprehensive process that has dimensions and processes. The two processes are the external and internal processes. The external process of learning involves the interaction with the learners' environment. Such an environment can be cultural, social or material in nature. The internal learning process on the other hand deals with the

psychological processes with elaboration and acquisition being key fundamentals. A learner constructs in her/herself ability in deriving meaning to the practical life challenges and this forms the personal functionality in learning.

The dimensions involved in learning include the content dimension. In the content dimension includes skills, knowledge, attitudes, opinions, insight, values methods, strategies and ways of behaviour. The other dimension is the incentive dimension. Within the incentive dimension, emotions, feelings, motivation and volition need to be considered. Incentive dimension has at times been known to determine the content as in the case of new information changing the incentive condition (Illeris 2009). More attention is normally given to the content dimension than the incentive dimension; yet it is understood that the mental energy mobilisation and interest is developed through the incentive dimension. It is therefore possible to learn something about the teacher's attitude, or other students besides the school besides what was originally intended (Illeris, 2009). Learning therefore is broad and can lead to a change as pointed out in the discussion above. This change can be valuable as people grapple with real life circumstances through entrepreneurial intent development. Life circumstances such as economic challenges require creativity to be embedded in learning environments like the University environment.

It has been noted that entrepreneurship develops differently across different universities (Muir, 2005). For the creation of new businesses as well as jobs to be realised there is need to develop an academic learning that is connected to the real world. Therefore the learning needs to be imaginative, creative and innovative and should link the academic programs to the real world (Robinson and Haynes, 1991). Previous studies have established the correlation between University learning and entrepreneurship image (Buyeze, 2013). Authors such as Buyeze have classified the four different types of knowledge gained as a result of learning:

The first of which is business general knowledge; this applies to all firms including new ventures.

The knowledge applicable to most firms and not necessarily a particular venture has been termed as Venture general knowledge.

There is also knowledge for the unserved existing market and the need of resources to venture is required. This type of knowledge is termed as the opportunity-specific knowledge.

Finally the venture specific knowledge - which applies to knowledge for producing a particular good or product.

Kent (1990) stipulated that entrepreneurship is multidisciplinary in nature and therefore the understanding that it is not limited to a particular discipline. Perhaps the issue to be considered here is the manner of teaching and learning associated with it to bring about an intent which is often considered a precursor to an entrepreneurial behaviour. In Ajzen's theory on planned behaviour (Ajzen, 1991); action is preceded by a cognitive process where beliefs, exogenous factors and perceptions get channelled to action. Perceptions could further be learned from an educational environment of learning in itself. Intention is a planned behaviour and so the fact that learning can shape such judgment is of note. Learning has its theories among which have been recorded by Piaget (1952) and Flavell (1963) in the four categorisations such as the *cumulative or mechanical*, *assimilative*, *accommodative* and *the transformative* learning. The fourth type of learning is said to impact on the self-personality and restructure all the other three learning processes mentioned. The dynamism of learning at a University level will need to be no less than transformative if an impact is to be realised that leads to creativity or innovation. According to the performed structural equation model 2 for the study, the hypothesis stating that the university learning stimulates entrepreneurial intent or inclination is not supported ( $\beta$  0.07,  $p < 0.18$ ). This may indicate the need to employ more of transformative learning as pointed above for the learners. The need for creative, imaginative as well as innovative academic learning being linked to the real working world (Robinson and Haynes, 1991) is therefore necessary. Once Universities ensure a particular knowledge with inspiration in business is emphasised, the entrepreneurial intent of the learners will be increased (Turker and Selcuk, 2009).

## 6.6 ROLE MODELS AND ENTREPRENEURSHIP

One of the objectives of this study was based on the need to investigate the relationship of role models and entrepreneurial intent of learners which is hypothesised in this study as role models impact on entrepreneurial intent of learners at the University of KwaZulu-Natal. It is understood that other people's opinion as well as behaviour, sometimes their identity and examples influence an individual's decision in choosing a certain behaviour (Ajzen, 1991; Akerlof and Kranton, 2000). This observation applies to occupational decisions made by individuals (Krumboltz, Mitchell and Jones 1976), this then includes entrepreneurial decisions as well. What is a role model then? This kind of question can be addressed by looking into the literature understanding thus far exhibited. It has also been recognised that many entrepreneurs decision to start a business had the influence of 'others'. It is these 'others' that have been termed as role models. Their level in society or industry can be wide ranging but as long as they fall within the ambits described above they are role models. In this vein, one would have examples of Bill Gates or others in various categories including family members. Therefore a role model acts as a common reference to persons by setting examples to be emulated and who inspire or stimulate other individuals in making certain career decisions or achieving certain goals (Shapiro, Haseltine, Rowe, 1978; Basow and Howe, 1980; Wright, Wong and Newill, 1997).

The term role model has some theoretical connectivity as noted in literature. Gibson (2004:136) noted the two constructs that relate to term 'role model'. It is the concept of identifying with a 'role' and then 'modelling'. It therefore involves the psychological pairing in terms of behaviour patterns as well as cognitive skills of one person by another. Individuals therefore get attracted to persons who are similar to in terms of their own personal goals, or characteristics and behaviour [the role aspect], whom they are able as well to learn some skills or abilities from [the aspect of a model] (Bosma, Hessels, Schutjens, Van Praag and Verheul, 2011). The theories of social learning and [role] identification have been portrayed in the 'role' and model aspects (Gibson, 2003; 2004). It is rather the identification of characteristics in another person (model) that leads to a cognitive response to that person's beliefs, once one recognises the proximity of such attributes to their own (Kagan, 1958). The individual's ideals that is being identified (model) get to be adapted by the person who is inspired by such ideals and preferences (Witt, 1991) or else such a behaviour is imitated if it is deemed to be rewarding (Kagan,

1958). It is moreover argued that sometimes role models not only promote the acceptance of a particular career/activity but may even cause the very rejection of a career or activity [the negative type of role model] ( Gibson, 2004). It is understood that learning by an example (model) is embedded in the social learning theory or the social cognitive theory (Bandura, 1977; 1986).

Three strands of literature have given credence to role models in entrepreneurial intent development. It should be noted that so far studies have positively correlated entrepreneurial business set up to parental role models (Chlosta, Patzelt, Klein,Dormann,2010; Dunn and Holtz-Eakin, 2000; Fairlie and Robb, 2007; Hout and Rosen, 2000; Parker, 2009). While deliberating on parental role models association between parents and their children, it is portrayed that this has been considered to exist on the following grounds: Genetic heritage (Nicolau, Shane, Cherkers, Hunkin and Spector, 2008) in job training provided by the family business (Fairlie and Robb, 2007) and in certain cases the financial assistance offered (Georgeliss, Sessions, and Tsitsianis, 2005). The support and advice offered by role models is helpful to those acting as mentees (Nauta and Kokaly, 2001).

Secondly, the part played by the peer groups is considered in the area of role modelling. Various authors have attested to this understanding (Djankov, Qian,Ronald and Zhurasvkaya.2006; Falck, Heblich and Ludemann, 2010; Gianneti and Simonov, 2009; Koellinger, Minniti and Schade, 2007; Nanda and Sorensen, 2009; Stuart and Ding, 2006). Networks have as well played part in providing role models as noted by some authors ( Kim and Aldrich, 2005; Klyver, Hindle and Scott, 2007).

Finally the third grouping of role models is that which is viewed from an aggregate level than an individual level. The regional evidence of varied entrepreneurship is said to be persistent which points to uneven spread of entrepreneurship (Reynolds, Storey and Westhead.1994). Differences have been noted among clusters, regions and countries in terms of the existing and available role models (Fornahl, 2003; Lafounte, Vailliant and Rialp, 2007; Sternberg, 2009). The legitimisation of entrepreneurial aspirations has been associated with the presence of other entrepreneurs in literature (Davidsson and Wiklund, 1997; Mueller, 2006). As to whether individuals choose role models that are similar to them, homopholic role models or those that they are attracted to and have no direct

relationship with them is a matter that is subjective in its own right. Studies such as those above have indicated that role models can influence one's entrepreneurial inclination or intention. In their study on entrepreneurial intent and self-efficacy, BarNir, Watson and Hutchins (2011) found that role models have a significant and a positive impact on intentions of entrepreneurship. Role models play a variety of roles and this may include moral support, guidance and information. The training for socialisation can be attained from the relationship with role models (Rajkonwar, 2006). The motivation towards developing an entrepreneurial intention does come from role models (Caputo and Dolinsky 1998). Another study on the significance of role models in entrepreneurial intentions by Van Auken, Fry and Stephens (2006) found that when the role models exercised the role model activities of involving respondents in professional business work, discussions in business and employment in business, such activities were related significantly to the interest of starting a business.

A study of this kind points the need for role models to relate in such a way that their impact can lead to a development that is desirable towards those that look up to them. The indicators necessary for effective role modelling may be a topic at separate consideration but the role models impact on entrepreneurial intentions is clearly stipulated by studies and observations as noted above. Other studies that have found that role models impact on the entrepreneurial intention include the Iranian College students' study in which the role models indirectly influenced entrepreneurial intentions of students through antecedents of the Theory on Planned Behaviour (TPB). The present study in response to the hypothesis that role models influence the entrepreneurial intentions of learner found that this hypothesis is accepted ( $\beta$  0.15,  $p < 0.03$ ) as reported in model 2; in addition model 1 indicates that role models do improve the entrepreneurial image of learners ( $\beta$  0.44,  $p < 0.01$ ). This latter observation defining the relationship between role models and entrepreneurial image is kin to entrepreneurial intention development. The role of entrepreneurial image in developing entrepreneurial intention is something notable.

## **6.7 IMAGE AND ENTREPRENEURSHIP**

The role of entrepreneurship in economic development is now an accepted fact (Postigo and Tamborini, 2002; Gurol and Atsan, 2006). This is alongside the fact that it creates



employment and therefore the image towards entrepreneurship is significant if behaviour towards it is to be realised. Image and University encouragement have been known to impact positively on entrepreneurship intentions of students (Autio, Keeley, Klofstein, 1997; Veciana, Aponte, Urbano, 2005). The challenges of unemployment have been felt in a number of countries and the image towards entrepreneurship is likely to be affected in one way or another. The recent World Bank findings indicate the challenges that relate to unemployment among graduates especially in developing economies. World Bank reports that the Sub-Saharan graduate unemployment is high with countries like Ghana having 50% of its graduates unable to find jobs in 2 years and 20% getting employed in 3 years after graduation. This is compared to countries such as Kenya in East Africa and Mozambique in Southern Africa, which causes reliance on an informal sector by the graduates which has been termed as vulnerable (Robb, Valerio and Parton, 2014). The economic outlook in terms of job availability creates a scary image; nonetheless, another image needs to be developed towards a solution that can revive the economy as well as create employment. Twenty one percent of the youth in Africa are unemployed as opposed to the 14.4% of the rest of the globe (Nafhuko and Muyia, 2010). Youth are three times more unlikely than adults to get employed. The statistical global trend in youth unemployment has not been steady. Between 2009 to 2011 youth unemployment decreased from 12.7% to 12.3%; yet in 2012 to 2013 it increased from 12.4% - 12.6%. In 2018 the projected youth unemployment globally is 12.8%! (ILO, 2013). The slimming hopes of getting rewarded by employment after education are getting dismal with such statistics and an entrepreneurial behaviour is undoubtedly significant. The sustainability of businesses is dependent on entrepreneurial employees and therefore the need to have a proactive capacity may prove helpful to business sector by potentially entrepreneurial employees that come from Universities. In a study of 142 countries there was dismal performance by South Africa on Entrepreneurial Employee Activity rating with only 0.32% to its favour (Bosma et al 2012).

Institutions according to Kaufman and Feldman (2004) have been preparing students for career jobs and not becoming job creators. It is perhaps the reason Bosire and Etyang (2000) have noted in their study on cognitive business skills that a majority of Kenya's small scale entrepreneurs were secondary school graduates or lower. The small and micro enterprises in the informal sector were considered demeaning to the Kenyan College

graduates. The paradox is noted in that an employment opportunity for post-secondary school graduates is low resulting on a negative investment on Kenyan education. Without doubt the image towards entrepreneurship is notable as a challenge in this scenario and hence the status as noted above. The fact that small and micro enterprise is considered demeaning is a reflection of poor image towards entrepreneurship. This observation is also notable in Ghana yet the absorption of graduates is low, where some of the graduates take up to three years to find a footing in the formal sector (Robb et.al, 2014). In this study, an entrepreneurial image and entrepreneurial intention was hypothesized. The results, however, indicate that the highest coefficient strength of all the predictor latent variables under the study ( $\beta$  0.77,  $p < 0.01$ ) was the entrepreneurial image. This finding can therefore be termed as interesting and could reflect the changing understanding of students. In model 1, it is notable that the institutional environment under study had a great impact on the learners' entrepreneurial image. According to the Entrepreneurial Event theory of Shapero (Shapero and Sokol, 1980) desirability and feasibility help determine the attractiveness and acceptability of the task. Image towards entrepreneurship can be deemed as the attractiveness experienced by an individual towards becoming entrepreneurial or developing an entrepreneurial intention as such. The desirability and attractiveness of a task are likely to be related if intention is to be developed in that regard. This may explain the reason why the latent predictor variable (Entrepreneurial Image) has a higher impact on the criterion variable (Student Entrepreneurial Intention).

## **6.8 LEVELS OF LATENT PREDICTOR VARIABLES IMPACT ON THE LATENT CRITERION VARIABLE**

Following the results presented in chapter 5 and the analysis done it can be deduced that the five Latent predictor variables had different levels of impact on the criterion variable under study. The predictor latent variables were: Role Models, Institutional Environment, Learning environment, Parental Motivation and Entrepreneurial Image. The criterion latent variable was and is Student Entrepreneurial Intention.

The order of impact is observed in the following order:

Entrepreneurial Image- [EI] (77%)

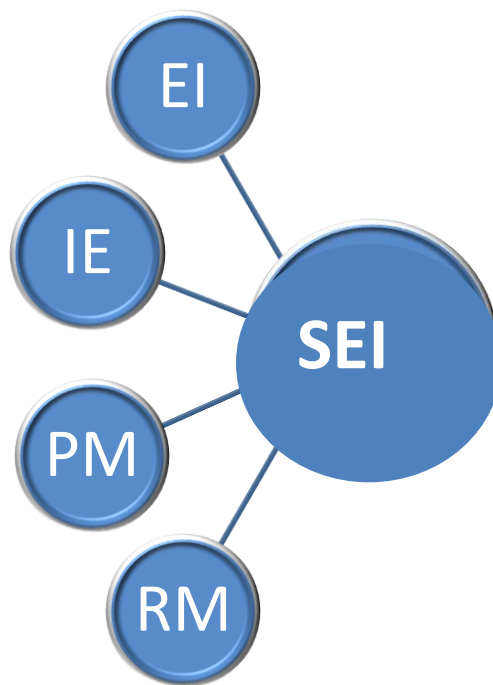
Institutional Environment- [IE] (19%)

Parental Motivation - [PM] (17%)

Role Models - [RM] (15%)

The above were found to impact on entrepreneurial intention of the participants under the study. The predictor latent variable on learning environment did not influence the entrepreneurial intention of the learners.

The author has identified the following Predictor Variables that influence the Criterion Variable. See Figure 6.3.



*Figure 6.3: Predictor Variables and Criterion Variable*

*Source: Author*

The above figure shows that Entrepreneurial Image (EI) has the highest impact on Student entrepreneurial intention (SEI) followed by Institutional Environment (IE). Parental Motivation (PM) and Role Models (RM) form the last two factors in entrepreneurial intention of the learners at the University. The level of impact of each of the variables towards an entrepreneurial intent is varied. There is need to foster the impact of various variables to enhance entrepreneurial intent.

## **6.9 PROPOSED MODEL**

The following model, Student Entrepreneurial Intention [SEI] is suggested under this study in enhancing entrepreneurial intent of the learners at the University. The Student Entrepreneurial Intention model may be influenced by entrepreneurial Image, Learning environment, Institutional environment, Parental motivation and Role models. Most of the models available deal with the existing entrepreneurs and do not encapsulate the potential entrepreneur-the student. The domains of the entrepreneurship ecosystem developed by Isenberg (2011) have a university as one of the components under human capital in the realisation of an entrepreneurial ecosystem. Likewise the WEF (2012) model on entrepreneurship ecosystem has education and training component where educational institutions are mentioned. The reference is with special reference to the ecosystem in which educational training plays a role. As to how the educational system develops or enhances the inclination or intention of its learners, remains untold. At the same time it is unknown to what extent the learning or the institutional environment enhances the entrepreneurial intent of the learners. This observation is evidenced in a number of models. In the Plug and Play TechCentre (2013) entrepreneurs have an environment which is enriched by the education among others, as to how the educational system fosters an entrepreneurial intent among its own remains to be known. Academia is also mentioned in the Six+Six Ecosystem entrepreneurial model (Kotlai & Co., 2013) but it is with a reference of sustaining and connecting into entrepreneurial system. This model just like the Silicon and China Innovation ecosystems do not enlighten or shed light on how an institution like a University can reach the largest population of its own. The education system where the role of talent creation is alluded to is also a component of the European Innovation system (Stanford, 2010). This study has not only proposed the model but has tested the model as presented in fig 5.1 and fig 5.2 of this work. Empirical finding of this model suggests that there are areas that need additional consideration to realise a greater entrepreneurial intent of the learners. This is in reference to the learning component of the model.

### **6.9.1 Predictor Latent Variables of the SEI model**

The Student Entrepreneurial Intent [SEI] model as pointed above is comprised of the following elements: Entrepreneurial Image; Learning environment; Institutional

environment; Parental motivation as well as the Role models. A brief explanation is given on these components below:

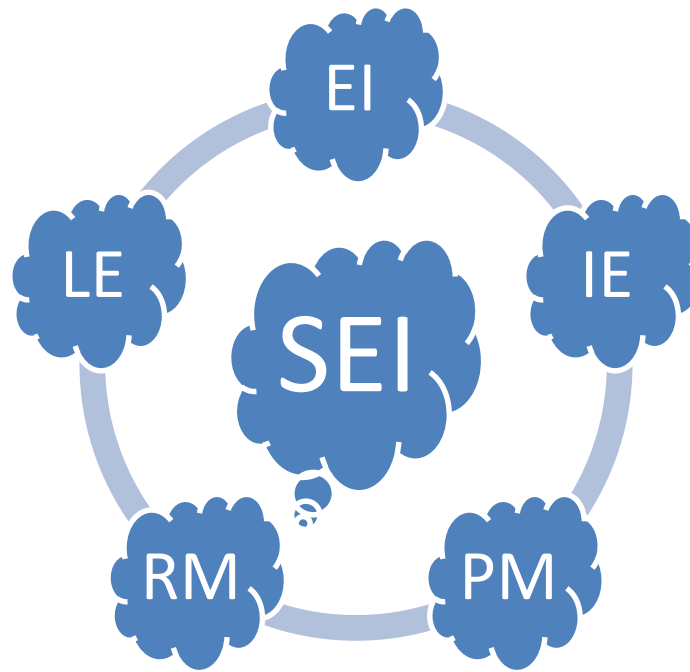
The entrepreneurial Image needs to continue to occupy an ideal place in the learners' minds if an entrepreneurial behaviour is to be achieved. This will tally with Shapero's theory on desirability and feasibility. It is vital that this position is sustained in the learning environment and institutional environment. For the entrepreneurial image to be enhanced there is a need for institutions/schools to often associate or develop a connection with entrepreneurial individuals as well as organisations in continuous student awareness. A motivation of students as well as the stakeholders in achieving an atmosphere of entrepreneurial development is necessary.

Learning environment needs to be developed to enable greater enhancement and realisation of entrepreneurial intent of the learners. Some of the indicators in this variable were found to enhance entrepreneurial intent of the learners as in the case of the university courses. By permitting students to explore issues related to creativity, learning is enhanced towards entrepreneurial mind-set.

Institutional environment should help form a second impacting variable in the study given the fact that most of the learners spend most of the time in this environment and therefore it can be a possible means by which transformation of the mind is achieved. Besides competitions, students must be encouraged to come up with ideas and should as well be encouraged by liaising with capital providers in business to venture into business start-ups.

Parental Motivation is essentially important as parents are often in touch with the learners. The role of parents is vital. The parental motivation can be more achieved as parents spend more time expressing ideas on business. The institution should as well organise a day in which parents meet and share on particular days their experiences that are business related.

Role Models have been known for their importance in guidance as well as inspiration as discussed in the preceding presentation. The active involvement of role models by institutions of learning is a necessity that need not be emphasised.



*Figure 6.4: SEI Model*

*Source: Author*

There is also a need for the relationship to be developed between each of the latent variables in the realisation of Student Entrepreneurial Intention (SEI). The use of an active role of the institution either by a specialised department or specific office by colleges with specific motivations is necessary for the model to be further developed.

## **6.10 CONCLUSION**

In this presentation the discussion critically handled the aspects related to the results which were presented in the previous chapter with the theory related to the different areas of study. This work afforded among others an opportunity to examine the demographic variables role in entrepreneurial intention in light of the personal value theory. The predictor learning variable is lacking for the student entrepreneurial intention at the institution and is a cause for concern. It is however interesting that parental motivation has a higher impact than the role models in student entrepreneurial intention of the learners. Entrepreneurial image of the learners is at a desirably higher level and may provide propensity for policy initiatives towards developing a stronger entrepreneurial

intent and behaviour of potential employees and economic participants. The SEI model has been proposed for enhancing entrepreneurial intent among learners at university in this study. The role of the institutions in activating each of the latent variables through connectivity with respective stakeholders is of vital importance. This may involve the setting up of an office responsible for evaluating the stakeholders in the institution for an entrepreneurial ecosystem review and development. The next chapter brings this journey to its conclusion.

## CHAPTER SEVEN

### CONCLUSIONS, RECOMMENDATIONS AND FURTHER RESEARCH

#### 7.1 INTRODUCTION

This study aimed at understanding whether the environment as well as learning impacts on the entrepreneurial intent of learners in a premier university. So far this study is conducted at a time when the entrepreneurial intent of learners is declining globally and incidentally the South African decline is much higher than the global decline as pointed out by the study.

The study on Institutional and Learning impact on Student Entrepreneurial Inclination or intention at the University of KwaZulu-Natal was conducted on a quantitative basis and was guided by the following objectives and hypotheses:

- ❖ To investigate the role of institutional environment in developing entrepreneurial inclination of students.
- ❖ To investigate whether learning stimulates students towards entrepreneurship.
- ❖ Analyse whether there is a relationship between role models and entrepreneurial inclination.
- ❖ To investigate whether entrepreneurial image increases entrepreneurial inclination/intention.
- ❖ To assess whether demographic variables such as gender, race and parental factors have any relationship with entrepreneurial inclination.
- ❖ To propose a model for the contextualization of an institutional environment and entrepreneurial inclination.

The above objectives were investigated alongside the following hypotheses:

#### *Hypothesis 1*

The University Of KwaZulu-Natal (UKZN) plays a role in stimulating the entrepreneurial intents of the learners.



### *Hypothesis 2*

The entrepreneurial inclination of students is likely to be increased by the nature of learning at the University.

### *Hypothesis 3*

The availability of entrepreneurial role models increases the entrepreneurial inclination of students.

### *Hypothesis 4*

Entrepreneurial inclination in students is stronger for:

Gender, Father's occupation and Mother's occupation

### *Hypothesis 5*

Entrepreneurial Image of the learners is related to the entrepreneurial intent.

## **7.2 INTERPRETATIONS OF FINDINGS**

One of the findings in this study was that the institutional environment inclines students to being entrepreneurial. This is in harmony with literature findings that the institutional environment inclines an individual to being entrepreneurial. The dominant entrepreneurial ecosystem in institutions is provided by the institutions themselves (Engel and Charron, 2006). The entrepreneurial ecosystem in institutions is composed of the entrepreneurial facilities, resources, people and atmosphere necessary to help establish entrepreneurship (Herrington, Kew, J. and Kew, P., 2011). Major institutions such as University of KwaZulu-Natal (UKZN) having held partnerships with industry and academia in entrepreneurial events, not least among which has been the hosting of the 19<sup>th</sup> International conference on SMEs, and the largest ever week-end start up workshop in the half of 2013 are notable. How effective the institution's environment in enhancing entrepreneurial inclination of learners was thus a subject of study in this work. It is also true that not all institutional environments may yield the same results and as such the need for Business schools in enhancing their environments with the necessary ecosystem elements that can stimulate such an atmosphere of entrepreneurial behaviours is significant. The schools would thus need to navigate the impact their present

environments have towards fostering entrepreneurial inclination of learners and make necessary amends where need be. The same principle is applicable to the learning environments as such, let alone the impact of role models on learner entrepreneurial inclination. The institutions that have had a rich ecosystem would need so far to assess the impact of their entrepreneurial ecosystem on student entrepreneurial intents. This consideration provides a practical ambit to institutions as such. Often there is need to keep checking the potential of new environmental changes towards the impact realised as a result.

It is important to recognise that though a lot of research has been done on entrepreneurs, however, it has been concentrated mainly on existing and pre-existing entrepreneurs rather than potential entrepreneurs - students. It has been evident that the study of entrepreneurial intentions has been increasingly (Autio, Keeley, Klofsten, Ulfdtedt, 1997; Krueger, 1993; Davidsson, 1995; Reitan, 1997) researched; for this reason attention is given at this study on the impact of institutional environment among other factors in influencing entrepreneurial intention. In the process of focusing on created ventures, it may be admitted that a pool of potential entrepreneurs has therefore been missed (Rasli, Khan, Malekifar and Jabeen, 2013) as a result. This pool is the students and this thesis focuses on them. The role of intention in entrepreneurial behaviour is significant and has been supported by prominent theories such as the Theory of planned Behaviour by Ajzen (1991) and Shapero in the SEE theory and model (Shapero and Sokol, 1980).

The role of entrepreneurial education which in itself is a learning scenario has been noted for enhancing entrepreneurial intents of learners (Frank and Luthje 2004). The likelihood of students becoming entrepreneurially minded as a result of the university role was a hypothesis that was proven to hold according to Keat, Selvarajah and Meyer (2011). In this empirical study, it was also found that students with self-employed mothers were entrepreneurially inclined as opposed to earlier studies that affirmed an influence of self-employed fathers in entrepreneurial inclination of students (Dunn 2004; Auken, Stephens et al 2006) as well as Keat et al (2011). This latter statement also depicts the role of entrepreneurial role models in enhancing entrepreneurial inclination which thus supports objective 2 of the study. The role of institutions in promoting entrepreneurial mind-set is thus highlighted as noted in literature findings of Keat, Selvarajah and Meyer (2011). This points to the title of the thesis of institutional and

learning impact on entrepreneurial inclination of learners. Conclusively this guides to objective one of the study which states the need *to investigate the role of institutional environment in developing entrepreneurial inclination of students.*

Most empirical research has not explored students as subjects of entrepreneurship; this explains why there is lack of understanding as to how public policies and Universities develop high tech business founders for example. The few findings have so far been inconsistent (Krueger, 1993; Reynolds, 1995). It has been therefore a significant effort on the part of this thesis to explore the unexplored area of students being considered as entrepreneurship subjects. As the study has shown, students have the potential for being treated as entrepreneurial subjects and the need to enrich institution's ecosystem is significant. This thesis has therefore contributed to understanding an institutional and learning impact of an entrepreneurial intent in an African premier University. It has also enabled the latent variables thereof to be explored.

### **7.3 STUDY LIMITATIONS**

Though this thesis has taken strides in underscoring the latent variables that surround the entrepreneurial intent of learners and pointed out the need in the learning and other aspects of the sample, it cannot be said that it perfectly achieved all that was there to be achieved. There is need to conduct comparative studies between private and public Universities in as far as the institutional and learning environments differ with a view to gaining leverage of how to address any gaps that require policy attention. There is also a need to conduct longitudinal studies to determine what impacts institutional and learning environments of higher institutions with regard to entrepreneurial intention.

### **7.4 THE PLOT OF THE STUDY**

The plot of this study has been divided into seven chapters. The first chapter termed as chapter one explored the significance of entrepreneurship to the economy, communities as well as to institutions. It deliberated on the entrepreneurial ecosystem as presented by Engel and Charron (2006). Various ecosystem models were explored; nonetheless, most of the models did have a University as a component of the ecosystem. The University however has its own nucleus with its ecosystem which is nonetheless unexplored. It is understood that exploration of entrepreneurship in the South African Universities has not

been done (Herrington, Kew, J., Kew, P., & Monitor, 2009). South Africa is however a beacon of hope in the African continent and therefore the study in a premier institution, the University of KwaZulu-Natal may have a significant impact. This chapter formed the foundation for the rest of the journey that was undertaken as it critiqued the various deliberations towards entrepreneurial mind-set.

In Chapter 2, the concepts and definitions are covered including the various types of entrepreneurship. It is within the consideration of definitions of entrepreneurship that this thesis brings to view the need to emphasise the overlooked aspect of creativity in entrepreneurial settings. Whenever the word ‘entrepreneurship’ is used the fundamental aspect of creative development is less associated to it especially in some policy circles. The main known aspect is that of starting a business. The varied definitions of entrepreneurship and lack of unanimity has an impact felt at policy level. The four categorisations of entrepreneurship as below have impacted on policy response:

- ❖ The setting up of high-growth and high-capitalisation firms (as opposed to low-growth and low-capitalisation ‘lifestyle’ businesses);
- ❖ Innovation and innovativeness leading to new products and new markets (the Schumpeterian tradition);
- ❖ Opportunity recognition (the Kirznerian tradition); and
- ❖ The creation of new organisations.

Following the above perceptions on the definitive aspects of entrepreneurship a government that supports high growth firms is likely to support firms that have high growth irrespective of the fact that they may not have been innovative (Sharma & Chrisma, 1999; Aldrich, 2011). Yet innovation is an important aspect inclusive in entrepreneurial endeavours. Innovation as noted in the literature section need not be technological but can be service oriented as markets get new service provision. The more comprehensive definition by which this thesis stands is on the European Union report stating that “*Entrepreneurship refers to an individual’s ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day to day lives at home and in society, makes employees aware of the context of their work and*

*better able to seize opportunities, and provide opportunities for entrepreneurs establishing a social or commercial activity.* (European Union Report, 2008). In this presentation, however, it is argued that this important aspect of creativity is a shared theme between business venture and other engagements not necessarily found in business start-ups. This finds its uses in public sectors as well as private enterprise. Creativity is what may make organisations survive perilous economic downturns. This is supported by the fact that entrepreneurial ventures remain profitable and are resilient to economic distress than just business ventures (Nieman, Hough and Nieuwenhuizen, 2008). A business venture against the entrepreneurial venture is deliberated upon as well as entrepreneurial economy vs a managed economy. An examination of these economies shows that there is a difference between these types of economies and that an entrepreneurial economy is necessary for an entrepreneurial flair development. Although there are different types of entrepreneurs ranging from small business entrepreneur to academic and policy entrepreneurs, yet the overarching fundamental positioning to all these is an entrepreneurial intent. Following the understanding that business is not an impulsive behaviour but one based on choices, intention is paramount in understanding such a behaviour. Moreover, intents can be influenced by various factors prior to the starting of such a behaviour. Such factors have included an institutional environment and learning among others as in the case of learners. It is recommendably important to underscore significance of institutions to be innovative in the development of their entrepreneurial environment as well as learning. This is possible as institutions review the impact of their learning and institutional environment as such.

Chapter two further deliberates on the categorisations of need based entrepreneurship and opportunity based entrepreneurship. The associated characteristics of the need based entrepreneurs is that of being unemployed otherwise they would not even start a business (Evan and Leighton, 1990; Storey, 1991; Masuda, 2006). Nonetheless, this debate among others gets challenged on the grounds that there was a negative correlation between local unemployment and self-employment or personal job creation among low and high ability workers in a longitudinal panel income study data of 1978-1983 and 1993-1995 (Deli 2011). Moreover in this study it was also discovered that the company size could lead to unemployment but this did not necessarily lead to self-employment. The criticisms labelled against need based entrepreneurs are that they do not create jobs, have marginal

growth, insignificant capital investment and high failure rates. These criticisms, however, may be contextual based given that a number of factors play a role in the success of entrepreneurial endeavours regardless of how one was drawn to an entrepreneurial task. It is also a debate that requires further enquiry not covered in this work.

The third chapter recognises the call for the learning of entrepreneurship in schools but brings to light the misconceptions about entrepreneurship; among which is the understanding that entrepreneurship is just about ‘business’ students doing their thing. These misconceptions are commonly embedded across the board despite the fact that high growth entrepreneurs come from science, engineering, medicine as well as arts (Wilson, 2013). The pillars as well as elements of an institutional entrepreneurial ecosystem are deliberated in this section. The third Chapter continues the journey of Chapter two in underscoring the theories that govern intention as well as learning. This leads to the deliberation of Ajzen’s Theory on Planned Behaviour (Ajzen, 1991) as well as Shapero theory on entrepreneurial Event (Shapero and Sokol, 1980) as well the learning theories. It is understood that intentions can be influenced by learning. It is at this point that the Bandura theory of learning gets engaged as well as approaches. Notable among the approaches is the Problem based learning approach which enriches learning environment and could have effect in the desirability of a task as pointed out by the Shapero’s entrepreneurial event theory.

Methodology was presented in the Fourth chapter of this work. Heretofore, the chapter in accordance with the objectives and aim of the study pointed the research problem as well as the research design that was employed in investigating the hypotheses and objectives of the study. In spite of the knowledge on entrepreneurship, intent was noted to be lacking among learners as per the research problem under investigation. The fifth chapter presented the results that were analysed using Statistical Package of Social Sciences (SPSS) as well as Partial Least Squares (PLS) Structural Equation Modelling (SEM). The use of PLS-SEM permitted the researcher to investigate the latent variables whose relationship could not be investigated by SPSS. The role of SPSS was achieved as it dealt with descriptive statistics as well as some of the inferential statistics of data but deeper analysis was achieved through performance of SEM analysis. Through this analysis the level of power of the various latent variables towards entrepreneurial intention of the students was observed as two model analyses were performed. This presentation and

analysis of results in this chapter introduced the discussion of results in the next chapter – the Sixth Chapter.

In Chapter Six, the discussion of the results in relation to theory and literature led to deliberation of debates surrounding issues such as the role of biographical factors in entrepreneurial intention. The role of personal values as opposed to biographical factors in entrepreneurial intention seems to hold weight in relation to the sample under study and does agree with the theoretical propositions advanced thus far. Parental Motivation is noted to have higher influence than role models in entrepreneurial intention of students yet at the same time it is notable that Student's entrepreneurial Image is the most strongest predictor latent variable for the chosen sample in entrepreneurial intention. Although literature has it that the learning environment influences entrepreneurial intention, it was unfortunately not the case in this study. Nonetheless, the institutional environment was found to have a greater impact in entrepreneurial image of the learners. Although intention is a precursor to an entrepreneurial activity, yet its development is somewhat an issue to be considered. It is for this reason that the thesis examines the various latent variables in regard to the entrepreneurial intents of the learners. The sample under study was the final year undergraduate students, students that are at the point of entering a working world. Either they enter as workers (employees) or as innovators on private capacity the one underlying factor does exist – the creative or innovative entrepreneurial factor that influences their existence in an out of school world. This creativity as contended by this thesis is necessary in the corporate world as well as in private enterprise and since the University is the place preparing learners to face the world, its environment and learning among others play a role. This role gets investigated in the hypotheses among other latent variables of this study. The role of Universities in relation to the economic development for which they are based has been advocated and can be realised through the graduates they produce for the market place. The University of KwaZulu-Natal is one of the notable public Universities in South Africa.

## **7.5 RECOMMENDATIONS**

Following the findings of the study it is recommended that the learning environment be enriched with project based learning in anticipation of fostering creativity of the learners.

The need to sustain the institutional ecosystem through various stakeholders should be taken into account. An institutional ecosystem is an important element in developing an entrepreneurial intent of the learners. An institutional ecosystem audit needs to be conducted in regular intervals to adapt to any unforeseen changes that are vital for the activation of entrepreneurial intent of the learners of the institution.

Increased collaboration and consultation with relevant stakeholders is relevant to the sustenance of the role the institutional environment is playing thus far. The relationship between the University and her stakeholders is noted by literature as an important ingredient in the student entrepreneurial intention development.

## **7.6 IMPLICATIONS**

This study enlightens one's ability in understanding the significance of the institutional environment as well as learning in capacitating the entrepreneurial intent of learners. It therefore follows the need that the development of the institutional environment is significant. As such this calls for the strengthening of the ecosystem that supports pedagogy in institutions. Policy makers can strengthen therefore the institutional environment for entrepreneurial purposes.

The role models play an important role and need to be strengthened as such for the speed of realising the development of an entrepreneurial intent. Developments that lead to stakeholder association with a view to strengthening such ties needs attention as such.

## **7.7 CONCLUSION**

The study on institutional and learning impact on student entrepreneurial intent at KwaZulu-Natal University was a study that underscored need to develop the learning environment. Though the institutional environment has sparked the entrepreneurial intent of the learners, yet the need to develop the learning component as well as the role model aspects remains an issue of note. The role of institutions as well as learning remains an important aspect for entrepreneurial intent development in institutions of learning and may remain so for unforeseeable time in the future.



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## APPENDIX A - TABLES

**Table A: A7- Final Year**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	83	100.0	100.0	100.0

### **SECTION B**

#### **B1 – ENTREPRENEURIAL INTENT**

*Table B1: Honourable People*

##### **B1a. Entrepreneurs are respectable and honourable people**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	1.2	1.2	1.2
Disagree	2	2.4	2.4	3.6
Unsure	10	12.0	12.0	15.7
Agree	36	43.4	43.4	59.0
Strongly agree	34	41.0	41.0	100.0
Total	83	100.0	100.0	

*Table B1b: Desirable Idea*

**B1b. Starting my own business is a desirable idea that I would want to pursue after my studies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	4	4.8	4.8	4.8
Diasagree	2	2.4	2.4	7.2
Unsure	7	8.4	8.4	15.7
Agree	35	42.2	42.2	57.8
Strongly agree	35	42.2	42.2	100.0
Total	83	100.0	100.0	

*Table B1c: Career Option*

**B1c. Entrepreneurship is a highly desirable career option**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	1.2	1.2	1.2
Diasagree	5	6.0	6.0	7.2
Unsure	13	15.7	15.7	22.9
Agree	43	51.8	51.8	74.7
Strongly agree	21	25.3	25.3	100.0
Total	83	100.0	100.0	

*Table B1d: Never career option*

**B1d. It has never come to my mind that entrepreneurship is even a career option.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	30	36.1	36.1	36.1
Disagree	38	45.8	45.8	81.9
Unsure	3	3.6	3.6	85.5
Agree	9	10.8	10.8	96.4
Strongly agree	3	3.6	3.6	100.0
Total	83	100.0	100.0	

*Table B1e: Risky Affair*

**B1e. Starting a business is a risky affair and am afraid of failing**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	11	13.3	13.3	13.3
Disagree	23	27.7	27.7	41.0
Unsure	11	13.3	13.3	54.2
Agree	28	33.7	33.7	88.0
Strongly agree	10	12.0	12.0	100.0
Total	83	100.0	100.0	

*Table B1f: Business Venture*

**B1f. I am actually planning on starting a business venture**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	6.0	6.1	6.1
	Diasagree	11	13.3	13.4	19.5
	Unsure	24	28.9	29.3	48.8
	Agree	28	33.7	34.1	82.9
	Strongly agree	14	16.9	17.1	100.0
	Total	82	98.8	100.0	
Missing	System	1	1.2		
Total		83	100.0		

**B2 – ENTREPRENEURIAL IMAGE***Table B2a: Business Idea*

B2a. It is a good idea in future to start my own business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	3.6	3.7	3.7
	Diasagree	4	4.8	4.9	8.6
	Unsure	4	4.8	4.9	13.6
	Agree	33	39.8	40.7	54.3
	Strongly agree	37	44.6	45.7	100.0
	Total	81	97.6	100.0	
Missing	System	2	2.4		
Total		83	100.0		

*Table B2b: Respectable Lot*

**B2b. Entrepreneurs are respectable and honourable people**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	1.2	1.2	1.2
Diasagree	1	1.2	1.2	2.4
Unsure	10	12.0	12.0	14.5
Agree	42	50.6	50.6	65.1
Strongly agree	29	34.9	34.9	100.0
Total	83	100.0	100.0	

*Table B2c: Job Creation*

**B2c. Entrepreneurship is basically about job creation**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	1.2	1.2	1.2
Diasagree	7	8.4	8.4	9.6
Unsure	1	1.2	1.2	10.8
Agree	47	56.6	56.6	67.5
Strongly agree	27	32.5	32.5	100.0
Total	83	100.0	100.0	



Table B2d: Admirable

**B2d. Personally I admire people who run their own businesses**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	2	2.4	2.4	2.4
Disagree	4	4.8	4.8	7.2
Unsure	3	3.6	3.6	10.8
Agree	32	38.6	38.6	49.4
Strongly agree	42	50.6	50.6	100.0
Total	83	100.0	100.0	

**B3 – Role Models’ significance**

Table B3a: Business related Lecturers

**B3a. Lecturers are a source of business related information for new ventures.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	4	4.8	4.8	4.8
Disagree	8	9.6	9.6	14.5
Unsure	9	10.8	10.8	25.3
Agree	45	54.2	54.2	79.5
Strongly agree	17	20.5	20.5	100.0
Total	83	100.0	100.0	

*Table B3b: Business friends*

**B3b. The main reason I have interest in starting my own business is because my friends are in business.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	21	25.3	25.3	25.3
	Diasagree	43	51.8	51.8	77.1
	Unsure	6	7.2	7.2	84.3
	Agree	11	13.3	13.3	97.6
	Strongly agree	2	2.4	2.4	100.0
	Total	83	100.0	100.0	

*Table B3c: Business Related friends*

**B3c. Friends are the main source of business related information to me.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	21	25.3	25.6	25.6
	Diasagree	46	55.4	56.1	81.7
	Unsure	7	8.4	8.5	90.2
	Agree	5	6.0	6.1	96.3
	Strongly agree	3	3.6	3.7	100.0
	Total	82	98.8	100.0	
Missing	System	1	1.2		
Total		83	100.0		

*Table B3d: Business Graduates*

**B3d. The graduates I have seen succeeding in their businesses have inspired me in starting business.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	4.8	4.8	4.8
	Diasagree	25	30.1	30.1	34.9
	Unsure	16	19.3	19.3	54.2
	Agree	28	33.7	33.7	88.0
	Strongly agree	10	12.0	12.0	100.0
	Total	83	100.0	100.0	

**B4 – INSTITUTIONAL ENVIRONMENT AND ENTREPRENEURSHIP**

*Table B4a: University people*

**B4a. It is my experience that at University you get to meet people with new ideas of venturing into business.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	6.0	6.1	6.1
	Disagree	5	6.0	6.1	12.2
	Unsure	11	13.3	13.4	25.6
	Agree	41	49.4	50.0	75.6
	Strongly agree	20	24.1	24.4	100.0
	Total	82	98.8	100.0	
Missing	System	1	1.2		
Total		83	100.0		

*Table B4b: Varsity Business Ideas*

**B4b. Being at varsity has provided me opportunity to reflect on developing business ideas.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	2.4	2.5	2.5
	Diasagree	6	7.2	7.4	9.9
	Unsure	4	4.8	4.9	14.8
	Agree	42	50.6	51.9	66.7

	Strongly agree	27	32.5	33.3	100.0
	Total	81	97.6	100.0	
Missing	System	2	2.4		
Total		83	100.0		

*Table B4c: University Learning Business*

**B4c. There is no better place to learn about starting your own business than at university.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	9.6	9.9	9.9
	Diasagree	19	22.9	23.5	33.3
	Unsure	18	21.7	22.2	55.6
	Agree	25	30.1	30.9	86.4
	Strongly agree	11	13.3	13.6	100.0
	Total	81	97.6	100.0	
Missing	System	2	2.4		
Total		83	100.0		

*Table B4d: Entrepreneurial Examples*

**B4d There are more business or entrepreneurial examples at classroom teaching at the university.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	7.2	7.3	7.3
	Diasagree	21	25.3	25.6	32.9
	Unsure	22	26.5	26.8	59.8
	Agree	31	37.3	37.8	97.6
	Strongly agree	2	2.4	2.4	100.0
	Total	82	98.8	100.0	
Missing	System	1	1.2		
Total		83	100.0		

*Table B4e: University and Entrepreneurship*

**B4e. The University needs to establish more entrepreneurial and business programs to help students start their own businesses.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.2	1.2	1.2
	Diasagree	1	1.2	1.2	2.5
	Unsure	10	12.0	12.3	14.8
	Agree	29	34.9	35.8	50.6

Strongly agree	40	48.2	49.4	100.0
Total	81	97.6	100.0	
Missing System	2	2.4		
Total	83	100.0		

*Table B4f: University Inspiration*

**B4f. I have been inspired by the university environment to start my own business.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	5	6.0	6.1	6.1
Diasagree	25	30.1	30.5	36.6
Unsure	17	20.5	20.7	57.3
Agree	29	34.9	35.4	92.7
Strongly agree	6	7.2	7.3	100.0
Total	82	98.8	100.0	
Missing System	1	1.2		
Total	83	100.0		

*Table B4g: Business Students entrepreneurship*

**B4g. Entrepreneurial activities are mainly limited to business students.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	14	16.9	17.1	17.1
	Diasagree	27	32.5	32.9	50.0
	Unsure	16	19.3	19.5	69.5
	Agree	21	25.3	25.6	95.1
	Strongly agree	4	4.8	4.9	100.0
	Total	82	98.8	100.0	
Missing	System	1	1.2		
Total		83	100.0		

*Table B4h: Entrepreneurial Encouragement*

**B4h Students are normally encouraged to pursue their entrepreneurial ideas at university.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	10.8	11.0	11.0
	Diasagree	21	25.3	25.6	36.6
	Unsure	20	24.1	24.4	61.0
	Agree	27	32.5	32.9	93.9
	Strongly agree	5	6.0	6.1	100.0



Total	82	98.8	100.0	
Missing System	1	1.2		
Total	83	100.0		

**B 6 – PARENTAL MOTIVATION**

*Table B6a: Motivational father*

**B6a. My father motivates me to start a business of my own.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	9	10.8	11.3	11.3
Disagree	28	33.7	35.0	46.3
Unsure	11	13.3	13.8	60.0
Agree	24	28.9	30.0	90.0
Strongly agree	8	9.6	10.0	100.0
Total	80	96.4	100.0	
Missing System	3	3.6		
Total	83	100.0		

Table B6b: Motivational Mother

**B6b. My Mother motivates me to start my own business.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	6.0	6.3	6.3
	Diasagree	29	34.9	36.3	42.5
	Unsure	6	7.2	7.5	50.0
	Agree	24	28.9	30.0	80.0
	Strongly agree	16	19.3	20.0	100.0
	Total	80	96.4	100.0	
Missing	System	3	3.6		
Total		83	100.0		

Table B6c: Inspirational Father

**B6c. My father inspires me to be creative.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	10.8	11.3	11.3
	Diasagree	17	20.5	21.3	32.5
	Unsure	10	12.0	12.5	45.0
	Agree	28	33.7	35.0	80.0
	Strongly agree	16	19.3	20.0	100.0

Total	80	96.4	100.0	
Missing System	3	3.6		
Total	83	100.0		

*Table B6d: Inspirational Mother*

**B6d. I have been inspired by my mother to be innovative.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	4	4.8	5.0	5.0
Diasagree	16	19.3	20.0	25.0
Unsure	7	8.4	8.8	33.8
Agree	30	36.1	37.5	71.3
Strongly agree	23	27.7	28.8	100.0
Total	80	96.4	100.0	
Missing System	3	3.6		
Total	83	100.0		

## APPENDIX B: QUESTIONNAIRE

### QUESTIONNAIRE

To Only Final Year Candidates in the Undergraduate Programs in the College Of Law and Management at the University Of KwaZulu-Natal.

Dear esteemed respondents,

It is an honour to inform you that after careful consideration, you were chosen to participate in this study, given the experience you have had both with the university as well as its environment. The study, among other factors, intends understanding how the university environment as wells as learning impact on entrepreneurial intentions. This study is voluntary and you are kindly requested to answer all the sections for a meaningfully successful endeavour of this important task. This study may help policy makers factor in your understand in essential service delivery.

The 7 paged questionnaires is expected to take just around 30 minutes or less of your time. Should there be any further queries; feel free to contact any of the numbers below.

Many thanks for your cooperation.

John: 0825208620; E-mail: [apostlejhn@gmail.com](mailto:apostlejhn@gmail.com), Prof. Migiros. (Head and Dean of Graduate School of Business and Leadership): [Migiros@ukzn.ac.za](mailto:Migiros@ukzn.ac.za). Tel 031-2608014

Mariette Snyman, HSSREC Office: Tel: 031 -260 8350. E-mail: [snymanm@ukzn.ac.za](mailto:snymanm@ukzn.ac.za)

#### **Consent Clause:**

Kindly please tick or put an x in the box below to show your consent for the study.

I, the respondent, acknowledge my freedom to continue or withdraw from this study at my wish or desire.

**SECTION A (Tick/write where necessary)**

AGE:			
GENDER:	1- Male	2 - Female	
PROGRAM/COURSE:			
MOTHER'S OCCUPATION:	1- Business Owner	2-Non-Business owner	
FATHER'S OCCUPATION:	1- Business Owner	2- Non-Business owner	
RACE:			
SCHOOL AND YEAR			

**SECTION B**

**You are requested to circle/tick the number that corresponds to your response to the statement below.**

<b>Entrepreneurial Intent</b>					
Please circle the number that matches your response to the statements below:	I Strongly Agree	I agree	Unsure	I disagree	I Strongly disagree
1.I prefer to work in a big organisation than a small one	1	2	3	4	5
2 Starting my own business is a desirable idea that I would want to pursue after my studies.	1	2	3	4	5
3. Entrepreneurship is a highly desirable carrier option.	1	2	3	4	5
4 It has never come to my mind that entrepreneurship is even a career option.	1	2	3	4	5
5. Starting a business is a risky affair	1	2	3	4	5

and am afraid of failing.					
6. I am actually planning on starting a business venture.	1	2	3	4	5

### **Entrepreneurial Image**

7. It is a good idea in future to start my own business.	1	2	3	4	5
8 Entrepreneurs are respectable and honourable people.	1	2	3	4	5
9 Entrepreneurship is basically about job creation.	1	2	3	4	5
10. Personally I admire people who run their own businesses.	1	2	3	4	5

### **Role Models' Significance**

11. Lecturers are a source of business related information for new ventures.	1	2	3	4	5
12 The main reason I have interest in starting my own business is because my friends are in business.	1	2	3	4	5
13 Friends are the main source of business related information to me.	1	2	3	4	5
14 The graduates I have seen succeeding in their businesses have inspired me in starting business.	1	2	3	4	5

### **Institutional environment and entrepreneurship**

15. It is my experience that at University you get to meet people with new ideas of venturing into business.	1	2	3	4	5
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16. Being at varsity has provided me opportunity to reflect on developing business ideas.	1	2	3	4	5
17. There is no better place to learn about starting your own business than at university.	1	2	3	4	5
18 There are more business or entrepreneurial examples at classroom teaching at the university.	1	2	3	4	5
19. The University needs to establish more entrepreneurial and business programs to help students start their own businesses.	1	2	3	4	5
20 I have been inspired by the university environment to start my own business.	1	2	3	4	5
21 Entrepreneurial activities are mainly limited to business students.	1	2	3	4	5
22. Students are normally encouraged to pursue their entrepreneurial ideas at university.	1	2	3	4	5

### **Learning and Entrepreneurship**

23. A university course prepares one for an entrepreneurial career.	1	2	3	4	5
24. The course I have undertaken at university provided me with a new and different experience.	1	2	3	4	5
25. The university course has helped me to develop my entrepreneurial skills and knowledge.	1	2	3	4	5
26. I have been empowered to deal with ambiguity in a real world by attending a university course.	1	2	3	4	5

27. Since I took this course, I now have better understanding of business.	1	2	3	4	5
28. One notable thing that my instructor did was to make the course more relevant to the real world.	1	2	3	4	5
29. My interest towards new venture creation has been raised during the course of my studies.	1	2	3	4	5

### **Parental Motivation**

30 My father motivates me to start a business of my own.	1	2	3	4	5
31 My Mother motivates me to start my own business.	1	2	3	4	5
32. My father inspires me to be creative.	1	2	3	4	5
33. I have been inspired by my mother to be innovative.	1	2	3	4	5



## APPENDIX C: GATE KEEPERS LETTER



3 December 2013

Mr John Amolo  
Graduate School of Business and Leadership  
College of Law and Management and Studies  
Westville Campus  
Email: [apostlejohn@gmail.com](mailto:apostlejohn@gmail.com)

Dear Mr Amolo

### RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

*"Institutional and learning impact on student entrepreneurial inclination at University of KwaZulu-Natal"*.

It is noted that you will be constituting your sample with a request for responses on the website. A copy of this letter (Gatekeeper's approval), the ethical clearance and the questionnaire must be sent to [govenderlog@ukzn.ac.za](mailto:govenderlog@ukzn.ac.za) or [ramkissoobh@ukzn.ac.za](mailto:ramkissoobh@ukzn.ac.za) which will be placed on UKZN notice system <http://notices.ukzn.ac.za>. You are not authorized to distribute the questionnaire to staff and students using Microsoft Outlook address book.

Please note that the data collected must be treated with due confidentiality and anonymity.

Yours sincerely

  
\_\_\_\_\_  
Professor J J Meyerowitz  
REGISTRAR

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Office of the Registrar  
Postal Address: Private Bag X24001, Durban, South Africa  
Telephone: +27 (0) 31 260 8005/2200 Facsimile: +27 (0) 31 260 7624/2204 Email: [registrar@ukzn.ac.za](mailto:registrar@ukzn.ac.za)  
Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

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## APPENDIX D: ETHICAL CLEARANCE



09 May 2014

Mr John Amelo (213573145)  
Graduate School of Business & Leadership  
Westville Campus

Protocol reference number: HSS/1430/0130

Project title: Institutional and learning impact on student entrepreneurial inclination at University of KwaZulu-Natal

Dear Mr Amelo,

### Approval - Amendment

I wish to confirm that your application dated 22 April 2014 in connection with the above mentioned project has been approved as follows:

- Pilot study to be conducted prior to study (50 participants)

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

  
Dr Sheenika Singh (Chair)

/ms

cc: Supervisor: Dr Stanley Handman  
cc: Academic Leader Research: Dr E Musapo  
cc: School Administrator: Ms Zarina Ballyraj

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Humanities & Social Sciences Research Ethics Committee

Dr Sheenika Singh (Chair)

Westville Campus, Green Mboke Building

Postal Address: Private Bag 201001, Durban 4000

Telephone: +27 (0) 31 260 2967/03044557 Facsimile: +27 (0) 31 260 4690 Email: [gsbs@ukzn.ac.za](mailto:gsbs@ukzn.ac.za) / [ethics@ukzn.ac.za](mailto:ethics@ukzn.ac.za) / [ethics@ukzn.ac.za](mailto:ethics@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



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