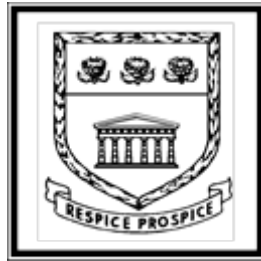


**University of the Western Cape**

**FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES**



Entrepreneurial learning, Opportunity  
Recognition and Development – Evaluating the  
Impact of a Training Programme at TSiBA  
Education, Cape Town, South Africa.

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Dissertation prepared in partial fulfillment of the requirements for the Degree of  
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Entrepreneurial Opportunity Recognition and Development

Impact Assessment

## **ABSTRACT**

### **Entrepreneurial learning, Opportunity Recognition and Development**

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The youth of South Africa is currently faced with high levels of unemployment and poverty. This raises concerns about the future of the South African people and its economy. Consequently, much is needed to develop the youth to allow for a prosperous future. A decrease in poverty and unemployment was found to be linked to an increase in education. Entrepreneurial education can have a significant impact on entrepreneurial success. This research paper aims to assess the influence of entrepreneurial education and training on students' entrepreneurial development.

To ensure a comprehensive assessment of the development of students, I utilised a mixed methodology to assess students both quantitatively and qualitatively. The study assessed a sample of students from South Africa and the United States of America who jointly partook in a two-week entrepreneurial education and training programme at TSiBA Education, Cape Town, South Africa. Entrepreneurial education and training had a positive effect on the students' entrepreneurial development, entrepreneurial orientation and intentions to start a business. While entrepreneurial orientation aids the exploitation of business opportunities, before opportunities can be exploited they must be recognised. Bringing into question the link between students' entrepreneurial orientation and their abilities to recognise and develop opportunities into successful ventures. To explore this I interviewed two participants and found the high entrepreneurially orientated participant to exhibit greater opportunity recognition and development abilities, compared to the low entrepreneurially orientated participant.

I concluded by finding that although differences do exist between high and low entrepreneurially orientated students, entrepreneurial education and training could positively influence students' entrepreneurial orientation and assist in the development of entrepreneurs. The results suggest that TSiBA Education should attempt to increase the duration of the entrepreneurial programme to maximize the influence of the entrepreneurial education and training.

## DECLARATION

I declare that *Entrepreneurial learning, Opportunity Recognition and Development* is my own work, that it has not been submitted for any degree or examination in any other university, and that all sources I have used or quoted have been indicated and acknowledged by complete references.

Full name: Mogamat Adeeb Samsodien

Date: 10 January 2017

Signed: *MA Samsodien*



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I would like to thank TSiBA Education and the University of the Western Cape for empowering me.

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## CHAPTER 1: INTRODUCTION

The development of successful entrepreneurs has become a major priority in South Africa in recent years. Youth entrepreneurship can play an important role in South Africa's efforts to promote economic and social prosperity. However, unemployment rates in South Africa are increasingly higher in the lower age groups with the highest occurrence in the group aged 15 to 35 years (Statistics South Africa, 2015). "Over the period 2008 – 2015, the number of discouraged work-seekers rose by 1.2 million" (Statistics South Africa, 2015). The age profiles of discouraged work-seekers (people who have given up on finding employment) indicate that the highest concentration is in the younger age groups of 15 to 34 years (Statistics South Africa, 2015). If we consider the millions of South African youth that has given up on finding employment, we can argue that not enough is being done to include the younger generation in the economy of this country and to stimulate self-employment for future sustainability. Consequently, 56% of South Africans (aged 17 and younger) are living below the poverty line (Brand South Africa, 2016).

Through further investigation, it was found that a decrease in poverty and unemployment was linked to an increase in education (Brand South Africa, 2016). Moreover, entrepreneurial education also has a significant impact on entrepreneurial success (Maas and Herrington, 2007). In addition, entrepreneurial education is key in the development of skills, contacts and opportunities vital to business success (Botha et al., 2007). Therefore, entrepreneurial education could be South Africa's solution to foster the development of entrepreneurs and new businesses to address the high levels of unemployment and poverty.

However, the development of entrepreneurs in South Africa is not a simple task given the influence of demographic factors on entrepreneurial education and training. Issues of gender, age and race also influence the development of entrepreneurs in South Africa.

Literature on female entrepreneurship suggests that women are more disadvantaged than men in terms of entrepreneurial opportunities and resources (Smith-Hunter and Boyd, 2004). Moreover, males are more likely than females to be involved in early stage entrepreneurial activity and business development (Herrington et al., 2014). This demands that training interventions designed for women requires greater nurturing in self-confidence, self-esteem and business skills (Botha et al., 2007).

In South Africa early-stage entrepreneurial activity is lower in the 18 to 24 years age category. Although it is in line with general Global Entrepreneurship Monitor (GEM) trends (Herrington et al., 2014), this phenomenon is of concern in the South African context, specifically when considering the disproportionately high youth unemployment figures, thus highlighting the importance of youth entrepreneurial training and development.

Furthermore, data from 2008 to 2015 Global Entrepreneurship Monitor (GEM) report outlines significant changes in the ratio of entrepreneurs by population group. In 2008, the lowest among the group were Black Africans, followed by Coloureds, Indians/ Asians and Whites (Herrington et al., 2014). Whereas in 2014, Coloureds and Indians showed a healthy increase while Whites recorded their lowest levels of opportunity-driven entrepreneurial activity (Herrington et al., 2014). These differences in entrepreneurial activity call for a renewed focus on entrepreneurship research, particularly for the identification of problem areas where training interventions will have the greatest impact.

The Tertiary School in Business Administration (TSiBA) is a private non-profit higher learning institute addressing the previously mentioned demographic categories and focuses on the development of entrepreneurs in Cape Town, South Africa. Moreover, TSiBA Education is an exceptional example of an institution that attempts to address poverty and unemployment through entrepreneurially focused initiatives. I have firsthand experience of such initiatives being a graduate of TSiBA Education (TSiBA Education, 2016). It was my enrolment and involvement in entrepreneurially focused initiatives, which initially served as a motive to focus my study in the field of entrepreneurship.

TSiBA Education has adopted the mission of addressing demographic inequalities and developing entrepreneurs by offering previously disadvantaged students full bursaries to not only achieve a bachelor's degree in business administration but also a golden opportunity to develop and undertake entrepreneurial ventures. One of the outstanding practical programmes that the higher learning institute offers is a programme administered jointly with North Eastern University (NEU), from Boston, United States of America (Northeastern University, 2016). The programme consists of American and South African students, who team up and consult to SMEs within Cape Town, South Africa. This programme exists as a valuable practical learning curve for both students and entrepreneurs (see Appendix 4 – for more information about the entrepreneurial education and training programme).

This study has evolved incrementally. The initial phases of conceptualizing the study aimed to uncover the effect that the jointly run programme has on students' entrepreneurial abilities. This led me to question, "How do entrepreneurs learn to recognise and develop opportunities into successful ventures?"

Through further research, I found that Entrepreneurial Alertness (EA) was linked to Entrepreneurial Orientation (EO), and individuals with higher Entrepreneurial Orientation (EO) would exhibit more Entrepreneurial Alertness



(EA) (De Koning and Brown, 2002). De Koning and Brown (2002) elaborated that researchers assume that the intervening variables between EO and performance are the entrepreneurial process (e.g. identification of opportunities, initiation of new activities and growth). De Koning and Brown (2002) found a more direct link between EO and the entrepreneurial process, specifically opportunity alertness. Additionally, EO was found to be influential in business performance, profitability, growth, and product innovation within entrepreneurial firms (Bolton and Lane, 2012).

Since EO is an important causal factor in the success of organisations (Rauch et al., 2009), developing an instrument that measures an individual's EO, would be beneficial to understand the propensity of an individual's entrepreneurial performance. Similarly, the instrument would be useful in measuring students' propensity to perform as entrepreneurs.

The instrument measuring an Individual's Entrepreneurial Orientation (IEO) was developed and validated by Bolton and Lane (2012) and later used in numerous studies (Ferreira et al., 2015; Ibrahim and Lucky, 2014; Robinson and Stubberud, 2014; Vidic, 2013; Vogelsang, 2015) to measure the effect of various entrepreneurial activities and initiatives. Bolton and Lane (2012) suggested the IEO test would be valuable in facilitating entrepreneurial teaching, as the assessment would assist in structuring the programme to greatly increase students' cohesiveness. They further suggested that understanding IEO would be useful to business incubators (similar to TSiBA Education's entrepreneurship centre) in assessing new business proposals. I have therefore chosen the IEO test developed by Bolton and Lane (2012) to quantitatively measure the effect of entrepreneurial education on students' entrepreneurial abilities.

The main research problem is to investigate: "the impact of entrepreneurial education in developing EO in students and their intention to start a business." The research problem will be explored through the following research aims:

- To measure the impact of entrepreneurial education on students' entrepreneurial orientation.
- To understand students' intention to start a business.
- To understand the influence of differences in demographics and family business on students' intentions to start a business and IEO.
- To understand the opportunity recognition and development abilities related to student's intention to starting a business and IEO.

A mixed methodology will be utilised to (1) quantitatively measure participating students' EO before and after participating in the entrepreneurial programme presented by TSiBA Education and NEU to students from TSiBA Education and NEU; and (2) qualitatively assess students opportunity recognition and development abilities through in-depth interviews. The quantitative measure will be used to quantify the impact of the programme on students' EO and attitude towards starting a business; while the qualitative measure would be used to better understand the level of opportunity recognition and development abilities related to participants' EO. Furthermore, the study involves a control group of non-participating students from TSiBA Education who will be measured

quantitatively before and after the programme, to account for the natural change in entrepreneurial orientation over the period.

The literature review was guided by an attempt to understand entrepreneurial opportunity recognition and development and the impact of higher learning institutes in developing entrepreneurs. The reviewed articles were sourced mainly via Google scholar. Importance was given to the relevance of the literature and the popularity of the article cited by other academics.



## CHAPTER 2: LITERATURE REVIEW

The literature review stems from an enquiry into entrepreneurial education, which developed into the exploration of Entrepreneurial Orientation (EO) linking to performance, Entrepreneurial Attitudes Towards Enterprise (ATE) and Entrepreneurial Alertness (EA). These bodies of literature encapsulate the following review. The review begins with a brief explanation of EO. Followed by the progression in theory from EO to the development of IEO. Concluding with an overview of entrepreneurial intentions, opportunity recognition and development.

### Entrepreneurial Orientation (EO)

In their meta-analysis of EO and business performance Rauch et al., (2009, p.762) define EO at the organisation level as “the strategic-making processes that provide organisations with a basis for entrepreneurial decisions and actions”. The constructs of EO have been described to consist of three to five behaviours that are derived from business strategy and entrepreneurship literature (Covin and Slevin, 1989).

These behaviours include and are defined by Rauch et al., (2009, p.763 – 764) as follows:

*Innovativeness* – “Predisposition to creativity and experimentation through introduction of new products and services as well as technological leadership via research and development in new processes.”

*Risk taking* - "Taking bold action by venturing into the unknown, borrowing heavily and/or committing significant resources to ventures in uncertain environments."

*Proactiveness* - "An opportunity-seeking, forward-looking perspective characterised by new products and services ahead of the competition and acting in anticipation of future demand."

*Autonomy* - "Independent action undertaken by entrepreneurial leaders or teams directed at bringing about a new venture and seeing it to fruition."

*Competitive aggressiveness* - "Intensity of a firm's efforts to outperform rivals."

Innovativeness, risk-taking and proactiveness have been used in majority of EO research (Lyon et al., 2000; Rauch et al., 2009). These three factors accounted for 60% of total variance in the study of EO after principle component analysis (Bolton and Lane, 2012). EO has further been studied predominantly in relation to a firm’s performance, and has been found to explain 24% of performance variance (Rauch et al., 2009). EO therefore describes the behaviour of a firm and serves as an indicator of the firm’s performance (Rauch et al., 2009).

An organisation is defined as a collection of individuals and therefore a collection of individual behaviours. Bolton and Lane (2012) argue that because EO

measures individuals collectively, individuals can be measured separately with the same variables. Therefore it could be argued that if EO predicts a firm's performance, measuring an individual's EO could explain an individual's entrepreneurial performance (Bolton and Lane, 2012).

"When considering the EO of individuals the question to be addressed is "What personal characteristics or attitudes might increase their propensity to engage in and be successful at entrepreneurial activities?" Three streams of research impact the answer to this question: (1) an individual's environment; (2) personality traits; and (3) attitudes towards being entrepreneurial impacted by social influences (Levenburg and Schwarz, 2008).

### **Personality Traits**

Individual entrepreneurial traits was a popular field of research in the 1980's and 90's, which stemmed from personality traits research. Traits were found to be long lasting and not varying much over time. Furthermore, traits were often examined as part of the entrepreneurial tendencies of an individual (Rauch and Frese, 2009). Traits research yielded mixed results as it was found that there was no set of personality traits that best defined a successful entrepreneur.

Many scholars (Athayde, 2009; Cromie, 2000; Johnston et al., 2009; Robinson et al., 1991; Van Wyk and Boshoff, 2004) argue that traits research has not been successful in entrepreneurship research. However, traits research was regarded as being useful for simplistic tests based on traits for exploration and descriptive purposes (Caird, 1991) and to explain some aspects of why people become entrepreneurs (Cromie, 2000).

Gartner (1989) concluded that behavioural approaches provide a more productive perspective for research on entrepreneurship (Gartner, 1989). Moreover, Robinson et al., (1991) also concluded that attitude's is a better approach to the description of entrepreneurs than either personality characteristics or demographics.

### **Attitudes and behaviours**

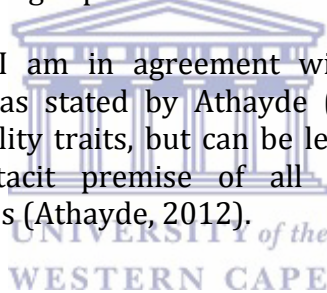
Steenekamp et al., (2011, p.317) states "literature on entrepreneurship suggests that the attitude's approach to research is largely based on the theory of planned behaviour (TPB), as proposed by Ajzen (1991). According to TPB, behaviour can be predicted by intentions, and these intentions, in turn, can be predicted by the attitude towards the behaviour, subjective norms regarding the behaviour, and perceived control over the behaviour (Ajzen, 1991)."

The focus of measurement in this study is therefore not on the isolated traits of the students, but rather on the attitudes (Athayde, 2009) toward behaviours based on traits measuring IEO (Bolton and Lane, 2012). Therefore, it is important that we do not consider personality traits in isolation but in addition to the attitudes of individuals that shape their behaviour.

Packham et al., (2010) found that attitudes to entrepreneurship can be influenced by exposure to entrepreneurial education; and the impact is moderated by a number of factors including: gender, cultural and industrial heritage (Packham et al., 2010). However, can entrepreneurship be taught in a classroom? Deakins and Freel (1998) appropriately describe entrepreneurial learning as a practical theory, defined as a living body of learning, which emerges from the intuitive and tacit resource of practice, combining thinking and acting in person. Moreover, Deakins and Freel (1998) argue that entrepreneurs learn and adjust their behaviour within the entrepreneurial process (Deakins and Freel, 1998).

Therefore, it could be argued that for entrepreneurship to be taught in a classroom, there needs to be a practical component to the programme, in which students are exposed to the practicality of entrepreneurship. We could label this practical exposure as experiential learning, which is also known as learning from experiences or simply as learning by doing. Experiential learning can be defined as a “combination of knowledge and reactions to critical events, rather than through planned development” (Deakins and Freel, 1998). Cope (2011) labels experiential learning as a “learning journey” where critical self-reflection plays an important role in converting experience into learning (Cope, 2011).

Based on these findings, I am in agreement with the implicit premise of entrepreneurial education as stated by Athayde (2012) that entrepreneurial skills are not fixed personality traits, but can be learnt and developed through experience, which is a tacit premise of all experiential learning-based entrepreneurial programmes (Athayde, 2012).



### **Individual Entrepreneurial Orientation (IEO) and Intention**

Through this research I aim to measure the impact of entrepreneurial education on students Entrepreneurial Orientation (EO). However, this is not easily measured as researchers studying entrepreneurship have used a variety of traits and attitudes to measure EO. Given the variety and mixture of constructs, there is no standard scale to measure an individual's EO (Bolton and Lane, 2012). However, innovation and risk taking are common constructs in entrepreneurial traits and attitude studies. Some of the constructs used by researchers that Bolton and Lane (2012) identified are:

- Achievement, personal control, innovation and self-esteem (Robinson et al., 1991).
- Managerial motivation, self-management, organisation effectiveness and power (Parnell et al., 2003).
- Self-efficacy, social support, normative support, parent-sibling ownership and family demands (Baughn et al., 2006).
- Need for achievement, locus of control, tolerance for ambiguity (Gürol and Atsan, 2006; Okhomina, 2007), risk-taking propensity, innovativeness and self-confidence (Gürol and Atsan, 2006).



On the basis that EO measures a firm's behaviours and was found to positively correlate with improved performance (Covin and Slevin, 1989; Lumpkin and Dess, 1996; Runyan et al., 2008), Bolton and Lane (2012) found it logical to use the scale developed to measure EO to measure an individual's EO. Bolton and Lane (2012) argued that measuring students' perceptions of their behaviours especially willingness to take risks, innovativeness and proactiveness may be an indication of how successful these individuals might be as entrepreneurs. In this study, I will use the IEO test developed by Bolton and Lane (2012) to measure students' EO before and after an entrepreneurial programme, with the aim of assessing the effect of entrepreneurial education and training on students' EO.

Students have been the primary focus of entrepreneurial propensity research as they are a convenient sample group and have yet to enter the business world (Bolton and Lane, 2012). Similarly, students are the primary focus of this research. Students are also interesting to research as it was found that students from different countries have differing propensities towards entrepreneurship (Levenburg and Schwarz, 2008). My sample will therefore consist of American and South African students to further explore the influence of nationality on the propensity towards starting a business.

With a particular focus on education, Harris et al., (2007) and Packham et al., (2010) examined entrepreneurial attitudes and how they might be influenced through classroom education. It was found that social influences to entrepreneurial ventures could have an impact on an individual's attitude towards starting a business (Robinson et al., 1991) and that entrepreneurial education and training had a positive impact on entrepreneurial activity (Packham et al., 2010).

Athayde (2012) tested the effectiveness of participation in an entrepreneurial programme on the attitude of students towards starting an entrepreneurial venture. The test scores of participants and non-participants were compared both before and after the programme. The following two hypotheses were supported: (1) participants' test scores will be higher than non-participants' scores; and (2) participants' scores will be significantly higher after participation compared with their pre-test scores (Athayde, 2012).

Similarly in this study, I will attempt to measure students' attitudes towards starting a business before and after an entrepreneurial programme, with the aim of assessing the impact of entrepreneurial education and training on the students' attitude towards starting a business.

Zhao et al., (2010) found that the intention to become an entrepreneur was correlated with actually becoming one (Zhao et al., 2010). Therefore, researching students' intentions to start a business can be achieved by simply asking students if they intend on starting a business.

Given the simplicity of researching students' intentions to start a business, some of the latent factors that influence intention to start a business as elaborated on by the following authors cannot be ignored.

Packham et al., (2010) highlighted gender, culture and industrial heritage as factors that moderate entrepreneurial education's influence on entrepreneurial attitude towards starting a business. Packham et al., (2010) further highlighted that young black people in the United States of America showed more desire for self-employment than other ethnic groups.

Harris et al., (2007) found that experience in family business is strongly related with entrepreneurial attitudes towards starting a business. Peterman & Kennedy (2003) and Harris et al., (2007) found that increased exposure to entrepreneurial businesses increases the likelihood that the individual will be interested in starting a business.

Robinson et al., (1991) found that attitudes towards being an entrepreneur are either positive or negative, and can change depending on exposure to outside influences. An example found in the preliminary study was that one participant who previously ran his own business, scored low on the IEO test, but the low score was a result of his business failing. Consequently, he now fears taking the risk of starting another business. His attitude has therefore changed towards taking risks due to past failure (Robinson et al., 1991). Ekanem and Wyer (2007) reiterated this preliminary finding by stating that an entrepreneur learns through reflecting on past failures and adjusting their behaviours accordingly (Ekanem and Wyer, 2007).

Given that our sample group will consist of students from the United States of America and South Africa. I will further assess the influence of differences in demographics and family business on students' intentions in starting a business.

The Attitude Towards Enterprise (ATE) scale developed by Robinson et al., (1991) is the most robust scale in measuring individual's attitudes towards starting a business (Bolton and Lane, 2012). The ATE scale has been further utilised in researching secondary school learners in South Africa, and was recommended for further research of young learners in South Africa (Steenekamp et al., 2011). However, a shortfall of the ATE test is that the scale does not take into account risk-taking. Additionally, the assessment questions were directed towards student's experience within a business and not to students without any business exposure. I have therefore chosen to utilize the IEO scale by Bolton and Lane (2012) as a measurement of attitude towards starting a business, instead of the ATE scale, as the IEO scale addresses the shortfalls of the ATE scale developed by Robinson et al., (1991).

Bolton and Lane (2012) used EO as a consistent base to develop the IEO test and further assessed whether the IEO scores were in anyway correlated with the intention to start a business. They proposed that the stronger the IEO score, the stronger the intention of individuals wanting to be entrepreneurs (i.e. start a business). This study will therefore utilize the IEO test developed by Bolton and Lane (2012) to understand the relationship between individual's intentions to become an entrepreneur and their IEO score.

## **Opportunity recognition and development**

Since 1973 when Kirzner argued that the discovery of opportunities is the core issue of entrepreneurship, the issue of opportunity recognition has slowly increased in importance for economics and management researchers (Kirzner, 1973). In 1980 Vesper cited several ways that new business ideas might be identified and suggested that one way could be through a systematic search (Vesper, 1980). A year later Cooper conversely suggested that entrepreneurs informally and intuitively perceive opportunities based upon some gut “feel” for the market (Cooper, 1981). These two studies in large part signaled the start of opportunity recognition for entrepreneurship researchers (De Koning and Brown, 2002).

High performing entrepreneurial-oriented firms are successful in exploiting business opportunities (De Koning and Brown, 2002). Similarly, it could be argued that individuals, who intend on starting a business and possess a high performing EO, might be successful in exploiting opportunities. However, before opportunities can be exploited, they must be recognized and before opportunities can be recognized, individuals must be attuned or alert to them (De Koning and Brown, 2002). Kirzner (1973) maintained that alertness to opportunity or a certain type of creative perception was the distinguishing factor determining entrepreneurial activity.

Ardichvili (2003) identified personality traits, social networks, and prior knowledge as antecedents of Entrepreneurial Alertness (EA) to business opportunities. In this paper, I will address De Koning and Brown’s (2002) finding that Entrepreneurial Alertness (EA) was linked to Entrepreneurial Orientation (EO). Ardichvili (2003) states that while alertness may be needed to recognise opportunities, opportunities are made and not found which highlights the importance of opportunity development after recognition.

Major factors that Ardichvili (2003) highlighted that influence the core process of opportunity recognition and development leading to business formation include:

1. Entrepreneurial alertness
2. Information asymmetry and prior knowledge
3. Social networks
4. Personality traits, including optimism and self-efficacy, and creativity
5. Type of opportunity itself

According to Ardichvili (2003, p.105) “the development process begins when entrepreneurial alertness exceeds a threshold level. Alertness is likely to be heightened when there is a coincidence of several factors: certain personality traits (creativity and optimism); relevant prior knowledge and experience; and social networks. The particular activities within the process are also affected by the degree of specificity of knowledge about market needs and resources.”

Given the limitation of this study I will not research the types of opportunities. However, I will explore the impact of entrepreneurial alertness, prior knowledge,



social networks and personality traits on the opportunity recognition and development ability of individuals.

To conclude this chapter, I've highlighted the main points as follows:

Innovativeness, risk-taking and proactiveness have been used in the majority of EO research (Lyon et al., 2000; Rauch et al., 2009). EO has further been studied predominantly in relation to a firm's performance, and has been found to explain 24% of performance variance (Rauch et al., 2009). If EO explains a firm's performance, measuring an individual's EO could explain an individual's performance (Bolton and Lane, 2012).

However, with no standard scale to measure an IEO, this study will utilize the IEO test developed by Bolton and Lane (2012).

The tacit premise of entrepreneurial education as stated by Athayde (2012) that entrepreneurial skills are not fixed personality traits, but can be learnt and developed through experience, which is a tacit premise of all experiential learning-based entrepreneurial programmes.

It was found that social influences to entrepreneurial ventures could have an impact on an individual's attitude towards starting a business (Robinson et al., 1991) and that entrepreneurial education and training had a positive impact on entrepreneurial activity (Packham et al., 2010).

Ardichvili (2003) states that while alertness may be needed to recognise opportunities, opportunities are made, not found, thus highlighting the importance of opportunity development after recognition. The major factors Ardichvili (2003) highlighted that influence the core process of opportunity recognition and development leading to business formation includes:

1. Entrepreneurial alertness
2. Information asymmetry and prior knowledge
3. Social networks
4. Personality traits, including optimism and self-efficacy, and creativity
5. Type of opportunity itself

On the basis of the literature reviewed, I conclude by highlighting that an individual's EO and intention to start a business can be developed through entrepreneurial education and training. However, I do not overlook that some individuals may naturally be more orientated towards entrepreneurship. Through understanding the effect entrepreneurial education has on an individual's EO, opportunity recognition and development ability and intention to start a business. I hope to add value to the development of future entrepreneurs within TSIBA Education.

The following section will detail the research methodology, the research aims, hypothesis, propositions, sample groups, research protocols and analysis.

## CHAPTER 3: RESEARCH METHODOLOGY

As previously mentioned, the research was undertaken through a mixed method design, comprising of quantitative surveys to measure IEO and intentions to start a business; and qualitative in-depth interviews to assess participants' opportunity recognition and development abilities. The in-depth interviews further attempt to investigate life experiences, thoughts and feelings, in an attempt to understand the respondents' world and the constructs involved in opportunity recognition and development.

A mixed method approach takes advantage of both qualitative and quantitative methods. The following sections highlight the advantages and disadvantages of the both the qualitative and quantitative methods, further justifying a mixed method approach before explaining how each was implemented.

### Mixed Methodology

#### **Advantages of qualitative methodology:**

Qualitative methods have the ability to help/enable researchers to interpret phenomenon in its natural setting (Denzin and Lincoln, 2005). This is especially important, as it will assist the researcher in understanding the participants within their social and cultural context. Maxwell (1998) states that qualitative studies are useful to understand the meanings that the participants give to an event within a particular context, and the process by which events and actions take place. Moreover, this enables the researcher to develop an understanding of how the participants have learnt from their perspectives (Myers et al., 2009). The qualitative method also allows the researcher the scope to actively participate in the study, to clarify any misunderstandings and to gauge emotions. This type of participation is not achievable when remaining an outsider, as is the case with quantitative studies.

#### **Limitations of qualitative methodology:**

Qualitative research naturally acknowledges the subjectivity of the researcher and therefore requires that the "biases, motivations, interests, and perspectives of the researcher" be made explicit throughout the study (Lincoln and Guba, 1985). This argument presents us with one of the major limitations of qualitative research, which is termed "*researcher's bias*." The bias of the researcher can present itself in many forms. I will briefly discuss a few instances where bias can creep into the research in an attempt to inform the study of ways to avoid researcher's bias.

Researcher's bias can influence the design of a study and the data collected. This manipulation can be seen in the way researchers structure their design and results to assist in proving the credibility of the research. It is possible that the researcher could be sitting under a tree, simply creating fiction and using justifiable designs and analyses to prove the fiction (Lincoln and Guba, 1985).

Researcher's bias could occur if the researcher does not use credible sources to collect data. Furthermore, researcher's bias could be seen in the way the researcher analyses the information, by intentionally leaving out data or by manipulating the data to obtain the desirable results (Lincoln and Guba, 1985).

Any group that is being studied is naturally affected by the presence of the researcher and may therefore not be completely honest or data might be somewhat skewed. Adding to this complex distortion of data collected when interacting with the participants, is the fact that to establish a trusting relationship between the researcher and participant takes time, and only once a trustworthy relationship is established will the researcher be able to obtain the honest-rich data required (Lincoln and Guba, 1985).

**Advantages of quantitative methodology:**

Quantitative methodology allows the researcher to measure a portion of reality (i.e. the level of IEO) with an instrument (i.e. the IEO test). This is advantageous as it allows for quantifying the relationships between variables, formulating a testable hypothesis, and not influencing the participants' perspective by the researcher remaining an outsider (Thomas, 2010). This would address one of the qualitative methods' major limitations (i.e. researcher's bias). Furthermore, the quantitative results could be generalized and the study can be easily replicated.

**Limitations of quantitative methodology:**

Quantitative methods are limited in obtaining sensitive, personal information, such as the type of in-depth information we might require to understand how entrepreneurs identify and develop opportunities (Thomas, 2010). An example of this limitation is not being able to witness or interpret the emotional responses of participants to certain phenomenon. Furthermore, the information collected through surveys might not be accurate or complete (i.e. participants omitting certain information or untruthfully completing the survey), thus not painting the entire picture. Consequently, our understanding of opportunity recognition and development may be limited or skewed.

**Justification of mixed methodology**

The mixed method approach takes advantage of both the qualitative and quantitative methods. By using both methods, the limitations of one method are addressed by the advantages of the other. As the quantitative method provides generalizable findings, but fail to provide explanations to the phenomenon being studied. The qualitative method addresses the quantitative shortfall by providing rich meaning and creating an understanding regarding the phenomenon being studied (Ahmadnezhad, 2009). We can therefore see how the advantages of one method address the limitations of the other. It is this complementary relationship between quantitative and qualitative elements that serves as justification for the mixed method study.

## **Research aims, hypotheses and propositions**

To investigate the main research question: “How effective is entrepreneurial education in developing students EO and their intention to start a business?” I will now recap and elaborate on the research aims to be addressed by quantitative hypotheses and qualitative propositions.

### **Quantitative hypotheses**

To quantitatively measure the impact of entrepreneurial education and training on students’ EO before and after an entrepreneurial programme, the IEO test developed by Bolton and Lane (2012) will be utilized.

H1. Participants’ IEO scores will be higher after the training programme when compared with their pre-test scores.

H2. Participants’ will reflect a greater increase in IEO when compared to non-participants, over the period of the training programme.

To measure students’ attitudes towards starting a business before and after the entrepreneurial programme as a measure of the programme’s impact, the IEO test developed by Bolton and Lane (2012) will be utilized. Additionally, this will aid in understanding the relationship between individual’s intentions to become an entrepreneur and their IEO score.

H3. The participants IEO scores will be positively correlated to their intention to start a business.

I will further assess the influence of differences in demographics on students’ intentions in starting a business and individual EO, given that our sample group will consist of students from the United States of America and South Africa.

H4. IEO test scores will differ among participants with different gender, age, race and nationality.

### **Qualitative proposition**

I will qualitatively explore the impact of prior knowledge, social networks, failures and personality traits on the opportunity recognition and development ability of individuals.

P1. Involvement in social networks increases the student’s ability to identify and develop opportunities into ventures.

P2. For successful opportunity identification both special interest knowledge and industry knowledge — is critical. Without this convergence there is a lower possibility of such success. Furthermore, prior knowledge of markets and customers increases the likelihood of successful entrepreneurial opportunity recognition.

P3. Reflecting and learning from failures increases an entrepreneur’s ability to identify and develop opportunities into ventures.

P4. Family and social backgrounds that support entrepreneurs to further learn from failures, will positively aid entrepreneurial learning and opportunity recognition and development.

P5. Through a combination of behaviour adjustment (achieved by reflecting on their practical entrepreneurial experiences) and personality (essentially characterized by risk-taking, optimism, self-efficacy and creativity), students could identify significantly more opportunities and develop these opportunities into ventures.

I will attempt to understand the opportunity recognition and development abilities related to an individual's EO.

P6. Participants' with a higher EO will exhibit more opportunity recognition and development.

### **Mixed method research design**

Yin (2003) describes a research design as an action plan for getting from the initial set of questions to a set of answered conclusions. As previously justified, a mixed method has been selected as it best utilizes the advantages of both qualitative and quantitative methods to overcome limitations.

I will commence by quantitatively measuring students IEO and intentions to start a business at the beginning of the entrepreneurial education programme, followed by qualitatively exploring the opportunity recognition and development abilities of a high and low IEO scoring student. Thereafter measuring students IEO and intentions to start a business after the completion of the entrepreneurial educational programme. The study is therefore longitudinal in nature.

After the collection of the first phase quantitative data, students will be grouped into high and low IEO categories. This would assist in assessing the opportunity recognition and development abilities and intention to start a business inked to the level of IEO. Assessing students IEO at the end of the programme would be done to measure the impact of the programme on students IEO and intentions to start a business.

Simultaneously, a control group of students at TSiBA Education will be administered the IEO test over the same period to account for any natural change in IEO.

According to Ivankova et al., (2006), this research design can be defined as a sequential explanatory design. Specifically, this follows the process of quantitative data collection and analysis, followed by qualitative data collection and analysis, and thereafter interpreting the entire analysis (Ivankova et al., 2006). This is an advantage as it allows for the exploration of quantitative data in more detail, by following up the quantitative with qualitative data collection (Ivankova et al., 2006). However, given that the period of assessment is over a short programme (i.e. two-weeks) the study will be limited. As testing students a few months later may provide a better indication of their true change in IEO,



however this is not achievable as the NEU students would have returned to Boston, United States of America.

### **Sample**

The participants of the study were selected from TSiBA Education, which was founded in 2004 with a vision to “Ignite Opportunity”, as their enrolled candidates meet the requirements of this study’s unit of analysis. Convenience non-probability sampling has therefore been chosen as the researcher had access to his undergraduate institution (i.e. TSiBA Education).

The unit of analysis is defined as entrepreneurship students who have been enrolled at TSiBA Education. The participants will be categorized according to their IEO scores, gender, race, age and nationality in order to identify differences in IEO, intentions to start a business and opportunity recognition and development abilities.

### **Research instruments and protocols**

#### **Quantitative data collection tool**

To collect the quantitative IEO data, I have utilised the survey instrument validated by Bolton and Lane (2012). In addition, I will measure students’ intentions to start a business. See survey used to collect the quantitative data in Appendix 1.

Construct validity can be defined as the extent to which IEO questionnaire items correlate with other measures designed to measure the same thing (Churchill, 1979). Simply, construct validity defines how well a test measures what it claims. Bolton and Lane (2012) identified a positive correlation between the IEO’s sub-scales and other measures of entrepreneurial propensity indicating the construct validity of the IEO test. Bolton and Lane (2012) concluded their study by developing a ten-item questionnaire with content validity, reliability and construct validity. The ten items were encapsulated by three variables (risk-taking, innovativeness and proactiveness) that correlate with each other and entrepreneurial propensity, supporting the one-dimensional measure of the IEO construct.

Bolton (2012) in a follow up study, conducted a principle component analysis (PCA) to determine the instrument’s content validity. Content validity can be understood as an estimate of much a measure represents every single element of a construct. However PCA has its weakness by being known as “not a true method of factor analysis and there is a disagreement among statistical theorist about when it should be used, if at all” (Osborne and Costello, 2005, p.2). While there’s lots of debate about the differences and similarities between PCA and factor analysis (FA) (Osborne and Costello, 2005). I have chosen to conduct a FA as it is the preferred analysis in uncovering latent variables and not simply data reduction (as is the case with PCA) (Osborne and Costello, 2005). All else being equal PCA and FA should yield the same results, but FA will discriminate

between shared and unique variances and not inflate estimates of variances (Osborne and Costello, 2005)

### **Quantitative survey protocol**

After contact was made with TSiBA Education and the relevant permission granted. I met with the students at the beginning and end of the 2015 & 2016 programmes to collect the IEO survey data. It must be noted that two groups of participating students were surveyed, the class of 2015 and 2016 respectively.

The data collected in 2015 was used to validate the instrument's content validity. After validating the instrument, I returned to TSiBA in 2016 to record the students IEO before and after the 2016 entrepreneurial programme, and further formulate groups with high and low EO students, by categorising students based on their IEO results into quartiles as recommended by Bolton (2012). After which I randomly selected high and low IEO scoring students to further assess qualitatively.

At the end of the entrepreneurial programme in 2016 the second survey administered contained the same questions as the first survey but reordered. Once collected, I conducted simple t-tests to validate the change in IEO based on mean scores and per demographic groups. A Pearson correlation coefficient test was utilised to assess the correlation between students IEO and intention to start a business. Over the same period the IEO test was administered to the control group within TSiBA Education.

### **Qualitative data collection tools**

Unlike the validity and reliability criteria to judge a quantitative study, a qualitative study stems from a different philosophical view and therefore its validity needs to be judged with different criteria. The alternative criteria used to judge the qualitative data collection are triangulation and credibility. In-depth interviews were used to collect the data from two participants aiding the *triangulation* of data, as Yin (2009) argues that the most desired convergence for a study occurs when independent sources all point to the same set of events, facts or interpretations. Credibility was best obtained by having the interviewee's read the transcribed interview and agree that the data collected was accurate.

The interview instrument consisted of a set of questions serving as a mental framework, to answer through derived lines of enquiries and not from verbatim script (Yin, 2009). The suggested interview protocol questions were derived from the literature reviewed see Appendix 3. The in-depth interviews were used to elicit information from the interviewee while keeping the interviewer on track. Importantly, the interview was aimed at understanding the constructs as shaped by the interviewee's opinions and beliefs. In addition, I aimed at creating an understanding of the interviewee's reality, knowledge acquisitions, and opportunity identification and development process. Importantly, I attempted to create a discussion through which the interviewee would be comfortable to share personal information.

**Qualitative in-depth interview protocol**

I emailed the selected participants and followed up with phone calls scheduling appropriate dates to commence with the qualitative in-depth interviews. A copy of an email sent to a prospective participant can be seen in Appendix 2. Once scheduled, I conducted the interview at TSiBA Education's campus. I then transcribed and reread/listened to categorise the information into context by coding and identifying emerging themes. I then triangulated and validate the information collected. This was achieved by comparing the transcription to the audio recording of the interview and subsequently having the interviewee read the transcription and confirming the credibility of the information. The qualitative interview protocol was followed as suggested by Guion et al., (2001).





## Chapter 4 – Results: Presentation and Discussion

Chapter 4 commences with a description of the sample group followed by the results of the factor analysis of the instrument developed by Bolton and Lane (2012). The validation of the instrument was vital in obtaining an accurate measure of students' IEO at TSiBA Education. Following the validation, I will elaborate on the results obtained in relation to the quantitative hypothesis and qualitative propositions. Concluding the chapter by summarizing the results.

STUDENT CHARACTERISTICS	Participants		Non-participants (Control Group)	
	Frequency	Percent	Frequency	Percent
Gender:				
<i>Male</i>	41	28.9%	31	54.5%
<i>Female</i>	101	71.7%	26	45.6%
Age:				
"18"	N/A	N/A	13	22.8%
"19"	6	4.2%	17	29.8%
"20"	43	30.3%	12	21.1%
"21"	39	27.5%	5	8.8%
"22"	29	20.4%	5	8.8%
"23"	9	6.3%	1	1.8%
"24"	4	2.8%	2	3.5%
Race:				
<i>Black</i>	41	28.9%	23	40%
<i>White</i>	39	27.5%	N/A	N/A
<i>Coloured</i>	44	31.0%	34	60%
<i>Hispanic</i>	7	4.9%	N/A	N/A
<i>Asian</i>	9	6.3%	N/A	N/A
Nationality:				
<i>South African</i>	82	57.7%	57	100%
<i>USA</i>	60	42.4%	N/A	N/A

As can be seen in the above Table 1, the sample encompassed 199 students of which 142 were students participating in training programme and 57 were non-participating students used as a control group. The participating students were made up of two groups, the first group comprised of 72 students used to validate the instrument in July 2015 and the second group comprised of 70 students used to conduct further analysis in July 2016. The participating students comprised of 71.1% female and 28.9% male. Both participants and non-participants were aged between 19 and 24, with 91.5% of the sample aged between 19 and 24. The sample further comprised of Black, White, Hispanic, Coloured and Asian students. The students drawn from were-predominantly: Coloured (31%), Black (28.9%) and White (27.5%). Furthermore, the nationality of the group was split 57.7% South African students and 42.4% students from the United States of America.

The non-participant control group's data was collected over the same period as

the July 2016 participants. The control group's data was collected from TSiBA Education students who had not taken part in the entrepreneurial programme. The control group comprised of a total of 57 South African students, 45.6% being female and 54.4% being male. The control group comprised mainly of Black (40.4%) and Coloured (59.6%) students. This was a major difference compared to the participants who comprised of both South African and American students. Furthermore, the age profile of the control group was similar to the participating group.

### Factor analysis results of the 2015 participants

Please note the following factor analysis was conducted to validate the instrument in 2015 and therefore only includes data collected from the 2015 participating students. After conducting a factor analysis (FA) in SPSS to assess the content validity of the 10-item instrument developed by Bolton and Lane (2012), I found that three factors explained 50.7% of the total variance. The three distinct factors identified were risk, proactiveness and innovation as expected. Similarly, Bolton and Lane (2012) found that the same three distinct factors accounting for 60% of total variance.

	RISK	INNOV	PROACT
<i>Risk - 2. I am willing to invest a lot of time and/or money on something that might yield a high return</i>	0,999	0,001	0,000
<i>Risk - 3. I tend to act "boldly" in situations where risk is involved</i>	0,345	0,243	0,160
<i>Risk - 1. I like to take bold action by venturing into the unknown</i>	0,204	0,583	0,109
<i>Innov - 7. I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems</i>	0,235	0,563	0,081
<i>Innov - 5. In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before</i>	0,138	0,357	0,11
<i>Innov - 6. I prefer to try my own unique way when learning new things rather than doing it like everyone else does</i>	0,209	0,456	0,374
<i>Innov - 4. I often like to try new and unusual activities that are not typical but not necessarily risky</i>	0,099	0,282	0,057
<i>Proact - 10. I prefer to "step-up" and get things going on projects rather than sit and wait for someone else to do it</i>	0,287	0,38	0,554
<i>Proact - 9. I tend to plan ahead on projects</i>	0,005	0,029	0,457
<i>Proact - 8. I usually act in anticipation of future problems, needs or changes</i>	0,164	0,042	0,235
Percentage of Variance:	24,248	15,046	11,384
Extraction Method: Factor Analysis, Maximum Likelihood. 3 factors extracted 6 iterations required. Rotation method: Varimax with Kaiser Normalization.			
1	Highest score		
0	Lowest score		

Table 2 primarily displays how each variable loads onto each factor. As can be seen, the “Risk 1” variable loads on the “Innovation” factor but also loads on the “Risk” factor. “Risk1” variable reads “I like to take bold action by venturing into the unknown” this has been understood by students to have both elements of innovativeness and risk. This raises the question of whether the three factors are correlated or uncorrelated. Similarly, Bolton (2012) found one variable to load on both the risk and innovation factors.

<i>Chi-squared</i>	<i>df</i>	<i>Sig.</i>
13.39	18	0.768

The goodness of fit test establishes whether or not an observed frequency distribution differs from a theoretical distribution. The goodness-of-fit chi-squared test in Table 3 indicates how well the three factors (i.e. risk, innovation and proactiveness) reproduce the ten variables (i.e. survey questions) (Research & Statistical Support Services, 2014). Table 3 displays that the reproduced matrix is not significantly different from the observed matrix, indicating a good fit.

<b>Individual Entrepreneurial Orientation</b>	RISK	INNOV	PROACT
1. RISK-TAKING SUBSCALE	0,971	0,093	0,219
2. INNOVATION SUBSCALE	-0,141	0,966	0,216
3. PROACTIVENESS SUBSCALE	-0,192	-0,241	0,951

*Rotation method: Varimax with Kaiser Normalization.*

The factor transformation matrix in Table 4a simply displays the factors correlation after rotation. It can be seen from the matrix that all three factors (i.e. Risk, Innovation and Proactiveness) clearly loaded on the respective subscales (i.e. the grouped variables aimed at measuring a particular factor). At this point, I conclude that the instrument developed by Bolton and Lane (2012) is a valid measure of IEO for the South African and American students participating in the jointly run entrepreneurial programme at TSIBA Education in Cape Town, South Africa.

One of the many decisions researchers are faced with when conducting a factor analysis is the method of rotation. Rotation methods are categorized based on whether factors are assumed to be oblique (correlated) or orthogonal (uncorrelated). Bolton and Lane (2012) chose a Varimax rotation, which assumes the factors are orthogonal and therefore uncorrelated. However, the *Risk 1* variable in this study loaded stronger on the *Innovation* factor than *Risk* factor (see Table 2). This raises questions as to whether or not the factors are truly uncorrelated as assumed by Bolton and Lane (2012). As recommended by Brown (2009), to test if the factors are correlated or uncorrelated, I conducted a factor analysis applying an Oblimin with Kaiser Normalization (oblique/correlated) rotation to test the strength of the correlation amongst the three factors. These results are reported in Table 4b.

<b>Individual Entrepreneurial Orientation</b>	RISK	INNOV	PROACT
1. RISK-TAKING SUBSCALE	1		
2. INNOVATION SUBSCALE	0.228	1	
3. PROACTIVENESS SUBSCALE	0.047	0.117	1

*Rotation method: Oblimin with Kaiser Normalization.*

The results in Table 4b, illustrate that the strongest correlation was between the factors *Innovation* and *Risk*. This result suggests that the *Risk* factor loads moderately on the *Innovation* factor. Brown (2009) suggests that only factors with a correlation of 0.32 and above should be considered to warrant an oblique (correlated) rotation, as it would indicate 10% (or more) overlap in variance. The correlation between Innovation and Risk is 0.228, which is noticeably less than the threshold to justify an oblique rotation. The results illustrated in Table 4b further support the use of the orthogonal (uncorrelated) Varimax rotation and further validates the IEO instrument developed by Bolton and Lane (2012).

### Quantitative Results of 2016 Participants

The programme outline received from Northeastern University can be read in Appendix 4.

**Hypothesis 1:** Participants' IEO scores will be higher after the training programme when compared with their pre-test scores.

STUDENT CHARACTERISTICS	Pre-test mean IEO score	Post-test mean IEO score	Significance (2-tailed)
Participating students	38.79	39.91	0.0001

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

In SPSS, I conducted a paired sample t-test to assess if the difference in IEO means over the period was statistically significant. The p-value of 0.0001 (see *Significance* column in Table 5) indicate that we can reject the null hypothesis with a 99% confidence level and that participant's change in IEO scores is statistically significant. Based on these results being significant and the mean score increasing from 38.79 to 39.91, I accept Hypothesis 1.

The entrepreneurial programme therefore had a positive influence on the IEO of participating students. Similarly, Packham et al., (2010) found that entrepreneurial education and training had a positive impact on entrepreneurial activity. It should be noted that statistically significant results are not necessarily indicative of material significance. Despite the relatively short (two-week) duration of the programme, students reflected a 2.9% increase in mean IEO.

Is the 2.9% increase beyond the natural increase in IEO that students at TSiBA Education would experience? Next, we will assess the change in the control group's IEO over the same period to understand if the change was beyond the norm.

**Hypothesis 2:** Participants' will reflect a greater increase in IEO when compared to non-participants, over the period of the training programme.

STUDENT CHARACTERISTICS	Pre-test mean IEO score	Post-test mean IEO score	Significance (2-tailed)
Participating students	38.79	39.91	0.0001
Non-participating students	39.75	39.68	0.892

*Correlation is significant at the 0.05 level (2-tailed)*

The paired sample t-test was used to analyse the control group's mean IEO score. The results reflected a p-value of 0.892 (see *Significance* results for non-participants in Table 6), which is more than the a-value of 0.05, failing to reject the null hypothesis with a 95% confidence level. This means that the change in the control group's mean IEO was not statistically significant. Hypothesis 2 is therefore accepted.

Furthermore, the 2.9% increase in IEO among participating students reflects the small but significant influence of the specialised entrepreneurial training programme undertaken at TSIBA Education, by TSIBA and NEU.

**Hypothesis 3:** The participants' IEO scores will be positively correlated to their intention to start a business.

STUDENT CHARACTERISTICS	Pre test		Post test	
	Pearson r value for IEO & Intention	Significance	Pearson r value for IEO & Intention	Significance
Participating students	0,314	0,008	0,419	0,0001
Non-participating students	0,278	0,036	0,317	0,016

*Correlation is significant at the 0.05 level (2-tailed)*

I conducted a Pearson product-moment correlation coefficient to measure the strength of association between IEO and intention to start a business.

Table 7a reflects a positive Pearson correlation coefficient of 0.314 (pre-test) and 0.419 (post-test) for participants and 0.278 (pre-test) and 0.317 (post-test) for non-participants. The fact that the values are positive means that there's a positive relationship between students' IEO and intentions to start an entrepreneurial venture. Interestingly the strength of the correlation increased over the same period of time for both participants and non-participants.

Participants' correlation increased from 0.314 to 0.419 and non-participants from 0.278 to 0.317. The relationship between IEO and intention to start a business has a moderate correlation. Participating students correlation scores has increased 32.80% compared to the 14.02% for students who had not undertaken the programme yet. Indicating the positive effect of the entrepreneurial education and training programme in developing students into entrepreneurs.

In Table 7a both participating and non-participating students have a significance value of less than 0.05, which indicates that the relationship is statistically significant with a 95% confidence level. An interesting observation is that while participating students IEO only increased by 2.9% this was linked to a 10% increase in their intentions to start an entrepreneurial venture (see below Table 7b).

STUDENT CHARACTERISTICS	Pre test Intention	Post test Intention
Participating students	74,86	82,29
Correlation= 0,0001 therefore significant at the 0.01 level (2-tailed)		

Hypothesis 3 is therefore accepted.

Furthermore, Table 7b's results are in line with Athayde's (2012) findings when testing the effectiveness of participation in an entrepreneurial programme on the attitude of students towards starting an entrepreneurial venture. The results also support Bolton and Lane's (2012) proposal that the stronger IEO score, the stronger the intention of individuals wanting to be entrepreneurs.

Identifying the predictors of students' intentions to start a business would be valuable in understanding the relationship between IEO and intention to start a business in more detail.

Individual Entrepreneurial Orientation	RISK	INNOV	PROACT	INTENTION
1. RISK-TAKING SUBSCALE	1			
2. INNOVATION SUBSCALE	0.239**	1		
3. PROACTIVENESS SUBSCALE	0.273**	0.016*	1	
3. INTENTION TO START A BUSINESS	0.008*	0.477***	0.02*	1
*Correlation is insignificant; **Correlation is significant at the 0.05 level (2-tailed); ***Correlation is significant at the 0.01 level (2-tailed)				

Table 8a illustrates the pre-test correlation scores of the IEO factors and intention to start a business. Before participating in the programme, the innovation factor was the highest scoring predictor for students' intention to start a business while risk-taking and proactiveness were the lowest scoring. Students therefore understood starting a business to be strongly linked to innovation and little to do with taking risks and being proactive. However, the correlation scores after participating in the entrepreneurial programme reflect different results, which can be seen in Table 8b.

Individual Entrepreneurial Orientation	RISK	INNOV	PROACT	INTENTION
1. RISK-TAKING SUBSCALE	1			
2. INNOVATION SUBSCALE	0.354***	1		
3. PROACTIVENESS SUBSCALE	0.054*	0.008*	1	
3. INTENTION TO START A BUSINESS	0.462***	0.511***	-0.036*	1
*Correlation is insignificant; **Correlation is significant at the 0.05 level (2-tailed); ***Correlation is significant at the 0.01 level (2-tailed)				

Table 8b illustrates the post-test correlation scores. The results indicate a major increase in the risk factor, from 0.008 before participating in the entrepreneurial programme to 0.462 after participation. Students' post-test scores indicate the realisation that risk is a major predictor for intentions to start a business. The



shift in the risk factor's correlation could be due to students' interaction with practicing entrepreneurs (during the entrepreneurial programme) exposing them to the reality of entrepreneurship. Through their interaction students could have realised the risk required when starting a business. Furthermore, innovation factor's correlation score remained high with a slight increase.

**Hypothesis 4:** IEO test scores will differ among participants according to gender, age, race and nationality.

Please note that Table 9 combines the data from the 2015 and 2016 participating students. The groups were combined to increase the sample size in an attempt to obtain statistically significant results. Table 9 highlights the demographic differences in IEO and Intention scores.

STUDENT CHARACTERISTICS	Frequency	Percent	IEO	Intention
Gender:				
<i>Male</i>	41	28.9%	39.91	89%
<i>Female</i>	101	71.7%	38.27	68%
Age:				
"19"	6	4.2%	38.33	73%
"20"	43	30.3%	38.04	69%
"21"	39	27.5%	39.38	71%
"22"	29	20.4%	38.63	77%
"23"	9	6.3%	41.67	100%
"24"	4	2.8%	41.00	100%
Race:				
<i>Black</i>	41	28.9%	39.94	86%
<i>White</i>	39	27.5%	38.75	63%
<i>Coloured</i>	44	31.0%	37.39	90%
<i>Hispanic</i>	7	4.9%	38.33	60%
<i>Asian</i>	9	6.3%	39.57	57%
Nationality:				
<i>South African</i>	82	57.7%	38.76	89%
<i>American</i>	60	42.4%	37.81	62%

It must be noted that none of the above differences in Table 9 were found to be statistically significant. However, I have continued to report on the differences to illustrate that the group is not homogenous and that even though the results are not statically significant, differences inherently do exist. Possibly with a larger sample these differences might be found to be statistically significant.

The entire group comprised of 71.1% females and 28.9% males. I found the ratio of females to males advantageous as females have been found to be more disadvantaged regarding access to opportunities and resources (Smith-Hunter and Boyd, 2004), and less likely to be involved in early stage entrepreneurial activity and business development (Herrington et al., 2014). By including more females, the programme helps to address these problem areas by providing

more females with opportunities and resources to develop entrepreneurial ventures. The importance of training intervention's designed for women (Botha et al., 2007), are highlighted by the females' lower IEO and intention to start a business scores (see table 9), when compared to males. Reiterating the degree to which females are disadvantaged and less likely to be involved in early stage entrepreneurial activity.

With 91.5% of the group between the ages 19 – 24, the sample assessed youth as intended. Youth in this age group have lower early-stage entrepreneurial activity and disproportionately high unemployment figures (Herrington et al., 2014). Assessing youth aged 19 – 24 is advantageous as it targets the youth at risk. Interestingly, the results from the initial survey indicated a positive trend in IEO and intention to start a business for students' aged 19 to 24. There are some instances when IEO and intention to start a business slightly decrease, but the overall view of the data reflects a positive relationship between age and IEO and intention to start a business. In light of the highest unemployment rates in South Africa occurring in the age group 15 to 35 years (Statistics South Africa, 2015), youth studying at TSIBA Education seem to reflect a positive change in IEO and intention to start a business which in future could address unemployment in the country.

The ethnicity of the sample group comprises of predominately Coloured, Black and White with Asian and Hispanic being minorities. The results reflect that Black South African students scored the highest IEO and Coloured students had the highest intention to start an entrepreneurial venture (see Table 9). The increase in entrepreneurial activity among Blacks and Coloured are in line with the GEM report reflecting a healthy increase in Blacks and Coloured entrepreneurial activity (Herrington et al., 2014).

South African and American students reflected minor differences in IEO and intention to start a business. With South African students reflecting a greater intention to start an entrepreneurial venture and American students having a higher IEO. These differences although minor reiterate the findings of Levenburg and Schwarz (2008) that students from different countries have different propensities towards entrepreneurship.

The design of this study has therefore succeeded in uncovering the influence of demographic in relation to IEO and intention to start a business. However, has failed to demonstrate that the differences are statistically significant. I therefore accept that demographic differences do exist but fail to accept Hypothesis 4 on account that the demographic differences are not statistically significant.

This far the quantitative results highlighted the positive influence of entrepreneurial education and training on students IEO and intentions to start a business. In the following section, I will attempt to qualitatively understand the opportunity recognition and development abilities linked to students IEO.

De Koning and Brown (2002) argued that as much as entrepreneurial orientation aids the exploitation of business opportunities, before opportunities



can be exploited they must be recognised. The quantitative results are linked to the qualitative results based on De Koning and Brown's (2002) findings that entrepreneurial orientation (EO) is linked to entrepreneurial alertness (EA). Furthermore, Ardichvili (2003) identified EA as one of the major factors that influence the core of opportunity recognition and development. Other factors included information asymmetry and prior knowledge, social networks, personality traits and the types of opportunities itself. I will now explore the opportunity recognition and development abilities of a high and low IEO scoring student based on Ardichvili's (2003) criteria, to understand the opportunity recognition and development abilities linked to an IEO score.

### **Qualitative results**

Two students participating in the entrepreneurial programme were selected based on the convenience of the researcher and willingness of the participant to further participate in the in-depth qualitative interviews. A high IEO scoring female was selected as she was among the minority of females. A low scoring male was selected as he was among the minority of males. The role of gender in opportunity recognition and development is relevant as DeTienne and Chandler (2007) argues that men and women utilize their unique stock of human capital to identify opportunities using fundamentally different processes.

Both participants chose to remain anonymous and henceforth I will refer to the female as "Jane" and the male as "Peter". I will briefly introduce the participants through their life stories and then explore their opportunity recognition and development abilities in more detail.

#### **Participant 1: Female, high IEO, currently running her own business**

Jane was born and raised in Cape Town, the only girl of three siblings. She was very spoiled and raised in a good home. Their family values revolved around doing what they loved and enjoyed. She was a very shy person in primary school. However, after moving to high school she became outspoken, active and rebellious. In high school she was a tomboy, a fact that would surprise many of her old friends today since she has become more feminine. Art and business were her favorite subjects and she received the top award for public speaking.

Shortly after leaving school she was in a life threatening accident. After being hit by a car, suffering a head injury and broken legs, her life changed. *"The accident has changed me in a way I cannot explain - I feel more grounded. It's tough to speak about it because I get flashbacks. I remember being in a ward with cripple people, I was in ICU and had a blood clot. And being the first to recover, I overcame a barrier and helped the poor people in the ward. This changed me because before then I would never have been kind to those people or even talk to them. But being there made me realise that we all human. I found my heart and found that I cared for people and want to help them be their best."* This experience is what sparked the high level of quality services she provides for her customers, non-judgmental but solely aimed at beautifying.

Being accepted by TSiBA Education was an opportunity for a fresh start for her to overcome her past and focus on her future development. *“TSiBA Education has been a source of encouragement for me to further my personal and business growth.”* Studying and working part time in retail stores and saloons was a painful experience, as she was still recovering from her tragic accident. She realised that she needed to start running her beauty salon from home to earn an income. She failed at successfully running her beauty salon many times before reaching the point where the business was sustainable, but she never gave up. Currently, she is completing her BBA degree at TSiBA Education and happily running her own business.

### **Participant 2: Male participant, low IEO, low intention to start a business**

Peter was born in Cape Town. Initially lived in Woodstock but moved out of the area as it became too dangerous. He grew up loving sport, especially cricket and soccer. His dad worked for an IT firm and one of his favourite childhood memories was playing on the PCs his dad would bring home from work. He has a need to always to keep his mind active. Having an overactive mind Peter reasons is the cause of his speech impediment.

He finds himself frequently in the gym as it helps clear his mind. He is not really a person to go out by himself, he was a *“loner”* going out and exploring alone, but he recently decided to be part of a group. He experienced a traumatic situation at a young age – *“my uncle who was terminal with cancer spent 6 months at my place. I saw how cancer took him; this changed my life and made me grow up quickly as my other uncle and grandpa died of cancer as well.”* Seeing death so often changed his outlook on life and how he engages with life. This is the reason why when he sees something he wants to do, he does it and never looks back. He fears looking back on his life saying, *“I could of done that”*, however he is still afraid of heights.

Before enrolling at TSiBA Education he never thought of starting his own business *“because I never thought I would be capable of running a business.”* His most successful attempt was the development of an online discounted home ware store. To date he has identified three opportunities but all three ventures failed due to not enough effort being put into the business by the team. Currently he is trying to overcome the failed business ventures. *“As soon as I get over the failures I will see what opportunities are available.”*

I will now explore the participants' opportunity recognition and development abilities using their responses to the interview discussion.

### **Proposition 1: Involvement in social networks increases the entrepreneur's ability to identify and develop opportunities into ventures.**

Through the use of social media Jane's beauty salon business has grown to the extent that she does not need to seek employment in the corporate world.

Through all the good online reviews, she has gained valuable exposure. *“Social media for me is a valuable marketing tool, through which I educate my clients and promote specials offers. The positive reviews also serve as a source of motivation for me.”* Through the use of social networks she has learnt that clients like to walk away from her salon with something tangible. So she started giving away small beauty care products, which has increased the number of repeat clients.

Peter uses social networks to keep in contact with past suppliers. However, he is not big on group work. He prefers to be a solo entrepreneur. He has not learnt through networking but rather uses networks to obtain contacts.

The utilization of social networks has played a major role in establishing Jane’s client base, increasing the number of repeat customers and unique opportunities to expand her product offering. However, Peter is still trying to find the right opportunity. Social networks have proved to be a greater source of opportunities to the high IEO scoring female participant than the low IEO scoring male participant. This could be due to the male’s preference for being a solo entrepreneur and hesitation to network.

***Proposition 2: For successful opportunity identification, both special interest knowledge and industry knowledge — is critical. Without this convergence there is a lower possibility of such success. Furthermore, prior knowledge of markets and customers increases the likelihood of successful entrepreneurial opportunity recognition.***

Both participants have similar amounts of industry experience related to their entrepreneurial ventures. Jane worked two years in the beauty industry and Peter worked two years in the retail industry. Experience in their respective industries provided opportunities for them to venture out on their own. The beauty industry is where Jane learnt to polish her childhood dream, to provide beauty therapy to A-list models. While Peter found that the retailers were overcharging customers and attempted to fill the gap by providing similar household items at a reasonable cost.

For Jane working in a beauty salon was of special interest because of her passion for beauty. It suits her perfectionist personality and seeing satisfied clients provides her with joy. For Peter working in the retail industry was about overcoming his fear of speaking to people and closing a sale gave him a sense of accomplishment.

Jane exhibits the convergence of both knowledge domains. Her beauty industry experience and continued research on the beauty industry, motivated by her fascination with beauty assists her in satisfying her clients and running a successful beauty salon. Peter however finds the IT industry to be fun and fascinating and not the retail industry. Consequently, his retail venture has failed and he is now looking for opportunities within the IT industry.

**Proposition 3: Reflecting and learning from failures increases an entrepreneur's ability to identify and develop opportunities into ventures.**

Both participants have failed numerous times. After Jane reflected on her failures, she found that she was unprofessional and not caring towards her venture. Peter found that his partners he worked with were not putting in as much effort as he did, causing him to pull out of the business.

Although different, they both have learnt from their failures. She learnt that being punctual, taking a special interest and responsibility for her actions assisted in the success of her business. Whereas he learnt that procrastination and postponement would eventually bring the venture to a sudden end.

However, failures have not assisted Peter in identifying and developing new opportunities into ventures. Whereas Jane has learnt that *"just because you can't do something does not mean that someone else cant. This opens up new opportunities to ventures."* Indicating that the mindset of a high scoring IEO participant is to use failures as opportunities.

**Proposition 4: Family and social backgrounds that support entrepreneurs to further learn from failures, will positively aid entrepreneurial learning and opportunity recognition and development.**

Jane's family supported her through failures. *"My family encouraged me despite my failures. Even after my mother got a call saying I was in a coma and about to die, my family never gave up on me. And today I am alive and appreciating life. Their support made me the positive person I am today."* As a result she believes that if you want something badly enough and work hard at it, you will achieve it. After her life threatening accident and coupled with support from her family, she realised that *"life is short"* and that she needed to pursue her dream of opening a beauty salon.

Peter's family views failure as a step towards success. He mentioned that his family encourages him to never give up. Through the continued support from his family, he realised that he had achieved something he never thought possible, to start a business.

Both participants' families were supportive and encouraged the participants to learn from their failures. There was no instance mentioned of their families seeing their failures as a disgrace. Therefore, regardless of the participants IEO scores, through their families support, they were positively aided to develop opportunities into ventures.

**Proposition 5: Through a combination of behaviour adjustment (achieved by reflecting on their practical entrepreneurial experiences) and personality (essentially characterized by risk-taking, optimism, self-**

**efficacy and creativity), students could identify significantly more opportunities and develop these opportunities into ventures.**

Through reflecting on practical experiences as an entrepreneur. Jane has learnt to adjust her behaviour to provide a more conducive service to her clients. She achieves this by reflecting on her interaction with her clients. She aims to be professional, while making her clients feel at home. Furthermore, she adjusts her behaviour as per the client, to help them feel comfortable.

Jane describes herself as being a risk taker, optimistic, determined, and a creative go-getter. Recovering from the accident demanded that she be positive and proactive. Sitting and recovering was very frustrating, especially being told that she would not be able to walk again. But she knew she would walk again. She remained positive and today she's walking and occasionally goes for light jogs.

Jane's personality allows for her to easily adjust her behaviour. This is especially needed when dealing with clients, as it's essential for her to remain flexible to suit the client. This combination allows Jane to identify more opportunities. Her risk taking, optimistic, go-getter personality combined with her flexible, friendly behaviour, allows for better interaction and networking with people. *"Through this I am exposed to more opportunities. Example: I went out to a client and after interacting with her, I got a tender to offer my beauty services in the corporate place."* As a result Jane now offers her beauty therapy services not only to the public but also to private organisations.

Peter has reflected on his experiences as an entrepreneur and continuously searches to find something revolutionary. To create something completely new but every time he tries moving forward, past failures come to mind, reminding him of his failures. *"And causes me to not be too open to creating a business too much."* He would rather wait and try and find something more assured to be a success than adjust his behaviour and fail. *"So it's as if I am waiting for something good. Failures have affected my behaviour in a negative way. I know if you fail a few times you not prone to fail again."*

Peter describes himself as not being a risk taker; he usually thinks things through to the point of certainty. He is optimistic, creative, resilient but *"I am not extremely confident."* He therefore believes in himself to a certain point. His lack of confidence is caused by his speech impediment.

Peter's personality does not allow him to stand up and speak for the group. *"That's how my personality affects my behaviour. My behaviour does not affect my personality. Who I am affects what I do."*

Interestingly, Peter's behavioral adjustment is hampered by his introspection and he lacks risk taking and confidence. However, he still found that a combination of his behavioral adjustment and personality traits resulted in him identifying and exploiting opportunities. He explains that he had to change his approach to allow for him to adapt to the behaviour of a sales person. Once he



assumed the role of salesman his mind opened up and he started thinking about the opportunity at hand.

**Proposition 6: Participants' with a higher EO will exhibit a greater ability to identify and develop opportunities.**

To recap, Jane scored very high on the IEO test, while Peter scored low. Jane currently runs her own beauty salon while studying, while Peter does not intend to start an entrepreneurial venture.

Jane utilizes social networks to further develop her business and to seek out new opportunities, whereas Peter utilizes social networks to keep in contact with people while trying to find the right opportunity.

Jane exhibits the convergence of both knowledge domains. Her industry experience and continued research on the beauty industry motivated by her fascination of beauty assist her in satisfying her clients and running a successful beauty salon. However, Peter does not find the retail industry to be fun or fascinating, but rather he finds the IT industry to be fun and fascinating. Consequently, his retail venture has failed and he is currently looking for opportunities within the IT industry.

Failures have not assisted Peter in any way, whereas Jane has learnt to convert failures into opportunities.

It therefore seems for Jane who easily adjusts her behaviour, identifying and developing opportunities seems easier compared to Peter. However, this does not exclude the possibility that:

- (1) with more effort, Peter could identify opportunities through adjusting his behaviours.
- (2) further entrepreneurial education could improve the IEO of low scoring participants and assist in developing the necessary skills and competencies to identify and develop an opportunity into a successful venture.

Overall, both the quantitative and qualitative results suggest that entrepreneurial education and training positively aids an individual's EO and intention to start an entrepreneurial venture. Furthermore, a higher IEO scoring participant has exhibited a greater ability to identify and develop opportunities into successful ventures. This further supports De Koning and Brown's (2002) finding that individuals with a higher EO will exhibit more EA, and therefore a greater ability to identify and develop opportunities.

Table 10 maps qualitative findings against quantitative concepts. Furthermore, the table highlights ways in which the high and low scoring participants demonstrated risk taking, innovativeness and proactiveness in light of their opportunity recognition and development abilities.

<b>Table 10: Combined summary of quantitative and qualitative factors</b>			
	<b>Risk</b>	<b>Innovation</b>	<b>Proactive</b>
<b>P1. Social Networks</b>	<p>* Jane: freely and openly utilises social networks.</p> <p>* Peter: hesitant to take risks and utilise the power of social networks as his introverted.</p>	<p>* Jane: uses social networks as a source of innovation increasing her client base and product offering.</p> <p>* Peter: no innovation.</p>	<p>* Jane: proactively uses social networks to promote her business.</p> <p>* Peter: uses social networks to communicate with suppliers.</p>
<b>P2. Special interest and Prior knowledge</b>	<p>* Jane: barely walking after her accident risked continuing to gain industry experience working at Salon.</p> <p>* Peter: overcame his fear by opting to be a salesman's in a retail store.</p>	<p>* Jane: being of special interest she continuously researches the beauty industry searching for innovative ideas.</p> <p>* Peter: is not interested in retail but rather in the IT industry.</p>	<p>Both participants have ventured to gain relevant industry experience before starting a venture.</p>
<b>P3. Failures</b>	<p>Both participants have taken the risks by starting ventures.</p> <p>* Jane: failures a learning curve.</p> <p>* Peter: Failures a hindrance to taking more risks.</p>	<p>* Jane: realizes failures as opportunities for growth.</p> <p>* Peter: see's no benefit in failure.</p>	<p>In response to failures...</p> <p>* Jane: searches for solutions to overcome her failures.</p> <p>* Peter: struggles to overcome his past failures, unsure of wanting to start a new business venture.</p>
<b>P4. Family &amp; Social background</b>	<p>Both participant families are encouraging and supportive with regards to taking risks.</p>	<p>* Jane: learnt her beauty salon techniques from her family at a young age.</p> <p>* Peter: hopes to discover an innovative opportunity within the IT industry.</p>	<p>* Jane's: family encouraged her to walk after her accident and gain the necessary experience to polish her skill.</p> <p>* Peter's: family encourages him to remain proactive.</p>
<b>P5. Personality traits</b>	<p>* Jane: is a risk taker, being told that she would not be able to walk again, to currently going on light jogs, indicates her high propensity to take risks.</p> <p>* Peter's: past experience hampers his willingness to take risks and describes himself as not being a risk taker.</p>	<p>* Jane's: creativity service as a source of innovation for her business.</p>	<p>* Jane: proactively adjusts her behaviour to suit her clients. Recovering from her injuries demanded being proactive and positive.</p> <p>* Peter: continues to search for something revolutionary in the IT industry, however prefers to wait until the point of certainty before going ahead with a new venture.</p>
<b>P6. higher EO = higher EA</b>	<p>* Jane's: risk appetite assists her in the development of new opportunities.</p> <p>* Peter's: risk-averse attitude hampers him from moving forward and developing new opportunities.</p>	<p>* Jane's: industry experience and fascination with the beauty industry assists in identifying new opportunities.</p> <p>* Peter: lack of interest in the retail industry has resulted in little to no innovation in his retail business.</p>	<p>Both participants continue to search for new opportunities. The deciding factor seems to be whether they decide to take the risk in exploring the opportunity or not.</p>

Jane the high IEO scoring female clearly indicated positive attributes of risk taking, innovation and proactiveness across all the propositions aimed at assessing her opportunity recognition and development abilities. These results compliment her high IEO score linked to her pronounced ability to identify and develop opportunities. Jane's elaboration about her entrepreneurial success is supported by Bolton's (2012) findings that high scoring IEO individuals self-reported higher levels of success.

Peter the low IEO scoring male only illustrated moderately positive attributes of risk taking, innovativeness and proactiveness linking to support from his family who aid him to identify and develop opportunities. The only other instance where Peter illustrated a positive attribute was in taking a risk to working in the retail industry to overcome his fear of public speaking. These results suggest that his low IEO score is linked to a lower ability to identify and develop opportunities into ventures.

In conclusion, the results found were predominantly positive; this is without mentioning that there are negatives and shortcomings, which could be addressed in a follow up studies.

The favourable results obtained after the factor analysis was a major positive result for the study. An improvement of 2.9% over two-weeks suggests a stable measurement of IEO. The instrument provides a valid measure of IEO and in future could be utilised by TSiBA Education as an assessment tool. Furthermore, a positive increase in IEO of students who participated in the entrepreneurial programme at TSiBA Education indicated the benefit of entrepreneurial education and training. Moreover, the 2.9% increase in IEO was linked to a 10% increase in their intentions to start a business. This can be further understood as TSiBA Education advancing their mission to develop entrepreneurs. Qualitatively, I found that the high IEO scoring student exhibits a greater ability to identify and develop opportunities. However, the low scoring student's participation in entrepreneurial education and training could yield an increase in IEO and intention to start a business, and in future assist in the students' ability to development opportunities into successful ventures.



## Chapter 5 - Conclusions and recommendations

This research paper answers Bolton and Lane's (2012) call to further test the IEO instrument to assess its robustness. The statistical evidence presented in this paper is sufficient to conclude the content validity of the IEO instrument developed by Bolton and Lane (2012) when used to study South African and American students at TSiBA Education, Cape Town, South Africa. The IEO test employed in this study resulted in acceptable levels of content validity in which the three factors (innovativeness, risk and proactiveness) explained 50.7% of the total variance. Bolton and Lane (2012) similarly found the same three factors to account for 60% of total variance. The Cronbach Alpha computed for the IEO test in this research resulted in a value above 0.77, verifying the internal consistency, similar to Bolton and Lane's (2012) findings. Obtaining similar validity and reliability results to those that Bolton and Lane (2012) found, inspires additional confidence in the IEO test.

Bolton and Lane (2012) recommended that universities use the IEO test to assess the impact of training programmes. The results obtained in this research reflect that the entrepreneurial education and training programme at TSiBA Education moderately increased students' IEO by 2.9%, and intention to start a business by 10% over a two-week period. It is clear that the entrepreneurial education and training programme has had a positive impact on students' entrepreneurial orientation. However, the two-week duration of the programme raises concern about whether the short period has limited the true potential of the programme.

The shortcomings of the results was predominantly around the short period over which students were assessed. The two-weeks of assessment only reflected a small increase in students' IEO. If students were assessed over a longer period, I might have obtained a more accurate view of the change in IEO. Furthermore, although test scores differed for students with differing demographics, the results were not statistically significant and reflected only minor differences between South African and American students. These shortcomings should hopefully aid a follow up study to more accurately assess the impact of entrepreneurial education and training on students IEO over time, and to further illicit the influence of students demographic on their IEO.

Answering Bolton and Lane's (2012) call to further examine if the IEO test correlated with other areas of individual performance and intentions to start a business. This research paper assessed the correlation between students' IEO scores and intentions to start a business. A positive Pearson's correlation value of 0.314 (pre-test) and 0.419 (post-test) illustrated that a positive relationship exists between IEO and intentions to start a business. The result further indicated that the entrepreneurial education and training programme strengthened the correlation between IEO and students intention to start a business. The main predictors of students' intention to start a business during the pre-test, was the innovation factor. However, post-test results indicated that risk and innovation were both predictors of students' intention to start a business. This change could be attributed to students' exposure to the additional

training about the realities of being an entrepreneur.

The positive influence of the entrepreneurial programme on students' IEO and intentions to start a business, contributes to addressing the problem of high unemployment and poverty amongst youth in South Africa. This further highlights progress for TSiBA Education towards its mission to address demographic inequalities and develop entrepreneurs. The results reinforce the findings of Botha et al., (2007) that entrepreneurial education is key in the development of skills, contacts and opportunities vital to successful business.

This paper responds to the findings of Packham et al., (2010) that entrepreneurial education's impact on entrepreneurship is moderated by a number of factors including: gender, cultural and industrial heritage. We further explored the influence of demographic factors on moderating students IEO and intentions to start a business. The difference in IEO scores and intention to start a business highlighted a clear difference in gender, in which females scores were lower on both accounts (i.e. IEO and Intention). This reiterates Botha et al., (2007) call for training interventions specifically designed for females. Entrepreneurial education and training nonetheless had a positive influence on IEO and intentions to start a business, aiding the development of entrepreneurs regardless of demographic differences.

This research paper has succeeded in highlighting the moderating effect of demographics on IEO and intention to start a business. However, has failed to find statistically significant demographic differences and understand the demographic factors influence on IEO and intention to start a business. Understanding how and why demographic factors moderate the impact of entrepreneurial education would be recommended for further studies.

Bolton (2012) found that high scoring IEO individual's self-reported higher levels of success. Similarly this research highlighted the difference between a high and low IEO scoring students. In which the high IEO student reported running a successful venture, while the low scoring student reported difficulty overcoming past failures and continuing with future ventures. De Koning and Brown (2002) further found that high performing EO firms were more successful at exploiting opportunities. This research suggests that the same conditions may apply to individuals. This investigation of IEO further demonstrates the positive relationship between IEO and self-report levels of success.

De Koning and Brown (2002) elaborated that researchers assume that the intervening variables between EO and performance are the entrepreneurial processes (e.g. identification of opportunities, initiation of new activities and growth). De Koning and Brown (2002) found a more direct link between EO and the entrepreneurial process, specifically opportunity alertness. EA was one of the major factors that Ardichvili (2003) highlighted that influence the core process of opportunity recognition and development. Kirzner (1973) maintained that alertness to opportunity or a certain type of creative perception was the distinguishing factor determining entrepreneurial activity. Similarly, I found the high IEO scoring student to exhibit greater EA when compared to the low IEO

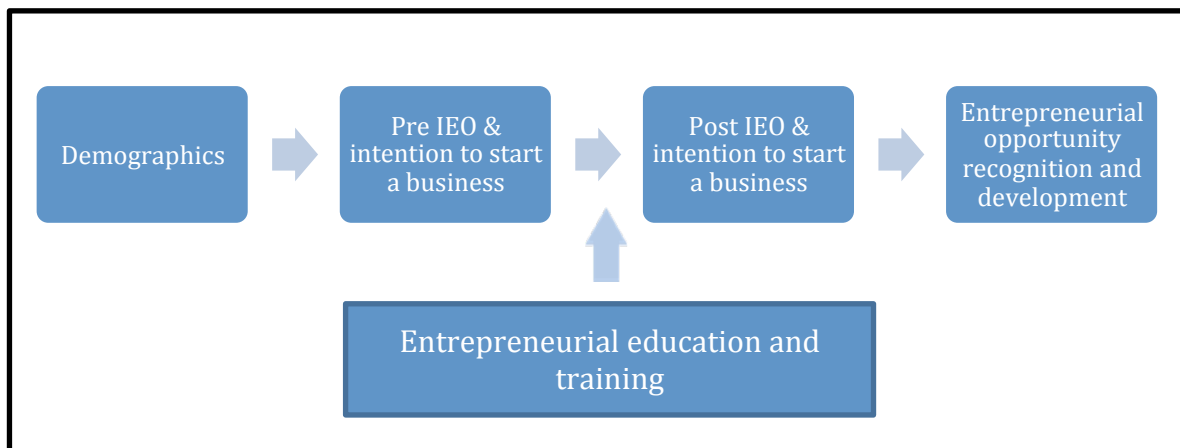
scoring student. This result was supported by De Koning and Brown's (2002) finding that EA was linked to EO.

Furthermore, in this research I found a high IEO scoring student to exhibit a greater ability to identify and develop opportunities into successful ventures. This is in accordance with De Koning and Brown's (2002) finding that individuals with a higher EO will exhibit more EA, and therefore a greater ability to identify and develop opportunities. This is without negating the positive influence of entrepreneurial education on individuals EO. Entrepreneurial education and training is therefore a means for low IEO scoring students to improve, which in future could assist them in their opportunity recognition and development abilities.

I found support for entrepreneurial education and training positively aiding students IEO and intention to start an entrepreneurial venture. Furthermore, a complementary relationship exists between individual's EO, intention to start a business and their opportunity recognition and development abilities. The catalyst in this scenario is entrepreneurial education and training. However, given the problem that many youth in South Africa experience high levels of unemployment and live below the line of poverty. The question of affordability takes center stage. Can the youth of today afford an education that would assist in their development and future development of entrepreneurs in South Africa?

TSiBA Education is an exceptional example of an institute that attempts to address poverty and unemployment through entrepreneurially focused initiative. The reason for this statement is not only due to the effectiveness of the institute's educational programmes in increasing students IEO and assisting them in developing into successful entrepreneurs. TSiBA Education also understands that not all youth in South Africa can afford a quality education. As a result TSiBA students do not pay tuition for a Bachelors in Business Administration degree majoring in Entrepreneurship. But rather the value of students paying it forward and helping the next individual is a prerequisite. Being a TSiBA Education graduate, this research paper is largely my attempt to "pay it forward".

This research has not explored Harris et al's., (2007) findings that experience in family business is linked strongly with entrepreneurial attitudes towards starting a business. It's therefore suggested for further studies to closely assess Peterman & Kennedy's (2003) and Harris et al's., (2007) findings that increased exposure to entrepreneurial businesses increases the likelihood that the individual will be interested in starting a business.

**Figure 1: Illustration of findings**

In conclusion the above illustration best represents the findings in this research paper. IEO and intention to start a business was affected by demographic factors. Entrepreneurial education and training has a positive impact on IEO and intention to start a business. There was a positive correlation between IEO and intention to start a business. Furthermore, a student with high IEO was found to exhibit greater opportunity recognition and development abilities.

The IEO test developed by Bolton and Lane (2012) would be valuable in facilitating entrepreneurial teaching, as the assessment could assist in structuring the programme to greatly increase students' cohesiveness with the programme's learning outcomes. Bolton and Lane (2012) further suggested that understanding IEO would be useful to business incubators (similar to TSiBA Education's Entrepreneurship Centre) in assessing new business proposals. I therefore conclude by suggesting that TSiBA Education employ the IEO test as an assessment tool within the institute and look at the possibility of increasing the duration of the entrepreneurial education and training programme run in conjunction with NEU.

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## Appendices

### Appendix 1: IEO questionnaire

#### ENTREPRENEURIAL ORIENTATION SURVEY

Name:	Age:	Gender:
University (Students Only)	TSiBA	NU
Business name:	Industry:	
Mobile no:	Email:	

For each of the below statements, circle the number to the right that best fits you.

Survey Item	Scale				
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. I like to take bold action by venturing into the unknown	1	2	3	4	5
2. I am willing to invest a lot of time and/or money on something that might yield a high return	1	2	3	4	5
3. I tend to act "boldly" in situations where risk is involved	1	2	3	4	5
4. I often like to try new and unusual activities that are not typical but not necessarily risky	1	2	3	4	5
5. In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before	1	2	3	4	5
6. I prefer to try my own unique way when learning new things rather than doing it like everyone else does	1	2	3	4	5
7. I favour experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems	1	2	3	4	5
8. I usually act in anticipation of future problems, needs or changes	1	2	3	4	5
9. I tend to plan ahead on projects	1	2	3	4	5
10. I prefer to "step-up" and get things going on projects rather than sit and wait for someone else to do it	1	2	3	4	5

**Appendix 2: Email to students selected for interviews**

*Good day*

*I hope this message finds you well.*

*I know you do not know much about me...I am a TSiBA graduate now completing my master at UWC and am grateful for your assistance in understanding the complexities of entrepreneurship.*

*Thank you for taking the time to complete the "Individual Entrepreneurial Orientation" survey.*

*I would like to ask you if you would honour me with an hour of your time to interview you. This would mean that your story will be written in my thesis and filed in TSiBA's history under pioneering entrepreneurs.*

*Know that you can remain completely anonymous if you wish.*

*I will contact you within the next couple of days, however if you wish to contact me my number is 083 430 0453.*

*Best wishes,*

*Adeeb*

**Appendix 3: Qualitative Protocol Questions**



<u>Protocol Question</u>	<u>Data Collection Instrument</u>
<i>The number of business ventures the entrepreneur has identified to date?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>The number of those opportunities further developed into ventures?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>How successful or unsuccessful were those developed entrepreneurial ventures?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>Has the entrepreneur adjusted his/her behaviour by learning through reflecting on practical experiences?</i>	<i>In-depth interview/recorded observations</i>
<i>Does the personality of the entrepreneur reflect risk-taking, optimism, self-efficacy and creativity?</i>	<i>In-depth interview/recorded observations</i>
<i>What effect does the personality of the entrepreneur have on his/her behaviour adjustment? And vice versa?</i>	<i>In-depth interview/recorded observations</i>
<i>Has the combination of behavioural adjustment and personality resulted in the entrepreneur identifying more opportunities?</i>	<i>In-depth interview/recorded observations</i>

<i>Does the entrepreneur participate in active entrepreneurial and social networks?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>Has the entrepreneur learnt from these networks? If so, what has he/she learnt?</i>	<i>In-depth interview/recorded observations</i>
<i>How has the networks assisted in identifying and developing opportunities into ventures? If not, how could networks possibly assist?</i>	<i>In-depth interview/recorded observations</i>
<i>The number of entrepreneurial ventures started by the entrepreneur that has failed?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>What's the entrepreneur's reflection of those failures about?</i>	<i>In-depth interview/recorded observations</i>
<i>Has the entrepreneur learnt from failures?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>What has the entrepreneur learnt?</i>	<i>In-depth interview/recorded observations</i>
<i>How has the learnings from failures assisted the entrepreneur's ability to further identify and develop opportunities into ventures?</i>	<i>In-depth interview/recorded observations</i>
<i>If not, what were the consequential outcomes of that failure?</i>	<i>In-depth interview/recorded observations</i>
<i>How many formal years of employment at an organisation other than the personal entrepreneurial venture does the entrepreneur have?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>What industry were they working in?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>What industry were their entrepreneurial ventures in?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>How is the entrepreneurial venture of special interest to the entrepreneur?</i>	<i>In-depth interview/recorded observations</i>
<i>How has the prior formal work experience assisted the entrepreneur in understanding the market and customers?</i>	<i>In-depth interview/recorded observations</i>
<i>How does the entrepreneur exhibit a convergence of both knowledge domains? What is the outcome thereof?</i>	<i>In-depth interview/recorded observations</i>
<i>Explore the entrepreneur's family and social background. Allow the entrepreneur to share his or her life story.</i>	<i>In-depth interview/recorded observations</i>
<i>Does the entrepreneur have a supportive family?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>

<i>How has the family supported or not supported the entrepreneur?</i>	<i>In-depth interview/recorded observations</i>
<i>If supported, how has the family supported the entrepreneur to learn from failures?</i>	<i>In-depth interview/recorded observations</i>
<i>Has this learning positively aided the entrepreneurial opportunity recognition &amp; development? How?</i>	<i>In-depth interview/recorded observations</i>
<i>What is the entrepreneur's level of "entrepreneurial alertness"?</i>	<i>Questionnaire/In-depth interview/ recorded observation</i>
<i>How has the opportunity identification process resulted in enriching the entrepreneur's knowledge base?</i>	<i>In-depth interview/recorded observations</i>
<i>Does the greater the number of previously successful opportunities identified, lead to a higher number of future successful opportunities identified?</i>	<i>In-depth interview/recorded observations</i>



## **Appendix 4: Programme outline**

### **Social Enterprise Field Program - South Africa; Summer 2 2016** **Professor Dennis Shaughnessy, Lead Faculty** **Professor Chaewon Lee, Second Faculty**

#### **Syllabus (v1.0; 5.2.16)**

##### **1. Introduction**

This Program is a two course, eight-credit undergraduate business program offered in our Summer 2 semester. At the core is a four-week intensive business program in Cape Town, South Africa. This is the ninth year for the Program, which we believe provides our students with a unique and often transformational global learning experience. Our hope is that you will have that kind of experience.

The Program has three segments. The first is the two-week “slum entrepreneur” consulting program run in partnership with TSiBA. During the second one-week segment you will focus on designing possible solutions to the challenges of living as economic refugees in informal settlements. The third and final one-week segment is a cultural immersion one in which you will go deeper into what it means to be South African today.

Please note that I (Professor Shaughnessy, writing this Syllabus) am the Lead Faculty for the Program, and your sole professor for the first three weeks in South Africa. Professor Chaewon Lee is our second faculty member and your sole professor for the fourth week of the program. Dr. Lee will post additional specifics regarding her teaching plans on Blackboard.

##### **2. Courses**

The registrar course numbers for the Program are ENTR3306 and ENTR3308. The titles for the courses are: “Global Entrepreneurship” (3306), and “Business, Economics and History of South Africa” (3308). The course titles are less meaningful taken individually than the program description considered as a whole—this is a global learning experience in which you will be immersed in hands-on business and entrepreneurship experiential learning, partnering with local students while serving low income and poor communities in South Africa.

##### **3. Summary of Academic Program Assignments and Requirements**

On February 27, we provided each of you with a copy of a document called “Summary of Program Assignments and Requirements.” This summarized for you the key academic elements of the Program, including the required pre-



departure sessions, the required and suggested reading, and the written and other assignments.

The document is attached to this Syllabus, with some edits that bring it up to date. Please be sure to refer to it, and this Syllabus, whenever you have a question about what's required of you academically.

#### **4. Our Daily Calendar**

We depart Boston on Friday, July 1, 2015 for Cape Town, and return to Boston on Wednesday, August 3, 2016. Each flight requires nearly two days of travel, including the time differences. All of our time will be spent in the Western Cape province of South Africa, where Cape Town is located.

We will post a detailed, day-by-day calendar for the four weeks on the Blackboard site for the Program (under ENTR3306) several weeks before departure. You will see that our calendar contains a wide variety of activities, including classes, field research visits, evening discussion sessions, site visits, weekend excursions, and planned dinners. Our calendar changes frequently when it comes to the details, but the major components are set well in advance. You should always check the date on the calendar version that you are looking at, and check Blackboard for the most recent version.

#### **5. A Three-Part Program**

While the focus of the program is clearly on the trip to South Africa and the field-consulting project, you are also required to read and write on the underlying topics of poverty and unemployment, entrepreneurship and innovation, social entrepreneurship and about South Africa generally (politics, economics, social issues). Our program is not just a “travel” program, but rather an intensive “hands on” field program in which a great deal is expected from you, both academically and professionally. Your success will be the direct result of the commitment you make to the success of others, including the disadvantaged township entrepreneurs you will work closely with.

Your work in this program with disadvantaged South African entrepreneurs is serious, important work that can lead in some cases to the creation of new sustainable businesses and the associated jobs, income and community development. Accordingly, we have high expectations for your engagement and performance.

#### ***Three Distinct Segments***

The program has three distinct segments, over the course of four weeks.

The first segment is an ***intensive two-week program*** with our academic partner TSiBA in which you work alongside South African students to provide consulting services to township (the term used for urban “slums” in South Africa) entrepreneurs. Typically, you attend morning classes at TSiBA, and then

work on your consulting projects in the afternoon, with consultation and reflection sessions in the evenings. This is an intense academic program with a great deal of work. In fact, this two-week segment may be comparable in academic expectations to many four or five week Dialogue programs.

The second segment during the following week (i.e., our **third week** in South Africa) includes completion of TSiBA analytics and reflection, followed by a new project in which you design a project or enterprise solution to a real-world problem in an informal settlement within or adjacent to a township. Informal settlements are the poorest communities in South Africa, where many recent economic refugees from other African countries settle and search for work. We will also focus in this week on programming on South Africa and its history, challenges and future prospects, combined with visits and service learning opportunities in and around the townships.

Finally, the third segment (and, **fourth week**) is a cultural immersion, service learning, and local travel segment. While the first two segments are led by me, your last week in South Africa will be led by **Professor Chaewon Lee**, a visiting professor at Northeastern in 2015-16 and an expert in entrepreneurship and entrepreneurial thinking. You will also hear from local professors and community leaders under staff direction during this fourth week.

## **6. Northeastern Faculty and Staff**

I'm the program lead faculty, and also the founder and director of NU's Social Enterprise Institute. I have expertise and experience in business, law and government (25 years), as well as in social enterprise and the social responsibility of business. I created this South African program in 2008. As I mentioned, I will be present for the three of the four weeks of the program.

As previously mentioned, Professor Chaewon Lee will join us for the fourth week of the program. She's an exceptional teacher and person, and I know that you will find her to be a wonderful teacher and program leader. You will find her biographical summary on Blackboard.

We will have additional staff join us throughout the program. Nina Angeles is our lead staff person. Nina was a student in this program in 2014, and was the lead staff member for the program in 2015. We will have two undergraduate teaching assistants, Cayman Macdonald and Lexi Prather, both of whom were students in the program in 2015.

## **7. Our Academic and Field Partner: TSiBA**

TSiBA is the Tertiary School in Business Administration, located just outside of Cape Town. Nearly all of its students are on "pay it forward" scholarships, and nearly all come from disadvantaged backgrounds. Many of you have seen the DVD that TSiBA created to educate others about their mission. TSiBA was created to offer an accessible university education to high potential disadvantaged youth from the townships and other poor communities, who in

turn will give back to their community in the future through service and community involvement.

TSiBA's staff, including interns, will be available to assist you in certain logistics, especially in successfully getting to and from our many destinations in and around Cape Town. We expect that you will treat TSiBA staff with respect, and with the understanding that they have many other activities and duties beyond our program.

TSiBA is lead by Professor John Durr, who has a long and successful career in business and entrepreneurship in South Africa. He is an exceptional person and resource, and one who I'm confident you will learn a great deal from during our time together.

## **8. The Micro-Entrepreneur Business Consulting Project**

The field project for the program is unique and powerful learning experience.

You will be working with entrepreneurs from racially segregated and historically disadvantaged townships surrounding Cape Town. These entrepreneurs have requested assistance from our TSiBA's Entrepreneurship Centre in starting, developing and financing their community-based small businesses.

All or nearly all of these South Africans come from disadvantaged backgrounds, and see the creation and growth of their business as an opportunity not only to improve their lives, but also an opportunity to improve and strengthen their community. By culture or design, these entrepreneurs typically seek to develop their businesses not only to improve their lives through business, but also to have a positive and lasting social impact on their country.

Many "micro-enterprise" entrepreneurs are not fully prepared to run a formal business. Often in poor communities in developing countries like South Africa, entrepreneurship is not a choice but a necessity. There are few jobs to found in the urban slums, especially for those without formal education, where unofficial unemployment rates can be 50% or more. These conditions present a unique opportunity for students to try to offer support and guidance to these hopeful but often inexperienced or resource-challenged entrepreneurs.

You will work in teams with students from TSiBA to assist these township entrepreneurs. We expect about 55 TSiBA students to join our 45 NU students enrolled in the program this year, so we are likely to establish 20-25 working teams of four to five students each, to work with 20-25 entrepreneurs.

Your project work on behalf of the selected township entrepreneurs will come in many forms, from offering marketing advice, to developing a web and social network presence, to writing a short-form business plan, to identifying

sources of capital, to developing a books and records system. You will need to listen carefully to your entrepreneur, and develop a plan for providing as much business consultation assistance as you can during a two to three week period.

The selection of 20-25 entrepreneurs (done by TSiBA's Entrepreneurship Centre staff in consultation with us) is a very time consuming and difficult process, and we will undoubtedly see some entrepreneurs who are unfortunately not as committed to the program as we may have hoped. It is nonetheless your job to do the very best work you can for your assigned entrepreneur, regardless of the difficulties you encounter in getting that work done.

### **9. Weeks 1-2 (Shaughnessy): The TSiBA Micro-Entrepreneur Business Consulting Program**

Classes taught on the TSiBA campus will be led by me with the support of Professor Durr from TSiBA, along with the periodic support of other TSiBA faculty, representatives and guests. TSiBA students will attend only the first two-week segment, as they return to their regularly scheduled classes after the close of our second full week in-country.

We will likely cover up to ten "lessons" in the first two segment of the program (i.e., the first two-weeks when TSiBA students are included in our academic program). It's important to note that while you may have had exposure to these topics through prior classes and assigned reading, TSiBA students are likely to be unfamiliar in some ways with these topics. In particular, social entrepreneurship is a relatively new topic for business schools in South Africa, and some of what we teach in our social enterprise classes is inconsistent with traditional business teaching in South Africa. Please be patient, to allow your student colleagues from South Africa to catch up to some of the concepts that you may have already been exposed to in our social entrepreneurship classes on campus.

The ten lessons/classes in the initial segment (first two-weeks) of our program are as follows. These topics may change in real time, depending on how are sessions are developing. Please note that we will likely have a quiz at the end of each week.

*1. Introductory Session.* In this first session, we will engage in exercises and discussions that allow us to get to know each other better. We will try to understand the significant differences between Americans and South Africans, on a social and cultural standpoint. This team building session should be the foundation for the working relationships necessary to complete the consulting project.

*2. Business Consulting.* This session will prepare you for the work of acting as a professional business consultant to a micro-enterprise. You will learn

about the tools that are needed to be an effective consultant, and the challenges that you will confront that are unique to micro-entrepreneur in lower income communities.

*3. Measuring Poverty and Inequality.* We will review the tools for measuring poverty, inequality and other indicators of economic and social wellbeing. Discussion of the impact of poverty and inequality on the daily lives of people will lead us to consideration of the potential interventions to alleviate these conditions, especially those based in private enterprise. At the same time, we will examine some of the basics of business, including what most often leads to success in a small enterprise.

*4. Innovation and Entrepreneurship.* This session will look at how innovation drives the growth of enterprises and economies. What defines a successful entrepreneur? We'll examine the latest great entrepreneurial stories to see if there are commonalities from which we can learn.

*5. Social Entrepreneurship.* Social entrepreneurship refers to the use of business skills and knowledge to have a positive social impact through enterprise activity. How can profit be used to create sustainable and impactful enterprises?

*6. Microfinance.* Microfinance is the most successful category of social enterprise to date, with millions of people lifted out of poverty through access to small loans. We will examine what it takes to be successful in microfinance, and why South Africa has not been a leader among African countries.

*7. Social Impact Investing.* The next step after microfinance, social investing typically involves lending or investing larger amounts of money to create larger enterprises and more jobs. How does impact investing and “patient capital” differ from traditional investing?

*8. Managing a Social Business.* Social businesses are the for profit impact businesses that are a small but growing segment of the social enterprise world. We will consider the unique challenges of managing a sustainable social venture.

*9. Measuring and Evaluating Impact.* The test of whether a social entrepreneur is serious about impact is the extent to which he or she is invested in impact measurement and evaluation tools. Are randomized controlled studies designed to test which poverty alleviation programs are the most efficient and effective ethical?

*10. Innovation for the Base of the Pyramid (BOP).* This involves how people can adapt their innovation approaches to more effectively meet the needs of the three billion people living at the so-called “Base of the Pyramid”.

**10. Week 3 (Shaughnessy): Field Research: Refugees and Informal Settlements;  
Projects & Service**



The third week of the program includes a project in which a group of you (NU students only) will design a project or enterprise to address a problem in an informal settlement community. This project will not be as intensive as the TSiBA micro-entrepreneur consulting project, but will nonetheless involve site visits and community engagement.

This third week will also include guest lectures addressing “hot” topics in South Africa today, from politics to economics to social issues. We are working with local universities and experts on a number of different topics of great interest regarding the past and future of South Africa, and we will advise you of the schedule and content upon arrival in South Africa.

This third week is a good time for you to work on your papers in the evenings, after we work in service learning capacities with poor and disadvantaged people, families and communities. Your efforts during this week of service comprise a significant part of your “citizenship” grade for each of the two classes, as described below in the grading section.



### **11. Week 4 (Lee): South Africa Cultural Immersion; Entrepreneurial Thinking; Projects & Service**

The fourth week of our program is typically the most difficult, as students tend to be a bit worn down after three intensive weeks of study and field based learning. This year, we are very fortunate to have Professor Lee lead this week, as she brings great energy, insight and enthusiasm to her teaching and work in the field of entrepreneurship.

The primary focus of this segment is cultural immersion in today’s South Africa. Professor Lee will lead class sessions, as well as coordinate project work, service learning and several guest lectures from local South Africans. She will post on Blackboard a summary of her teaching plan for the week.

We will also set aside time for you to work on your written assignments.

### **12. Service Learning and Projects**

You will also be required to participate in several service learning projects. These are as important to the Program and your learning as any other component. The projects range from serving children at a rape crisis center to working in a vision clinic. The projects and activities will be posted on Blackboard before we depart, and updated in our evening sessions. We will incorporate your service learning experiences into our evening discussion and reflection sessions.

We have also been working to develop projects that carried over from our 2015 Program, including a microfinance program for refugees living in informal



settlements to an impact sourcing program in internet cafes in the townships. We will engage you from time to time in advancing these projects while we are in-country.

### **13. Evening Discussion and Reflection**

You will be required to attend evening sessions two or three times each week, for about 90 minutes each. During these informal sessions, we help you advance your projects, discuss what you've learned and where there are gaps, discuss assigned reading, and otherwise engage in an extended conversation about your experience in-country.

These sessions are not lectures, but rather interactive discussions that require that you engage and contribute to the learning of your peers.

### **14. Reading**

You have previously been provided with a Reading List for the program (a version is attached at the end of this Syllabus). Please be sure to read each of the books on that list. You can't understand South Africa and South Africans nearly as well as you need to if you don't commit to intensive reading in advance and while you are there. Also, note the references to reading quizzes in the List, and in the Grading section that follows.

You will also be provided with an Online Reading Guide (posted to Blackboard), to supplement the assigned books. You should be sure to read these online materials while in-country, note that our hotels will have internet access to enable this reading.

### **15. Grading and Assignments**

You receive a separate grade for each of the two courses (3306 and 3308). I will provide your grade for both courses, though Professor Lee will provide grading input and our staff will contribute to the grading of your program engagement.

Your grade for each course is comprised of four input groupings, which will be described below. The value of each input will be *one-fourth of your grade*, though we reserve the right to make reasonable adjustments to the grading input values to insure that each student's grade fairly and equitably reflects his or her work and participation.

*1. Citizenship and Engagement:* This is what you do each day in the field, including classroom participation, field research engagement, and your overall participation, contribution and conduct during the program. We collectively assess your commitment to the program's goals and your demonstrated effort to help the group achieve those goals. As part of this process, we require that you write a two or three page summary of your performance on these measures.

2. *TSiBA Consulting Project*: This is your work on the consulting project for the TSiBA entrepreneurs. You will write a consulting project report, which may be a business plan in some cases, and do a presentation to your entrepreneur as well as all program participants. You will also write a short (3-4 double spaced pages) personal evaluation paper on your individual contribution to the group project.

3. *Papers*: You will write two additional papers for the program (in addition to the reflection paper described in #2 above). The first paper (10-12 double spaced pages) will be a research paper on an issue or topic of importance in today's South Africa, ranging from politics to economics to public health to business. You should write this paper with a partner, and try to incorporate some of the assigned reading into your work. The second paper will be an individual reflective paper (5-6 double spaced pages) on the impact that this trip and program had on your personal development.

All of these papers are due before you leave South Africa.

4. *Quizzes and other Assignments*: This includes your reading quizzes and other small assignments related to additional reading, reflection and discussion sessions and other activities.

## 16. Grading Philosophy

Students often relate to me stories of the “easy A” that everyone gets in summer travel courses by just “showing up”. Whether or not that is generally true, it is not true for our programs. We grade you based on actual performance and achievement, not just on participation or good intentions.

If you meet all of the basic expectations for the two courses, you can expect to receive a B grade for each course. In order to receive an A grade for each course, you must consistently exceed expectations for your performance. A B+ or an A- grade of course falls in between these two parameters.

The specifics of grading can be found in the “Written Assignments and Grading” section that follows. Remember always that your conduct and behavior is part of your academic performance in a field program like this, and you should be prepared for adverse academic consequences if your conduct is inconsistent with program policies (as described more fully later in this syllabus).

## 17. Blackboard & Web Access

Please note that the available Blackboard site for the program is the one associated with ENTR3306; we will not open the second Blackboard site for ENTR3308.

You should bring a laptop or other computing device to South Africa, so that you can consistently access Blackboard as well as engage in research, writing and other academic exercises. We will arrange for internet access for

you in our Mouille Point accommodations and on the TSiBA campus whenever possible, though it's important to plan in advance as access can be intermittent and slow at times.

## **18. Safety and Conduct**

You have already been provided a contract that you must sign in order to participate in the program that governs your conduct while in South Africa. This will briefly provide some context for that contract requirement.

Cape Town has many faces. It is home to the very wealthy, and the very poor. It has beautiful high-end ocean front neighborhoods, alongside informal settlements or “townships” that lack the basic necessities of life. Sections of the city are virtually crime free, while other areas are burdened with extraordinarily high crime rates. You always need to know where you are, with whom and when in order to be safe and secure in Cape Town. It is easy to be lulled into a sense of comfort initially, but you should always be prepared and taking the steps necessary to insure your safety. Please always follow our instructions and requirements, if you do so, you will be able to avoid the risks presented by living and working in a major African city.

You are also required to be a good “citizen” throughout the program, meaning that your behavior and approach reflects a consistent commitment to representing the university and the Social Enterprise Institute. Of course, any illegal conduct, such as use or possession of illegal substances, will result in severe consequences, including being sent home at your expense, in accordance with university guidelines. In addition, conduct that is disruptive or detrimental to the success and integrity of our program, including in appropriate or excess consumption of alcohol and its after effects, may also result in an adverse impact on your grade at the least, and potentially more severe academic consequences.

We know from experience that those who closely follow the rules of conduct and behavior that we have established in cooperation with our local partners will be safe, and will enjoy this diverse and intriguing community. If you choose not to comply with our rules, you are creating an unnecessary risk that you may regret.

## **19. Investment Capital from SEI**

One of the keys to the development and success of our field programs has been that we have provided our field partners with investment capital to advance their programs. This investment capital is provided by or through SEI, to finance the most promising entrepreneurs that we work with in our collaboration with TSiBA. The provision of project or program finance allows you to work on programs that will be both real and impactful. We have worked closely with TSiBA to create formal investment funds that offer the Entrepreneurship Centre's clients, including those that you will work with during this year's program, the opportunity to apply for equity or debt financing.

## 20. Contact Information

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## First Attachment to the Syllabus

### Summary of Program Assignments and Requirements

**Updated May 1, 2016**

This will summarize the assignments and requirements for students enrolled in our 2016 South Africa Program.

#### A. Pre-Departure Sessions

We are required to attend three pre-departure sessions for our program:

February 1, February 29 and April 4

Your attendance is required in each case. Our April 4 session will include a talk from the author of one of our assigned books, see below for more information.

You're also required to attend a fourth pre-departure session managed by GEO, on one of these three dates:

March 15, March 16 or March 17

#### B. Assigned Books

You are required to read five books.

##### 1. *No Future Without Forgiveness*, by Archbishop Desmond Tutu

This is the story of the Truth and Reconciliation Commission, told by the Nobel Laureate Archbishop Desmond Tutu. We have met with the Archbishop during two of our past programs, and we hope to again, though his advancing age and declining health is a concern.

You are required to read this book in February; you will be quizzed on the book in-class at our *February 29* pre-departure session.

##### 2. *No Bread for Mandela*, by Ahmed Kathrada

This is the memoir of Ahmad Kathrada, Mandela's close friend and Robben Island cell mate. We have travelled to Robben Island with Dr. Kathrada each year, and hope to again this year, though like the Archbishop his health and advancing age is a concern.

**You are required to read this book in April/May; you will be quizzed on it by way of a take home quiz due *May 16*.**

##### 3. *The Born Frees: Writing with the Girls of Gugulethu*, by Kimberly Burge

This is a new book by a Peace Corps volunteer who worked with young girls in this township of Gugulethu. You will visit this famous township while in Cape Town. You will hear from the author at our April 4 pre-departure session, as she will be our guest speaker that evening.

We strongly encourage you to read, or begin reading, this book prior to the April 4 session. We do not plan to quiz you on the book on April 4. We will also be discussing the book during our reflection sessions in the third and fourth weeks of the program.

4. *We Are All the Same*, by Jim Wooten

This is the story of an inspirational young South Africa boy who died of AIDS. He is a famous figure in the HIV/AIDS community, as well as throughout South Africa. We will discuss numerous chapters from this book in a reflection session during our third week in Cape Town.

5. *The South Africa Reader: History, Culture, Politics*, by Crais and McClendon

This is an anthology of articles and chapters on South Africa. We will discuss selected chapters in reflection sessions in our third and fourth weeks in Cape Town.

C. Other Reading

We will create an “online reading guide” for you to read in May, after our pre-departure sessions are complete. This reading will inform our evening reflection sessions in the third and fourth weeks.

D. Projects

1. TSiBA Entrepreneur Consulting Project (weeks 1-2)

This is your major work project while in Cape Town. It’s a two-week immersion project that results in three key deliverables: (1) a business or action plan for your consulting client, a township entrepreneur, (2) a presentation of your work to the extended consulting family (all students and entrepreneurs, and their guests), and (3) a personal reflection paper that captures your thoughts and insights from working on this project.

2. Informal Settlement Project (week 3)

This second project will be defined more specifically as we get closer to our arrival. It involves working on a project plan that it is intended to help improve the lives of people living in informal settlements. People living in informal settlements are typically the “poorest of the poor”, and frequently economic or political refugees from nearby countries like Zimbabwe and from more distant countries like Somalia and the DRC.

3. Service Learning Projects (week 4)

These are structured service learning projects that you are required to contribute to, primarily in our third and fourth weeks. You will learn more about these projects during the months of May and June, via Blackboard and other communications. These experiences can be enriched with pre-departure fundraising.

F. Daily Engagement



Perhaps the most important part of the program is your engagement in the day-to-day activities that we have planned for you.

You will typically have five or six days of planned activity, and three evenings, each week. You are expected to actively engage in all of our activities, which while challenging at times, is really the core of this program. We expect you to be a *positive, attentive, supportive, collaborative, active and engaged* person and team member throughout the program.

G. Written Assignments/Papers:

1. TSiBA Consulting Project Paper (including a self-assessment paper)
2. Informal Settlement Project Plan
3. **A Partnered Research Paper**
4. Trip Reflection Paper
5. Other short writing assignments as may be required

H. Grading

Your grade will be based on a balanced consideration of the four input categories: (1) your field engagement, (2) your project contributions, (3) your papers, (4) and your reading quizzes. The grades are distributed across the two courses based on the associated program content.

